Profiles in Leadership:

A Review of Exemplary Practices to Increase Health Professions Workforce Diversity in California

April 2008
Profiles in Leadership:
A Review of Exemplary Practices to Increase Health Professions Workforce Diversity in California

The Connecting the Dots Initiative
A Comprehensive Approach to
Increase Health Professions Workforce Diversity in California

Produced by:
The Public Health Institute
and the UC Berkeley School of Public Health

Sponsored by:
The California Endowment
February 2008

ABOUT THE INITIATIVE

The Connecting the Dots Initiative:
A Comprehensive Approach to Increase
Health Professions Workforce Diversity in California

This is one of seven reports that share findings from a coordinated set of inquiries commissioned by The California Endowment. The purpose is to foster a more comprehensive, evidenced-based understanding of the issues, challenges, and opportunities associated with efforts to increase health professions workforce diversity. Each report includes a set of targeted recommendations to increase health professions workforce diversity in California. The basic theme and title of the initiative is “Connecting the Dots,” reflecting an understanding of the need for a thoughtful, deliberate, and sustained commitment by the full spectrum of educational institutions, health professions employers, businesses, community stakeholders, and other leaders in the public and private sectors. The Public Health Institute and UC Berkeley School of Public Health formed a partnership to conduct the research and take action as part of The Connecting the Dots Initiative, and worked in collaboration with UCSF Center for Health Professions, Gibson and Associates, and The Praxis Project.

Impetus for the Connecting the Dots (CTD) Initiative was provided by earlier reports from the Institute of Medicine, The Sullivan Commission, and The UCSF Center for Health Professions. These reports documented the dramatic under-representation of many racial and ethnic groups in the health professions and provided evidence that a more diverse health workforce can contribute to improved access and quality of care for all Americans. They also made the case that increased representation is essential to our future health workforce and economy. The Connecting the Dots Initiative builds on those earlier reports by documenting the current state of affairs in California and developing an evidence-based, comprehensive strategy to increase health workforce diversity. The Connecting the Dots Initiative reports include:

• A quantitative assessment of the current level of diversity in CA health professions education institutions and among practicing professionals.
• A qualitative assessment of issues, challenges, and opportunities based on key informant interviews with the leadership of health professions education institutions, health professions employers, and state regulatory agencies.
• Profiles of over 30 exemplary practices to enhance health professions diversity
• An analysis of how the issue of diversity is framed in the California media, and strategies to re-frame the public dialogue.
• Qualitative and quantitative research with health professions students, faculty and alumni to explore the benefits of diversity in the educational environment.
• A comprehensive annotated bibliography and literature review of diversity-related research to date.
• A qualitative assessment of K-12 networks of support to pursue health careers in four CA communities.
All seven reports can be found at [http://www.calendow.org/Article.aspx?id=2290](http://www.calendow.org/Article.aspx?id=2290). The Connecting the Dots Initiative is in its next phase to support the implementation of the targeted recommendations. For more information, please contact Shelley Skillern at sskillern@phi.org.

**ACKNOWLEDGMENTS**

First and foremost, we want to extend our appreciation to the academicians, practitioners, administrators, and advocates who generously shared their time, expertise, and insights in the development of these profiles. We were impressed by the dedication of each of these individuals to the shared goal of increasing health professions workforce diversity.

We would also like to acknowledge the contributions of Academic Supervisors for their assistance, guidance and input to student profile authors. The Academic Supervisors include:

Janine Bishop, M.P.H., Program Director, Pediatric Advocacy Program at Stanford School of Medicine

Juan Carlos Belliard, Ph.D., Assistant Professor, Loma Linda University, School of Public Health

Yolanda Jenkins, Ph.D., Research Project Manager, UC Berkeley, School of Public Health

Case profile authors include:

Alexandra Alznauer
Patrice Esser, M.P.H.
Claire Colón Hopkins, M.B.A.
Kimberly Jackson
R. Ruth Linden, Ph.D.
Donald Matsuda
Ed McField, M.S.A., Ph.D. Candidate
Margie Powers, M.P.H., M.S.W.
Sylvia Sanchez

Brief biosketches for each author are included as Appendix A.

In addition to his role as co-director of the Connecting the Dots Initiative, Kevin Barnett, Dr. P.H., M.C.P. served as editor of this report and was the primary author on five of the case profiles. Ruth Linden, Ph.D. also provided invaluable editorial assistance with numerous case profiles.

Cover design by Shelley Skillern
# Table of Contents

Executive Summary .................................................................................................................. vii  
Introduction ............................................................................................................................. 1  
Methods .................................................................................................................................... 2  

I. Leadership / Institutional Commitment .............................................................................. 3  
1. Office of Diversity, Loma Linda University ................................................................. 4  
2. Chancellor’s Advisory Committee on Diversity University of California, San Francisco ................................................................. 8  
3. Aetna Diversity Alliance, Aetna Health Plan ............................................................ 11  
4. COMP Advisory Board College of Osteopathic Medicine of the Pacific .................. 16  

II. Pipeline Investment ............................................................................................................ 19  
A. Efforts Led by Higher Education Institutions .......................................................... 19  
1. Latino Center for Medical Education and Research K-16 Health Professions Pipeline, UC San Francisco – Fresno ............... 19  
2. FastStart and Medical Scholars Program (MSP) Division of Biomedical Sciences University of California, Riverside ................................................................. 26  
3. California Postbaccalaureate Consortium University of California (UCD, UCI, UCLA, UCLA/Drew, UCR, UCSD, UCSF) ...................................................................... 31  
4. California Dental Pipeline Collaborative (LLU, UCLA, UCSF, UOP, USF) .................................................................................. 36  
5. Future Nurses (Accelerated pre-nursing program) Paradigm (Contract education program) Fresno City College, Department of Nursing ......................................................... 41  
6. Biology Scholars Program University of California at Berkeley ....................................... 49  
7. Science Educational Equity Program (SEE) and the STEM Initiative California State University, Sacramento (CSUS) .............................................................................. 53  
8. Community Health Works San Francisco State University / City College of San Francisco .............................................................................................................. 60  
B. Efforts Led by Health Professions Employers .............................................................. 66  
1. Long Beach Memorial Medical Center Accelerated Nursing Program Department of Nursing, California State University Long Beach (CSULB) ........................................... 66  
2. Making the Case for Diversity: Community Advocacy and Academic Reform in the Inland Empire J. W. Vines Medical Society .................................................................................. 71
3. Family Practice Residency Program
   White Memorial Medical Center .......................................................... 76
4. Faces for the Future
   Children’s Hospital and Research Center Oakland ..................................... 80
5. Health Career Connection ................................................................. 85
6. Cope Health Solutions
   Health Workforce Transformation Program ........................................... 91
7. Career Mobility Program
   Kaiser Permanente – Service Employees International Union................... 95
8. Nursing Career Ladder Initiative
   San Francisco Jewish Vocational Services ................................................ 101
9. Sonoma County Healthcare Workforce Development Roundtable
   Napa-Sonoma Collaborative ..................................................................... 106
10. The Greater Bay Area Mental Health and Education Workforce
    Collaborative California Institute for Mental Health ............................. 111

III. Admissions .......................................................................................... 115
1. Stanford University School of Medicine ............................................... 115
2. University of California, Davis School of Medicine ............................ 118
3. University of California, San Francisco School of Dentistry ............... 121

IV. Reduce Financial Obstacles ................................................................. 124
1. Bridge to Nursing, East Los Angeles College ........................................ 124

V. Institutional Climate ........................................................................... 129
1. Program in Medical Education for the Latino Community (PRIME-LC)
   University of California Irvine-College of Medicine ............................. 130
2. Students of Color for Public Health
   UCLA School of Public Health ...................................................... 134
3. Pediatric Advocacy Program (PAP) and
   Scholarly Concentration in Community Health and Public Service (CHPS)
   Stanford University School of Medicine ............................................. 138
4. Family Practice Residence Community Immersion Program
   Scripps Mercy Hospital -Chula Vista .................................................... 142
5. Community Health Programs
   USC School of Dentistry (USCSD) .................................................... 145
VI. UR Faculty Recruitment and Retention ......................................................... 149

1. Berkeley Diversity Research Initiative
   University of California at Berkeley ............................................................ 150
2. National Center for Leadership in Academic Medicine
   University of California, San Diego ............................................................. 154

VII. Summary ..................................................................................................... 158

Appendix A Statewide Advisory Committee ....................................................... xi
Appendix B Author Biosketches ......................................................................... xiii
Executive Summary

This report provides a sampling of 33 exemplary practices undertaken by individuals and institutions in the public and private sector to increase health professions workforce diversity. The primary purpose is to inspire and to provide insights for others who seek to undertake similar initiatives at the institutional, local, or regional level. In this way, these individuals and their partners gain the advantage of learning from their predecessors, and in so doing further advance the field. It is also intended to provide foundations and other funders with information that will guide their future investments.

In our approach to the identification of exemplary practices for documentation, we were guided by key issues examined in the Institute of Medicine report entitled “In the Nation’s Compelling Interest” and the parallel report from the Sullivan Commission entitled “Missing Persons: Minorities in the Health Professions,” both published in 2004. Our intent in the documentation of exemplary practices is to:

- Acknowledge the efforts of committed individuals and organizations to date
- Inspire others to take action
- Provide a more comprehensive picture of the scope of potential contributions that can be made by a broad spectrum of stakeholders from different disciplines and sectors
- Demonstrate that the current call to action is not based upon an abstract concept, but is supported by the substantive accomplishments of many others across the nation.

The selection of exemplary practices was informed by referrals and input from a 25-member statewide advisory committee (See list of members in Appendix A), and through other inquiries conducted as part of the Connecting the Dots initiative. Selection was also guided by relative alignment with a set of five criteria outlined in the Methods section of this report. It is important to note that the selection and documentation of the profiles in this report is not intended to convey the judgment that these are the best practices per se. Despite extensive outreach, we are confident that we have overlooked other excellent examples of definitive actions to increase health professions workforce diversity in California.

Summary of Accomplishments

The exemplary practice profiles documented in this report provide insights into a wide array of innovations at all stages of the health professions pipeline, each contributing in some way to the goal of increasing health professions workforce diversity. One constant across all practices is leadership by individuals with profound commitment to the achievement of their programmatic, institutional, and/or regional goals.

With few exceptions among practices in early stages of development, most profiles have documented measurable impacts, including increases in under-represented (UR) high school and undergraduates with skills and strong interest in the health professions, improved academic performance among UR undergraduates and selection of health professions career tracks, increased admissions and matriculation of UR students into health professions education institutions (HPEIs), increased UR nurses and other clinicians through incumbent worker and re-training and certification of foreign trained health professionals, an increase in UR practitioners in underserved communities, and a significant increase in access to health services in underserved communities.

---
1 “In the Nation’s Compelling Interest: Ensuring Diversity in the Health Care Workforce,” 2004, Institute of Medicine, Washington, D.C.
3 CHRCO Faces for the Future (II.B.4), CSUS SEE Program and STEM Initiative (II.A.7), Sonoma County Healthcare Workforce Development Roundtable (II.B.9), UCSF-Fresno Latino Center for Medical Education and Research (II.A.1).
4 UCB Biology Scholars Program (II.A.6), UCR FastStart and Medical Scholars Program (II.A.2), Health Career Connection (II.B.5), CHS Health Workforce Transformation Program (II.B.6).
5 California Post-Baccalaureate Consortium (II.A.3), SU SOM, UCD SOM, and UCSF SOD Admissions Process (III.1, 2, and 3), UCI SOM Prime-LC (V.1), LBMMC-CSULB Accelerated Nursing Program (II.B.1), FCC SON Future Nurses Program (II.A.5).
6 FCC Paradigm Program (II.A.5), SFSU/SFCC Community Health Works and Welcome Back Center (II.A.8), JVS Nursing Career Ladder Initiative (II.B.8), KP-SEIU Career Mobility Program (II.B.7).
Other, more qualitative impacts cited by interviewees in documentation of profiles include a more supportive academic environment for UR students and UR faculty in HPEIs, increased coordination on a campus-wide or organization-wide basis, and stronger links with community stakeholders.

Last, but not least, engagement and advocacy by a local medical society has contributed to the re-design of a medical degree program and played a role in the planned establishment of the first University of California school of medicine with a core mission to increase diversity and serve the regional population.

**Key Challenges**

While the accomplishments documented by these practices are substantive and important, most face significant challenges. In most cases, the cohort of UR individuals impacted by the practices is relatively small, and continuation of programs is dependent upon the entrepreneurial ability of program leaders to secure internal discretionary funding and external support from a variety of philanthropic sources. A need for increased formal institutional commitment was cited most frequently, in some cases framed as long-term commitment (given other issues and priorities), a need for more stable funding, or increased internal leadership buy-in. A number of interviewees indicated that despite clear evidence of success, their program had a relatively marginal existence within their institution/organization.

A number of exemplary practices also cited challenges associated with program monitoring and evaluation. One of the most practical challenges is tracking career paths after participants graduate from the program, but program leaders also cited a lack of time, designated funding for evaluation, and internal expertise.

Programs within academic institutions cited challenges associated with the engagement of faculty and administrative leadership. A number of programs among health professions employers also cited

---

7 WMMC Family Practice Residency (II.B.3), SCVMC Family Practice Residency Community Immersion Program (VI.2), UCSF-Fresno Latino Center for Medical Education and Research (II.A.1), California Dental Pipeline Collaborative (II.A.4).
8 California Dental Pipeline Collaborative (II.A.4).
9 UCI Prime-LC (V.1), UCLA Students of Color in Public Health (V.2), ELAC Bridge to Nursing (IV.1), UCR Medical Scholars Program (II.A.2).
10 UCSD National Center for Leadership in Academic Medicine (VII.2).
11 LLU Office of Diversity (I.1), UCSF Chancellor’s Advisory Committee on Diversity (I.2), UCB Berkeley Diversity Research Initiative (VII.1), WU COMP Advisory Committee (I.4).
12 Aetna Diversity Alliance (I.3).
13 SU SOM Pediatric Advocacy Program and Scholarly Concentration in Community Health and Public Service (VI.1), USCSd Community Health Programs (VI.3).
14 Making the Case for Diversity, J.W. Vine Medical Society (II.B.2).
15 California Post-Baccalaureate Consortium (II.A.3), FCC Future Nurses (II.A.5), UCB Biology Scholars Program (II.A.6), CSUS SEE and STEM Initiative (II.A.7), SFSU/SFCC Community Health Works and Welcome Back Center (II.A.8), CHRCD Faces for the Future (II.B.4), UCSD National Center for Leadership in Academic Medicine (VII.2).
16 UCR FastStart and Medical Scholars Programs (II.A.2), UCLA Students of Color in Public Health (V.2), SCVMC Family Practice Residency Community Immersion Program (VI.2).
17 JVS Nursing Career Ladder Initiative (II.B.8), ELAC Bridge to Nursing Program (IV.1), SU SOM Pediatric Advocacy Program and Scholarly Concentration in Community Health and Public Service (VI.1), UCSF-Fresno Latino Center for Medical Education and Research (II.A.1).
18 KP-SEIU Career Mobility Program (II.B.7).
19 CHS Health Workforce Transformation Program (II.B.6), Sonoma County Healthcare Workforce Development Roundtable (II.B.9), JVS Nursing Career Ladder Initiative (II.B.8), CHRCD Faces for the Future (II.B.4), UCSD National Center for Leadership in Academic Medicine (VII.2).
20 UCR FastStart and Medical Scholars Programs (II.A.2), USCSS Community Health Programs (VI.3), California Post-Baccalaureate Consortium (II.A.3), UCB Biology Scholars Program (II.A.6), UCB Berkeley Diversity Research Initiative (VII.1), SFSU/SFCC Community Health Works and Welcome Back Center (II.A.8).
challenges associated with the engagement of academic institutions. Others cited difficulties in the recruitment of UR faculty and all nursing programs cited shortages of faculty as a persistent challenge.

Also among nursing programs, a number of hospital partners cited challenges associated with a lack of retention of RNs (up to a 40 percent loss) after the initial two years of required service, most often attributed to a lack of affordable housing in the area. It is important to note, however, that these investments by hospitals and the resulting increase in UR RNs in regional markets by hospitals represent an important community benefit contribution.

While the impact of Proposition 209 was cited as an obstacle to more substantial progress, a number of interviewees indicated that much could be accomplished with leadership and innovation.

**Lessons for Replication**

The most common and important factor cited by interviewees is early buy-in and strong support from key leaders, with some emphasizing the importance of buy-in at multiple levels. Visible support and resources from key leadership send a clear message and provide the sense of security needed to build successful programs and practices.

Interviewees also cited the importance of partnerships, with one describing it as creating a local web of support. A number of the exemplary practices focus on intersectoral engagement. Others gave particular emphasis to community stakeholders, not only as partners, but also as an external constituency that will contribute to increased institutional accountability. Still others emphasized inter-campus partnerships as a means of encouraging innovation and sustaining commitment. Interviewees encouraged careful selection of partners and frequent communication, delineation of clear roles and responsibilities, and sharing credit for successes.

In the development of programs and practices, interviewees identified the importance of careful planning, clarity of purpose, strategic focus (i.e., don’t get spread too thin), and flexibility that allows for timely

---

21 J.W. Vines Medical Society (II.B.2), KP-SEIU Career Ladder Initiative (II.B.7), CIMH Greater Bay Area Mental Health and Education Workforce Collaborative (II.B.10).
22 UCSD National Center for Leadership in Academic Medicine (VII.2), UCB Berkeley Diversity Research Initiative (VII.1), UCI SOM PRIME-LC Program (V.1).
23 LBMMC-CSULB Accelerated Nursing Program (II.B.1), FCC Future Nurses and Paradigm Program (II.A.5), ELAC Bridge to Nursing Program (IV.1).
24 A reasonable calculation for nurses who leave the hospital after two years might involve the net costs for their training minus savings accrued during their two years of service (compared with contract nursing costs).
25 LLLU Office of Diversity (I.1), UCSF Chancellor’s Advisory Committee on Diversity (I.2), UCB Berkeley Diversity Research Initiative (VII.1), UCI Prime-LC Program (V.1), CSUS SEE and STEM Initiative (II.A.7), ELAC Bridge to Nursing (IV.1), LBMMC-CSULB Accelerated Nursing Program (II.B.1), CIMH Greater Bay Area Mental Health and Education Workforce Collaborative (II.B.10), SU SOM Pediatric Advocacy Program and Scholarly Concentration in Community Health and Public Service (VI.1).
26 Aetna Diversity Alliance (I.3), KP-SEIU Career Mobility Program (II.B.7).
27 UCSF-Fresno Latino Center for Medical Education and Research (II.A.1).
28 Sonoma County Healthcare Workforce Development Roundtable (II.B.9), KP-SEIU Career Mobility Program (II.B.7), JVS Nursing Career Ladder Initiative (II.B.8), FCC Future Nurses and Paradigm Program (II.A.5), Health Career Connection (II.B.5).
29 UCLA Students of Color in Public Health (V.2), SCVMC Family Practice Residency Community Immersion Program (VI.2), CIMH Greater Bay Area Mental Health and Education Workforce Collaborative (II.B.10), USCSD Community Health Programs (VI.1).
30 J.W. Vines Medical Society (II.B.2).
31 UCLA Students of Color in Public Health (V.2), SFSU/SFCC Community Health Works and Welcome Back Center (II.A.8), California Dental Pipeline Collaborative (II.A.4), California Post-Baccalaureate Consortium (II.A.3).
32 FCC Future Nurses and Paradigm (II.A.5).
33 JVS Nursing Career Ladder Initiative (II.B.8).
34 UCSF-Fresno Latino Center for Medical Education and Research (II.A.1).
35 UCLA Students of Color in Public Health (V.2), SCVMC Family Practice Residency Community Immersion (VI.2).
36 WU COMP Advisory Committee (I.4).
37 Aetna Diversity Alliance (I.3).
responsiveness to changes in circumstances.\textsuperscript{38} A number of interviewees also emphasized the importance of building an infrastructure that will support ongoing problem solving,\textsuperscript{39} monitor progress,\textsuperscript{40} provide oversight,\textsuperscript{41} and provide the means to build on existing assets (institutional and community) and minimize duplication of effort.\textsuperscript{42}

In summary, the exemplary practices profiled in this report provide a wealth of insights into strategies to increase diversity in the health professions. While much has been accomplished, more engagement is needed to produce meaningful results in the aggregate. Programs and practices must be increased in scale, institutions must clearly demonstrate their commitment through long-term allocation of resources, and an infrastructure is needed to foster true collaboration at the local and regional level.

Increased investment in K-12 school reform is needed, with particular focus on improving the quality of physical infrastructure, support services, materials, and instruction in urban and rural public schools. When compared with suburban public schools, which rely on a significant volume of direct contributions of more affluent parents, students in ethnically and culturally diverse low-income urban and rural communities face profound inequities in opportunity.

It is our hope that the insights shared in this report will encourage institutions that have taken the first tentative steps to expand their efforts, and inspire others to explore creative ways to make meaningful contributions in the weeks, months, and years to come.

\textsuperscript{38} UCD SOM Admissions (III.2), CHRCO Faces for the Future (II.B.4), WMMC Family Practice Residency (II.B.3).
\textsuperscript{39} UCR FastStart and Medical Scholars Program (II.A.2),
\textsuperscript{40} Health Career Connections (II.B.5), UCSF-Fresno Latino Center for Medical Education and Research (II.A.1).
\textsuperscript{41} UCSF Chancellor’s Advisory Committee on Diversity (I.2).
\textsuperscript{42} CSUS SEE and STEM Initiative (II.A.7).
Introduction

In the development of strategies to increase health professions workforce diversity, it is important to examine and learn from promising initiatives being implemented by individuals and institutions in the public and private sector. For those who seek to undertake new initiatives or strengthen current efforts, profiles of existing practices can provide a wealth of information on what works well and what doesn’t under a variety of circumstances. Increased awareness and understanding of existing efforts also provides leverage for institutional change and engagement. For those within and proximal to institutions seeking to undertake new efforts, it is important to know that increasing diversity is possible and that individuals and organizations in the field are fully engaged in making a difference.

This report provides a sampling of 33 exemplary practices undertaken by individuals and institutions to increase health professions workforce diversity. The primary purpose is to inspire and to provide insights for others who seek to undertake similar initiatives at the institutional, local, or regional level. In this way, these individuals and their partners gain the advantage of learning from their predecessors, and in so doing further advance the field. It is also intended to provide foundations and other funders with information that will guide their future investments.

It is important to note that our use of the term “exemplary practices” in this context is not intended to convey our judgment that these are the best practices of their type in the field. In essence, we are sharing exemplary practices to stimulate innovation, not to dictate a specific path that should be applied in every situation. We are confident, given both the size and complexity of the state of California and the limited time span to conduct this review that we have overlooked excellent practices that would have merited inclusion in this report. It is also important to note that we did not conduct a systematic and in-depth comparative evaluation of the programs and practices that are included in this report. This having been said, we are confident in our conclusion that these are excellent examples of definitive actions to increase health professions workforce diversity.

In our approach to the selection of exemplary practices for documentation, we were guided by key issues examined in the 2004 Institute of Medicine report entitled “In the Nation’s Compelling Interest” and the parallel report from the Sullivan Commission entitled “Missing Persons: Minorities in the Health Professions,” also published in 2004. These key issues are organized into seven parameters that provide the structure for the organization of exemplary practices in this report. They include:

- Leadership/Institutional Commitment
- Expanding the Pipeline
- Admissions
- Reduce Financial Obstacles
- Create a Supportive Environment
- Curriculum Reform
- Faculty Recruitment and Retention

The greatest number of exemplary practices documented is in section II, Expanding the Pipeline, in part a reflection of the profound complexities, challenges, and scope of potential partners who can address this fundamentally important dimension of efforts to increase health professions workforce diversity. This section is divided into two parts; one covering efforts led by educational institutions, or what we refer to as “supply side” institutions and the other covering efforts led by health professions employers and other community stakeholders, or what we refer to as “demand side” institutions. Effort was also made to cover the full spectrum of health professions and stages in the educational process.

---

43 “In the Nation’s Compelling Interest: Ensuring Diversity in the Health Care Workforce,” 2004, Institute of Medicine, Washington, D.C.
Methods

Potential case profiles were identified through a variety of referral sources, including, but not limited to the following: a) a 25-member Statewide Advisory Committee, b) over 60 group and individual key informant interviews with the leadership of supply and demand side institutions, c) a review of available literature, d) a review of grants from California funders, and e) information provided by other colleagues in the field. The general intent in the selection process was to capture unique practices in each of the seven categories, with each practice demonstrating relative alignment with specific recommendations in the Institute of Medicine and Sullivan Commission reports. Effort was also made to capture practices and associated dynamics in different geographic regions of California, as well as the type, size, and programmatic emphasis of different supply and demand side institutions.

In the interest of broad representation we made significant effort to minimize the documentation of multiple practices by single institutions. This general rule of thumb was set aside in situations where there was a gap in representation of a particular type of exemplary practice or where failure to document a second practice would represent a clear oversight. Selection was also guided by attention to the following criteria:

- Internal resources to sustain commitment
- Formal policies that codify commitment
- Accountability and oversight mechanisms in place
- Measurable impacts
- Validation by external stakeholders

Thus, we were most interested in documenting how a practice has been integrated and institutionalized as a formal commitment as distinct from being a temporary innovation dependent on soft money. While external funding may have played a role in supporting development of the innovation, institutional long-term commitment should be evident.

Selected students at three academic institutions, including Loma Linda University School of Public Health, Stanford University, and the University of California at Berkeley developed the majority of case profiles. Each student worked under the supervision of a faculty or administrative supervisor, who reviewed and edited early draft profiles. A substantial number of profiles were also developed by independent consultants and Connecting the Dots team members, with other team members providing editorial assistance. Author and editor bios are included as Appendix A.

In the development of case profiles, primary authors first reviewed written information provided by CTD staff and/or key contacts at profile institutions. Authors then conducted at least one telephone interview with institutional contacts; in most cases, additional phone and electronic communications were needed to supplement information collected through the first round of materials review and telephone interviews. Institutional contacts were then given the opportunity to review draft profiles to identify and correct errors and/or provide supplemental information.

In general, the format for the exemplary practice profiles included a) an overview and impetus for the development of the practice, b) a description of the practice, c) identification of key partners and their contributions, d) identification of specific IOM and Sullivan Commission recommendations addressed by the practice, e) key challenges associated with the development and implementation of the practice, and f) key lessons for others seeking to replicate the practice.

Each of the seven sections provides a brief overview of the issues addressed and its importance in efforts to increase health professions workforce diversity.
I. Leadership / Institutional Commitment

The honor and privilege of serving as an institutional leader comes with a responsibility to provide ongoing guidance that ensures optimal success. The definition of success is determined to a substantial degree by an institution’s mission, as well as its history, sector, functional role, and form of ownership. As society evolves, however, the most successful institutions evolve in a manner that reflects a high degree of sensitivity, responsiveness, and in some cases, anticipation of those evolutionary changes.

The leaders of the most successful institutions are able to move their organizations in the right direction, and at the right time. Moving in new directions, however, often involves some risks and pain, as practices adjust to shifts in values, priorities, and requirements. These adjustments may be embraced, ignored, tolerated, and in some cases, strongly resisted by different individuals and groups within and external to the institution with a stake in the status quo.

Responding to the societal imperative to increase diversity in the health professions requires the courage and commitment of institutional leaders to overcome both internal and external obstacles and operationalize their vision. These obstacles vary significantly, depending upon the type of institution. For example, investor-owned hospitals, health plans, and pharmaceutical companies tend to have more streamlined, hierarchal decision-making structures, and hence can shift directions more quickly than their counterparts in the nonprofit sector. At the same time, pressure from investors for optimal quarterly returns may complicate changes in direction that require deferral of near term profits in favor of projected long term gains.

The Institute of Medicine and Sullivan Commission reports both issued recommendations addressing the concept of leadership and institutional commitment, including the following:

- Develop mission statements that clearly indicate the value/importance of diversity
- Develop a comprehensive strategic plan
- Develop formal policies that codify desired institutional practices
- Develop institutional objectives and conduct departmental evaluations
- Create senior manager positions with explicit responsibilities for diversity
-Engage and train students, faculty, and staff

While the primary audience for the IOM and Sullivan Commission recommendations was health professions education institutions, they are fully applicable and equally important to demand side institutions such as hospitals, health systems, community health clinics, health plans, government agencies, health departments, biotechnology/pharmaceutical companies, and other health professions employers.

This section profiles the efforts of three health professions education institutions and one health professions employer to provide leadership and demonstrate institutional commitment to increase health professions workforce diversity.

---

45 Institute of Medicine Recommendation #2.1; Sullivan Commission Recommendation # 4.10
46 Institute of Medicine Recommendation #5.1; Sullivan Commission Recommendation # 6.2
47 Institute of Medicine Recommendation #2.2
48 Institute of Medicine Recommendation #6.1
49 Sullivan Commission Recommendation #4.11
50 Sullivan Commission Recommendation #4.12
51 Institute of Medicine Recommendation #5.2
1. Office of Diversity
Loma Linda University

Primary Author: Kimberly Jackson

Overview

The Loma Linda University Adventist Health Services Center (LLUAHSC) Office of Diversity was established in 1991 and is responsible for the recruitment, retention, and support of UR students at Loma Linda University. As one of the few unifying offices on the decentralized LLU campus, the Office of Diversity serves a dual role; to manage diversity programs and to partner with like-minded programs throughout the campus and community. Many of the programs supported by the Office specifically focus on increasing diversity in the health professions.

Impetus

In 1973, LLU established an Office of Minority Affairs on campus as a first step to enhance the experience of diverse students at LLU. According to Dr. Pollard, the Office of Diversity is the maturation of that office. In 1991, LLU appointed a Special Assistant to the President for Diversity and established the Office of Diversity that same year. The Office of Diversity continued to expand over the next several years. In 1999, the Black Alumni of Loma Linda along with the Office of Diversity launched the MITHS program, which eventually led to the similar Si Se Puede program in 2005. Finally, in January 2007, LLU launched the Leadership Excellence through Administrative Diversity (LEAD) program.

Description

Loma Linda University is a decentralized campus. Each school on campus operates independently, operating its own budget and setting its own academic standards. The Office of Diversity serves as one of the few campus offices that offer services across all schools. The Office of Diversity is funded through central administration. In addition to coverage of salaries, additional funding is allocated for program operations. In some cases, the staff directly manages campus-wide diversity initiatives; in others, the Office of Diversity offers support to initiatives led by individual schools. Examples of campus-wide diversity initiatives include:

Leadership Excellence through Administrative Diversity (LEAD) is a training program for UR faculty members who show promise as future academic leaders (initial funding provided by The California Endowment). The goal of LEAD is to build LLU’s pipeline of prospective under-represented faculty leaders by exposing them to multiple schools on campus so they have a sense of the different climates, skills and strategies necessary to lead. One expected outcome is the establishment of a collaborative, multidisciplinary pool of well-equipped potential deans. Participants are required to take on a separate project at each school and present a portfolio of their work to the Dean’s council at the end of the year. Currently, the program has two participants, one of whom is Dr. Juan Carlos Belliard, who serves as the Associate Director for Diversity in the Office of Diversity.

MITHS is a three-week summer program operated by the Black Alumni of Loma Linda (BALL) and La Sierra Universities. MITHS is an educational outreach program aimed at promising black Seventh-day Adventist high school students, exposes participants to health sciences research, university laboratory studies, patient care settings, and preparatory subjects, and administers a study skills and comprehensive learning enhancements course. While BALL fully funds and operates the program, the Office of Diversity provides administrative support.

The Si Se Puede program is a similar program to MITHS but focuses on Latino students. The program is one week long and costs $25,000 to operate. Si Se Puede students are introduced to health sciences research, laboratory studies and preparatory academic subjects, participate in learning skills enhancement programs, and are exposed to medical center and patient care areas with healthcare professionals.
Partners/Contributions

The Office of Diversity works with the following entities to support diversity in the health professions on campus:

- **Schools of medicine, nursing, dentistry, public health and allied health.** Each school has separate recruitment and/or retention programs to support UR individuals.
- **Center for Health Disparities Research (CHDR).** Funded by NIH in 2005, CHDR is a partnership between the School of Medicine and the School of Public Health. There are two components; to develop biomedical researchers in the field, and to translate research into community outreach through the development of a community outreach corps in two high school pipeline programs.
- **Versacare,** an independent foundation gave a grant of $20,000 in 2005 to launch the Si Se Puede program.
- **The California Endowment** provides funding for LLU diversity programs, including the LEAD program.
- **Latino Health Collaborative,** a 62-member group focused on health disparities and violence prevention.
- **LLU minority alumni pool** has provided program support and scholarships.

Alignment with IOM / Sullivan Commission Recommendations

The mission and programs of the Office of Diversity address the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

3.4 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health care workforce.

5.1 HPEIs should develop and regularly evaluate comprehensive strategies to improve the institutional climate for diversity. These strategies should attend not only to the structural dimensions of diversity, but also to the range of other dimensions (e.g., psychological and behavioral) that affect the success of institutional diversity efforts.

**Sullivan Commission Recommendations**

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

4.12 Health systems and HPEIs should have senior program managers who oversee: a) diversity policies and practices; b) assist in the design, implementation, and evaluation of recruitment, admissions, retention, and professional development programs and initiatives; c) assess the institutional environment for diversity; and d) provide regular training for students, faculty, and staff on key principles of diversity and cultural competence.

4.13 HPEIs should increase the representation of minority faculty on major institutional committees, including governance boards and advisory councils. Institutional leaders should regularly assess committee/board composition to ensure the participation of underrepresented minority professionals.

**Impacts to Date**

Staff identified curricular reform as a key measure of success. Last year, the School of Public Health opted to add a required health disparities course in their Master’s of Public Health curriculum in addition to an
optional disparities policy course. The Si Se Puede and MITHS programs continue to grow steadily, exposing more students every year to the possibilities within the health care professions.

Also, the decentralized offices in the medical professions schools are increasingly working with the Office of Diversity. The Office of Diversity and related programs are continuing to focus on recruiting minority students from the Inland Empire, as a significant portion of their students are currently from around the country. LLU feels that it is very important to involve Caucasian faculty in the diversity discussion with underrepresented minority faculty.

The establishment of the CHDR has created a new momentum at LLU and has enabled faculty to further establish community ties. Also, the creation of the Latino Health Collaborative, which looks to LLU as a research arm, has helped to build a critical mass of Latino leaders with strong links to the university.

Office of Diversity staff said that while they want to increase the number of UR students across the campus, there has not been a systematic effort to track enrollment patterns to date. They indicated that the near term emphasis is on increasing the quality of leadership. Nevertheless, the Office of Diversity continues to receive recognition for the programs it administers and supports.

Despite the success of LLU’s diversity programs, Dr. Pollard says he recognizes that there is still much to accomplish. “The ultimate definition of success is that at some point we would be able to say we have so embedded (diversity) in the culture that the Office of Diversity is no longer needed,” Dr. Pollard said.

**Projected Impacts**

The Office of Diversity has not documented the specific number of UR students who have matriculated to LLU as a result of these pipeline programs to date, but feedback from program staff suggests that the quality of students and their leadership has increased substantially. Si Se Puede is growing quickly and Office of Diversity staff expects that the number of students in the program will reach 50 within a few years; a significant increase from its enrollment of 15 in 2005.

**Challenges**

*Program Development, Management, and Institutionalization*

In contrast to other university offices, the Office of Diversity is busy year-round, much of staff time focused on resource development and the management of current initiatives. This has made it difficult to focus on program refinement and institutionalization. Thanks to strong internal financial support, the office is beginning to give increased emphasis to these important concerns.

*Decentralized Academic Structure*

It is difficult to bring everyone together under one theme because every school has its own independent culture. While the establishment of a centralized Office of Diversity has created a mechanism to encourage a more coordinated approach, changing historical practices will be difficult.

*Religious Affiliation and Conservative Values*

As an affiliate of the Seventh-day Adventist church, it is a conservative religious institution; discussions of race relations and social justice can be difficult to initiate. This can impede the ability to secure buy-in from key leaders.

**Lessons**

*Secure Early Buy-in From Key Leadership*

It is important to secure early buy-in from administrative academic leaders, and be proactive and persistent in sharing ideas and soliciting input throughout the process.
Build Critical Mass of Support
While it is important to draw in a sufficient volume of both external stakeholders and students to provide broad support, it is also important to strategically engage those who are willing to actively engage their communities and push the diversity agenda.

Establish and/or Support Key Stakeholder Groups
The establishment of the Center for Health Disparities Research has “created new momentum at Loma Linda” and has enabled faculty to further establish community ties. Of equal importance, the creation of the Latino Health Collaborative (which looks to LLU as a research arm) has helped to build a critical mass of engaged Latino leaders.
Chancellor’s Advisory Committee on Diversity
University of California, San Francisco

Primary Author: Margie Powers, MSW, MPH

Overview

The University of California, San Francisco’s Chancellor's Advisory Committee on Diversity (CACD) is a standing committee to advise and make specific recommendations to the Chancellor and Cabinet for campus-wide diversity issues. Interviewees cited civil rights actions on campus in the late sixties as providing the early impetus for the creation of the CACD in 1999. In 1968 the UCSF Black Caucus was created, with an early focus was equality in both the university working environment and its admission policies.

Impetus

The creation and success of the UCSF Black Caucus provided the impetus for the establishment of other ethnic and cultural associations in the following years. In 1969 the Latin American Campus Association (LACA) was organized to sensitize the UCSF community to the needs of the Spanish-speaking community, and in 1971 the United Filipino Employees’ Association (UFEA) was founded to voice its concern for the social, cultural, intellectual, and moral well being of UCSF’s Filipino community. In 1986 the Native American Health Alliance was organized by three Native American second and third year medical students in order to foster a feeling of community and belonging while at UCSF and to have support during their rigorous course of study. In 1988 the Asian Pacific American Systemwide Alliance (APASA) at UCSF was formed to address issues impacting the Asian Pacific community.

The five organizations came together in the spring of 1989 to form the Council of Minority Organizations (COMO) to foster a working relationship among the major advocacy groups, to enhance the cultural diversity aspects of the campus, and to respond collectively to issues which affect the constituents of these groups. A Task Force on Cultural/Ethnic Diversity was appointed by the Chancellor to include a broad representation of the campus community and members of COMO. The Task Force submitted 134 goals to the Chancellor in 1992. In 1995, the Chancellor appointed the Steering Committee on Diversity which reviewed the 134 goals, narrowing them down to a list of 19 recommendations around issues pertaining to faculty, staff, trainee, business subcontracting, and university infrastructure. In 1997 the Chancellor appointed a standing committee called the Committee on Diversity, which in 1999 became the Chancellor’s Advisory Committee on Diversity.

Description

The CACD’s charge is fourfold:

1) Recommend to the Chancellor specific actions to improve diversity at UCSF;
2) Advise the Cabinet on implementing the campus Affirmative Action Plan goals;
3) Serve as a coordinating body for groups or individuals concerned with diversity at UCSF;
4) Examine trainee issues related to students, residents and fellows, and post-doctoral candidates.

The CACD meets monthly, as do its topic-specific sub-committees. Membership in the CACD is by appointment, but sub-committee membership is open to anyone on the UCSF campus. The sub-committees identify priorities and related projects within their identified area of focus, bring them to the full committee for review and endorsement, and submit those approved to the Chancellor.

There are three additional standing committees representing women, Gay-Lesbian-Bisexual-Transgender-Intersex, and people with disabilities that meet regularly to formulate recommendations to the chancellor. Their goals are:


- **Women:** Examine the issues regarding the status of women at UCSF;
- **Gay-Lesbian-Bisexual-Transgender (GLBT):** Examine issues of concern to the UCSF GLBT community and make recommendations to the Chancellor's Cabinet;
- **Disability:** Examine issues on campus affecting individuals with disabilities.

To achieve the identified goals, the vision must be clear, an action plan with metrics established, and responsibilities and accountability defined. Project priorities are determined each year, with a final report and set of recommendations sent to the Chancellor. If funding is received for the projects, focused work plans and budgets are created and the programs are implemented.

Since 1995, many projects have been recommended by the CACD that were subsequently implemented. Some of the projects that have been successfully implemented include:

- Held a ½ day forum on the impact of Proposition 209 on Diversity
- Developed implementation strategies of the June 1, 2001 Affirmative Action Guidelines for Recruitment and Retention of UR Faculty
- Developed a supplemental questionnaire for academic search process reporting
- Updated vendor coding to include gender and UR status to comply with federal requirements
- Developed a SBE/SDB business services directory

**Partners/Contributions**

The CACD is divided into subcommittees; its 33 members represent a cross-section of the UCSF population including faculty, trainees and students. The members of the CACD are appointed to the Committee, but subcommittee members can participate without being appointed. The CACD also partners the other standing committees on issues of mutual interest.

The Department of Affirmative Action, Equal Opportunity and Diversity has been a valuable partner to the CACD. The Department employs the Administrative Manager of the Committee and the Department Director, who has a direct reporting relationship to the Executive Vice Chancellor, is an ex-officio member of the Committee.

**Alignment with IOM / Sullivan Commission Recommendations**

The CACD addresses the following IOM and Sullivan Commission Recommendations:

**IOM Recommendations**

5.1 HPEIs should develop and regularly evaluate comprehensive strategies to improve the institutional climate for diversity.

5.2 HPEIs should proactively and regularly engage and train students, house staff, and faculty regarding institutional diversity-related policies and expectations, the principles that underlie these policies, and the importance of diversity to the long-term institutional mission.

**Sullivan Commission Recommendations**

4.10 Diversity should be a core value in the health professions. HPEIs should ensure that their mission statements reflect a social contract with the community and a commitment to diversity among their students, faculty, staff, and administration.

6.2 HPEIs and health systems should have strategic plans that outline specific goals, standards, policies, and accountability mechanisms to ensure institutional diversity and cultural competence.

**Projected Impacts**

After spending two years assessing the success of various diversity programs and committees on campus, ten key outcomes were identified for accomplishment in 2007. For each outcome, a campus leader is charged with implementation. The ten key outcomes include:
1. Implement comprehensive communication program and diversity webpage.
2. Establish faculty database for conducting faculty searches.
4. Develop comprehensive plan for staff recruitment and retention.
5. Develop comprehensive program promoting diversity among trainees.
6. Develop preliminary set of proposals on accountability and incentives.
7. Recruit director of academic diversity.
8. Establish coordinated outreach program.
9. Establish school-specific plans.
10. Incorporate recommendations from the Strategic Planning Initiative.

The 10-Point Initiative was established to relate to Strategic Planning Initiatives that were developed over the past year and to set a clear timetable for implementation. Prior to the 10-Point Initiative, there was a belief that recommendations from Advisory Committees to the campus leadership were not always acted upon. In response, the Initiative began a process to address this concern through setting timetables and doable goals. The Initiative also empowered the Executive Vice Chancellor and Provost to establish accountability at the appropriate offices on campus.

**Challenges**

**Committee Leadership**
Until recently, both the CACD and a parallel Executive Diversity Committee were guided by the same experienced leader. The Executive Diversity Committee was composed of Vice Chancellors, School Deans, and the medical center CEO, and met regularly to review CACD’s progress toward goals. Over the past few years, leadership has changed substantially and the Executive Diversity Committee was discontinued. While strong leaders are again in place in the CACD, progress slowed during the transition period.

**Program Implementation**
The CACD develops priorities and makes recommendations, but does not implement programs. Other departments are responsible for obtaining funding and implementing CACD recommendations. To minimize the potential for a disconnect, a part time faculty member has been hired to serve as “Director of Academic Diversity”—a position that will assure ongoing planning, development and implementation within the Committee.

**Lessons**

**Centralize Committee Ownership**
Given the wide number of Committee and sub-committee participants, there is a high need for a centralized organizing structure to manage the myriad goals and work streams of the CACD. The CACD has an extremely strong and experienced person in place that provides staff support to the Committee, assists in coordinating meetings, and as a 37-year employee of UCSF, provides valuable insight into the Committee planning process.

**Chancellor Involvement**
The CACD involves people from all levels of the university, including the Chancellor. One of the Chancellor’s top three goals is improving diversity at UCSF, and his support has been invaluable to the Committee. The Chancellor has demonstrated his commitment to diversity in a variety of ways, including attending the CACD trainings along with the other Committee members and supporting annual campus-wide diversity celebration events. This lends credibility to his participation and delivers a strong message that diversity is important at the highest level of the university.
Overview

Aetna’s leadership to increase diversity stands as perhaps the most definitive and consistent demonstration of commitment among private sector employers we examined in the course of this statewide inquiry. The role of senior leadership in “setting the tone” for the organization has been well embodied in the work of Executive Chairman John Rowe, who served as a member of the Sullivan Commission, and Ron Williams, Aetna’s Chief Executive Officer and President.

This profile will summarize a variety of diversity-related initiatives at Aetna, but focuses particularly on an organization-wide committee entitled The Aetna Diversity Alliance. The Alliance was formed in 2004 to raise awareness and leverage diversity efforts throughout the organization. The Alliance is led by a 30-person, multi-disciplinary Diversity Board that is drawn from leaders at all levels from throughout the organization, and is chaired by Aetna’s Chief Executive Officer. The purpose of the board is to hold leaders accountable and to provide general oversight on progress and areas requiring additional focus.

Impetus

The Alliance was formed in 2004 in recognition of the need to take optimal advantage of the passion and commitment of an increasingly diverse employee workforce. Given this growing diversity among the internal workforce, the need for definitive efforts to increase understanding of different perspectives, backgrounds, and experience is viewed as essential to foster optimal productivity. In doing so, the Alliance is responsible for both elevating the dialogue throughout the organization and embedding associated practices and objectives into Aetna’s business goals and strategic plan.

Impetus for the establishment of the Alliance was also provided by recognition of the need to be responsive to the growing diversity among Aetna members and potential future members in emerging markets across the country. Internal inquiries indicate that a sizeable percentage of Aetna members speak languages other than English such as Spanish, Mandarin, Korean, or Vietnamese in their home.

Description

There are a variety of diversity-related activities underway at Aetna. Many of these activities preceded the formation of the Alliance, but are now supported and/or coordinated through the efforts of the Alliance.

One Aetna diversity-related product that preceded the Alliance is an African American History calendar. For over 26 years, the calendar has highlighted individuals who have overcome challenges to provide leadership in their communities and beyond. For the last five years, the calendar has focused on the contributions of African Americans to health care. One of the early products of the Diversity Alliance is a Diversity Annual Report, which summarizes key accomplishments and commitments over the previous year.

Over the last 10 years, Aetna has established employee networks for seven groups, including African American, Latino, Native American, Asian, women, working mothers, and Gay, Lesbian, Bisexual, and Transgender employees. These networks provide opportunities for shared learning across the organization and support employee efforts to partner with and give back to their communities. Examples of outreach activities sponsored by these networks include the “adoption” of a local elementary school in Albany, Ohio to mentor and increase writing skills, and an educational summit for Latino high school and college students to encourage and support the pursuit of higher education and career development. In response to the creation of the Diversity Alliance and Employee Networks, a number of Aetna departments across the
nation have established their own diversity councils to increase awareness and support engagement at the local and regional level.

Perhaps one of the most important diversity-related activities undertaken at Aetna since the formation of the Alliance is the Employee Commitment Inventory Survey, which examined the link between how employees are treated, the organizational culture, and the level of commitment and effort in the workplace. Specifically, the survey examined employee experiences such as a lack of recognition, stereotyping, unjustified criticism, demeaning treatment, and acts of incivility, among others. These kinds of behaviors are understood as the symptoms of underlying problems that need to be addressed to foster optimal productivity. The findings from the survey indicated a potential savings of nearly $600 million on an organization-wide basis through increased productivity and reduced turnover.

In response to this survey, Aetna leaders are in the process of scheduling executive level training, and conducting focus groups and key informant interviews to increase understanding and develop strategies to improve behaviors in the future. They are also developing an enterprise diversity curriculum for managers.

Performance on diversity-related standards is measured on an annual basis for all employees at Aetna through the integration of a diversity metric into employee self-evaluation forms. As described by Aetna leaders, employee actions associated with this metric have a direct bearing on salaries and bonuses. Moreover, the metric is adjusted on an individual basis each year to ensure that continuing progress is made. In essence, the “bar is raised” in recognition of the need for ongoing attention and a focus on continuing improvement.

Each Aetna employee is also required to do web-based diversity training on an annual basis, which focuses both on increasing awareness and addressing the business case. In addition, Aetna holds a “Diversity in Action” lecture series each year that brings outside speakers into the workplace.

In 2006, Aetna created a program called Diverse Discoveries, which provides coaching and customized leadership education for employees of color. As noted by one employee, “Being part of diverse Discoveries program opened a lot of doors for me. Knowing the program had the backing of Ron Williams made everyone comfortable reaching out to people in other areas for information and advice.”

While the survey and the diversity metric focuses on diversity in the workplace, Aetna is also engaged in efforts to demonstrate their commitment to diversity in the external marketplace. One area of focus is reducing health disparities. Examples of efforts to date include, but are not limited to the following:

- Regional community grants program – have awarded $11 million for regional programs to reduce disparities since 2001
- Awarded $400 thousand to Latinos in Philanthropy (funders collaborative), which has helped the group to raise over $19 million, with a target of $50 million in the next five years.
- Quality of Care Grants Program – In 2005, $2.25 million was awarded to 14 nonprofit organizations in communities across the country.
- Care management programs specially designed for population groups who experience health disparities – Just completed a yearlong assessment of a hypertension disease management program for African Americans in partnership with the Morehouse School of Medicine.
- Launched a web-based program in collaboration with the organization 100 Black Men of America entitled Health Power 2006 that promotes healthy lifestyles among the organization’s 10,000 members.
- Produced a video entitled “Closing the Health Care Gap – Aetna’s Call to Action” to highlight the issue of disparities.

Aetna is also engaged in a variety of efforts to support higher education and career development among communities of color. Examples include, but are not limited to the following:

---

- Partnership with Hispanic Association of Colleges and Universities – Sponsored 20th annual conference
- Alliance with the Thurgood Marshall Scholarship Fund – Sponsored four day career development conference, provided speakers, and recruited African American candidates for internships and employment
- Ongoing recruitment at minority colleges and presentations at minority professional associations

Aetna has established an Emerging Markets organization that focuses on the development of working relationships with a wide array of cultural organizations, providing consulting services to develop and expand an infrastructure that will support the provision of culturally competent services and strengthen their market presence. Considerable effort is made to build working relationships with minority- and women-owned businesses through mechanisms such as targeted funding of sourcing professionals to identify minority and women-owned supplies, and encouraging non-minority owned suppliers to subcontract with minority- and women-owned businesses. In 2006, Aetna made $75 million in direct purchases from minority- and women-owned businesses, representing seven percent of total direct purchases. A program was initiated in November 2005 to invest up to $100 million in minority- and women-owned businesses.

**Partners/Contributions**

As indicated in the description above, Aetna has engaged a wide array of organizations as partners in efforts to increase diversity, including institutions of higher learning, professional associations, funders, community and advocacy organizations, health care provider organizations, government agencies, and legislative bodies.

**Alignment with IOM/Sullivan Commission Recommendations**

The Aetna Diversity Alliance addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

3.4 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health care workforce.

7.1 Additional data collection and research are needed to more thoroughly characterize UR individual participation in the health professions and in health professions education and to further assess the benefits of diversity among health professionals, particularly with regard to the potential economic benefits of diversity.

**Sullivan Commission Recommendations**

2.6 Key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers.

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4.12 Health systems and HPEIs should have senior program managers who oversee: a) diversity policies and practices; b) assist in the design, implementation, and evaluation of recruitment, admissions, retention, and professional development programs and initiatives; c) assess the institutional environment for diversity; and d) provide regular training for students, faculty, and staff on key principles of diversity and cultural competence.
5.3 Public and private entities should significantly increase their support to those health professions schools with a sustained commitment to educating and training underrepresented minority students.

6.1 Health systems and HPEIs should gather data to assess institutional progress in achieving racial and ethnic diversity among students, faculty, administration, and health services providers, as well as monitor the career patterns of graduates.

6.2 HPEIs and health systems should have strategic plans that outline specific goals, standards, policies, and accountability mechanisms to ensure institutional diversity and cultural competence.

As noted in the introduction to this section, there are a number of the IOM and Sullivan Commission recommendations that target HPEIs, but are also fully applicable to demand side organizations such as Aetna. As such, the actions of Aetna’s leadership and the Diversity Alliance also address recommendations calling for formal institutional policy development (IOM 2.2), developing institutional objectives (IOM 6.1), departmental evaluations (Sullivan 4.11), and engaging and training staff and leadership (IOM 5.2).

**Impacts to Date**

Aetna leadership indicate that their commitment to valuing diversity has enabled the organization to “attract and retain some of the best talent in the industry” and make important contributions to efforts to reduce health disparities. As of April 2006, of Aetna’s 30,684 employees, 29 percent are people of color, 19 percent of professional positions are held by people of color, 11 percent of senior leaders are people of color, and 25 percent of the Board of Directors are people of color.

Aetna has been recognized by the National Committee for Quality Assurance (NCQA) for being among the first health plans in the country to capture self-reported race, ethnicity, and language among members. Over five million members have voluntarily provided this information to date. More than five million members have voluntarily provided information on race, ethnicity, and language preferences.

**Projected Impacts**

Aetna interviewees identified the following projected impacts associated with the Diversity Alliance:

- Secure industry commitment for use of diversity criteria to bid on government and public sector business.
- Enhance workforce capabilities to address the needs of our multicultural/multilingual constituents.
- Provide culturally appropriate consumer experience; design products and services to meet their needs.
- Establish business relationships with diversity-related organizations and local communities to support community-based marketing and sales.
- Establish an infrastructure that supports sales efforts of employers with diverse workforces.
- Increase supplier diversity spending to fully leverage emerging business opportunities.

Aetna interviewees noted that the term "diverse" should not be a substitute for people of color of ethnic/racial minorities in the U.S. Rather, diversity applies to all groups, with the embrace of everyone’s similarities and differences yielding a strong, productive and engaged workforce. A stated focus is to make all employees understand that they play a key role -- and that they matter, regardless of their background and identity. This role is manifested both in the internal functions of the organization and in the role it plays in the larger society. As stated by one of Aetna’s consultants, “The value that Aetna places on diversity gives their employees a platform to go out and do good works in diverse communities.”

---

Lessons

Long Term Commitment
Achieving sustainable positive results and culture change is a long-term process that requires vigilance, commitment, and the institutionalization of diversity-related strategies into the business of the business.

Strategic Focus
A focus on a few important diversity dimensions is important, without totally ignoring other less visible areas is crucial. The balance achieved is key to foster full inclusion.

Inclusive Culture
A collaborative and inclusive culture allows for the full participation and contributions of an increasingly diverse workforce, maximizes productivity and better meets the needs of our customers.

Need for Incentives
A strong link to the business strategy, accountability, assessment, education, reporting, and compensation are required to execute an effective diversity strategy.

Measurement
A fully inclusive infrastructure for workforce diversity involves assessment, development and deployment of people, processes and systems.

Visionary Leadership
CEO leadership and commitment, and the full support of senior management, are essential.

Sensitivity to Emerging Markets
From a product development perspective, not all products work for all the people all the time; identifying population segments and meeting their unique needs make a difference in the marketplace.
Overview

The Advisory Board of the College of Osteopathic Medicine of the Pacific (COMP) represents a commitment to inform the mission of this health sciences academic institution through ongoing input from both graduates of the program and a variety of health professionals from the immediate geographic region. The current membership of the Advisory Board ensures that the issue of diversity will be addressed as an ongoing priority and a fundamental concern in preparing the next generation of health professionals to practice in one of the most diverse regions in the nation.

Impetus

The College of Osteopathic Medicine of the Pacific (COMP) at the Western University of Health Sciences established an Advisory Board in 2005 to provide guidance to the Dean on a variety of issues. Issues outlined in the purpose statement for the Advisory board include assistance with “emerging issues in health care,” fundraising and college growth, program evaluation, and the development and assessment of new initiatives.

Description

There are between 15 and 25 members of the COMP Advisory Board; each is appointed by the Dean in consultation with current Board members and others “with an interest in the College of Osteopathic Medicine of the Pacific.” Members include CEOs and other senior leaders of hospitals and health systems, health plans, and physicians groups, as well as other community leaders. Organizational representation is limited to one member per organization, unless there are specialized and unique skills that can be contributed by different individuals. The Advisory Board meets on a quarterly basis. Stated responsibilities include:

- Advise the Dean about strategic issues facing the College, including key opportunities and trends
- Assist with COMP fundraising
- Help promote the reputation of COMP
- Serve as a bridge between industry/business and the College
- Serve on task forces and committees as needed to address strategic issues
- Solicit and monitor feedback from COMP students, alumni, and key supporters

Perhaps the most important function of the Advisory Board is to facilitate ongoing dialogue and alignment between the priorities and needs of health professions employers and the college. As such, an important part of the dialogue focuses on how best to address the health needs of the Inland Empire and recruit the next generation of health professionals. Given the fact that this is one of the fastest growing and most diverse regions in the state of California (if not the country), a key focus is how to increase diversity in the academic environment and address health disparities in local communities. Based upon interviews with Advisory Board members, while the issue of diversity is not explicitly identified as a focus for the committee, it is discussed at length in most, if not all meetings.

---

54 COMP Advisory Board description; statement under Purpose section.
55 COMP Advisory Board description; statement under Membership section.
**Partners/Contributions**

As indicated previously, the Advisory Board members include senior leaders from local hospitals and health systems, health plans, physicians groups, and other community leaders. Since the establishment of the Board, several members have become more involved in strategic planning for Western University, providing valuable input on issues including, but not limited to the development of new programs and/or campuses, curriculum development, and residency training. In addition, Board members have helped establish links to a broad range of external stakeholders who could provide financial support for Western University.

**Alignment with IOM/Sullivan Commission Recommendations**

The COMP Advisory Board addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

3.4 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health care workforce.

**Sullivan Commission Recommendations**

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4.13 HPEIs should increase the representation of minority faculty on major institutional committees, including governance boards and advisory councils. Institutional leaders should regularly assess committee/board composition to ensure the participation of UR professionals.

**Impacts to Date**

The Advisory Board has provided input into a variety of important developmental and functional issues for Western University, and the following impacts can be directly attributed to Board member recommendations.

Board members have contributed significantly to a major educational program under development, which focuses on the creation of an inter-professional learning environment that brings together the five health sciences programs (i.e., osteopathic medicine, pharmacy, allied health, graduate nursing, and veterinary medicine) currently in place, as well as four others under development (i.e., podiatry, optometry, dentistry, and biomedical sciences).

A Board member who sits on a State University Medical School Admissions committee was able to engineer a suggested review process for all applicants’ records regardless of GPA/MCAT in order to determine if outstanding, but higher risk candidates are being overlooked. At this time the review has only called one additional recorded into question.

Since this discussion at the Board level began the continued focus on UR has resulted in Western University’s College of Osteopathic Medicine to be named to the TOP Twenty Medical Schools for Hispanics by the Hispanic Business Magazine.

Advisory Board members from the health care delivery organizations raised the sense of urgency to add Spanish language courses and or electives to the curriculum. The College will complete this change by 2009.

Board members have also provided valuable and timely input on strategies to build common understanding between osteopathic residents and non-osteopathic attending physicians in teaching hospitals.
Last, and most relevant to the inclusion of the COMP Advisory Board as an exemplary practice, the issue of diversity has emerged as a priority and focus for strategic planning in each meeting. Board members have provided valuable input and facilitated links to external stakeholders to help strengthen outreach to UR youth in the Inland Empire Region and help create a campus environment that supports diversity and shared learning.

**Projected Impacts**

The COMP Advisory Board holds the potential to strengthen the role of Western University as a major regional stakeholder that is positioned to take advantage of the rich diversity in the Inland Empire, and to do so in a manner that is sensitive to the evolving needs and priorities of the health care delivery system.

**Challenges**

**Sustaining the Engagement of Senior Leaders**

One of the challenges faced in the creation of a high level advisory committee such as this is how to sustain the engagement of senior leaders who are quite pressed with other obligations. Also important is selecting the right kinds of individuals, typically those who have a strong interest in health professions education, as well as an understanding and passion about the intersection of education, practice, and the community. One interviewee described the selection process as a bit of a balancing act, finding individuals who are at a high enough level to be in a position to influence their organization, but not so high as to be largely unavailable. Thus far, the Dean’s Office at Western has secured strong participation among very senior leaders, in part by focusing on issues of high relevance, providing high quality advance materials, and ensuring plenty of time for substantive discussion.

**Sustaining a Focus on Diversity**

The current leadership at Western University and composition of the COMP Advisory Board ensure that the issue of diversity is a priority concern at present and in the immediate future. Regional demographic trends and health professions workforce shortages combine to reinforce the need for attention to this issue. Given the breadth of possible issues to be addressed for an HPEI of this size and complexity, however, changes in the leadership and/or composition of the Board could result in diminished attention in the future. An important step to institutionalize diversity as a focus would be to build explicit language in the Board’s formal written charter, as well as other relevant issues of concern, such as addressing health disparities in the region.

**Lessons**

**Diversity in All Forms is Essential**

One of the most important aspects in the development of the COMP Advisory Board was to seek the broadest spectrum of competencies, interests, and backgrounds among leaders with a stake in the health professions. The level of diversity among Board members has led to an in depth examination of issues, often far beyond what would have been the case among a more homogeneous group of academic leaders. The Advisory Board has embraced a vision that seeks to supplant the late 20th century pattern of insular deliberation and decision making with a more open and innovative approach to health professions education.

**Clarity of Purpose**

One of the concerns of assembling a group of leaders who operate in the competitive marketplace is the potential for some to seek advantage for their interests and/or organizations. It is important to clearly articulate the purpose of such a deliberative body, and to proactively identify and avoid or manage situations where such dynamics could emerge.
II. Pipeline Investment

The term “pipeline” in the health professions arena has traditionally applied to K-12 and undergraduate education, the product of which is a pool of qualified applicants. A common lament among HPEI administrators is that the pool of qualified UR applicants is too small, and most are engaged in a competition with other HPEIs to lure these individuals through financial incentives.

The meaning of the term “qualified” has been appropriately challenged by leading HPEIs around the country as inappropriately weighted towards standardized test scores and other quantitative criteria and is addressed in section III of this report. This section focuses on the imperative for direct investment by HPEIs, health professions employers, and other key stakeholders in expanding the pipeline of UR youth in the health sciences.

This investment is essential to overcome the profound inequities in educational opportunity experienced by youth from lower income families in urban and rural communities across the country. Ideally, a substantial proportion of these inequities would be addressed through sufficient societal support for urban inner city and rural public schools; support that conveys a clear message that quality education and career development in these communities is a priority, and that these young people are valued future contributors to the economic vitality of our nation.

The shameful reality is that almost every facet of K-12 school operations, from deteriorating physical infrastructure and out-of-date (or absent) teaching materials to under qualified, poorly supported teachers and inadequate curricula tell the youth in these communities that they are not valued members of our society. Moreover, so many of these youth lack the parental guidance and social support networks that will help them navigate the increasingly complex pathway to higher education and career advancement. As has been noted by other leaders in the field, it is not surprising that dropout rates in these schools are so high; it is surprising that so many manage to overcome all of these obstacles.

Given the fact that IQ and genius is randomly distributed in our communities, society fails to take optimal advantage of the potential contributions of those who are not given the opportunity to develop and succeed. In this context, it is essential that HPEIs, undergraduate higher education institutions, health professions employers, and other key stakeholders step into the void. There are a myriad of options for investment in expanding the pipeline; this section provides 17 tangible examples, each of which outlines the approaches, impacts, and lessons for consideration by others with the commitment to make a difference.

A. Efforts Led by Higher Education Institutions

The first eight profiles represent efforts led by higher education institutions, both HPEIs and undergraduate universities and colleges. In most cases, however, there is a broad spectrum of partners that have made substantial contributions to programmatic and institutional achievements.

1. Latino Center for Medical Education and Research
K-16 Health Professions Pipeline
UC San Francisco – Fresno

Primary Author: Kimberly Jackson

Overview

The University of California, San Francisco (UCSF) Fresno Latino Center for Medical Education and Research (LaCMER) founded and operates a unique K-16 pipeline program that inspires, prepares and supports disadvantaged Central Valley youth to achieve academic goals and successfully pursue health
professions. Its stated mission is: (1) to increase the number of students who graduate from high school, go onto a university and become competitive applicants to health professional schools; and (2) to strengthen the educational pipeline of under-represented or disadvantaged populations throughout the Central Valley and encourage them to enter a health profession.

Most programs that support youth to pursue health careers focus on a single educational level (i.e., high school). The LaCMER creates a multi-level “pipeline” consisting of linked, sequential programs with comprehensive continuous academic, parental and career support from intermediate school through entrance into health professions training. The pipeline includes the Junior Doctors Academy (JDA) for seventh and eighth grade students at four middle schools, the Doctors Academy (DA) for high school students at three high schools, the Pre-medical and Health Scholars Program for undergraduates at California State University Fresno (Fresno State) and a support program for DA alumni at Fresno State and other colleges and universities. LaCMER and other UCSF departments and individuals provide support for students throughout the pipeline. Through an Early Conditions of Acceptance Agreement with LaCMER, UCSF School of Medicine makes pipeline participants’ aspiration to become a physician a realistic possibility by committing that a certain number of DA graduates who meet qualifications will be admitted to its medical school. A similar agreement has just been finalized with UCSF School of Pharmacy to offer admission to qualified DA graduates. LaCMER is continuously working to create greater support and extend its pipeline to elementary schools and to rural sites.

**Impetus**

The Doctors Academy and Junior Doctors Academy programs were the vision of and initiated largely by Dr. Katherine A. Flores of LaCMER, along with help from many others. Dr. Flores believes that her own road to and through medical school could have been less difficult with the type of support provided by the Academies; she wanted to provide that support to others. Originally, Dr. Flores envisioned starting DA at her alma mater, Roosevelt High School. However, because Sunnyside High School was recently built and located in an economically disadvantaged neighborhood, just being built and in a largely disadvantaged area, it emerged as an ideal site for the program. Because the school curriculum was still being structured, Sunnyside’s administration was able to accommodate Dr. Flores’ ideas.

Conversation about the possibility of a pipeline program began at UCSF-Fresno in 1996. By 1998, the program was being planned and Dr. Flores was seeking funding and forging partnerships with Fresno Unified School District, the Fresno County Office of Education, and county schools. The first cohort of Doctors Academy students began the program in 1999 and graduated from Sunnyside in 2003. In 2001, the first Junior Doctors Academy was established. The name Doctors Academy was chosen to set the highest expectations and to encourage students to hold the highest professional aspirations for themselves.

**Description**

**Doctors Academy**

The Doctors Academy was established in 1999 at Fresno’s Sunnyside High School. It was the vision of Dr. Katherine A. Flores, LaCMER’s Director and practicing local physician, who established a partnership with Fresno Unified School District to establish and grow the program. Sunnyside High School serves a diverse, low-income, community in southeast Fresno. As an indicator of student socio-economic status, 70 percent of Sunnyside students qualify for free or reduced lunch. The DA is operated in a close partnership with Fresno Unified and Sunnyside High School. Sunnyside High School Principal Sheryl Weaver has been involved in the DA since its inception and along with Vice Principal Angel Durazo, counselors and lead teachers, provides invaluable support to the program and students. LaCMER Education Director, Bertha Dominguez, Dr. Flores and other team members work in close partnership with the School to design and deliver the multi-faceted program and support the students.

The Doctors Academy receives 150-200 applicants per year for 40-50 opportunities for students to be part of the incoming Freshmen class DA cohort. At least 40 percent of each cohort of DA students are JDA graduates. Although Sunnyside itself is not a magnet school, the DA program attracts students from throughout the Central Valley. Approximately 40 percent of the average DA cohort is composed of students from rural areas in Fresno County. There were 32 students in the first DA graduating cohort, the
class of 2003; the class of 2011 is expected to total 45 students. Based on the Sunnyside DA’s success and the demand from students throughout the County, the DA has expanded and now offers new programs at Selma High School and Caruthers High Schools, two small rural communities located 20 miles south of Fresno. The combined DA Programs currently have 198 students.

To gain admittance to the DA program, students must submit a formal application, personal statement, and two letters of recommendation. They also must hold and maintain a GPA of 2.8 or better. After completing the sophomore year, students and parents are required to apply for a recommitment to the program.

In order to introduce economically and educationally disadvantaged students to medical career opportunities, the DA comprises a comprehensive curriculum of academic preparation, job shadowing, career exposure, test preparation, and summer programs. DA students are required to enroll in Sunnyside’s honors and Advanced Placement (AP) classes, attend organized college campus visits, and participate in summer school programs, including Leadership, Summer Health Careers Course, and a Summer Research Methodology & Clinical Site Internship. In addition, DA students each receive 20 hours of SAT preparation. A very important component of DA student preparation is the Advancement Via Individual Determination (AVID) curriculum that all students take. AVID empowers the students with note taking and study and analytic skill set development, both of which enhance their performance and confidence and provide essential tools for success in college. The DA-AVID course is the only course at Sunnyside that is not open to non-DA students. In its history, no DA student has dropped out of high school. One of the DA’s strengths is that teachers, parents, principals, LaCMER staff and counselors are all engaged in supporting and monitoring student progress and are able to intervene quickly and effectively as needed.

Parents of DA students play a key role and are actively engaged in the program from the start. There are numerous activities in which DA parents are involved, including a required parent empowerment program facilitated by DA and UC Merced. The series of seven evening courses assists parents with understanding how to support their children’s academic success and provides information on how to prepare for college admission and access financial aid sources.

The majority of DA graduates attend a University of California school or Fresno State; a slight portion attends private or out-of-state universities. In the 2006 cohort, 6 percent of graduates opted to go to community college.

Junior Doctors Academy
The Junior Doctors Academy, established in 2001, is a similar program aimed at seventh and eighth-graders. While the intention is for students to filter into the DA program after completion of the JDA, this is neither a requirement nor a guarantee. Approximately 40-50 percent of JDA students go on to the DA program. The JDA program focuses on increasing awareness of health-related professions and academically preparing students for high school. JDA students achieve these goals through tutoring, field trips to universities and colleges, and primary care facilities, providing community service, and attending lectures given by guest speakers in the health workforce. Additionally, JDA students in eighth grade are invited to a one-week summer enrichment program at Fresno State.

Like the parents of DA students, JDA parents are also expected to be involved. JDA parents are invited to attend the bi-annual Medical Mania Conference and the parent empowerment meetings that are held each semester. Four different schools host a JDA: Sequoia, Kings Canyon, Terronez, and rural Washington Colony. While all the middle schools administer the same basic JDA program, each school has its own customized program.

The Pre-Medical and Health Scholars Program at Fresno State provides support for college Freshmen and Sophomores interested in pursuing careers in Medicine, Dentistry and Pharmacy. The program includes academic advising and support with an emphasis on success in science coursework. Students are also provided MCAT, DAT or GRE test preparation courses. This program is a smaller scale replacement for a comprehensive Health Careers Opportunity Program (HCOP) that had been operated for Fresno State undergraduates but that had to be closed when HRSA eliminated HCOP funding. Parents also participate in the college program.
The LaCMER staff also provide academic and career support for DA alumni attending colleges outside the area and are now offering an on-line MCAT preparation course. Very few “pipeline” programs provide support to students from intermediate school through Medical School. The same central support staff runs the LaCMER programs across the levels to ensure that support of students throughout the pipeline is continuous and consistent.

**Partners/Contributions**

Partnerships with School Districts, school principals and teachers, parents, local health organizations and practitioners, Fresno State and UCSF are key to success to date. Examples include:

- Fresno Unified School District has provided staff support to start and operate the DA and JDA programs. The MOUs for the Programs are with each School District.
- DA and JDA School partners are responsible for student performance and decisions. LaCMER collaborates with schools on program design, curriculum and operations, and has significant influence on the program’s operations, but cedes a fair amount of credit and authority to the school district. LaCMER staff meet weekly with principals and teachers from high schools, where they discuss issues ranging from the progress of individual students to long-term planning. LaCMER meets monthly with middle school teachers and visits each site each week, working one-on-one with teachers and students.
- Selma Unified School District and Caruthers School District (Fresno County hosts rural DA programs).
- The LaCMER Partnership for Health Professions Education Council includes the Superintendent of the Fresno Unified School District, Superintendent for Fresno County Office of Education, President of Fresno State University, CEOs from local hospitals, community clinics, and other members. The Council meets biannually and focuses on how to increase UR representation in the health professions pipeline. Dr. Flores also sits on the board of several partner organizations, in part to strengthen the relationship with LaCMER.
- The California Endowment (TCE), The California Wellness Foundation, the Office of Statewide Health Planning and Development (OSHPD), Kaiser Permanente, and Wells Fargo Bank provide funding for various aspects of the DA and JDA programs. For example, TCE provided the initial transportation funding to LaCMER for students who live outside of the school district. These partners stepped up to provide essential funding when HRSA HCOP funding was eliminated.
- UCSF School of Medicine has a memorandum of understanding with LaCMER to give consideration for early admission to two DA graduates who enroll at Fresno State and declare an interest in medicine. These students must achieve a minimum of a 3.6 GPA and score an average of 10 on the MCAT. Although the MOU stipulates that two DA graduates will be selected for this program each year, the School of Medicine has extended this award to five students each year. UCSF also provides in-kind staff and facilities support.
- Numerous local physicians, dentists, psychologists, physical therapists, nurses, and community health partners support the program in many capacities, including serving as mentors, speakers, and role models; they have also provided donations towards scholarships.
- Local hospitals, health centers and other health organizations provide opportunities and internships for students and have provided financial support.
- Parents are a key partner in the program as previously described.

**Impacts to Date**

The goal of these pipeline programs is to increase the number of minority health care practitioners in the Central Valley. Dr. Flores stressed, however, that different stakeholders have different definitions of success. For example, LaCMER defines success as 100 percent acceptance to four-year colleges for all DA students. Fresno Unified School District, meanwhile, defines success as 0 percent high school dropout rate among DA participants, higher grades compared to a control group, leadership in schools, and a heightened interest in AP classes at the schools. By comparison the drop out rate at Sunnyside High School is 50 percent. LaCMER has found that parents define success by the maturity, good behavior and academic accomplishments of their children, while the students themselves feel success is driven by their sense of accomplishment and self-esteem.
While the long-term impact of this program remains to be seen (the first DA graduating class was in 2003), the near term impact has been significant. Over 120 students have graduated from the Doctors Academy program. Of these students, 97 percent are enrolled in a university or college. Eighty-two percent of these students still consider themselves interested in the health professions. While the ultimate career decisions of these students are unknown, one student is in medical school and four students from the first DA cohort are now applying to medical school.

In order to track DA alumni progress, LaCMER conducts follow-up interviews with past participants in the form of annual surveys, roundtable events, and individual emails. LaCMER encourages alumni to return to work in the Central Valley after their health training is completed. LaCMER works with area health organizations to offer summer internships and service-learning opportunities for college students, and also emphasizes keeping alumni connected with the program and the community after leaving the area. “We call it ‘the loop’. We emphasize how important it is to give back and come back to the community. We are trying to create that bread crumb trail for them follow back,” said Bertha Dominguez, Education Director for LaCMER.

The majority of DA graduates return to the Central Valley during their breaks from school. With the help of a recent grant from The California Endowment, LaCMER is in the process of developing and implementing an alumni support program intended to evaluate DA alumni progress and provide ongoing support and resources to them. Specifically, LaCMER launched an alumni Web site, providing academic and career counseling services, creating additional service learning and shadowing opportunities, continuing parent engagement programs to ease the transition from home to college, and hosting a free online MCAT preparatory course for alumni to access remotely. It is LaCMER’s hope that keeping alumni connected to the program and to the Central Valley will encourage them to serve in the community and ultimately impact the health outcomes of its residents.

The DA changes the lives of the students in the program and has a powerful impact on parents, other family members, other students and the community. The annual graduation ceremony and other events inspire all and let people know that it is possible for students to graduate, go to college and realize their health career dreams.

**Alignment with IOM/ Sullivan Commission Recommendations**

The programs of the Latino Center for Medical Education and Research address the following Sullivan Commission recommendations:

**Sullivan Commission Recommendations**

4.1 Health professions schools, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4.7 Colleges, universities and health professions schools should support socio-economically disadvantaged college students who express interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

**Challenges**

**Loss of Title VII Funding**

Due to previous funding issues, LaCMER was forced to cut the middle school JDA coordinator position, as well as discontinue financial support to the Fresno State Health Careers Opportunity Program. In 2003, LaCMER’s application for a HRSA grant was rejected, putting the entire DA and JDA program in doubt. However, LaCMER, the Fresno Unified school district, and their community partners came together and were able to sustain the program for one year. In 2004, LaCMER reapplied for the grant and received
funding for three years. However, in 2005, the federal government cut the HCOP funding nationally and LaCMER has had to seek other private sources of funding. If LaCMER were to receive additional funding, they would like to expand the existing programs regionally and offer support at the elementary school level.

Differential Impacts upon Local Schools
LaCMER staff reports that some rural schools express concern that they have lost some of their best students to Sunnyside High School because of the DA program there. The launch of two new DA programs at rural high schools will hopefully help to alleviate this problem.

Going to Scale
LaCMER staff report that the most common complaint they hear about the DA and JDA programs is that not enough students are accepted. Not only is LaCMER unable to admit more than the current number of students due to budget considerations, but the programs are limited to economically and educationally disadvantaged students. According to Ms. Dominguez, parents of students who apply but do not qualify for the program due to their more comfortable financial situations are often disappointed that they cannot participate. In response to this criticism, LaCMER staff report that a significant portion of the academic DA program—AP classes—are available to all students enrolled at Sunnyside. Since the focus of the programs is to academically prepare students for college and beyond, these classes are a cornerstone of the DA program that can be accessed by all.

Lack of Male Students
Since the DA program is about 70-80 percent female, LaCMER staff caution that recruiting male students can be a challenge. Being a “smart kid” can be a negative brand among some teenage groups and it is necessary to address this challenge. Some female students mentioned that male students seem to have trouble committing to a four-year program.

Lessons
Sharing Credit Among Partners
For the staff at LaCMER, strong partnerships have been key, especially with teachers and administrators at the site schools. Dr. Flores cautions other organizations that might try to implement a program similar to the DA and JDA that sometimes it is best to keep quiet when another party is taking credit for your hard work. She noted that often, the success is your partners’ but the problems are yours.

Importance of Public Recognition for Graduates
Additionally, LaCMER staff stressed the importance of the graduation ceremony. For the DA program, over 500 people are in attendance, including CEOs of local hospitals. Other community partner representatives attend as well. The event is the highlight of the year for students, parents and community partners.

Operational Infrastructure
A key issue is having a dedicated team and infrastructure of sufficient size for the scale of the program. Capable, caring LaCMER leadership and team members put their heart and soul into the program and students and make the significant time needed to develop and maintain effective partnerships.

Parental Involvement
LaCMER staff alluded to the importance of involving parents in the JDA and DA programs. The trust, cooperation and participation of parents are integral to students’ success and must be gained by program staff and school instructors. The ripple effects of motivation and self-esteem through families and communities can be powerful. “The name “Doctors Academy” speaks for itself in terms of higher aspirations. “What higher motivation and aspiration can you ask of a student?” said Ms. Dominguez.

Diversity of Funding Sources
The DA and JDA programs receive funding from various avenues, including The California Wellness Foundation, The California Endowment, Kaiser Permanente, State of California Office of Statewide Health and Planning Development, Wells Fargo Bank, and of course, UCSF Fresno’s LaCMER. A significant portion of administrative costs and overhead are line items in the UCSF Fresno budget. Summer programs
receive in-kind support from local hospitals and Fresno State. The total cost to run the DA is approximately $250,000 per year, and the JDA program costs nearly $100,000 per year.

Create a Local Web of Support
As noted earlier, Dr. Flores develops partnerships with local hospitals, community clinics and universities by sitting on their boards, and inviting stakeholders in the Central Valley health professions and education communities to sit on the Partnership for Health Professions Education Council. Developing these relationships and creating a web of support for LaCMER’s goals is an integral part of their sustainability strategy; the more support in the community that LaCMER has for its programs, the more the programs can expand and be protected from budgetary challenges.
Overview/Impetus

FastStart was launched in 1999 to help students from disadvantaged communities overcome the academic and learning challenges they incur when they enter college.

Medical Scholars Program (MSP) began admitting students in the mid-1970s as a highly selective program that enabled UC Riverside students to complete a combined BS/MD degree in seven years. The program underwent fundamental redesign in the early 2000s and admitted its first cohort of students in 2005. Development of the successor program was prompted by the California legislature’s demand that the Riverside campus meet the needs of its local and regional population by increasing the diversity of medical and health professions students and supporting them to achieve their academic and career goals (see J.W. Vines Medical Society profile).

Description

These programs reflect the Division of Biomedical Sciences’ mission “to prepare graduates for distinguished medical careers in service to the people of California with emphasis upon the needs of the underserved, inland, and rural populations.” These two programs are profiled together because they establish the means for ongoing support throughout a student’s undergraduate years. To date, 100 percent of students who participate in FastStart also seek admission to the Medical Scholars Program when they enter the University of California, Riverside (UCR).

The Division of Biomedical Sciences offers a third, unique program in conjunction with the David Geffen School of Medicine at UCLA. Founded in 1974, the UCR/UCLA Thomas Haider Program in Biomedical Sciences provides a pathway to medical school for 24 UCR students each year. Students accepted into the Haider program take the first two years of their medical education at UCR and the remaining two years at UCLA. They receive their MD degree from UCLA. While the UCR/UCLA program is not discussed in this profile, it is an essential part of the history and landscape of FastStart and MSP. Both programs demonstrate UCR’s commitment to enhancing options for UR students and creating the conditions for them to succeed in college and beyond.

FastStart is an intensive, residential, five-week program for incoming UCR freshmen who aspire to medical and other science-based careers. Instruction is offered in the gateway sciences, such as math, biology, and chemistry—courses considered foundational to success in health professions education. In the most recent cohort for which data are available, 93 percent of FastStart students were from UR groups. All students accepted into the program receive full scholarships.

FastStart’s goal is to increase the number of disadvantaged students who pursue careers in the sciences and health professions and to provide the academic and social support needed to help students persist and succeed in their higher education goals.

Admissions preference is given to students from disadvantaged backgrounds as defined by the University of California system, whose second language is English, who are the first members of their family to attend college, and who indicate a commitment to a health science career. Although all incoming UCR students may apply to FastStart, approximately 24 students are accepted each year. The size of a typical applicant pool is 120 students.
Medical Scholars Program is an ongoing, four-year support system and rigorous academic program for students who are under-represented in the health professions.

MSP’s mission is to increase the diversity of UCR students who succeed in their baccalaureate training and achieve their goal of entering medical school, postgraduate training in an allied-health field, or graduate school.

Admission is based on financial need, commitment to the goals of the program, community service, interest in helping the underserved populations of the Inland Empire and California, and interest in a graduate or professional career in a health-related field. The program does not rely on traditional academic criteria for acceptance. Neither are additional fees charged for special services and courses. MSP is open to all students regardless of major.

Program faculty and administrators are deeply committed to students’ success. “Once accepted a student is in MSP for life and will not be kicked out, not even for less-than-perfect grades,” stated the program’s director. Internships, participation in time-management and test-taking workshops, paid summer research experience, seminars on health care, and opportunities to interact informally with senior faculty and community physicians further enhance the program. As one staff member explained, “We free their [students] mind to learn.” In addition, the program sponsors preparation courses for medical, dental, and graduate school entrance exams.

Students, too, play an integral role in their classmates’ success. They may meet during the early weeks of FastStart and matriculate into MSP together, forming tight bonds of academic and personal support. They buoy each other up during rough times and celebrate together. As in many communities, one person’s triumphs become a victory for the group. One’s peers may be quicker to recognize the signs that one is having personal or academic difficulties than a faculty member or advisor, thereby ensuring that appropriate and timely help is sought. The cohort experience offered by both programs is vital to their effectiveness. Loyalty to MSP also binds first-year students and seniors preparing to graduate.

Students have a space of their own that they refer to as the “community center,” equipped with personal computers, a refrigerator, and a comfortable lounge. A single mother in MSP started a support group for other MSP mothers, which meets at the center. Another student started the “humanitarian aid group” that secures corporate funding to enable local nonprofit groups to conduct outreach with marginalized communities. The community center helps to build group solidarity and encourages students to take care of themselves and reach out to and beyond the wider Riverside community.

Neither FastStart nor MSP are traditional bridge programs to medical school. Indeed, many program activities are designed to impact students’ lives beyond the classroom by directly engaging senior faculty and members of the community, including students’ families and friends, as well as by providing mentoring, specialized counseling, leadership training, and career advisement. These programs are neither remedial nor deficit focused, but asset-based. “Each student is taken from where he or she is and we build from there,” stated a member of the staff.

Partners/Contributions

Both MSP and FastStart have community outreach and service learning components. The Division of Biomedical Sciences’ network of over 40 physician-preceptors from the community mentors students and provides internship opportunities. Community partners include:

- Community Health System (operates four clinics)
- Kaiser Riverside and Kaiser Moreno Valley
- The Clinical Care Extender Program operated by Riverside Community Hospital. This program enables students to partner with nurses in patient care areas and complete one thousand hours of community service over the course of a year.
Alignment with IOM / Sullivan Commission Recommendations

FastStart and the Medical Scholars Program address the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

2-3 Admissions should be based on a comprehensive review of each applicant, including an assessment of applicants’ attributes that best support the mission of the institution.

5-1 HPEIs should develop and regularly evaluate comprehensive strategies to improve the institutional climate for diversity. These strategies should attend not only to the structural dimensions of diversity, but also to the range of other dimensions (e.g. psychological and behavioral) that affect the success of institutional diversity efforts.

5-4 HPEIs should be encouraged to affiliate with community-based health-care facilities in order to attract and train a more diverse and culturally competent workforce and to increase access to health care.

**Sullivan Commission Recommendations**

2.5 HPEIs should work to increase the number of multi-lingual students, and health systems should provide language training to health professionals.

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4.4 Baccalaureate colleges and HPEIs should provide and support “bridging programs” that enable graduates of two-year colleges to succeed in the transition to four-year colleges.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

4.9 Dental and medical schools should reduce their dependence upon standardized tests in the admissions process. The Dental Admissions Test and the Medical College Admissions Test should be utilized, along with other criteria in the admissions process as diagnostic tools to identify areas where qualified health professions applicants may need academic enrichment and support.

4.10 Diversity should be a core value in the health professions. Health professions schools should ensure that their mission statements reflect a social contract with the community and a commitment to diversity among their students, faculty, staff, and administration.

**Impacts to Date**

One hundred and seventy-five students have participated in FastStart. Only two students have dropped out since the program’s inception. As of spring 2007, one hundred percent of FastStart participants had been admitted to the successor MSP. One hundred and seventeen FastStart students have graduated from UCR; fifty-six are still completing their degrees. Seventeen percent of FastStart graduates (n = 20) have matriculated at a UC medical school. The program only tracks students accepted at University of California medical schools; thus, information about students who take their medical training elsewhere, continue their training outside of medicine, or pursue other careers, is unavailable.

The Medical Scholars Program has not yet graduated its first cohort of students (the class of 2009), so complete student outcomes data are not yet available. However, the program’s success is exemplified by a student whose GPA increased from 1.3 to 3.3 over the course of two quarters. Another indicator of the
program’s success is that five of seven 2006 graduates were accepted to medical school. Program staff caution against tracking the number of students entering medical school as the sole measure of program success because the majority of MSP students start with a low GPA.

**Projected Impacts**

- Expand FastStart and MSP pipeline activities with the development of the new UCR medical school.
- Strengthen MSP relationships with community colleges to create a seamless transition for transfer students. To accomplish this goal faculty will take an active role in advising prospective UCR students while they complete their general education requirements. According to one administrator, an advantage of this outreach is that “students received in MSP would immediately have a community, thus alleviating some of the uncertainties and difficulties associated with being a transfer student.”
- An ethnographer (sociologist) has been retained to study student success and identify problems faced by students that are not addressed by the program and more effective approaches to advisement.

**Challenges**

**Secure Stable Funding**
Financial constraints are ever-present. Program leadership acknowledges the need to diversify funding sources and continue to be engaged in grant writing and developing other resources with community partners. The Division of Biomedical Sciences has been the sole source of internal funding for FastStart and MSP. A $1.6 million, four-year grant from the Howard Hughes Medical Institute, which ends in 2010 but may be renewed, and funding from The California Endowment and other private sponsors could complement the programs’ current support.

Program leadership hopes that sustained success and new streams of revenue from other funders—a sign of continued endorsement of the programs’ goals and outcomes—will provide the impetus and generate the support to convert the MSP Director’s position into a line item in the campus budget.

**Identify Faculty to Actively Participate**
A familiar challenge is securing commitments from faculty to serve as mentors and advisors. The current promotion and tenure model in research-intensive universities devalues non-research activities and fails to provide incentives for faculty to participate in mentoring programs and other non-research initiatives. While the problem is acknowledged, specific actions are yet to be taken to address this issue.

**Recruit, Hire, and Retain UR Faculty**
Few UR faculty members hold tenure-track appointments in the division. However, the announcement of the new medical school has brought hundreds of applications for future faculty positions. Although the recruitment process has not yet begun, it is anticipated that the emphasis on serving the region’s UR populations will be reflected in hiring outcomes.

**Develop a Tracking System**
It will be essential to follow all MSP graduates to identify the educational and career paths they pursue beyond admissions to UCLA medical school and other graduate schools.

**Lessons**

**Create an Infrastructure for Ongoing Problem Solving**
An important step in changing the culture is the establishment of SC³OR³E—the Special Committee for the Coordination of Outreach, Recruitment, Retention, and Research Excellence—comprised of student life officers whose programs promote undergraduate success through research and summer bridge programs. The Associate Dean of the Division of Biomedical Sciences recently organized this group to share information and problem solve about issues of mutual concern. Division leadership view the group as key
to FastStart’s and MSP’s long-term sustainability and institutionalization because of the benefits that accrue from working with colleagues across departmental and program lines.

**Program Alignment with a Change in the Institutional Culture**

Before the redesign of MSP, admission decisions had been based largely on students’ academic performance. But the program’s enhanced mission and the mission of the new medical school both call for the recruitment of students from disadvantaged backgrounds and UR students who are committed to serving marginalized communities. In light of the new medical school’s mission, program staff believes that FastStart and MSP will play even more significant roles to ensure that UR students successfully complete their undergraduate training and achieve their aspirations to enter medical school.
Primary Author: Kevin Barnett, Dr.P.H., M.C.P

Overview

The California Postbaccalaureate Consortium represents a long-term effort by seven campuses in the University of California system to expand the capacity, effectiveness, and sustainability of five current and two new postbaccalaureate training programs. Each program recruits students from disadvantaged backgrounds who are committed to practice in underserved communities, and provides the academic and socio-cultural preparation that will enable them to compete effectively for admission to medical school. The purpose of the Consortium is to expand the number and capacity of programs, share best practices, increase the effectiveness of outreach efforts, and facilitate the achievement of long term state funding. Phase I of the program was funded by The Robert Wood Johnson Foundation and The California Endowment (TCE). Phase II is funded by TCE.

Impetus

The creation of the Consortium was driven by two major factors. First, the five individual programs that preceded the Consortium were faced with periodic struggles to ensure their viability, despite a clear track record of success. The programs relied on varying degrees of support from their medical school campuses, fluctuating allocations through the UC Office of the President’s annual funds for academic enrichment, and external grants from foundations such as TCE and The California Wellness Foundation (TCWF). The time and energy required to secure annual funds sufficient to sustain the individual programs impeded efforts to enhance and expand the capacity of the programs.

Second, current data indicate that medical school enrollment of UR students in California continues to lag well behind the percentage of these groups in the general population; demographic trends threaten to further widen that gap. Moreover, a significant proportion of these groups reside in Primary Care Health Professions Shortage Areas (HPSAs) and Medically Underserved Areas/Populations (MUAs) and students who attend medical school from these areas are most likely return to their communities to practice upon completion of their education. As such, targeted investments in postbaccalaureate programs hold the potential to both address the shortage of health professionals and reduce health disparities that are concentrated in these communities.

Description

Postbaccalaureate Program Components

Each of the five pre-existing postbaccalaureate programs currently serves 10-20 students per year. Common elements in the programs include:

- Summer MCAT preparation and learning skills (5-9 weeks)
- Academic year courses to strengthen science backgrounds and improve GPAs
- Psychosocial services to address challenges common to students from disadvantaged backgrounds
- Workshops on application process (e.g., personal statements, secondary applications, interviews)

For three of the programs (UCLA Geffen, UCSD, UCSF), students take courses at local CSU campuses or through UC extension programs, and at UCD and UCI the students take courses on their respective UC campuses.

The consortium will also support the designation of release time for two UC campus deans. One dean will focus on the programmatic side of the project. Among other activities, this will involve bringing together program administrators on a regular basis to facilitate shared learning. This dean will also supervise a unified evaluation of the effectiveness of the programs. The online application system developed during Phase I will provide the baseline data for evaluation and research to validate accomplishments. Both quantitative and qualitative evidence will be collected, including testimonials from program graduates. Organization and consolidation of new and historical data on a centralized web location will provide an immediate resource for program administrators and researchers. The Consortium will also cooperate with external researchers to conduct a detailed study of graduate practice locations, patient populations, and type of practice.

The second dean will lead policy development and systems change efforts. The most significant areas of focus in this regard will be to secure long-term state funding for the programs, increase program capacity, and increase matriculation into UC medical schools through the development of ongoing partnerships with internal and external stakeholders. This will be supported in part through the establishment of a policy committee with deans or other designated leaders from each campus. On the internal front, staff and researchers will conduct a survey to assess the attitudes of medical school faculty and administrators towards the postbaccalaureate programs. The data collected in the survey will provide a basis for dialogue to address misperceptions and concerns and to build common understanding and support.

Program leaders will also engage the admissions committees on their campuses, both to build common understanding and to develop options that will expand the pool of disadvantaged students in the program. Options include, but are not limited to conditional admissions tracks, conditional interviews, and/or automatic secondary applications.

On the external front, a major focus is the development of ongoing working partnerships with local CSU campuses. This will include the coordination of regular contact between program administrators and pre-health advisors at the CSUs, the development of a listserv of pre-health advisors, and scheduling of regular presentations at CSU campuses. In addition, the Consortium will work with CSU leaders to develop a
detailed strategy to facilitate increased numbers of CSU applicants to the Postbaccalaureate Consortium programs and thereby to UC medical schools and other health professions graduate programs.

Last, but not least, some funding has been allocated to support student mentoring and community service projects, to better engage alumni, and to provide guidance to the large number of applicants who are not accepted into the programs. The last activity is currently carried out on an ac-hoc basis, but funding will support the designation of dedicated staff time for this purpose.

**Partners/Contributions**

The grant from TCE calls for active and ongoing coordination with the CSU system. Consortium leaders and staff are in the process of scheduling visits to CSU campuses this year. Additional funding may be requested from TCE to provide direct support of CSU capacity building and partnership activities.

**Alignment with IOM / Sullivan Commission Recommendations**

The California Postbaccalaureate Consortium addresses the following Sullivan Commission recommendations:

**Sullivan Commission Recommendations**

4.1 HPEIs, hospitals and other organizations should partner with businesses, communities, and public school systems to a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

**Impacts to Date**

The original five UC postbaccalaureate programs have collectively assisted over 700 students gain admission into medical school. Available data indicate that approximately 82 percent of postbaccalaureate students gain admission into medical school, and another 2-3 percent are admitted into other health professions programs. Over 70 percent of participants in the programs have come from UR backgrounds, and over 85 percent of alumni practice in underserved communities.

**Projected Impacts**

Projected impacts for the Consortium within the next five years include:

- Increase the number of annual graduates by 25 percent
- Achieve 25 percent matriculation of students from CSU campuses
- Achieve 50 percent matriculation of graduates into UC medical schools
- Annual shift in percentage funding from UC / TCE, with the following targets:
  - Year One 35 / 65
  - Year Two 45 / 55
  - Year Three 55 / 45

**Challenges**

**Institutionalization**

Perhaps the most significant challenge to be addressed by Consortium members is to secure long-term institutional support for the programs. The enhanced data collection system and plans for research and evaluation will provide additional evidence to support this goal. Substantial work is needed, however, to increase the understanding of policymakers and educators that this investment is a centrally important
element of building a health professions workforce that will optimally serve the needs of California’s increasingly diverse communities.

Some assistance also may be garnered from health professions employers. For example, employers such as nonprofit hospitals could provide stipends and mentoring for program participants as a community benefit contribution, as well as advocacy support in the policy arena.

**Building Formal Links with CSU**

The development of working partnerships with CSU campuses is a critically important component of efforts to build a critical mass of diversity in UC medical schools (as well as other health professions graduate programs). CSU campuses possess both the diversity among their students and the academic preparation to produce highly qualified health professionals. Yet efforts to build partnerships in the past have failed to produce substantive impacts. Some CSU students and faculty perceive that UC campuses are unwelcoming and that UC faculty view CSU students as being unprepared for the rigor of UC programs.

As a result, CSU students often decide early in on their undergraduate education that UC is not a viable option. In some cases, this perception is reinforced by pre-health counselors. CSU faculty and administrators also cite numerous efforts to work together more closely in the past, and note that there appeared to be little interest among their UC counterparts in working together in a serious and ongoing manner. In order to overcome these historical dynamics, UC representatives will need to clearly and consistently demonstrate their commitment to work together in an environment of mutual respect and shared accountability. It will be expected that resources necessary to carry out these partnership activities will be shared on an equal basis, as well.

**Ensure that Conditional Admits Yield a Net Increase**

In the development of a conditional admissions option at UC medical schools, it will be important to resist the temptation to focus on applicants from disadvantaged backgrounds who may have been otherwise accepted without conditions into the program in previous years. In essence, the establishment of a conditional-admit category should yield a net increase in students from disadvantaged backgrounds into the medical school.

Some outside observers have questioned the wisdom of allowing first time applicants to participate in the post-baccalaureate programs. The reasoning offered is that re-applicants have greater familiarity with the process and re-application indicates a high level of commitment, hence, a greater potential for success. In response to this stated concern, interviewees cited experience indicating that UR undergraduates are more likely to give up the medical school application process in the absence of a support mechanism such as a postbaccalaureate program. Moreover, at least in prior years, the programs found that they were not getting enough UR postbaccalaureate applicants if they just focused on re-applicants. The research and evaluation conducted as part of the work of the Consortium in the coming years will enable program leaders to build capacity and further refine their outreach process in a manner that will permit effective support of both populations.

**Lessons**

**Build on Small Successes**

Start with a small, manageable program, develop clear and measurable outcomes, and use success at this level to take efforts to scale. Some small efforts yield big payoffs. For example, last year a list of postbaccalaureate students from throughout the Consortium membership was sent to Program Directors. The number of postbaccalaureate graduates admitted to UC Schools of Medicine increased from 16 percent to 62 percent.

**Targeted Outreach**

Recruit from locations that will yield the diversity you would like to attract to the program (one year UCD didn’t get any UR students, despite the fact that all were from disadvantaged backgrounds).

**Organization and Practicality**

Identify an organized plan of action, with time for leaders and a coordinator to accomplish their tasks.
**Measure Success**
Engage qualified evaluators to identify metrics that will demonstrate success to a variety of audiences.

**Ongoing Engagement of Partners**
Engage all consortium members on a regular basis.
The California Dental Pipeline program is an initiative of the five California dental schools (Loma Linda University (LLU), University of California at Los Angeles (UCLA), University of California at San Francisco (UCSF), University of the Pacific (UOP), and University of Southern California (USC), with a primary goal of reducing disparities in access to dental care. The initiative started in January 2002 as a state component of a national pipeline initiative jointly funded by the Robert Wood Johnson Foundation (RWJ) and The California Endowment (TCE). Phase II of the initiative is a three-year extension funded by TCE that began in September 2007 with the five California schools.

The lack of access to dental care for low-income populations is well established at the national level. In California, most residents do not have private dental insurance, and access to care for low-income populations through DentiCal, the state’s public sector dental plan is hampered by numerous restrictions and a lack of participating dentists (often attributed to low fees). It is estimated that half as many low-income adults and children visit dentists on an annual basis compared to upper-income families. Not surprisingly, most untreated oral diseases are seen in low-income populations.

The Pipeline program focuses on three strategies to achieve the goal of reducing disparities; 1) expand community-based dental training through partnerships with community health clinics (CHCs), including Federally Qualified Health Centers (FQHCs); 2) integrate cultural competency programs into education and training programs; and 3) increase the enrollment of UR and low-income (LI) dental students.

Community-Based Training – The objective is to have dental students and residents in General and Pediatric Dentistry spend an average of 60 days providing care to underserved patients in CHCs. The five schools have established partnerships with approximately 70 CHCs, many of which are in rural areas, where the lack of access is most acute.

The shift from dental school-based clinics to CHCs addresses a number of important concerns related to both the effective education and training of dentists and the lack of access to dental care for a substantial proportion of low-income patients. On the education and training side, dental school-based clinics operate primarily as teaching laboratories, and hence lack many of the efficiencies seen in patient-centered community clinics and practices, whose primary mission is patient care. As a result, a major part of the expense associated with dental education is the subsidization of dental school clinic operations.

In community-based settings, students and residents see three to four times as many patients as they do in dental school-based clinics. In this way they gain invaluable clinic experience, treating more patients and learning to provide care in a real delivery system. At the same time, they help to reduce access disparities by caring for many more underserved patients. The net result is more clinical experience for students and residents and increased access for underserved patients. In the view of dental education leaders engaged in this initiative, any loss of focused instruction associated with the shift to community-based settings is more
than offset by the significant increase in the volume of real world clinical experience received by dental students.  

In the Phase II initiative (2007 to 2010), the five schools are developing formal financial relationships with selected FQHCs to ensure a strong, long-term partnerships with them. Experiences during the first phase of the initiative indicated that relatively high reimbursement rates for dental care in FQHCs with a high percentage of Medicaid patients, combined with a significant increase in the number of patients treated increased net revenues. For example, it is estimated that full-time equivalent dental students and residents providing care in FQHCs can generate $200,000 or more in gross revenues per year. Preliminary estimates indicate that the marginal cost of the student and resident to the FQHC on an annual basis is about $50,000. Thus, there is the potential for revenue sharing between schools and FQHCs.

In addition, one of the possible outcomes of the partnerships will be an increase in the operational efficiency of FQHCs. Schools and the Pipeline program will provide FQHCs a range of services, including staff training, greater access to specialty services, etc.

**Cultural Competency** – All schools have integrated cultural competence instruction throughout the four years of dental school. In most schools cultural competency training begins with a core course taught in the first year, and associated content is then interwoven throughout the subsequent curriculum. Most schools have also provided cultural competency training for faculty and staff. At the USC site, faculty leaders have integrated case-based teaching into the curriculum, to facilitate shared learning and problem solving with complex cases that present culture and ethnicity-based challenges.

In the current phase of the initiative, the schools are focusing on increasing the capacity of school dental schools to treat diverse populations. This includes the more effective use of interpreters, as well as expanded clinic signage and patient information in different languages. They are also developing an evaluation instrument to assess the didactic knowledge, attitudes, and skills acquired by students to care for diverse populations. Eventually, the intent is to share these capabilities with CHCs and other dental schools.

**UR/LI Enrollment** – In the implementation of this strategy, the five schools confronted the reality that California had the most diverse population in the nation but the lowest number of UR dental students compared with dental schools in other states. Proposition 209 was identified as a factor, but the schools acknowledged that much more could be done.

During the first phase of the initiative, dental schools shared information and expanded existing recruitment programs, resulting in a significant increase in UR/LI student enrollment. This included the engagement and coordination of pre-health advisors meetings at a variety of feeder undergraduate institutions, as well as the development of regional post-baccalaureate programs in northern and southern California.

In the Phase II program, schools will expand enrollment in their post-baccalaureate programs to at least five students per school per year. This will yield a minimum of 25 students per year, 80 percent of which are expected to enroll in dental school. The schools recognize that ongoing coordination and strengthening links to both undergraduate education institutions and K-12 schools in California is needed to expand the pipeline of qualified UR applicants to dental school and other health professions education and training programs.

**Key Partners / Contributions**

The 70 CHCs are key partners with the five dental schools, and the two groups are working closely to strengthen and formalize their working relationships.

---

58 It is important to note that dental school education and training is the only clinical health profession that has used the internal clinical training model; all others provide training in real world settings.
In order to address these and related issues, a Partnership Committee was formed to bring together key stakeholders such as the California Primary Care Association, the California Dental Association, and a number of the largest FQHCs. In addition to the development of model financial plans, the committee is exploring opportunities for schools to provide specialty care (including telemedicine) and a variety of technical assistance services to FQHCs.

The schools are also in the process of establishing relationships with the California chapters of the National Dental Association, Hispanic Dental Association and the Society of American Indian Dentists to support and facilitate the recruitment and mentorship of UR students.

A central long term goal for the initiative is to influence and change health policies at the state and federal level to sustain the pipeline initiative in California and nationally. With this in mind, a health work group has been established to facilitate continued engagement of key stakeholders in the public and private sector and to position schools for meaningful dialogue when opportunities arise. The California Dental Association will host an annual dental health policy summit that brings together the dental schools and other key stakeholders to develop health policy strategies.

The California Primary Care Association has a three-year subcontract to disseminate best practices from the Pipeline initiative to other community health dental clinics.

**Impacts to Date**

Major accomplishments of the Phase I California Dental Pipeline program include:

- Ongoing collaboration among dental schools to recruit UR and low-income students
- Significant increase in the amount of dental care provided to underserved communities
- Increase in the number of dental school graduates who go on to practice in CHCs
- Increased support among community stakeholders for Pipeline program
- Shared information and resources to develop comprehensive cultural competence curricula

At the beginning of the program, California had the most diverse population in the country, but the fewest UR dental students. In the first four years of the program, implementation of a coordinated regional recruitment plan increased the percentage of freshman UR students from 5 to 11 percent. These accomplishments positioned the partner dental schools to secure additional grants from other private and sector funders in the last two years.

Also, the schools were successful in increasing the time senior students and residents spent providing care in CHCs. From an average of 10 days at the start of the Pipeline program, schools ended the project with an average of 52 days, and a few schools met or exceeded the 60 day objective.

In addition, a proposal was submitted to the Health Resources and Services Administration (HRSA) to establish a framework of incentives for partnerships between FQHCs and dental schools to encourage replication of this effort at the national level. The proposal was approved, but budget reductions in 2006 prevented the project from moving forward. Partners are hopeful that funds will be allocated in the near future.

**Projected Impacts**

Projected accomplishments for the current phase of the initiative include:

- Formalize working partnerships with FQHCs
- Deepen collaboration among the five dental schools
- Increase the volume of underserved patients treated in FQHCs
- Increase the number of UR/LI students admitted into CA dental schools
- Advance the health policy agenda at the state and national level
- Hold three annual dental health policy summits hosted by the CDA
- Disseminate best practices to other community health center dental clinics in CA.
Alignment with IOM/Sullivan Recommendations

The California Dental Pipeline Collaborative addresses the following IOM and Sullivan Commission recommendations:

IOM Recommendations

3.4 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health care workforce.

5.2 HPEIs should proactively and regularly engage and train students, house staff, and faculty regarding institutional diversity-related policies and expectations, the principles that underlie these policies, and the importance of diversity to the long term institutional mission. Faculty should be able to demonstrate specific progress towards achieving institutional diversity goals as part of the promotion and merit process.

5.4 HPEIs should be encouraged to affiliate with community-based health care facilities in order to attract and train a more diverse and culturally competent workforce and to increase access to health care.

6.3 HPEIs should develop a mechanism to inform the public of progress toward and outcomes of efforts to provide equal health care to minorities, reduce health disparities, and increase the diversity of the health care workforce.

Sullivan Commission Recommendations

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

6.1 Health systems and HPEIs should gather data to assess institutional progress in achieving racial and ethnic diversity among students, faculty, administration, and health service providers as well as monitor the career patterns of graduates.

Key Challenges

Annual Fluctuations in UR Matriculation
One of the key challenges identified is the tendency for relatively dramatic fluctuations in the number of UR students who matriculate into these programs on a year to year basis. These fluctuations are a function of a complex set of factors, some of which are controllable, others that are beyond the control of individual institutions.

Financial Crisis in Dental Education
On a more fundamental level, dental schools across the country are facing major financial challenges. These challenges have reached an acute stage in California. On one level, it makes it difficult to discuss the institutionalization of the innovations developed as part of this initiative. At the same time, the level of financial challenge calls for profound change in the way these institutions do business.

Faculty Resistance
Another challenge to be addressed is faculty resistance to sending students to practices that serve communities with disproportionate unmet needs. This appears to be a continuing problem, but partners anticipate that increased learning and sensitivity associated with the working relationships with FQHCs will begin to influence perceptions.
Lessons

Importance of Focused Leadership
It is very difficult to effectively change the behavior of dental schools (and by extension, HPEIs) in terms of their approach to outreach, recruitment, admissions, and matriculation of UR/LI students at the macro level. Sustainable change requires focused leadership and action by administrators and key faculty, with attention to all aspects of the process, and the establishment of accountability mechanisms and incentives that ensure definitive action.

Advantages of Cross-Institutional Collaboration
The gains associated with collaboration between the five dental schools to strengthen UR/LI recruitment and mentoring suggest that far more could be accomplished through coordinated efforts across different HPEI disciplines. There is immense potential for achieving economies of scale and extending the reach of programs through resource sharing and coordination of efforts among medical, dental, nursing, public health, and other health professions programs.

The “opening up” of dental schools has positioned them to increase their engagement in regional collaboratives, engage dental societies and other key stakeholders in the development of more comprehensive and sustainable approaches. Further work is needed to engage other key stakeholders such as health professions employers and community-based organizations at the local and regional level, to facilitate a more seamless and coordinated approach, explore areas for shared advocacy, and to establish strong and diverse constituencies that ensure continued attention and focus on these and related priority concerns in the years to come.
5. Future Nurses (Accelerated pre-nursing program)  
Paradigm (Contract education program)  
Fresno City College, Department of Nursing

Primary Author: Alexandra Alznauer and R. Ruth Linden, Ph.D.

Regional Demographics

Fresno is the sixth largest city in California. In 2007 its population was estimated to be 44 percent Latino, 12 percent Asian, 8 percent African American, and two percent Native American. In 2006, 35 percent of Fresno City College students identified as Latino, 15 percent as Asian/Pacific Islander, eight percent as African American, and one percent as Native American. Of the 13 students who entered the Future Nurses program in 2006, 62 percent were Asian, 24 percent were Latino, and none were African American.

Future Nurses Program

Impetus

Future Nurses is a regional nursing education partnership, which includes participation from a nursing school, a Regional Occupation Program (ROP), area high schools, and local hospitals. Each partner had a similar motivation for becoming involved.

The Interim Director of Fresno City College Department of Nursing, Carolyn Drake, RN, Ed.D, was concerned about both the shortage of nurses and the high average age of the current population of working nurses. Dr. Drake worked with the region’s ROP, area high schools, and local hospitals to:

- Expand the group of potential nursing students, particularly UR youth who showed the potential to complete nursing prerequisites and become eligible for entry into the ADN program lottery
- Increase the quality and number of nursing students who complete the ADN program, graduate, and sit for the registered nursing licensure exam (NCLEX-RN)
- Increase the numbers of licensed RNs who enter the workforce at a younger age, thus enabling them to have longer careers before retiring or shifting to part-time work or teaching

Fresno Regional Occupation Program

Operated by Fresno County, the Fresno ROP offers career technical education that empowers high school students 16 years of age and older to make meaningful career choices by providing opportunities to explore their interests, develop career skills, and reinforce their academic preparation. Established in 1974 with six school districts, Fresno ROP works with area high schools in 22 districts throughout Fresno, Madera, and Mariposa counties. Courses are developed by business and industry advisory committees. Fresno ROP created a CNA program for high school students to address the nursing workforce shortage. Combined with Fresno City College’s Future Nurses Program, the Fresno ROP CNA program forms a pipeline to the college’s ADN program and RN licensure.

Leaders at the partner hospitals realized that the demographics of both their clients and the region had changed from being primarily English speaking to being 12 percent Hmong, Laotian, Cambodian, and Vietnamese speaking and 45 percent Spanish speaking. Yet the nursing staff at area hospitals were primarily English speaking. The lack of sufficient numbers of culturally and linguistically competent

---

59 More than one-third (36 percent) of Fresno’s total Asian population of 54,354 residents is Hmong. Of the remaining Asian population, 11 percent are Laotian, seven percent are Cambodian, and four percent are Vietnamese.
60 No demographic data are available for Hmong, Laotian, Cambodian or Vietnamese students.
61 California Association of Regional Occupational Centers and Programs (http://www.carocp.org/)
62 California Regional Occupational Program (http://www.fresnorop.fcoe.net/Pages/)
63 No demographic data are available for the nursing staff at partner hospitals.
nurses was compounded by the general nursing shortage from which California and the entire country currently suffer. The hospitals needed to rapidly hire and retain a large number of bilingual, bicultural nurses to address the region’s critical nursing shortage.

**Description**

In 2007, 462 students were enrolled in the Department of Nursing at Fresno City College. Forty-one of these students were enrolled in Future Nurses, an accelerated, two-year, pre-nursing program designed to decrease the time it takes students to qualify for entrance to FCC’s Associate Degree in Nursing (ADN) program. Leadership at local hospitals collaborated with FCC’s Department of Nursing and Fresno County’s ROP to develop the Future Nurses program specifically for area high school graduates who were trained and licensed as Certified Nursing Assistants (CNAs) during high school through the Fresno ROP. Since 2000, a committee consisting of representatives from FCC’s Department of Nursing, Fresno ROP, local high schools, and area hospitals has chosen approximately 15-17 students per year for admittance to Future Nurses.

Future Nurses students are admitted to the summer session immediately after high school graduation and enrolled in a required “Introduction to Nursing” course. In addition, students must complete seven prerequisite courses before they qualify for admission to an ADN program. Unlike other pre-nursing students, Future Nurses are carefully tracked and receive a variety of support services to ensure their success.

Like other impacted, public, undergraduate nursing programs in California, FCC’s Department of Nursing can admit only some of the qualified students who apply. Once a qualified student applies, she or he enters a semi-annual lottery. Future Nurses students do not receive preferential treatment in the lottery for acceptance into FCC’s ADN program. However, they are permitted to pre-register for all nursing prerequisite courses, thus decreasing the number of semesters it takes to qualify for entry into the lottery. If a qualified Future Nurse has not been selected by lottery after five tries, she or he is automatically admitted into FCC’s ADN program.

**Partners/Contributions**

**Fresno City College (FCC)**
- Assists in annual selection of students admitted to Future Nurses Program
- Funds one full-time and two part-time counselors, including a part-time diversity counselor, in order to identify and provide resources for students who need academic and other support
- Provides academic and personal counseling
- Provides faculty, classroom space, and tutoring
- Provides part-time “ambassador” who visits area elementary, middle, and high schools, often with an FCC nursing student, to make presentations about nursing as an attractive career
- Holds monthly orientations in the community to generate interest in FCC’s nursing and allied health programs and nursing as a career path

**Fresno Regional Occupational Program**
- Created and administers a regional, high school-based CNA program that serves as a pipeline for FCC’s Future Nurses and ADN programs
- Participated on committee to plan and implement Future Nurses Program
- Assists in annual selection of students admitted to Future Nurses Program

---

64 To be considered a qualified applicant, a student must complete at least 56 credit units, including all General Education requirements with a minimum, cumulative GPA of 2.5, earn a grade “C” or better in all prerequisite nursing courses, and complete an academic skills test.
Area High Schools
- Participated on committee to plan and implement Future Nurses Program
- Assist in annual selection of students admitted to Future Nurses Program

Local Hospitals
- Initiated discussions that led to design of program
- Participated on committee to plan and implement Future Nurses Program
- Assist in annual selection of students admitted to Future Nurses Program

Alignment with IOM/Sullivan Commission Recommendations

The Future Nurses Program addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

2.3 Admission should be based on a comprehensive review of each applicant, including an assessment of applicants’ attributes that best support the mission of the institution (e.g. background, experience, multilingual abilities). Admissions models should balance quantitative data (i.e., prior grades and standardized test score) with these qualitative characteristics.

5.4 HPEIs should be encouraged to affiliate with community-based health-care facilities in order to attract and train a more diverse and culturally competent workforce and to increase access to health care.

6.1 HPEI governing bodies should develop institutional objectives consistent with community benefit principles that support the goal of increasing healthcare workforce diversity including, but not limited to efforts to ease financial and non-financial barriers to UR participation, increase involvement of diverse local stakeholders in key-decision-making processes, and undertake initiatives that are responsive to local, regional, and societal imperatives.

**Sullivan Commission Recommendations**

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4.3 For UR individuals who decide to pursue a health profession as a second career, HPEIs should provide opportunities through innovative programs.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

**Impacts to Date**

- Future Nurses has helped to meet the joint goals of the hospitals and the college: (1) increased the number and quality of pre-nursing students, (2) swift preparation AND lottery eligibility, and (3) guaranteed slots in the ADN program within a maximum of five lotteries.
- The program met the joint goal of the college, Fresno ROP, and area high schools to create a pipeline from area high schools into FCC’s ADN nursing program.
- The program met the college’s goal to increase the nursing pipeline, increasing the number of students seeking eligibility for the ADN lottery from 100 to 600.
- The program secured commitment from partner hospitals to work with FCC and ROP to address the nursing shortage.
Since its inception in 2002 through 2007, Future Nurses has admitted 92 students. Of the program participants:

- 28 percent have completed the program
- 45 percent are still enrolled in the program
- 5 have dropped out of the program
- 16 percent have applied to FCC’s ADN program
- 8 percent made the lottery and enrolled in FCC’s ADN program
- 2 of the 8 enrollees graduated from FCC’s ADN program
- 1 of the graduates passed the NCLEX-RN exam
- 1 of the graduates has not taken the NCLEX-RN exam
- 2 of the 8 enrollees graduated from FCC’s ADN program
- 2 percent are enrolled at CSU Fresno in non-nursing health science programs

Of the 92 student participants in Future Nurses to date:

- 43 percent are Latino
- 33 percent are Asian or Asian American
- 9 percent are Caucasian
- 8 percent are African American
- 6 percent are “Other”

**Projected Impacts**

- Continued growth in recruitment and retention rates, especially among UR and Spanish-speaking RNs is anticipated.
- Higher rates of linguistic and cultural congruence between nursing staff and clients at area hospitals are anticipated.
- Improved health outcomes for bilingual, bicultural clients at partnering hospitals.
- Growth in the number of younger RNs entering the regional workforce who will have longer careers in nursing as hospital-based or private-care nurses, nursing administrators, nursing instructors, and community leaders.

**Challenges**

**Institutionalize Funding Support**

Interviewees cited a need to institutionalize funding for student support, such as a counseling position. Currently the program has one half-time counselor and the Health Sciences Department as a whole has one full-time counselor and one half-time diversity counselor. Counseling support for Future Nurses is funded by a grant. The interim director envisions regional corporate employers, who benefit from improved community health outcomes, offering financial support to Future Nurses. However, no concrete plans are underway to institutionalize this position.

**Expand Classroom Facilities**

The program’s growth is limited in part by insufficient classroom space. This is a problem common to many California nursing programs. No plans are being pursued to address this challenge at this time.

**Lessons**

**Build in Remediation**

Incoming Future Nurses students were not as well-prepared academically as anticipated. Strategies to be implemented in the near future include: (1) tracking academic progress more closely, so any needed interventions can be initiated at the earliest sign of difficulty; (2) establishing learning communities; (3) implementing a technology-based, self-paced learning system (Tegrity) that will allow students, many of whom are ESL, to review taped lectures individually as often as needed.

---

65 No data are available to break down the category Asian or Asian American.
Develop Comprehensive Admissions Criteria
Initially the ROP and high schools included metrics such as school attendance records in the admission criteria. The college took control of the process and identified a set of criteria that emphasize a minimum GPA and a personal essay. This allows candidates to explain why they want to pursue nursing as a career.

Paradigm Program

Impetus
By the late 1990s, there was growing concern at the Fresno City College Department of Nursing about how to meet the shortage of nurses in the region, given a lack of adequate classroom space and an insufficient number of master’s-prepared, clinical faculty. At the same time, local hospitals were seeking to rapidly retrain and retain a large number of CNAs and LVNs who would commit to continuing employment as RNs. When sixteen employees from an area hospital did not win a space in FCC’s ADN program lottery, the need for increased funding for additional slots became evident to the leadership.

Description
Paradigm was initiated in 1998, and the program design grew out of discussions between a visionary local medical center’s director of nursing and Dr. Drake at a regional nursing association board retreat. After Paradigm graduated its first class in 2001, other area hospitals joined the partnership.

Of the 519 students enrolled in FCC’s nursing department in 2007, 105 were enrolled in Paradigm. The program uses a multifaceted approach combining financial, academic, and personal support in order to prepare employees of area hospitals to pass the NCLEX-RN upon graduation from an ADN program. Like all of California’s impacted, public college and university nursing programs, FCC’s Department of Nursing can admit only some of the qualified students who apply for admission.66 Once a student applies, she or he is entered in a lottery. But Paradigm students bypass the lottery. Twice yearly FCC admits approximately five students per partner hospital into Paradigm.

To be eligible to apply to the Paradigm program the student must be an employee of one of the partner hospitals. Prospective Paradigm students apply to both the hospital and the college and must meet both institutions’ criteria to secure sponsorship by the hospital. Each hospital has its own set of criteria for consideration.67 Once sponsored and accepted by the college, the student becomes part of the Paradigm cohort of nursing students and enters either the four-semester program. Paradigm students take the same courses as students in FCC’s traditional nursing program, but they are permitted only to take required nursing classes and sections reserved for the Paradigm cohort.68 Paradigm students receive:

- Stipend to cover tuition, fees, books, and other school-related expenses
- Support services while they are in school
- Two-year nursing employment contract at the sponsoring hospital

An important strength of Paradigm is the collaborative vision shared by the leadership of area hospitals. These hospitals recognized that by working together on an initiative to increase the number of nurses in the region, rather than competing against each other to hire existing nurses, all hospitals and the community would benefit.

---

66 See footnote 6.
67 Generally, a candidate must work for a partner hospital for one year prior to applying for sponsorship and must also agree to work for that hospital for two years after graduation and licensure.
68 Some Paradigm students who have had difficulty keeping up with coursework have switched to the traditional nursing program at FCC. However, nearly all have graduated, passed the NCLEX-RN, and fulfilled their commitment to work as RNs for area hospitals.
Partners/Contributions

**Fresno City College (FCC)**
- Funds one full-time and two part-time counselors including a health-sciences diversity counselor to identify and provide resources for students needing academic and other support
- Provides faculty, classroom space, and tutoring
- Provides academic and personal counseling
- Teaches required 18-hour course on “Trans-cultural Nursing”

**Health System and Five Area Hospitals**
- Community Regional Medical Center (Health System and Hospital)
- Clovis Community Medical Center
- St. Agnes Community Medical Center
- Madera Community Hospital
- Children’s Hospital Central California
- Kaiser Permanente Fresno

Shared contributions include:
- Funding for theory courses, skills labs, and other expenses from hospitals on a per-student basis
- Each partner hospital selects five students, usually its own employees, to participate in Paradigm
- Clinical opportunities for students on at hospitals, including hands-on experience in critical care
- Two-year employment contract for each program graduate upon licensure
- Hospital nurses receive release-time to serve as clinical instructors

Alignment with IOM/Sullivan Commission Recommendations

The Paradigm Program addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

3.4 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health care workforce.

5.4 HPEIs should be encouraged to affiliate with community-based health-care facilities in order to attract and train a more diverse and culturally competent workforce and to increase access to health care.

**Sullivan Commission Recommendations**

2.6 Key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers.

4.3 For UR individuals who decide to pursue a health profession as a second career, HPEIs should provide opportunities for URs through innovative programs.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

**Impacts to Date**

- Paradigm has helped meet the health system’s and hospitals’ goals of retraining CNAs and LVNs, and of graduating nurses who: (1) successfully pass the NCLEX-RN exam within three

---

69 During the first two years, $210,000 was provided by the Hospital Council of Northern and Central California, a nonprofit hospital and health system trade association. The college funded the theory course during that period.

70 The LVN-RN program was discontinued in 2004.
months of degree completion and (2) fulfill their two-year commitment to work at their sponsor’s hospital.

- Of the estimated 65 Paradigm graduates who have reported to area hospitals after licensure, nearly all have remained in the region after meeting their two-year commitment. (However, many do move on to employment at different hospitals in the region after their two-year employment contract is fulfilled).  
- Paradigm has helped meet health system, hospital, and FCC joint goals to improve the quality of and increase the number of newly graduated nurses to meet the nursing workforce shortage. 
- The health system’s director of nursing education, who conceived of and initiated Paradigm, received an ACNL Nursing Leadership award for the program. 
- Leadership at the health system and FCC have made presentations about Paradigm and served as consultants to hospitals and nursing schools seeking to implement Paradigm-like programs. Paradigm has been replicated many times in California and across the country.  

Since its implementation in 1999 through May 2007, Paradigm has enrolled 504 students. Three hundred ninety-eight of these students enrolled in the basic Paradigm nursing program and 106 enrolled in the LVN–RN Paradigm program. Of the total program participants to date:

- Approximately 87 percent entered and completed the program within the expected timeframe. 
- Between 89 and 97 percent of those who were employed by a partner hospital while participating in Paradigm continued working at that hospital upon licensure for at least two years. 

Paradigm is not intended to increase the participation of UR groups in nursing. Therefore, no specific data on race/ethnicity are collected or available for this program. Nevertheless, Paradigm students initially represented greater diversity than students in the traditional nursing program. It is believed, however, that the department has caught up with Paradigm in this respect, although no comparative data are available.

**Projected Impacts**

- Continued growth in recruitment and retention rates, especially among Spanish-speaking RNs 
- Higher rates of linguistic and cultural congruence between nursing staff and clients at area hospitals 
- Improved health outcomes for bilingual, bicultural clients at area hospitals and for the community as a result of the increase in ADN nursing graduates

**Challenges**

**Recruiting Nursing Faculty**

In order to expand both the quality and number of nursing students enrolled in Paradigm and the nursing department as a whole, FCC would require more faculty, particularly those qualified in specialty areas. In the face of anticipated faculty retirements, FCC plans to participate in a grant received by California State University Fresno Department of Nursing that will provide sixty new slots to train graduate-level nurses. After receiving their MSN degree, some of these graduates will join FCC’s faculty.

---

71 Retention data at the hospital and regional level are available only for the first two years after graduation.
72 Association of California Nurse Leadership (www.acnl.org)
73 Another California institution was the first to publish an article about its collaborative nursing education program modeled on Paradigm. This type of nursing partnership is often given the name of the city where the replicating institution is located, instead of being known by the name of the city where it originated, i.e., the “Fresno Program.” Nonetheless, Community Regional Medical Center, in partnership with Fresno City College Department of Nursing, was the first to develop and implement this form of nursing education partnership.
74 See footnote 14.
75 This figure is not exact because some Paradigm students may have moved to FCC’s traditional nursing program and may have completed that program.
76 Ninety-seven percent of all FCC nursing students’ time to degree completion is two years.
77 Retention data are available for only two of the five partner hospitals.
Expanding Classroom Facilities
Although creative solutions have been used to address the shortage of classroom space, such as offering Sunday courses, the college needs fund a more permanent solution in order to grow the Paradigm program. This is a problem common to many California nursing programs. No plans are being pursued to address this challenge at this time, however.

Lessons

Choose Partners Carefully
The success of Paradigm is due in great part to the trust that exists among the leadership of the college and the partner hospitals. This confidence among the partners grew out of existing relationships formed through years of side-by-side participation in and leadership of regional nursing associations.

Communicate Frequently
Partners in Paradigm meet monthly to discuss outcomes, workforce trends, funding, and other issues that might affect or shape the program. This keeps all partners apprised of opportunities or concerns that arise, so that action may be taken on a timely basis.
6. Biology Scholars Program  
University of California at Berkeley

Primary Author: Don Matsuda, undergraduate student, Stanford University

Overview/Impetus

The Biology Scholars Program (BSP) was founded in 1992 with funding from the Howard Hughes Medical Institute (HHMI) by three U.C. Berkeley scientists: John Matsui, Ph.D., Lecturer in Integrative Biology and formerly Associate Director at the Student Learning Center; Corey Goodman, Ph.D., formerly a Professor of Neurobiology and Genetics; and Caroline Kane, Ph.D., Professor in Residence of Biochemistry and Molecular Biology.

Through his work at the Learning Center, Dr. Matsui had observed that many motivated and intellectually capable undergraduates who were first-generation college students from low-income families left the sciences. He believed that their potential for success in the sciences could not be fairly judged by their performance in introductory science courses without regard for their unique backgrounds, life circumstances, and family situations. In 1991, the Dean of Biological Science in the College of Letters and Science invited Drs. Matsui, Goodman, and Kane to submit an HHMI proposal to develop a program that would help high potential students from low-income/disadvantaged backgrounds fill the gap between their academic preparedness and the university’s expectations of their performance. The proposal was funded and the Biology Scholars Program opened its doors with initial funding of two million dollars.

Description

The goal of BSP is to diversify the biosciences workforce and thereby benefit the sciences and society at large. The program promotes the success of students from economic, racial/ethnic, and cultural groups historically underrepresented in the biological sciences, including women.

BSP serves over 700 students at any given time. The program aims to “shrink down the university and individualize and personalize students’ experiences.” BSP’s philosophy sets the program apart from traditional science curricula. According to the director, “We don’t handhold and we don’t ‘baby’, but we take a realistic assessment of where the student is, what skills and background they have, what they need in order to succeed, and we start them there.”

BSP provides students pursuing an interest in the sciences with comprehensive support and guidance during their undergraduate years. Key programmatic elements include:

- Academic workshops and study groups
- Seminars, research internships, and opportunities for community service
- Dedicated courses, including “Studying the Biological Sciences I and II,” “Current Topics in the Biological Sciences,” “Applying to Graduate School,” and “Understanding the Culture of Medicine”
- Faculty and student mentors
- Supportive community and cohort experience that many students refer to as “family”

In addition to academic enrichment and professional socialization, another feature of the program is that instruction is offered about the culture of the university and the culture of university science. This content is delivered via classes that feature guest speakers, faculty and researchers who speak to undergraduates about the nature of academia and give them advice on how to survive and thrive in a university setting.

Partners/Contributions

Biology Transfer Consortium (BTC), a partnership between BSP and three community colleges (Contra Costa College, City College of San Francisco, and Napa Valley College). These colleges were selected
because they have established science programs with administrators who support diversity in science by increasing the numbers of science majors who transfer to four-year college. Criteria for admission of transfer students are based primarily on students’ potential to benefit from the program and their willingness to give back to their community. Traditional metrics, such as GPA and SAT scores, are not used by BSP to evaluate transfer students. This program has been funded by state money, but unfortunately the funds have since run out.

**Kerry’s Kids**, a volunteer organization that provides free mobile healthcare and education to underserved children in Oakland and seeks to ensure that each child receives care in a permanent medical “home.” BSP students can arrange to do internships with Kerry’s Kids, providing basic clinical and clerical support to the clinics.

**FACES for the Future**, a collaboration with Children’s Hospital and Research Center, Oakland and the Oakland and Berkeley Unified School Districts. BSP students serve as mentors, interns, tutors, and role models in FACES’ three-year internship pipeline program that introduces UR high school students to the healthcare professions. (Faces for the Future is described in a separate Exemplary Practice profile.)

**Brothers Building Diversity in Science** (BBDS), a group of men committed to building diversity in the sciences. BBDS provides support via educational programs, resources such as seminars, and mentoring to students interested in careers in the health professions. The director of BSP is a board member of BBDS and his students provide mentoring and lead seminars and workshops for the students in this group.

**Howard Hughes Medical Institute** (HHMI) provided initial funding for BSP and continues to financially support the program. In June 2006, HHMI announced a $1.6 million grant to BSP—its fourth, four-year grant to the program. The purpose of the grant is to help BSP initiate a new research pathway to increase the academic competitiveness of students who hope to pursue an MS or PhD in the biological sciences.

**Gordon and Betty Moore Foundation** awarded a five-year, $5.6 million grant to BSP in 2004. The grant provides mentoring and other academic and financial resources to students pursuing science degrees and premed majors and supports sharing the BSP model with between forty and fifty four-year institutions in the state.

**Alignment with IOM/Sullivan Commission Recommendations**

The Biology Scholars Program addresses the following IOM and Sullivan Commission recommendations:

**Sullivan Commission Recommendations**

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of the their children.

4.4 Baccalaureate colleges and HPEIs should provide and support “bridging programs” that enable graduates of two-year colleges to succeed in the transitions to four-year colleges.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions and provide these students with an array of support services, including mentoring, test-taking skills, counseling in application procedures, and interviewing skills.

**Impacts to Date**

Over 1200 students have graduated from BSP and 750 are currently enrolled. 80 percent of BSP members come from low-income/first-generation backgrounds, 70 percent are women, and 60 percent are from UR ethnic groups. Admission to BSP is by application and interview. There is no GPA or SAT threshold to join the program. Selection is based on an assessment of a willingness of a student to not only benefit
from, but to give back to others in BSP. Because of this, BSP members enter Berkeley with lower GPAs and SATs than non-BSP science students.

In a 2003 study, a quantitative comparison of students in and out of BSP indicates that students in the program graduate with a degree in biology at significantly higher rates than students not in BSP, regardless of race/ethnicity. Moreover, students who are in BSP have statistically lower high school grade point averages (GPAs) and SAT scores than students not in the program. African-American and Hispanic students who join BSP graduate with significantly higher UC Berkeley biology GPAs than non-BSP African-American and Hispanic students, respectively. Asian American and White students in the program graduate with statistically similar UC GPAs despite having lower SAT scores than non-BSP majority students. Thus, BSP students are more successful in completing a biology degree than non-program members. Further, like many undergraduates in biology at Berkeley, a majority of BSP members are interested in a medical career. Since 1992, 85 percent of BSP applying to medical school have been admitted (vs. 55 percent for UC Berkeley applicants, and 50 percent for applicants nationally). That 80 percent of the successful BSP medical admits are from low-income communities is significant since, according to the AAMC, they are 4-5 times more likely as physicians to return and practice in those communities than physicians from other backgrounds.

BSP has impacted the UC Berkeley sciences curriculum in subtle ways. “Studying the Biological Sciences: An Introduction to the University and Science in the University” initially enrolled only BSP students but it is now regularly offered by the Biology Department and is open to all students. The course draws between seventy and ninety incoming freshman and transfer students each fall. In it, these students learn how to navigate the culture of science, “similar to the way a newcomer learns from a long time resident of a city, the real ins, outs, and behind-the-scenes information that s/he would never learn by taking a guided commercial tour,” according to the program director.

Projected Impacts

Key objectives in the grant from the Gordon and Betty Moore Foundation grant are to send several hundred low-income/first-generation program graduates to medical and science graduate schools and to replicate BSP in at least ten programs at four-year colleges and universities throughout California.

Another long term objective for BSP is to develop an institute dedicated to conducting research on the methodologies for diversifying the health professions. The institute would support original qualitative and quantitative studies by a wide range of experts from epidemiologists to ethnographers and sociologists that demonstrate the impact of diversity in the sciences. It would be sufficiently funded to support faculty during their sabbaticals. BSP leaders are currently seeking an endowment to support this endeavor.

Challenges

Institutionalization

Institutionalization is the greatest challenge facing BSP. The program director would like to see BSP endowed so that it can serve the needs of underserved and disadvantaged students far into the future. The proposed research institute would help to achieve this goal by helping to both refine strategies and effectively document the impacts upon participants and the larger academic environment.

Engaging the Academic Community

Conveying the importance of supporting diversity in the health professions to the educational community. The educational community here is broadly defined to include everyone from UC Berkeley faculty in the sciences to state legislators, members of Congress and the greater philanthropic communities.
Lessons

Provide the Proper Support
Students from backgrounds that are least like those that have traditionally succeeded as biology majors can succeed if given the “proper support” (e.g., academic advising and support, timing of when to do research and which research to choose, counseling to balance the competing demands of “town” and “gown,” etc.).

Support should be individually tailored to the life history and current circumstances of each member, acknowledging that one size (e.g., graduating in 4 years) does not fit all. Further, the support components (e.g., tutoring, advising, social events) should be integrated, comprehensive, and developmental.

While the BSP experience has helped to illuminate what kinds of support are most helpful for students in the this particular program, Dr. Matsui calls upon health scientists to work more closely with their social science colleagues to clarify what works, what does not, for whom, and under what kinds of circumstances.
The Science Educational Equity (SEE) Program and the STEM Initiative are two programs that are currently being undertaken at California State University, Sacramento. These two programs are profiled together because they demonstrate a range of increasingly coordinated practices that are being undertaken at CSUS to increase the pipeline of future STEM and health professionals from diverse backgrounds.

SEE Program
The Science Educational Equity (SEE) Program traces its origins to a Health Professions Pilot Project funded by a OSHPD-HPCOP grant in 1984 to introduce students to careers in the health professions. In 1986, the project was expanded and institutionalized at California State University, Sacramento as the SEE Program to serve as a comprehensive academic and peer support system for an ethnically diverse population of students who face social, economic, and cultural barriers to careers in the sciences and health professions. Dr. Juanita Barrena, who has served as the program's director since its inception, along with Dr. Isabel Hernandez-Serna and Dr. Cecilia Gray, co-authored the proposal to obtain on-going University support for the program.

This and other programs among other CSU campuses brought together CSU faculty members who shared concerns regarding the lack of access and opportunity in the sciences for underrepresented minority students in the fields of science, technology, engineering and mathematics (STEM). In the course of the inter-campus dialogue, representatives from a number of CSU statewide campuses expressed interest in the Louis Stokes Alliance for Minority Participation (LSAMP). LSAMP is sponsored by the National Science Foundation (NSF), and is dedicated to increasing the number UR student groups who graduate with baccalaureate degrees in STEM disciplines. In 1994 the California State University system secured funding from NSF to join the ranks of LSAMP alliances and launch the CSU*LSAMP program. This funding, along with grants from TCWF, OSHPD, and NIH-NIGMS, support core operations and fund of most of the SEE program's activities.

STEM Initiative
In the spring of 2004, President Alex Gonzalez and California State University Sacramento launched Destination 2010, an initiative intended to establish CSUS as a premier metropolitan university and a destination campus for prospective students and employees in the Western U.S. The following year, in response to a report published by the National Academies Committee on Science, Engineering, and Public Policy,\(^78\) Dr. Barrena, Dr. Thomas Landerholm, and other faculty from CSUS initiated discussions focused on strengthening institutional commitment to STEM, faculty teaching and research, and the role of the university in workforce development. They secured approval from the CSUS Provost to authorize 6 units of time for Dr. Landerholm to develop and establish the STEM initiative as part of the Destination 2010 program.

Description
SEE Program
SEE is an academic support program designed to meet the needs of students who face social economic or educational barriers that limit access to careers in the health professions, science research, and science

teaching. The stated goals of the SEE program are a) to improve access to quality of health care in underserved communities and b) to foster inclusion of diverse perspectives in science research and science education that is attentive to the needs of pluralistic society. To accomplish these goals, SEE sponsors a wide range of structured activities (through NSF, NIH-NIMS, and TCWF funding) designed to build academic excellence, enhance personal development, and develop a sense of social responsibility. The intent is to create a learning community in which students are expected to share their knowledge with other students, provide personal and moral support to each other, participate in academic and extracurricular activities, and expand their understanding and appreciation for the cultural experiences of all SEE members. Activities include:

- Supplementary adjunct courses in the basic sciences for community college and CSUS students
- Science Transfer Program assists local community college students with the application and transfer process to the CSUS campus. Orientation/survival skills activities are offered upon CSUS enrollment
- Study groups, peer mentoring, and pre-professional career guidance advising for each student. SEE advisors keep office hours at the SEE office and are available for academic advising
- Professional conferences, academic workshops and seminars, and summer enrichment programs at nationwide universities and laboratories
- Application assistance to graduate programs and health profession schools
- Social events such as barbecues, field trips, and pot lucks

Other SEE activities involve support of two local high schools for the Health Professions Pipeline Partnership Project. CSUS students provide mentoring and enrichment through this academic support program to the students at Sol Aureus College Preparatory Academy and Health Professions High School. CSUS also partners with three campuses of the Los Rios Community College district for the Science Transfer Program. Community College students are assisted with the application and transfer process to CSUS.

CSUS also partners with 18 other CSU campuses, and other PhD granting institutions, including the University of California system as part of CSU*LSAMP, and its Bridge to the Doctorate Program. The CSU*LSAMP program is administered by SEE. Now in its third phase with CSUS as the lead campus, CSU*LSAMP aims to:

- Enhance first and second year retention rates and overall academic performance of UR students in STEM majors to levels comparable to non-UR students
- Enhance the performance of UR students in math and science courses
- Increase the number of UR students who pursue graduate study in STEM disciplines

**STEM Initiative**
The STEM initiative is part of the Destination 2010 project at CSUS. The goals include:

- Develop and implement a regional plan to strengthen STEM education in the Sacramento region
- Recruit student, staff and faculty populations that better reflect the diversity of California
- Increase the number of students graduating in STEM to meet local and national workforce needs
- Increase the capacity of the region to contribute to the advancement of knowledge in STEM

The STEM initiative seeks to integrate efforts at CSUS with those of regional government, business, K-12, two-year and four-year universities and the community to improve the physical and intellectual infrastructure of the Sacramento region, in order to increase the number of students entering the science and technology workforce. The program seeks to pool the human and monetary resources of Sacramento State, with those available from external sources and to also develop a regional strategy to expand the science and technology workforce. The focus of the STEM initiative in the first year is to engage programs that will
increase enrollment and graduation of students in STEM disciplines. There are currently 23 departments from five colleges engaged in the initiative. Key elements of the STEM initiative include:

**The Outreach Initiative** is designed to increase STEM literacy and public awareness of STEM programs at CSUS, and to recruit a diverse student body into STEM disciplines by providing educational programs such as public seminar series, and community forums for open discussion of issues of public concern. It also requires the marketing of STEM career training to prospective students in the form of student presentations and advising at local K-12 schools and community colleges.

**The STEM Academic Support Program** provides structured study and learning programs to STEM majors to increase individual and program success and reduce the time to graduation. The program involves tutoring for students by faculty and advanced students, as well as cooperative learning experiences that take students outside of the classroom.

**The STEM Academic and Career Advising Program** provides students with the necessary information needed to tailor their academic training to real career goals by making advisement mandatory for all STEM majors. The Program provides trained advisors, on-line interactive advising, and alumni mentoring by CSUS graduates from cornerstone industries of the regional economy.

**The STEM Academic Enhancement Program** is a commitment to secure increased funding to support infrastructure upgrades and growth to meet rising numbers of students. This program addresses faculty and curriculum development, upgrading and modernization of classrooms and equipment, support for faculty, and student participation in innovative research.

**The STEM Assessment Program** involves periodic internal and external assessment of all STEM programs, to determine whether key success benchmarks are being met for academic programs, research education programs, student academic performance, student retention and time to degree, and post-baccalaureate placement in STEM industries. This includes meetings with faculty and Deans at peer CSU campuses to learn how STEM education and research efforts are applied on their campuses and to share best practices and lessons learned.

**The CSU*LSAMP Bridge to the Doctorate** activities aim to broaden participation in graduate study by attracting graduates of LSAMP programs to Master’s level study at designated Alliance graduate institutional sites and providing substantial student financial support and a focused program of educational support designed to retain, graduate and place participants into doctoral degree programs.

**Partners/Contributions**

**STEM Initiative**
There are currently 23 Departments from five Colleges on the Sacramento State campus participating in the STEM Initiative, representing more than 9,000 students. Community partners include Linking Education with Economic Development (LEED), the Valley Vision Consortium, the Sacramento Chamber of Commerce, the Workforce Development Group and the Sacramento Council of Education. Dialogue between these organizations and regional educators will ultimately coordinate the STEM education of students. For example, by suggesting curriculum changes, industries play a role in training the future workforce in the Sacramento region. Businesses in these alliances also offer internships to students and recruit graduates from CSUS.

Other partners include many of the K-12 districts in the region, the Los Rios, Sierra and Delta Community College Districts, the University of the Pacific and the University of California, Davis. The STEM initiative’s goal is to open discussions between these groups and to create a roadmap for the long-term commitment and improvement of STEM education throughout the region.
Alignment with IOM/Sullivan Commission Recommendations

SEE and the STEM Initiative address the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

6.1 HPEI governing bodies should develop institutional objectives consistent with community benefit principles that support the goal of increasing health-care workforce diversity, including, but not limited to efforts to ease financial and non-financial barriers to UR student participation, increase involvement of diverse local stakeholders in key decision-making processes, and undertake initiatives that are responsive to local, regional and societal imperatives.

**Sullivan Commission Recommendations**

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4.4 Baccalaureate colleges and HPEIs should provide and support “bridging programs” that enable graduates of two-year colleges to succeed in the transition to four-year colleges.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

**Impacts to Date**

**SEE Program**

The Science Educational Equity Program at CSUS has consistently met and exceeded documented expectations for the engagement, retention, and graduation of UR students in the sciences. In accordance with TCWF standards for the Preparation of Pre-Health Professional Students grant, the SEE program:

- Provides educational and health career support to 30 unduplicated students per year
- Engages at least 30 additional students in larger group activities
- Ensures that at least 10 SEE participants are accepted to health professions schools annually

The CSUS-Los Rios Science Transfer Project has resulted in the successful transfer of hundreds of UR Community College students to CSUS by improving their completion of major appropriate transfer courses, improving their GPA’s, providing mentoring, research experiences, and fostering an early connection to CSUS faculty, staff, and students. The following data represents the statewide CSU*LSAMP program, for which CSUS is the lead campus:

<table>
<thead>
<tr>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase II percent increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of UR STEM students</td>
<td>1,839</td>
<td>3,391</td>
</tr>
<tr>
<td>UR STEM baccalaureate degrees awarded by all CSU campuses</td>
<td>1,313</td>
<td>1,313</td>
</tr>
<tr>
<td>Non-UR STEM baccalaureate degrees awarded by all CSU campuses</td>
<td>5,553</td>
<td>5,435</td>
</tr>
</tbody>
</table>

**Table 1. UR STEM student participation and degrees awarded by academic year**
The data in Table 1 shows that Phase III has been successful in substantially increasing participation of UR-STEM students in CSU*LSAMP project activities. Although the number of students served in year three was lower than the first two years of Phase III, the overall number of participating students in year three was substantially greater than the proposed target of serving 2,000 participants per year (See Program Description). This decrease reflects a drop in the number of CC participants as a result of increased transfer rates to STEM majors in the CSU and the full or partial institutionalization of the CC programs receiving funding from other sources. The decrease also reflects an increase in the number of students who enter graduate programs. The data also reflect a significant increase in the number of baccalaureate degrees awarded to UR STEM students as compared to a relatively stable number of non-UR degrees awarded.

Although tracking students to graduate programs is still a relatively new Phase III initiative, at least 101 undergraduate CSU*LSAMP students were admitted to STEM graduate programs for fall 2006. Notably 55 of the students were admitted to STEM Ph.D. programs at prestigious universities nationwide, including eight of the UC campuses, Harvard, Cornell, Texas A&M, Duke, and Johns Hopkins Universities. In addition, the CSU*LSAMP Program has created new alliances between institutions. This year saw the first jointly-sponsored UC/CSU LSAMP Conference to broaden student participation in the STEM fields.

STEM Initiative
Though still in its early phases, the STEM initiative has already been successful in identifying funding sources, writing grant proposals, developing a STEM marketing strategy, identifying partnerships to be developed, and developing a comprehensive campus STEM inventory. Additionally, CSUS has created a new Center for STEM Excellence, which includes office space, faculty assigned time, and support staff for the coordination of all STEM activities. Other impacts have included the redesigning of STEM curricula to allow students more specialization through interdisciplinary training.

Projected Impacts

SEE Program
The SEE program plans to continue its efforts to meet the needs of UR students in the sciences at CSUS. As many of the components of the LSAMP program have become institutionalized by the establishment of adjunct courses (to replace academic excellence workshops) at the community colleges to better prepare science students for transfer to CSUS, Program administrators are now focusing on a fourth phase of LSAMP – the Bridge to the Doctorate Program. This Program aims to increase matriculation of former LSAMP students into Master’s level programs at the Alliance’s ‘graduate institution sites’, including participation in rigorous coursework and significant research experience. The Program also provides academic support, mentoring, and training activities that enhance performance and competitiveness for admission to Ph.D. programs. This activity provides stipend support of $30,000/student/year and an educational cost allowance of $10,500/student/year for up to two years.

STEM Initiative
There are two main areas of projected impact for the STEM Initiative. The first is the effort to obtain an NSF STEP Grant for Student Recruitment, Retention and Graduation. The Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP) seeks to increase the number of students receiving associate or baccalaureate degrees in STEM fields. The grant, which is due in September 2007, allows requests for up to $2 million over five years. These funds would support outreach and pipeline activities as well as academic support for students and potential students throughout the richly diverse Sacramento region.

The second is to obtain certification of CSUS as a Minority Serving Institution with the NIH. This certification will make CSUS eligible for funding through a variety of grants that support UR student recruitment, retention and academic capacity building in the STEM disciplines. The National Institutes of Health, the National Science Foundation, the Department of Education and the Department of Defense all have programs aimed at minority participation that require designation of a university as a Minority Serving Institution.
**Challenges**

**Limited Institutional Financial Support**

As a public institution, the greatest challenge facing CSUS is limited institutional financial support. The academic excellence workshops (supplemental instruction) introduced by the SEE program are now being funded by University sources. The University also provides on-going funding to maintain the Program's infrastructure, by supplying an office, supporting a full time program coordinator, providing 20 percent class release time for Dr. Barrena, and covering some office student assistants and minimal supplies and services.

All other staff support is funded by either grants obtained in-house or extramural grants. For example, the program's full time Student Activities Coordinator, full-time Office Manager, Outreach Coordinator (who works on the community college project), database entry and maintenance personnel, faculty research coordinator time, faculty curriculum coordinator time, other time for faculty members serving on special projects, and PI project management time all come from the grant. In addition, all field trips for students (including conference attendance), stipends for their participation in summer programs or research experiences, student travel, enrichment activities, several of the adjunct courses, additional student assistants, and the bulk of supplies and services, etc., are paid for by grants.

Another challenge is finding the resources to develop a tracking system to follow all CSUS graduates to identify the educational and career paths they pursue beyond graduation from CSUS. Suggestions for substantive and lasting institutional support needed to produce a meaningful impact include:

(a) All supplemental instruction programs for Math and Science should be funded by the University (and academic departments), as well as expanded and "attached" to gate-keeper courses. These are FTE-generating, proven methods to improve student academic performance. This has been done on several other campuses.

(b) An increased base-budget should be allocated to the project, providing a minimum of 40 percent release time for the faculty director, elevation of the Program Coordinator position to a higher classification, creating a full-time office manager, and sufficient supplies and services.

(c) Greater "recognition"/integration of the SEE Program into the academic "life" of the College/University (e.g., participation in Department Chair meetings, meetings with the Dean).

(d) Creation of a more comprehensive student support system in the College of Natural Sciences.

(e) Since many of the SEE activities cannot be funded from University sources (e.g., scholarships and summer stipends), the Principal Investigator should be provided with resource development support.

**Lessons**

**Importance of Academic Leaders**

A key factor in the successes to date is the presence of a core of committed academic leaders. The presence of a competent & committed team of professionals who proactively work and advocate to support and help promising students realize their career aspirations is essential.

**Build Supportive Student Cohorts**

Cooperation and support among student cohorts, especially among UR students is also vital and has been proven in many cases to be the key to student success (particularly among UR students). The summer programs are an important part of building cohorts that will stay together for the rest of their college tenure. CSUS academic excellence workshops reinforce an atmosphere of cooperative learning. Socially and personally, students deal with enormous pressures--financial, family, educational, and are able to call on each other for mutual support. The See program provides important psychosocial support, serving as a source of community and friendship. Finally, as it relates to science and the health professions, it is very important to be with others who have a common goal and mission. Pursuing a career in the health
professions involves many sequential steps and one learns from others by watching them go through the experience.

**Identify and Build on Existing Assets**

One of the early lessons learned by the STEM Initiative’s organizers is the need to build on existing assets. An early goal of the STEM initiative was to inventory all current campus STEM-related activities, in order to tap into individuals and groups of faculty engaged in smaller scale versions of the activities that STEM wanted to undertake. Organizers were unable to complete the inventory, however, and determine how best to engage and coordinate with existing efforts. As a result, in the early stages of the initiative, the organizers often discovered that they had duplicated and/or failed to learn lessons from a pre-existing effort. Earlier engagement and coordination of some of these efforts would have saved a lot of time in developing an efficient and comprehensive program. The organizers also recognize that earlier engagement of these individuals and programs would have helped to build momentum, establish more of a broad-appeal, and create an atmosphere of many hands engaged – each doing less.
8. Community Health Works
San Francisco State University / City College of San Francisco

Primary Authors: Alexandra Alznauer and R. Ruth Linden

Overview

Founded in 1992, Community Health Works (CHW) seeks to eliminate health disparities and increase workforce diversity for low-income and immigrant communities. With a focus on public health and primary care, CHW acts as an “incubator” by creating programs to:

- Improve the care and prevention of chronic conditions
- Develop methods to train front-line health workers
- Integrate foreign-trained health professionals into the US health care system with a special emphasis on service to the California health safety net

This profile focuses on the latter two goals and CHW’s development of three programs, including a) Certificate in Community Health Work, b) The Health Train / Metropolitan Health Academies, and c) the Welcome Back Center for International Health Worker Assistance.

Certificate in Community Health Work

Impetus

Impetus for the Certificate in Community Health Work was generated by a series of three multicultural focus groups convened by San Francisco State University (SFSU) in the city’s African American, Latino, and Asian communities to assess and identify local unmet needs. Each group was asked how its community could benefit from SFSU’s Department of Health Education. All three focus groups agreed that neighborhood leaders currently serving as community health promoters needed recognition, training, and access to career ladders.

Description

Given a growth in outpatient and home care, and the need for increased investment in community-based prevention, community health workers have the potential to play an important role in the nation’s health. In partnership with City College of San Francisco (CCSF), CHW created the first, college-based Certificate in Community Health Work in the U.S. Initially a one-year generalist Certificate in Community Health Work was offered. The program now also offers specialty certificates in Drug and Alcohol, HIV/STD Prevention Education, and Health Care Interpreter. Students are evaluated not by traditional testing methods but by demonstrated, skill-based competencies. Students’ life experiences are used as educational tools. The curriculum combines the development of content expertise with instruction in leadership and work culture competencies, e.g., time management, organization, communication skills, conflict resolution, and resume writing.  

79 Leadership concluded that a community college was the most appropriate and affordable venue for the certificate program.
80 Working students enrolled in the generalist certificate program taking evening classes may finish the certificate in three to four semesters instead of two.
The Health Train Concept and the Metropolitan Health Academies

CHW leadership has conceptualized an articulated pathway to higher education in public health that is captured by the title “The Health Train.” The Certificate in Community Health Work, for example, extends the train line by moving the first station from the community college back to the community itself. From here the worker and prospective student can board the train and get off at the second station, earning a CHW certificate at the community college. At this point the individual can choose to work in the community or get back on The Health Train to earn an associate’s degree at the community college’s last station. Upon graduation, the individual can seek employment or hop back on The Health Train to study for a baccalaureate degree at the university. A few graduates will travel the greatest distance and enroll in SFSU’s Urban MPH program.

Overview

In the Fall of 2008 CHW will implement a pilot program, Metropolitan Health Academies (MHA), in San Francisco. MHA will be the most developed route on The Health Train and will also function as its “express train.” MHA credits earned at the community-college level will transfer to the collaborating state university, reducing the red tape and time it takes for a student to pursue a baccalaureate, master’s, or other graduate degree. In addition to “sparking a passion among people in urban communities to pursue a lifetime of work in community health,” MHA seeks to close the educational equity gap for students of color, low-income students, and those from immigrant families.

Impetus

MHA represents a working model of the recommendations presented in a study published by the AACU82 entitled “Greater Expectations: A New Vision for Learning as a Nation Goes to College.” While on sabbatical, CHW’s Executive Director and SFSU professor Mary Beth Love was inspired to develop MHA after reading this report.

Description

Metropolitan Health Academies will function as the curricular pathway in the two partnering departments (Health Education at SFSU and CCSF) and will integrate public health content with general education foundation skills. MHA will serve first- and second-year students including adult learners returning to school. Rather than targeting a small number of already-strong students, MHA is designed to build a broad on-ramp to higher education. Many MHA students will seek employment after transferring to a university and earning their baccalaureate degree in urban public health or nursing. Others will pursue graduate degrees in these areas or in related healthcare fields such as psychology, social work, and medicine.

Metropolitan Health Academies’ academically accelerated curriculum focuses on pressing issues in urban community health. In addition, the program will prepare learners for success in college. MHA’s curriculum is built around the notion that the most effective health interventions are not individual medical interventions or lifestyle changes, but community-level interventions. Foundation skills are contextualized by community health content, with an emphasis on civic engagement, social justice, and experiential learning. Each student is part of a learning community or linked set of courses, which will serve as a “college within a college.” MHA instructors from the community college and state university will also form a community, choosing which issues to incorporate throughout the two-year curriculum. Second year students will mentor beginning students.

SFSU and CCSF are strategic partners with California Newsreel, producers of the documentary, “Unnatural Causes: Is Inequality Making Us Sick?” to be broadcast on the Public Broadcasting System (PBS) in 2008. The partnership’s intent is to initiate a national conversation about the social determinants of health and to

---

Welcome Back Center: International Health Worker Assistance

Impetus

A foreign-trained physician from Mexico, now executive director of WB, SFSU professor José Ramón Fernández-Peña, observed that foreign-trained health professionals resided in California and were not using their training and skills in the state’s health sector. He partnered with CHW’s executive director to identify these individuals and address the barriers they faced to practicing their profession.

Description

Incubated by CHW and launched in March 2001, Welcome Back Center: International Health Worker Assistance Center (WB), is a statewide initiative that helps foreign-trained health workers living in California to gain language and technical skills as well as any licensure required to return to their profession. The program also seeks to increase cultural and linguistic competency as well as overcome shortages of essential health professionals, particularly in rural areas and underserved communities. WB’s model incorporates educational case management services, courses, and group activities.

Four barriers facing foreign-trained health workers were identified: language, limited financial resources, lack of familiarity with the US healthcare system, and the complex rules that determine whether education undertaken in foreign countries is granted or withheld. WB’s case managers address these issues by:

- Providing basic skills assessment
- Assisting foreign-trained clients in setting realistic educational goals
- Referring clients with licensure issues to Jewish Vocational Services (see profile in this report)
- Providing pre-training orientation
- Providing classes such as “The English Health Train” (vocational ESL for health care professionals) and an NCLEX-RN preparation course

If a client is unable to practice her/his profession in the US, WB case managers provide counseling about alternative healthcare careers. This may require training for a position different than the one held in the client’s former country. Group activities offered include Health Career Fairs at CCSF and SFSU and presentations such as “Careers in Research” and “Residency in the US for International Medical Graduates.” In addition, WB clients usually take CCSF’s “Introduction to the US Health Care System” course. Many clients also attend SFSU’s “Leadership in Health” lecture series.

Alignment with IOM/Sullivan Commission Recommendations

The Community Health Works programs address the following IOM and Sullivan Commission recommendations:

83 Welcome Back Center offices are located in San Francisco, Los Angeles, and San Diego. The San Diego WB center has a satellite office in the Imperial Valley. Due to vast geographic spread of the Central Valley, local politics, and the low number of potential clients, a planned center in Fresno was not implemented.

84 WB serves all health professionals including nurses, pharmacists, physicians, speech therapists, occupational therapists, laboratory and other technicians, psychologists, dentists, social workers, health educators, and others.

85 Some former physicians and other healthcare professionals pursue health care administration. Others temporarily or permanently work as health care interpreters after earning a specialty Certificate in Community Health Work at CCSF. Working in such a position can provide a foreign-trained health professional a chance to learn more about the US healthcare system, while earning an income and allowing time to study for the NCLEX-RN.
Sullivan Commission recommendations

4.3 For underrepresented minorities who decide to pursue a health profession as a second career, health professions schools should provide opportunities through innovative programs.

4.4 Baccalaureate colleges and health professions schools should provide and support “bridging programs” that enable graduates of two-year colleges to succeed in the transition to four-year colleges.

4.7 Colleges, universities, and health professions schools should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

Impacts to Date

Certificate in Community Health Work Program

- Four out of five CHW graduates are persons of color.
- All graduates work in medically underserved communities.
- One year after completion of the certificate program, 79 percent of the graduates previously employed as community health workers had received promotions attributable to their certificates.
- The San Francisco Department of Public Health recognizes the CHW certificate as equivalent to six of the 12 months of experience required for community health worker positions.
- CHW leadership has disseminated the model, evaluation tools, and impacts of the certificate programs at the state and national level through articles and conference presentations.
- A number of other sites have begun to develop college-supported CHW courses.

Welcome Back

Of 4,711 foreign-trained health professionals who have been clients of a California WB center, the majority were nurses and medical doctors. At the time of assessment, only 29 percent of these program participants had been working in California in the health sector. With support from WB:

- Twenty-two percent validated their credentials.
- Twenty-two percent of clients with validated credentials passed their licensing exams. Of those who passed their licensing exams, 46 percent obtained licenses in their profession.
- Of the original 4,711 clients, six percent entered a new career in the health sector, i.e., obtained employment; another seven percent obtained employment in their former health professions.
- Fifty-five foreign-trained physicians entered medical residency programs.

In collaboration with Bunker Hill Community College, the University of Massachusetts, Boston, and the Massachusetts Board of Higher Education, a new WB Center focusing solely on foreign-trained nurses was established in Boston in October 2005.

San Francisco WB leadership is also working with collaborators in Alaska, New York, and Washington State. WB’s model has been presented through trainings at 20 colleges nationwide with participants from 35 US and Canadian educational institutions.

Overall, after beginning in 1989 with a $50,000 grant, Community Health Works has raised more than $17 million from over 18 different public and private sources including: The US Department of Education, Fund for the Improvement of Post-Secondary Education; the California Office of Statewide Health Planning and Development; the U.S. Centers for Disease Control and Prevention, The California Wellness Foundation, and Blue Cross of California Medi-Cal Program.

---

86 CHW leadership believes strongly that college credit-bearing certificate programs should not become requirements for entry into community health work, nor should they be the only path into the field.
Projected Impacts

CHW Program
CHW leadership is writing the nation’s first textbook for community health workers to be published by Jossey Bass/Wiley.

Metropolitan Health Academies
Initially, 35 students will be enrolled in MHA at CCSF and another 35 at SFSU with faculty working collaboratively. CHW plans to disseminate the MHA model nationally.

Welcome Back
In Spring 2008, WB will implement The Immigrant Nurse Re-Entry Project in the East Bay, in partnership with Jewish Vocational Services of San Francisco, the English Center for International Women, Chabot Community College, and the Alameda County Medical Center. In addition, an article on WB has been written for publication.

WB continues its strategy of seeking support from a variety of sources: flexible, non-categorized funding to address emerging issues; diversified, ongoing funding from public and private entities; modular sponsorship, e.g., Kaiser Permanente’s funding of “The English Health Train”; training contracts from employers and community organizations; fee for services/sliding scale; and alumni support.

Challenges

Institutionalization
Obtaining funding to expand programming remains a challenge. CHW is working on gaining further funding in order to develop additional specialty certificates and trainings in areas such as mental health.

The entire MHA program will require a further $1 million in order to achieve its goal of extending The Health Train to high school students during the 11th and 12th grades. Community Health Works will continue its current strategy of seeking grant funding from a variety of public and private sources.

Collaboration Among Academic Institutions
Working with community colleges has proved challenging. Partnerships with academic centers have often been problematic until the first positive outcomes are achieved. WB’s leadership works to convey to educational partners the benefit to their institution and the broader community of establishing WB courses on campus or allowing WB candidates to participate in existing courses.

Building Trust in the Community
In the broader healthcare community there is an inherent mistrust of WB’s “agenda.” Leadership has learned that it must clearly communicate that its role is consistent with maintaining professional standards and assisting in filling current vacancies in the health professions, e.g., nursing.

Lessons

Benefits of Creating a Health Professions Career Ladder
With the validation that accompanies certification in standardized competencies, community health workers gain recognition and respect and are able to access the career ladder, while serving their communities more effectively.

Importance of Links Between Higher Education and Community
With pedagogical techniques that include low-income workers with little or no post-secondary education, community colleges can develop curricula that meet the needs of community health workers and employers to the benefit of the broader community.
Importance of Links between Community Colleges and State Universities
Partnerships between urban community colleges and state universities can overcome the obstacles faced by low-income, UR transfer students. By focusing on fundamental skills and creating both learning and teaching communities, innovative bridge programs should increase the likelihood of student success.

Advantages of an Urban Environment
For political and geographical reasons, WB’s model is well-suited to urban, not rural, areas. The number of potential clients is lower and the timeframe for getting to know the local players in healthcare is longer in rural areas. Experience to date with the Fresno pilot program suggests that the will be far lower than that of an urban center. Even with incentives, WB program graduates have primarily sought health care employment in urban areas for reasons including the desire for higher pay and to reside close to family.

Importance of Engaging Demand Side Institutions
Strong partnerships with area healthcare employers, workforce development agencies, and others are key to the success of WB. Relationships with employers should be established from the outset in order to best serve clients and employers.
B. Efforts Led by Health Professions Employers

The following ten profiles include efforts to expand the pipeline of UR students that are led by health professions employers. Many of these efforts involve substantial engagement and leadership by other stakeholders, as well. For example, California State University at Long Beach is a major partner with Long Beach Memorial Medical Center in the development and implementation of an Accelerated Nursing Program (Profile II. B.1), and others such as the White Memorial Medical Center Family Practice Residency Program (Profile II. B.3), and the Faces for the Future Program at Children’s Hospital Oakland (Profile II. B.4) include a broad spectrum of academic and community stakeholder partners.

1. Long Beach Memorial Medical Center Accelerated Nursing Program
   Department of Nursing, California State University Long Beach (CSULB)

Primary Authors: Alexandra Alznauer and R. Ruth Linden, Ph.D.

Demographic Overview

According to the 2000 census, Long Beach is the most ethnically diverse large city in the United States and has the second largest Cambodian community outside of Asia. Cambodians comprise approximately 10 percent of the population of Long Beach. The remaining UR population is 36 percent Latino, 15 percent African American, and 0.8 percent Native American.

Long Beach Memorial Medical Center (LBMMC)
In 2006, 11 percent of the nursing staff identified as Latino, 5 percent as African American, and 0.6 percent as Native American. 87

California State University, Long Beach (CSULB)
In 2006, 13 percent of undergraduate nursing students identified as Latino, eight percent as African American, and one percent as Native American. There is no demographic difference between the students enrolled in the Trimester Program—the partnership between the CSULB Department of Nursing and Long Beach Memorial Medical Center—and the undergraduate nursing students enrolled in the undergraduate nursing program.

Impetus

Two organizations comprise this regional, nursing education partnership: a hospital and an HPEI. Each partner had a different motivation for becoming involved.

Long Beach Memorial Medical Center, a tertiary care hospital, is part of Memorial Care, a nonprofit health system with hospitals in Los Angeles and Orange counties. By 2003, costs for registry nurses and travelers (often from out of state) had run to over $3 million monthly. With a growing volume of high-acuity care clients, the hospital had eliminated LVN positions and sought to increase the number of baccalaureate-prepared nurses. Moreover, leaders at LBMMC realized that the demographics of both its client population and its primary service area had changed from being primarily English speaking to 10 percent Cambodian and close to 40 percent Spanish-speaking, although the hospital’s nursing staff remained at about 10 percent Spanish speaking. LBMMC needed to rapidly hire and retain a large number of well-prepared, bilingual, bi-cultural nurses, particularly Spanish-and Cambodian-speaking nurses who would commit, at least for the short term, to working at the hospital.

87 In 2006, 33 percent of LBMMC’s nursing staff and 24 percent of CSULB’s undergraduate nursing students identified as Asian. There are no demographic data available on the percentage of Cambodians who are CSULB students, CSULB undergraduate nursing students, or LBMMC nurses or staff. Therefore, we don’t know to what extent the Trimester program is or will be graduating Cambodian nurses who are linguistically and culturally competent.
By 2003, California State University, Long Beach Department of Nursing chair, Loucine M. Huckabay, Ph.D., was concerned about cuts to her department’s enrollment that had already occurred, anticipated budget cuts, insufficient classroom space to expand programs, and an insufficient numbers of master’s-prepared clinical faculty to expand programs. CSULB’s president worked with then CEO of LBMMC, Byron Schweigert, to develop the concept of the Trimester Program partnership.

**Description**

The Trimester Program began in 2004, and uses a multifaceted approach combining financial, academic, and personal support. Like all of California’s impacted, public college and university nursing programs, CSULB’s Department of Nursing can admit only some of the qualified undergraduate students who apply for admission. Once a student applies, she or he is entered in a lottery. Ninety students win a place in the Department of Nursing each fall and spring. (A total of 180 students are admitted each academic year.) These students are then invited to enter a second lottery for one of the 36 places in Trimester. Trimester is attractive to many students because it provides a stipend for tuition and fees and carries other benefits in exchange for which a student must fulfill a two-year contract to work at LBMMC upon passing the NCLEX-RN. For other students, the Basic program that leaves summers free is a better fit.

Trimester students must be willing to attend school year round, including an intensive Summer term (jokingly referred to as “boot camp”), and sit for the NCLEX-RN within three months of graduation. Students who are not enrolled in Trimester but are enrolled in the Basic program may also receive a stipend and offer of employment from LBMMC. Occasionally a Trimester student elects not to receive a stipend. Trimester stipend recipients receive:

- Stipend of $3,500 for each of six semesters to cover tuition, books, and fees
- CSULB NCLEX-RN preparatory course for ESL students
- Two-year nursing employment offer at LBMMC
- Support services during school and the first two years of employment to ensure a successful transition from school to work

What makes this “fast-track” program exemplary is the leadership demonstrated by LBMMC in recognizing that the hospital could significantly cut its registry costs by underwriting expansion of the nursing program at CSULB. Moreover, the Trimester Program positioned the hospital to hire baccalaureate-prepared nurses, many of whom would be bilingual. It is also notable that the leadership of these two complex institutions recognized their common needs and interests and came together in a very short period of time to develop a strategy that is mutually beneficial.

---

88Incoming undergraduates for the year were to be cut back from 72 to 48 with the State of California providing only 54 percent of funding.
89To be considered a qualified applicant, a student must complete at least 56 credit units, including all General Education requirements with a minimum, cumulative GPA of 2.5, earn a grade “C” or better in all prerequisite nursing courses, and complete an academic skills test.
90CSULB’s nursing department found that two-thirds of its graduates who failed the NCLEX-RN exam on their first try were predominantly Asians and Latinos whose first language was not English. Now, within one month of graduation, CSULB’s ESL students take an intensive NCLEX-RN preparation course. As a result, its pass rate has climbed from a low of 69 percent three years ago to an average of above 80 percent, which is the state and national average pass rate. On the last NCLEX-RN exam, CSULB’s pass rate was 89 percent.
91RN attrition rates during the first two years of hospital employment are particularly high, generally 50-60 percent. Support services, including mentoring, during the first critical transitional year increase retention, according to one key informant.
92Hospitals that employ a higher percentage of baccalaureate- and master’s-prepared nurses have lower mortality rates for surgical patients. See “Educational Levels of Hospital Nurses and Surgical Patient Mortality,” L.H. Aiken, S.P. Clarke, R.B. Cheung et al., Journal of the American Medical Association 290 [12]: 1617-1623.
Partners/Contributions

**Long Beach Memorial Medical Center (LBMMC)**
- Provides $10 million over the five-year contract period, covering student stipends, a renovated hospital building, a newly constructed simulation lab, computers, and 15 master’s-prepared staff nurses who provide the CSULB Department of Nursing with the equivalent of 7 FTEs
- Supports clinical opportunities for students on the hospital campus, including hands-on experience in critical care using Human Patient Simulators
- Provides a final-term preceptorship in an area of student’s choosing
- Offer of two-year employment contract upon graduation and licensure
- Funds hospital-based position to coordinate the preceptorship program to ensure a smooth transition to full-time hospital employment
- Provides mentoring by unit managers, the director of nursing education, and other professional staff during first two years of employment
- Offers possibility of rapid professional development and advancement, including financial support to pursue the MSN after two years of successful employment at LBMMC

**California State University Long Beach, Department of Nursing (CSULB)**
- Selects qualified, first-year nursing students by lottery
- Funds half-time counselor to identify and provide academic and other support services for students
- Provides faculty, classroom space, and tutoring
- Provides academic and personal counseling both before and after applying to the Trimester Program to ensure a smooth transition into the program and from the classroom to the hospital
- Provides an NCLEX-RN preparatory course for ESL students taught by CSULB faculty

**California State University of Long Beach (CSULB)**
- Provides $5 million over the five-year contract period, mostly comprised of in-kind contributions of faculty, lab space, and classrooms

Alignment with IOM/Sullivan Commission Recommendations

The Trimester Program addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

3.4 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health-care workforce.

5.4 HPEIs should be encouraged to affiliate with community-based health care facilities in order to attract and train a more diverse and culturally competent workforce and to increase access to health care.

**Sullivan Commission Recommendations**

5.2 To reduce the debt burden of underrepresented minority students, public and private funding organizations for health professions students should provide stipends, loan forgiveness programs, and tuition reimbursement strategies to students and institutions in preference to loans.

4.3 Health professions schools should provide opportunities for UR individuals through innovative programs.

4.7 Colleges, universities, and health professions schools should support socio-economically disadvantaged college students and provide these students with an array of support services.

---

93During hospital-based preceptorships students are under the direct supervision of one or more nurses. The clinical setting offers exposure to areas of nursing more appropriately taught outside the academic setting.
Impacts to Date

- Trimester has successfully met LBMMC’s goal to graduate baccalaureate-prepared nurses who pass their boards within three months of graduation and fulfill a two-year work commitment.
- The retention rate at LBMMC of Trimester graduates is 60 percent over three years. Some nurses have stayed beyond two years and act as mentors to new graduates during their first year at LBMMC.
- LBMMC’s nursing staff has been reinvigorated by the presence of CSULB students at the hospital. Many nurses in their 40s and 50s who intended to retire early or transition to part time, have chosen to continue at LBMMC full time. Some have completed their MSN so that they can teach part time.
- The Trimester Program has met CSULB’s goal to avoid cutbacks in annual nursing student admissions of 33 percent, and has increased the number of admissions by 180 percent (130 students) annually.
- Since Trimester’s inception in 2004, LBMMC has awarded a total of 231 stipends. During 2006-’07, 72 stipends of $10,500 were awarded.

Among the Trimester Program participants:

- 98 percent of students who took the NCLEX-RN passed on their first try
- 70 percent of those who passed the NCLEX-RN on the first try became employees of LBMMC
- 20 percent of graduates are preparing for the NCLEX-RN exam and, upon licensure, plan to work for at least two years at LBMMC
- 146 are still enrolled in coursework at CSULB and nearly 100 percent intend to work for LBMMC for at least two years upon graduation and licensure

Nearly 50 percent of the 231 cumulative Trimester stipend recipients are from UR groups, specifically:

- 13 percent are Latino
- Five percent are African American
- One recipient is Native American

Projected Impacts

Projected impacts for LBMMC include:

- Achievement of $10 million savings in annual nursing registry and travelers costs by 2009
- Continued rise in recruitment and retention, especially Spanish and Cambodian-speaking RNs
- Higher rates of linguistic and cultural congruence between nursing staff and clients
- Improved health outcomes for bilingual, bicultural clients at LBMMC and for the community, as more BSN graduates trained onsite in LBMMC’s best practices join the hospital staff

Challenges

Nursing Staff Retention

Of the 85 Trimester Program graduates who were hired by LBMMC after passing their boards, 40 percent have left to work at other area hospitals or relocated out of the region after meeting their two-year commitment. The majority left because of long-commutes due to the high cost of housing near LBMMC. Leadership at LBMMC are working with real estate developers to create affordable workforce housing developments either near the hospital or on a city bus line. Part of the process will be educational, having the developers hold meetings at the hospital with employees interested in home ownership. After enough

---

94No demographic data are available for Cambodian students.
95Over the life of the five-year contract, 288 students, including an estimated 38 who are Spanish-speaking, will be guaranteed stipends and employment at LBMMC upon licensure.
96Two individuals left before the end of their two-year commitment to follow their spouses, whose jobs relocated.
employees “pre-qualified” for home loans commit to housing, developers can obtain financing at lower interest rates based on the amount of “pre-sold” housing units.  

**Recruitment and Retention of Bi-lingual, Bi-cultural Cambodian Nursing Staff**

As the percentage of Cambodian hospital clients increases, so does the need for nurses who can communicate effectively with this population and with the multicultural hospital staff, acting as a bridge between different cultures. However, many Cambodian nursing students and graduates have insufficient English-language skills. LBMMC’s Director of Clinical Workforce Development refers Cambodian nursing students who need additional support to CSULB for language workshops and one-on-one English conversation tutoring to improve their chances of successful completion of their clinical studies and preceptorships.

**Expanding Current Student-aid Funding**

The program has not met the goal of providing financial support for 100 percent of students with financial need.

**Expanding Current Departmental Funding**

The success of Trimester and CSULB’s partnership with LBMMC has paradoxically made it more difficult for the Department of Nursing to reach its capital campaign goal. Rather than donate funds for a new classroom building with spacious, state-of-the-art facilities on CSULB’s campus, area philanthropists have become more interested in donating to hospitals that train nurses onsite. Many potential donors tend to see the situation as “either/or,” whereas the nursing department sees the need to upgrade the department’s facilities as complementing enhancements at the hospital level.

**Lessons**

**Allow Sufficient Time for Planning**

The magnitude of the work necessary to plan and implement Trimester was more than the hospital initially anticipated. The initial planning phase for Trimester lasted 9 months.

**Secure Early Buy-In**

Ensure buy-in at as many levels as possible from all partnering institutions during the planning and initial implementation phases. It is not enough to have buy-in at senior levels of partnering institutions. Dialogue with employees at all levels, especially the nursing college’s instructors and the hospital’s unit managers, nurses, and other workers who will work most closely with the nursing students.

**Make the Business Case**

There are both short-term and long-term financial gains to be had in partnering with a nursing college. Over time the costs of hiring registry nurses and travelers are reduced significantly. By 2009, LBMMC anticipates that the savings per year will rise to $9 – 10 million per year, an amount nearly equal to that invested by the hospital over the life of the five-year contract period. There may also be unexpected gains such as savings through retention of existing staff as morale goes up and mid-life nurses decide to defer retirement or plans to shift to part-time employment. A program such as Trimester may require a significant investment of time and money upfront but the long term rewards are significant and well worth it.

---

Interviews with key informants at LBMMC took place well before the collapse of the housing market in Southern California and nationally in 2007. It is not known what effect the present state of the real estate market will have on any plans LBMMC may have for developing affordable workforce housing.

To date, only $3 million of the Department of Nursing’s $11 million capital campaign goal has been raised.
2. Making the Case for Diversity: Community Advocacy and Academic Reform in the Inland Empire
J.W. Vines Medical Society

Primary Author: Kevin Barnett, Dr.P.H., M.C.P.

Introduction

One of the obstacles to increasing diversity in higher education is the lack of engaged community constituencies. Among the many reasons for diminished engagement, particularly in low income, ethnically and culturally diverse communities, is a range of near term economic, social, and political challenges that take precedence over longer term concerns such as access to higher education. In this context, it is particularly important for key local stakeholders with specialized expertise and access to legislators, to provide leadership and support to focus and amplify the voices of the broader community. One of the best leadership examples in California has been provided by the J.W. Vines Medical Society (JWV) in its engagement and advocacy for change within the University of California at Riverside (UCR) Biomedical Sciences program. This advocacy model should be considered for replication by other California health care stakeholder organizations, and for the nation.

The J.W. Vines Medical Society (JWV), a component society of the National Medical Association (NMA)\(^99\), was established in 1987 to serve Inland Southern California. JWV and its affiliate, the J.W. Vines Foundation, have provided continuing education and support for practicing physicians, and mentorship and support for African American youth in Inland Southern California for over two decades. Examples of support provided by JWV and the J.W. Vines Foundation include, but are not limited to the following:

- Mentoring support for undergraduate pre-med students at UCR, La Sierra University, Cal State San Bernardino, and other regional colleges and universities
- Grants to pre-med students to take Medical College Admissions Test (MCAT) prep courses
- Symposia for high school students, discussing curricula and course preparation, college admission requirements, and preparation for standardized tests, for example the SAT
- Stipends for undergrad pre-med students to tutor high school students in mathematics and science
- Sponsorship of the Elma Vines Summer Health Academy, which involves placing pre-med students with physicians in various specialties for weekly “rotations” that include instruction by preceptors, lectures by representatives of regional medical schools and student presentations

The UC Riverside Thomas Haider Biomedical Sciences program was one of two satellite medical programs created in partnership with University of California at Los Angeles (UCLA) in the wake of the 1965 Watts (California) riots. In the two programs, one student cohort would complete the first two years of medical school at UCLA, and the second two years at the King-Drew Medical Center; the other cohort would complete the first two medical school years at UCR, and the final two years at the UCLA Medical Center Complex. Following completion of each program, students would receive a UCLA, MD degree.

The Thomas Haider Biomedical Sciences Program, a seven-year combined undergraduate pre-medical, and medical school program, initially selected 250 freshman students to undertake a compressed, three-year undergraduate curriculum. Given the contracted time frame for completion of the undergraduate degree requirements, the criteria for admission were elevated and this program tended to be reserved for students with stronger grade point averages and higher SAT scores. At the end of the third year, however, only 24 of the original 250 students were accepted into the formal medical school program. Four years later, most of the remaining 24 students graduate with a UCLA medical degree.

---

\(^{99}\) Established in 1895 to provide continuing education, support, and advocacy on behalf of African American physicians in the United States
Stage One: Institutional Review and Engagement

Beginning in the mid-1990’s, JWV leaders initiated a series of programs and services in Inland Southern California to increase interest and support for African American youth to enter the medical professions. In reviewing medical education opportunities, it was discovered that very few African American youth were being accepted into the seven-year, UCR Biomedical Sciences Program.

In 1996, JWV leaders initiated a dialogue with the UCR administrative leadership to address the lack of under-represented youth in the program. While administrators agreed to meet on multiple occasions over the course of the next five years, Vines Society representatives cited poor receptivity to issues and concerns raised in meetings with program administrators, with the deans of the colleges and with the office of the Chancellor. UCR administrative leaders frequently claimed that issues raised by JWV representatives were in the purview of the university academic senate, and not subject to the judgment or review by non-faculty members. JWV representatives were also informed that since the program had been in existence for over 20 years without prior objection from faculty or other community stakeholders, administrators concluded that JWV concerns lacked sufficient merit for further consideration.

Among the issues raised by JWV representatives was the academic trauma created by a program that, by design, resulted in the failure of over 90 percent of all students accepted. Multiple cases were cited where African American and Latino students with excellent grade point averages were denied admission into the UCR/UCLA program, but subsequently completed their medical education at other highly competitive medical schools such as University of California, San Francisco, Washington University at St Louis, and Cornell University.

In separate conversations with UCR allies in academic, administrative leadership roles, JWV representatives learned more about campus administrative intent in the establishment of the UCR Biomedical Sciences Program. In the mid-1970’s, UCR was a struggling campus, and it was determined that the construction of the Biomedical Sciences program would accomplish two strategic objectives. On the one hand, it would produce a small physician cohort that would be viewed as elite health professionals within the University of California (UC) medical system. On the other hand, the second objective appeared more ulterior in nature. The 226 fourth year participants eliminated from the program each year would provide a captive pool of superior students to bring academic excellence to other campus departments. For a campus that aspired to legitimize its reputation within the UC system as a premier, world class public institution, the benefits of this excessively rigorous program appeared to outweigh student health and welfare concerns.

Stage Two: Policy Advocacy

In 1998, JWV secured support from State Senator Theresa Hughes, who convened a meeting with UCR leaders and expressed concern about the paucity of African American and Latino students in the program. However, no discernable changes were made in the program in the wake of this discussion. By the end of 1999, JWV representatives indicated that talks with UCR leaders had broken down, and following publication of a local newspaper story about an excellent African American, Phi Beta Kappa, honor student with nearly an “A” average, who was not accepted into the program, the JWV issued a letter to guidance counselors in regional high schools and community colleges, indicating that the JWV could no longer support this highly restrictive, onerous program.

In 2001 and 2002 JWV representatives went to Sacramento and met with a number of state legislators to share concerns and findings based upon a demographic review of student matriculation, retention, and graduation rates within this UCR program. Following each presentation by JWV representatives, state legislators challenged the UCR administrative leadership to bring about meaningful change, but no action was forth coming.

Finally, in 2003, JWV representatives were given the opportunity to present to the State Assembly Budget Subcommittee on Education Finance. UCR administrative leaders were also called to testify in the hearing. In the presentation, JWV representatives shared quantitative data on enrollment and fourth year
advancement for a 20-year period from 1981 – 2001 (see Table 1). As indicated in Table 1, only 95 African Americans were admitted to the program over the course of 20 years, out of a total of 4,527 students, representing only 2 percent of the total. Only 5 students were admitted to the medical program at the end of their third year during the same time period, representing just over 1 percent of the total. But only 12 Latino students one African American actually completed the program in 20 years.

### Stage Three: Legislative Action

Following presentations by JWV and UCR representatives, the Assembly Subcommittee voted with unanimous, bipartisan support to insert conforming language into the UCR Biomedical Sciences Program budget, mandating specific changes in order for this program to continue receiving state funds. The legislative mandate focused on diversification of both the student body and faculty.

For students, UCR was required to a) increase the percentage of undergraduate pre-med students accepted to medical school, b) give special attention to students interested in practicing in underserved areas, c) open the medical program to all UCR undergraduates, and d) expand support mechanisms for UR students.

For faculty, UCR was required to a) increase the number of faculty members interested in working with students planning to practice in underserved areas, b) increase the number of faculty engaged in research that “advances the understanding of race and ethnicity as they intersect with traditional medical disciplines in multicultural populations”, and c) increase the number of faculty who have “demonstrated a commitment to developing sound educational programs for economically disadvantaged students.” Perhaps the most significant requirement within the legislative ruling was for UCR to submit progress reports to the state legislature on an annual basis for 5 years.

This legislative ruling is historic because it represents the first time in the history of the University of California that fundamental changes were made in an existing academic program without the advice or consent of the University Academic Senate.

### Stage Four: Establishing a New Model for Medical Education

In the wake of the State Assembly Budget Subcommittee on Education Finance mandate, leaders from UCR, the UC system, JWV, and other key stakeholders made a concerted effort to implement the required changes. Changes in leadership at UCR over the course of 2002-2005 brought together a number of individuals with a commitment to fulfill both the letter and spirit of the legislative mandate. In reviewing the options, stakeholders observed population demographic trends toward increased diversity. This finding, combined with a paucity of physicians practicing in underserved communities called for a redoubling of efforts to increase the number of UR physicians in coming years. For UCR, the legislative mandate created an unprecedented opportunity to make the case for the establishment of a new, independent UC school of medicine, the first in nearly forty years.

In the context of the legislative mandate, new leadership at UCR and the recognition of inland southern California as the fastest growing, most ethnically and culturally diverse region in the state, a proposal was put forward to establish the first regional medical school with an explicit mission to increase diversity in the California health professions workforce. This proposal was approved by the UC Regents in November, 2006, and a strategic plan and fundraising strategy is now underway. The proposed school will open in 2012, and the projection is the enrollment of a total of 200 medical students by 2017.

---

100 Data compiled and provided by the Vines Medical Society
Looking Forward: Translating the Model into a Reality

The California legislative mandate and approval by the UC Regents for the establishment of a new, regionally serving medical school at UCR is an important commitment that represents a revitalization and enforcement of governmental standards central to the land grant origins of the UC system. The Morrill Land grant, initially enacted by congress in 1862, then revised in 1890, granted land parcels, based on the number of congressional representatives to U.S. territories and states, to establish public colleges and universities. The University of California, Riverside, founded in 1907 as a citrus experimentation station, conducted research in biological control, investigated the use of natural predators to reduce pest populations, and experimented with growth regulators to extend the California citrus growing season. The undergraduate college of natural and agricultural sciences was founded in 1954.

The California State Legislators and the UC regents acted responsibly in upholding the principles and tenants of these important land grant documents, and represented a significant and important revitalization of social educational standards created by the federal government. It is important to note, however, that a substantial volume of work and resources will be required to translate this inspired vision into reality. The J.W. Vines Medical Society, along with key internal UCR administrators provided the critically important leadership and commitment necessary to reach this stage in the process. Continued support and engagement by other community stakeholders will be required in the coming years to retain the clarity of the vision and to ensure definitive progress towards identified goals and objectives.

For other California stakeholders, a key question is whether this vision and approach to establishing a UCR School of Medicine will represent an anomaly in the UC system, or a model worthy of replication and integration into other UC medical programs. While the circumstances, history, and context is different in every institution, the concept of upholding federal and state legislative standards is and should be a central consideration for all California HPEIs. Community stakeholder advocacy can and should play an integral role in ensuring optimal accountability for all state and federally funded public institutions.

Alignment with IOM/Sullivan Commission Recommendations

The J.W. Vines Medical Society advocacy and support programs for UR youth address the following IOM and Sullivan Commission recommendations:

IOM Recommendations

4.6 If diversity-related standards are not met, the institution should be required to declare formally what steps will be taken to address the deficiencies. Repeated deficiencies should result in accreditation-related sanctions.

6.4 Private and public entities should convene major community benefit stakeholders (e.g., community advocates, academic institutions, health care providers), to inform them about community benefit standards and to build awareness that placing a priority on diversity and cultural competency programs is a societal expectation of all institutions that receive any form of public funding.

7.2 Local and national efforts must be undertaken to increase broad stakeholders’ understanding of and consensus regarding steps that should be taken to enhance diversity among health professionals.

7.3 Broad coalitions should advocate to vigorously encourage HPEIs, their accreditation bodies, and federal and state sources of health professions student financial aid to adopt policies to enhance diversity among health professionals.

Sullivan Commission Recommendations

4.6 Key stakeholders in the health system should work to increase leadership training and opportunities for UR physicians and dentists.
5.4 Businesses, foundations, and other private organizations should be encouraged to support HPEIs and programs to increase financial resources needed to implement the recommendations of the Sullivan Commission.

6.6 Community and civil rights organizations should collaborate with health care organizations and HPEIs to advance institutional diversity and cultural competence goals, including community needs assessment and evaluation.

Challenges

Sustain Public Attention and Engagement
The efforts of the J.W. Vines Medical Society outlined in this profile highlight both the challenges and extensive time commitment required to secure meaningful engagement of a major academic institution, elevate public awareness, and gain the attention and support of state legislators. While the circumstances will vary in different locales, it may be difficult to create an external constituency that can sustain attention and focus over time without some level of institutional receptivity.

Lessons

Create a Local Constituency to Hold Academic Institutions Accountable
Perhaps the most important lesson learned from this experience is the importance of creating a local constituency of stakeholders who will hold HPEIs and other academic institutions accountable to play some meaningful role in addressing societal imperatives. In interviews with HPEI academic leaders, many acknowledged the lack of external regional constituency that communicates public expectations of academic institutions. While reserving the right of HPEIs to retain academic freedom, it is appropriate for local, regional, and state level stakeholders to expect these institutions to make tangible contributions in efforts to address community and societal priorities.

Create Infrastructure to Sustain Attention and Engagement
Given the need for sustained attention to institutional practices, to track relative alignment with specific performance measures and public expectations, it is important to have an infrastructure that will support the process in an ongoing manner. Ideally, such an infrastructure, with a robust engagement of external stakeholders, could exist as a functional unit within HPEIs, such as the COMP Advisory Committee at Western University (see EP profile I.4.). In the absence of clear commitment to meaningful engagement, one or more external organizations would need to make a commitment to provide ongoing coordination and support.
In 1988, the Family Practice Residency Program at White Memorial Medical Center (WMMC) was created to address a shortage of primary care physicians in the East Los Angeles community. While over 800 new physicians graduate from training programs located in Los Angeles County every year, data shows that less than five percent actually stay to practice in the County’s underserved areas. The Residency Program grew out of a unique collaboration between the California Area Health Education Center (Cal AHEC), the University of Southern California School of Medicine, and the California Office of Statewide Health Planning and Development (OSHPD) with the aim of meeting this critical need in the community. In what founders of the program now deem a “harmonic convergence,” several factors came together at the Residency Program’s inception that contributed to its success.

Community Need
In the mid-1980s Cal AHEC was exploring methods of improving access to care for underserved populations. Seven community physicians in East Los Angeles received funding to start a residency program that would improve access to care for Latinos, specifically within the community where they worked, and improve primary care physician training for working with the Latino population. These physicians selected WMMC, an inner city teaching hospital affiliated with the Loma Linda University School of Medicine, as the sponsoring institution for the Residency Program.

Passionate Physicians
A critical mass of enthusiastic, committed, and well-trained physicians coalesced around the idea of the Residency Program. Since they had little experience that would guide them in creating a Residency Program, they engaged experienced mentors, who participated in the program development and provided invaluable guidance and support.

Hospital Strategy Shift
As a teaching hospital for Loma Linda University, WMMC had many subspecialty programs but very little in terms of primary care. This changed in the early 1980s, when the hospital encountered financial problems. Anticipating the arrival of managed care, WMMC believed that a strong primary care base would strengthen its chances of survival, and began to look for a group of physicians that would create a Residency Program.

Cultural Change
Prior to the creation of the Residency Program, WMMC did not have a strong history of working with Latino patients or physicians, and as a teaching hospital, WMMC was isolated from its own community. In fact, community clinics trying to get privileges for their physicians at WMMC were often turned away from the hospital and physicians who were not trained at WMMC were often not received well at the hospital. The hospital recognized the need to expand its presence and value to the community by better serving its residents.

Political Support
The program gained strong support from local officials. Through their support, the community was designated as an underserved area, and as a disproportionate share hospital (DSH) received additional funding.
Description

The Family Practice Residency Program’s objectives include:

1. To address the persistent shortage of primary care physicians in the East Los Angeles community and other similarly underserved populations in the state;

2. To establish a strong primary care base for the WMMC in order to expand its mission of service to vulnerable communities and to position the hospital to thrive in the inner city;

3. To establish a program known for its academic excellence, producing health professionals with the skill sets necessary for practice in medically underserved areas, and capable of addressing the health status disparities experienced by the community;

4. To improve the diversity of the healthcare workforce; and

5. To develop the leadership skills of its resident physicians so that they may advocate for the communities they serve.

To accomplish its objectives, the Residency Program has three major components:

Culturally Competent Curriculum

The Residency Program curriculum is structured around cultural competency and acquiring the skill sets needed to practice in underserved areas. The curriculum is designed to satisfy all of the requirements that qualify program graduates to take the certifying examination of the American Board of Family Medicine, and to meet all of the requirements of the general and special essentials of training as stipulated by the Accreditation Council on Graduate Medical Education. The curriculum also assists program graduates in roles which require special skills in geriatrics, community medicine, practice management, managed care, preventive medicine, nutrition, patient education, quality improvement and data management.

Economic Investment in Community

Within five years, the Residency Program found that it was generating revenues of approximately six million dollars per year. Believing that healthcare can be an economic engine for community, they began to offer vendor contracts to local employers and made a commitment to hire people from within the community. They then prevailed on the hospital to do the same.

Mentoring Local Students

The founders of the Residency Program wanted to replicate the opportunities that they had benefited from, so they worked with the Los Angeles Unified School District under an Adopt-a-School program to link with local schools in their service area. Initially, Residency Program faculty and students made visits at career day, adopted classes, and came to classrooms to motivate students and worked with teachers when health was a barrier to engaging students. The program has since evolved into a more formal mentoring program called Jóvenes Para La Salud—a career preparation program that exposes Latino high school students to professional opportunities in health care and medical fields. Jóvenes Para La Salud does not just target the highest achieving students, but also those that may be low achievers with high potential. For the college cohort, there is also a formal pipeline program where support is given to pre-med students in five local colleges.

Partners/Contributions

In a formal partnership with other community organizations, the Program is a member of the Health Partnership of East Los Angeles, which includes organizations from each of the six pillars that make up community: 1) educational institutions, 2) healthcare institutions, 3) law enforcement, 4) business, 5) community based organizations, and 6) the faith community. The Partner organizations focus on community solutions by sharing leadership opportunities, tapping into resources, and collectively articulating their vision for the community.
WMMC is the primary funder for the Program. Family Care Specialists, the Residency’s affiliated medical group, subsidizes half of the residency budget. The program subsidizes this funding through grant-writing.

**Alignment with IOM / Sullivan Commission Recommendations**

The WMMC Family Practice Residency Program addresses the following Sullivan Commission recommendations:

**Sullivan Commission Recommendations**

*4.1* HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

*5.2* To reduce the debt burden of underrepresented minority students, public and private funding organizations for health professions students should provide scholarships, loan forgiveness programs, and tuition reimbursement strategies to students and institutions.

*5.3* Public and private entities should significantly increase their support to those HPEIs with a sustained commitment to educating and training underrepresented minority.

*6.1* Health systems and HPEIs should gather data to assess institutional progress in achieving racial and ethnic diversity among students, faculty, administration, and health services providers, as well as monitor the career patterns of graduates.

**Impacts to Date**

The Family Residency Program has graduated 88 new Family Practice physicians to date, all of which are Board-Certified. Some other key program impacts are:

- 41 percent of graduates practice in the WMMC service area.
- 15 new WMMC Family Medicine Department faculty are trained in other specialty programs.
- Almost 500 students have gone through the Jóvenes Para La Salud program, with 92 percent going to college (compared to a historical 50 percent drop out rate, and 10 percent of students going on to college).
- Received the Community Advocacy Award from the Latino Coalition for a Healthy California (coalition of community-based health centers, health policy advocates, and civic leaders).

Opening up economic opportunities to local residents and vendors has improved the community in which the Residency Program resides. Until 1993, none of the $200 million generated annually by WMMC stayed in the community. Now, about $40 million stays in community through procurement agreements with local businesses, and the creation of new jobs for community residents. Allowing local businesses to bid on hospital contracts has provided employment, health insurance and career opportunities for community members.

Some of the special features and curricular components of the WMMC Family Practice Residency Program that have been replicated include:

- The residency program mission, vision, and curricular elements have been replicated by program graduates in the Migrant Health Center track at the UC San Francisco, Fresno Family Medicine Residency Program (Ventura P. Huerta Migrant Health Center) in 1993 and at the Pomona Valley Hospital Medical Center (PVHMC) Family Medicine Residency Program in 1996.
- The shortage area Practice Management curriculum has been adapted by the California Hospital Medial Center (CHMC) Family Medicine Residency Program (1999) and at the UCLA-Harbor Medical Center Family Medicine Residency Program (2000).
- The Roosevelt High School Student Health Center model has been replicated at Gardena High School (1999) by Residency Program graduates at the UCLA-Harbor Medical Center Family
Medicine Residency, and at The Accelerated School by a community medicine Fellowship graduate at the South Central Family Health Center (2005) in Los Angeles, California.

- The Residency Program chronic disease management model of the CB DMMP is being replicated by a local federally-qualified health center, Alta-Med Health and Human Services Corporation.
- The MAHEC/WMMC Family Practice Jóvenes Para La Salud/Youth for Health project has been adapted by Cal State University, Fresno and the Cal AHEC programs as the Sunnyside High School Doctors Academy.

**Challenges**

**Overcoming Historical Antipathies**
An initial challenge for the Program was resistance by community clinics. Historically, the clinics had an adversarial relationship with the hospital, and did not trust any program affiliated with it. When the Residency Program started, community clinics felt that it would compete with them. The Program had to show the clinics the value of their role in the community and demonstrate that they were training doctors that would work with and support the community.

**Financial Challenges for Family Practice Physicians**
One major hurdle to becoming a practicing family physician is the management of finances, including debt management. To overcome this hurdle, all Residency Program interns are assigned a financial advisor. The Program then works with the student and their advisor on managing any financial duress. An emergency loan fund is available for residents who have student indebtedness due upon graduation from medical school and the Program helps students get licensed so they can immediately start work to lessen their financial stress.

**Collaboration in an Environment of Competition**
Another challenge is working within an underserved area in an evolving healthcare marketplace. The expansion of managed care has resulted in increased competition among health care organizations. The Residency Program and WMMC are currently looking for potential partners that could serve as allies in the competition for patients.

**Lessons**
Over the past 19 years, the Residency Program has translated what has been learned into changes in the program:

**Integrate Program into Institution Core Functions**
The Program, instead of operating as an appendage to the hospital, is part of the institutional fabric. Program leaders have worked hard to make it an integral component of the hospital’s operations and services.

**Community Oriented Primary Care Model**
To give every resident a meaningful experience on every rotation, and also infuse the program with academic rigor, the Program created the Community Oriented Primary Care Model. COPC views the patient within a family and community context, emphasizing that the patient does not exist in a vacuum, but within a family; that family in turn exists in a community, and the community is thus viewed as the patient. COPC utilizes epidemiology and data sets and residents learn how to glean from the data what they need to have a positive impact as physicians. All residents are taught how to perform community needs assessment and asset mapping to identify who is providing important services and where gaps in services exist.

**Team Based Care**
The program promotes a team approach to patient care and healthcare delivery. The team consists of residents and non-physician providers such as nurse practitioners, physician assistants, health educators, case managers, behavioral health scientists and, most recently, promotores.
**Impetus**

**FACES for the Future** was launched in August 2000 as a two-and-a-half year internship program that introduces UR high school students to the health professions, helps them enter educational programs of their choice, and equips them with the necessary skills to succeed in their careers and personal life. The program was founded by Dr. Tomás A. Magaña, MD, and Dr. Barbara Staggers, MD, both practicing physicians at Children’s Hospital and Research Center Oakland (CHRCO).

The idea for the program came during Dr. Magaña’s training in medical school, where it became clear to him that “increasing diversity in the health profession was necessary to ensure that hospitals could provide good quality care.” Upon completion of his training, Dr. Magaña took a year off in 1995 to pilot a model that would serve as the foundation for FACES for the Future. In the pilot project, Dr. Magaña met with students from Mission High School in San Francisco on a frequent basis, taught them about health career options, and gave them the opportunity to participate in clinical “rotations” at the Kaiser Hospital in San Francisco. Based upon the experience of the pilot program, Dr. Magaña developed the model further, focusing on adolescent health and a school-to-work program.

Dr. Magaña partnered with Dr. Barbara Staggers, an expert in adolescent health at CHRCO, and together they spent a year planning the program and developing a curriculum. They received support from colleagues, a small family foundation, and a variety of small grants. In 2000, Dr. Magaña and Dr. Staggers received a grant from The California Endowment to launch the FACES program. Dr. Magaña and Dr. Staggers serve as co-directors.

**Description**

**FACES for the Future** was started as a two-and-a-half year internship program that focuses on workforce development, adolescent youth development, empowerment, case management and training in life skills for underrepresented high school youth. Last year the program expanded to support its alumni who are attending college, thus making it a five-year program for students who have successfully completed the high school program and choose to continue. The program has five goals:

- To support and prepare UR youth for the demands of college and a future career in healthcare
- To empower youth with the personal and professional skills to become agents of change for the health and well-being of their communities
- To foster academic excellence through mentoring and tutoring programs
- To address the psychosocial issues of each individual student through comprehensive assessment, prevention, and intervention plans
- To establish an extensive network of educational, community, and medical partners who can provide continuous support to underrepresented minority students in their educational journey from high school through their professional training

All students who participate in the program are UR youth from local school districts. Their communities are faced with high levels of poverty, crime, unemployment and mortality rates, as well as under-funded schools and limited recreation and employment opportunities.

Admission to the program is based in part on academic performance but primarily on a student’s “potential to succeed in the program and the motivation to participate fully in all aspects of the program.” This includes the quality of their application, their recommendations and their interest in pursuing a healthcare career. Students are recruited from partner schools, where FACES for the Future gives presentations about the internship. Teachers in partner schools will also refer students to the program.
Students begin the program in the spring semester of their sophomore year in high school and commit two-and-a-half years. For those who complete the high school internship successfully, the program extends support to its alumni in college and other post-secondary programs making it a formal five-year program.

Health Careers Exposure/Academic support
Each week students devote approximately eight hours to the program and are involved in a variety of activities, depending on their grade level. High school sophomores typically take a class from the program’s health careers curriculum each Monday and Wednesday, where they learn about health careers and life-skills needed to work in hospital environments. High school juniors and seniors typically spend Mondays and Wednesdays completing clinical rotations with the program’s partner hospitals and healthcare providers. After these rotations, they participate in any number of activities, including SAT preparation and college essay writing workshops. Students in all grade levels, depending on their academic needs, receive academic tutoring and mentoring from local college students. One of the program’s partnerships for academic tutoring and mentoring is the Biology Scholars Program at the University of California, Berkeley (Profile II. A.6).

Case Management
The program also provides one-on-one case management to address the psychosocial needs of their students as well as workshops on life skills such as managing stress. Workshop topics include healthy relationships, STI’s and contraception, violence prevention and conflict resolution, and depression and anxiety. The workshops are often presented by the program’s trained peer health educators, called Youth Health Leaders. Case management is a crucial component of the program given the many social and familial challenges faced by its students.

Community Outreach
Each year a group of senior students are selected to train as community health educators through peer health education training. Students facilitate workshops and presentations on health issues affecting their communities, such as violence prevention, STIs, and healthy relationships, to hundreds of youth enrolled in middle and high schools throughout the community. Additionally, students provide education to the community through participation in health fairs, conferences and other community events.

Partners/Contributions
FACES for the Future works with an impressive network of business, educational, community, and medical/research partners who support the program in various capacities. Some of these partners include:

- Alameda County Healthcare Services Agency
- Alameda County Public Health Department
- Berkeley and Oakland Unified School Districts
- Children’s Hospital Oakland Research Institute
- Children’s Hospital in Oakland
- Highland General Hospital
- Kaiser School of Allied Health
- Kaplan Test Preparation Services
- La Clinica de la Raza
- National Youth Leadership Forum in Medicine
- Stanford University, Stanford Youth Medical Science Program
- Alameda and Emeryville Trader Joe’s
- University of California, Berkeley, Biology Scholars Program
- Youth Radio

In addition, FACES for the Future has various funding partners. Examples include:

- The California Endowment
- The California Wellness Foundation
- Bank of America Foundation
FACES for the Future addresses the following IOM and Sullivan Commission recommendations.

IOM Recommendations

2.3 Admissions (in this case, admissions to the FACES program) should be based on a comprehensive review of each applicant, including an assessment of applicants’ attributes that best support the mission of the institution (e.g., race/ethnicity, background, experiences, multilingual abilities). Admissions should balance quantitative data with these qualitative characteristics.

3.4 Private entities should collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health care workforce.

Sullivan Commission Recommendations

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education of their children.

4.7 Colleges, universities, and HPEIs (and in this case, hospitals) should support socio-economically disadvantaged students who express interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

5.4 Businesses, foundations, and other private organizations should be encouraged to support HPEIs and programs to increase financial resources needed to implement the recommendations of the Sullivan Commission.

6.6 Community and civil rights organizations should collaborate with health care organizations and HPEIs to advance institutional diversity and cultural competence goals.

Impacts to Date

During the period of 2003-2007, 112 students graduated from the FACES for the Future program. Of this number, one hundred and eleven (99 percent) graduated from high school. By comparison, approximately 40 percent of students graduate from high school in Oakland Unified School District.

Of 112 total alumni, 109 (97 percent) enrolled in college the fall semester after graduation. Some of the universities where these students were enrolled include: California State Universities (East Bay, Fresno, Northridge, Riverside, San Francisco, San Jose, Sonoma), Columbia University, Stanford University, University of California (Berkeley, Davis, Los Angeles, Santa Cruz) and Williams College. Many students who were accepted into four-year colleges enrolled into community colleges due to financial constraints.

The program sees an attrition rate of about four to seven students each year. Often this is due to psychosocial problems that prevent students from successfully finishing the program. This year the program witnessed the highest number of graduates with twenty-eight students completing the internship program. On average, twenty-two students graduate each year. Of those who successfully complete the program, one hundred percent intend to pursue a career in healthcare.
Projected Impacts

New Programs
With funding obtained through the City of Hayward, the model of FACES for the Future is being replicated in a formal partnership between St. Rose Hospital, California State University East Bay, and the Eden Area Regional Occupational Program (EAROP) in Hayward. The partnership is an initiative to bolster nursing in Hayward and is set to begin September 2007. St. Rose Hospital in Hayward will provide clinical internships and case management for students. California State University East Bay will provide tutoring, college credit and support. EAROP will provide education and training on health careers. This is a unique partnership with three entities working together to serve the community in their respective capacities and strengths. This replication highlights the value of linking health providers with educational institutions and job programs. Partners bring their own expertise, knowledge, and resources to form a mutually beneficial network.

College Alumni
This year marks the graduation of the program’s first student cohort from college. Entering college students participate in a five-day residential Summer Bridge program to prepare them for the transition from high school to college. Alumni continue to receive career and academic assistance as well as case management and support. There are plans to also incorporate MCAT preparation courses for those who are pursuing medicine.

Develop a Student Advisory Committee
Students from grades 10, 11 and 12 in high school will nominate and self-select members for a new Student Advisory Committee that will improve communication and feedback between the students and the program.

Challenges

Funding and Institutionalization
FACES for the Future is funded entirely through grants so maintaining a constant flow of funds remains a constant challenge. The program has been grateful for its generous partners and continues to pursue partnerships and innovative models to build the program further. The largest donors to FACES for the Future are The California Endowment, The California Wellness Foundation and the Bank of America Foundation. To date, the program has received two cycles of funding from both The California Endowment and The California Wellness Foundation. Presently the program is exploring innovative ways to obtain long term funding support.

Assessing Impact
Due to the small staff size, it has been a challenge for the FACES for the Future program to quantify its impact though it has been a longstanding objective for the program. The next stage for the program as noted by the director for this coming year, is implementing a thorough system to assess and evaluate the program’s results, particularly in tracking the program’s alumni and their post-program pursuits.

Parental Involvement
Involving parents is critical to the success of each student but involvement is not always an option as many parents often work multiple jobs and have conflicting schedules. In general, parents are supportive of their children’s participation in the program, but it remains a challenge to see more specific involvement.

Legal and Financial Assistance for Students
Many students who have not secured legal immigration status need legal assistance and support to qualify for financial aid or other sources of financial support.

Under-Resourced Communities and School Districts
FACES for the Future has assumed larger responsibilities due to the scarcity of local resources. In light of these obstacles however, the FACES program continues to prepare and empower the students who participate.
Staffing
With the expansion of FACES for the Future, the staff would benefit from additional staff members who can assist with program activities such as the tracking of their alumni students. Two former students from the first cohort of high school students currently work with FACES as peer case managers.

Lessons

Continuously Adapt to the Needs of the Community
As noted by Dr. Magaña, “the curriculum is always changing and this is crucial to the continued success of the program.” Each year the curriculum and case management are adapted to appropriately support each new incoming class of high school students.
5. Health Career Connection

Primary Author: Claire Colón-Hopkins, M.B.A., M.S., doctoral candidate, CSU East Bay

Overview

Health Career Connection (HCC) was founded in 2000 by three healthcare executives and a business executive who had previously met in graduate school at UC Berkeley. They were motivated by the desire to expand available resources, opportunities, and support for UR undergraduate students who are interested in health careers. They were also motivated to increase the number of well prepared, diverse health leaders and professionals.

Impetus

In 1990, the three health executives started a small (6-10 student) health administration internship program for UR undergraduate students in northern California. All 3 had been alumni of an earlier version of the program, the Fellowship Retention Program in Health Administration, which had a profound influence on their own health career and educational decisions and success. The Fellowship Retention Program had been established in the 1970s as a joint project of the UC Berkeley School of Public Health and Healthcare Executives of Northern California (HCENC). The Program offered paid summer internships at hospitals to provide experience in health administration and included workshops to prepare students for graduate education.

When the Fellowship Retention Program was discontinued in the mid-1980s (end of grant funding), one of the HCC founders, now a healthcare executive, became President of HCENC and made the organizational commitment to resurrect the program. He and the other founders made a commitment to lead the program on a volunteer basis.

After a decade of operating the HCENC Internship Program, several factors provided the impetus for the founders to transform the small association-sponsored program into Health Career Connections:

- Significant annual increases in the number of applicants, far beyond the supply of internships;
- Growing evidence that a major barrier to pursuit of their health career interests was a dearth of opportunities for undergraduates to obtain paid practical experience before critical choice points;
- As with the founders, interns in the program reported that it had a significant impact on their ability to make informed educational and career choices; most interns discovered or refined their plans and successfully obtained employment in the health field or admission to graduate school.
- Increased interest from employers and graduate schools for access to UR students;
- Lack of progress in increasing diversity in graduate schools and in the health professions;
- Passion and commitment by the Founders to help young people of color realize their potential through successful pursuit of health careers.

The Founders interest in expanding the Internship Program was fueled by key mentors and supporters. One of the founders, Jeff Oxendine, had moved to Boston and developed a relationship with Jeff Cook, the President of the Environmental Careers Organization (ECO). ECO was a leading national organization that provided internships and career support in the environmental field (ECO.org). He encouraged Jeff Oxendine to expand the Program’s scale and impact and had ECO serve as an incubator and fiscal agent for the development of HCC. Mr. Oxendine also obtained support from Jeffrey Otten, CEO of Brigham and Women’s Hospital, to replicate the Northern California Program model in Boston and begin to work toward a national model. A year later, Dr. Mark Smith, the President of the California HealthCare Foundation, provided funding for HCC to start a southern California Program and offer an important new initiative that funded internships for students of color to work in organizations serving California’s underserved and ethnically diverse populations. The expansion of the Internet and development of relationships with faculty, student associations and career centers throughout the county has enabled HCC to identify
thousands of interested students. The success of HCC interns and marketing to employers has dramatically increased the number of HCC internship offerings and impact.

Description

Health Career Connection’s mission is to inspire and empower a greater numbers of UR undergraduate students to choose and successfully pursue health careers by providing real-world exposure, experience, and support. It fulfills this mission though a multifaceted, integrated set of program components including: paid summer internships, workshops, mentoring, leadership development opportunities, professional networks, web-based resources and contacts for health careers, and educational options. These components are provided to a cohort of 15-50 interns in each of HCC’s four regions (Northern California, Southern California, New England and NY/NJ) who also form a peer learning and support network during and beyond the internship. A support network and connections are also provided across regions to maximize intern opportunities and support.

HCC’s programs and outreach efforts are targeted to UR undergraduate students interested in health administration, health policy, community health, health education and other public health options. Many HCC interns are interested in medicine or other clinical careers, but want exposure to other options before making a final decision or learn how to combine them with medicine. In Boston, HCC offers a limited number of internships in nursing, physical therapy and speech pathology. HCC targets undergraduate students for the following reasons:

- UR students are faced with major educational and career choices without sufficient exposure, experience and guidance to make well-informed choices;
- There are few programs to provide support to undergraduates;
- Most undergraduates are not aware of health career options beyond medicine and nursing;
- Internship experiences and connections can exert considerable influence upon career decisions;
- Interns can be hired or pursue health professions training shortly after graduation;
- Health professions employers are increasingly interested in access to promising UR students;
- The number of undergraduates with health related majors is growing, as is the diversity of their students.

HCC takes considerable care to place students in healthcare organizations that suit students’ career interests, life aspirations, and geographic constraints. Concerted efforts are made to place students in organizations serving underserved or ethnically diverse communities and/or to provide educational opportunities through projects focusing on issues critical to community health and the elimination of health disparities.

HCC’s aim is to improve the health services provided to our increasingly diverse population by motivating and developing more value-driven, capable, and ethnically/rationally diverse healthcare leaders. HCC’s goals include:

- Increase the number of health professionals from UR groups who are committed to develop innovative solutions to today’s complex healthcare challenges
- Provide healthcare organizations and health professions educational institutions with greater access to talented UR students and involve them in supporting their preparation and success
- Help students realize their potential and make well-informed health career and educational choices

HCC differs from its predecessors whose sustainability depended on grant money. HCC’s revenue model is to have interns sponsored directly by their host organizations and have them pay an additional program fee to contribute to the costs of additional funding from those organizations to support the program. Students are paid $4,500 for the entire ten-week, full-time internship. Ninety-five percent have been UR students. Many come from disadvantaged backgrounds and are the first in their families to attend college.

HCC helps students get exposure to many health career options, through summer internships at community health centers, hospitals, health systems, public health departments, community-based organizations,
advocacy groups, medical groups, consulting firms, and foundations. In addition to paid internships, the program includes:

- Workshops (e.g., career planning, school prep, leadership, advocacy, and cultural competency)
- Site visits to expose students to multiple organizations, communities, role models and mentors
- Web resources and links to sites about health careers and educational opportunities
- Connections to leading employers and graduate programs through HCC alumni, graduate school application workshops and conferences
- Membership in the HCC Alumni Association for former interns to network, share professional contacts, and post notices about jobs, scholarships, and events via listserv

**Partners/Contributions**

HCC depends on the contributions of numerous formal and informal partners. HCC partners include Founding Sponsors, Host Organizations, Health Professions Education Institutions, Community Based-Organizations, HCC Alumni and Health leaders. The roles and relationships of these partners are listed below.

HCC was established with the generous support of its founding sponsors and internship sponsors, who continue to support the organization’s mission. Founding Sponsors include the Brigham and Women’s Hospital, Integrated Healthcare Association of California, Partners HealthCare System, and UCSF Medical Center and the Environmental Careers Organization. In addition to their critical financial support, these funders have also served as key advisory board members. Founding Sponsors also serve as Host Organizations. Host Organizations provide and supervise full-time internships for interns within their organization. In addition to providing $6,300 for each intern they hire, Host Organizations:

- Identify a preceptor to supervise and support the intern. Managing this relationship is crucial to success. Preceptors are expected to make the time to work with energetic, inquisitive students.
- Identify meaningful project work that can be completed within the ten-week timeframe.
- Arrange for dedicated workspace and computer access for students during their placement.

Examples of HCC California intern Host Organizations include:

- Alameda Alliance for Health
- Alameda County Public Health Department
- Alta Bates-Summit Medical Center
- San Diego Public Health Dept.
- Blue Shield Health Plan
- Catholic HealthCare West
- Centers for Medicare and Medicaid Services
- Hill Physicians Medical Group
- Kaiser Permanente
- Latino Coalition for Healthy California, Sacramento
- La Clinica de la Raza
- Operation Access
- St. Josephs, Santa Rosa
- La Maestra Health Center, San Diego
- San Francisco General Hospital
- Sequoia Health Centers, Fresno
- John Muir Health Alliance
- Catholic HealthCare West
- Centers for Medicare and Medicaid Services
- Hill Physicians Medical Group
- Kaiser Permanente
- Integrated Healthcare Association of California

HCC is supported by numerous other host organizations in California and in its New England and New York/New Jersey Regions.

Graduate schools of public health at UC Berkeley, UCLA, Harvard and Columbia are also key HCC partners. Administrators, faculty, students and staff at these schools provide graduate education workshops, counseling and mentoring to HCC interns and alumni. Many HCC alumni are students in these schools and provide support to current interns. Educational partners also provide space for HCC interviewing and workshops and ongoing support to interns who apply to their graduate programs. HCC also has relationships with contacts at leading medical and business schools and other professional schools to support interns with interests in those fields. The MGH Institute for Health Professions in Boston partners with HCC to provide internships and guidance for students interested in nursing, physical therapy, and speech pathology.
Key community based and advocacy organizations, such as Greenlining Institute in Berkeley and COPE Health Solutions in Los Angeles provide workshops, space, internships and mentoring to HCC interns.

Foundations are also key partners, providing funding for internships and infrastructure.

As indicated previously, HCC alumni play key roles in supporting HCC and interns both in volunteer and in paid roles, ranging from general support for HCC to serving as guest speakers, role models and mentors. Several HCC alums serve as host organization preceptors for current interns. Many other non-HCC alumni who are health leaders generously devote their time to serve as guest speakers, role models, and mentors to HCC interns.

**Alignment with IOM / Sullivan Commission Recommendations**

Health Career Connection addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

3.5 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health care workforce.

**Sullivan Commission Recommendations**

4.1 Health professions schools, hospitals, and other organizations should partner with businesses, communities, and public school systems to provide students with classroom and other learning opportunities for academic enrichment.

6.6 Community and civil rights organizations should collaborate with healthcare organizations and health professions schools to advance institutional diversity and cultural competence goals.

**Impacts to Date**

Over the past seven years, HCC has expanded from a Northern California program placing 18 interns selected from 70 applicants (2000) to a national organization placing 92 interns selected from over 2,000 applicants (2007). HCC has successfully replicated its regional model three times as it operates regional programs in Northern and Southern California, New England, and New York/New Jersey.

- A total of 450 interns have participated in HCC and the predecessor version run by the Founders.
- Responding to a satisfaction survey administered to students and preceptors at the end of the internship, over 95 percent of interns report that HCC had a profound influence on their health career and educational choices and opportunities. Most discover or refine their desired health career direction and report significantly increased motivation, confidence, and knowledge of their next steps.
- The program has also benefited participating healthcare organizations by providing them with access to talented UR students who contribute to their organizations during and after the internship. Ninety-eight percent of HCC host organizations are repeat intern sponsors and many host multiple interns.
- Over 33 percent of HCC interns have been hired by their host organization after completing their internship or education. Those not hired often obtain jobs through the HCC network of alumni, preceptors and staff.
- Many interns have matriculated to graduate school en route to promising healthcare careers. For example, over the past five years, the UC Berkeley School of Public Health has admitted at least six HCC alumni per year. HCC has alumni in other schools of public health, medicine, law, business and policy. HCC helps “credential” students as competitive graduate school applicants.
- Upon concluding their internships, many students return to their home campuses and communities and enthusiastically spread the word to help recruit new applicants through campus organizations, websites, and listservs supporting students of color.
- Over 60 percent of HCC interns are engaged in efforts to improve health in underserved communities. These efforts increase the capacity of their organizations to better serve their
communities during and after the internship. Many interns report increased motivation to work in these communities during their careers.

- Interns report being able to discover and pursue health career and educational options most aligned with their passions, goals and talents, and are more likely to stay in the health field.

**Projected Impacts**

Although no official tracking system is in place, HCC is currently conducting a formal evaluation of its alumni to assess program outcomes (to be completed in Dec 2007).

Program expansion is planned within HCC’s current regions by pursuing multi-year relationships with large organizations that could potentially sponsor multiple interns, as well as year-round internship opportunities. In addition, there are plans to engage HCC interns to support high school students and establish formal links to key K-12 pipeline programs that will provide support for students once they reach college. There are also plans to partner with organizations such as the Institute for Diversity in Management of the American Hospital Association to promote organizational sponsorship by AHA members.

Program expansion is also planned by targeting new geographical areas, including California Central Valley, Philadelphia, and Washington DC. These areas have high numbers of UR students, large underserved communities, major health systems, and local graduate and professional programs to prepare executive and clinical leaders.

**Challenges**

**Building Organizational Capacity**

As HCC continues to grow, the primary challenge for the founders is finding time to deliver the program through its virtual network, while also working their day jobs. HCC has reached a critical point of expansion beyond its current infrastructure. The labor intensive process of screening thousands of applications, conducting regional interviews, custom placements, website maintenance, and other operations activities, as well as strengthening the infrastructure of the program through fundraising, managing existing partnerships, and creating new ones, requires the hiring of staff. Establishing a regional office to support this rapidly expanding organization may also be necessary.

**Lessons**

**Spectrum of Engaged and Committed Health Professionals**

The founders of Health Career Connection have a unique perspective as alumni of a similar internship program and experience in leading HCC and its predecessor programs for 19 years. They believe that it takes the sustained effort of a group of committed professionals who share a passion for assisting youth of color to:

- Become better informed about the range of career opportunities in healthcare beyond medicine and nursing, such as health policy, community health, and healthcare administration
- Discover compelling health career goals that best suit each student/intern
- Believe that a student/intern can achieve her or his goals
- Support students/interns to ultimately realize their full potential for their own benefit and the benefit of their families and communities

**System for Effective Evaluation**

In retrospect, at the outset, the founders would have benefited from the implementation of a system to track and evaluate program impacts.
Early Focus on Organizational Infrastructure Development
Also, in retrospect, the Founders would have benefited from an early focus on infrastructure development, strategic planning, and fundraising.

Mobilize Program Graduates as Preceptors/Mentors
Organizations like HCC would benefit from a more systematic focus on the recruitment of alumni to become preceptors. At present, alumni-preceptors are recruited on an ad hoc basis. A staff person would optimally be hired to assume responsibility for this task, raise funds, and develop an alumni network to support professional development.

In summary, key attributes that have contributed to the success and rapid expansion of HCC include:

- Filling a significant void
- Making connections that add value to participating interns and organizations
- Building partnerships with organizations that share the same priorities as the founders; these organizations value the recruitment and mentoring of a young, diverse workforce to meet the healthcare needs of a complex society.
- Thorough screening and support of students. Selecting interns who may not have stellar grades, but, rather, candidates who exhibit maturity, motivation, and leadership potential is crucial. Interns must have the skills. HCC’s strength is in making a match between the intern’s passion, skills and learning objectives and the opportunities that the host organizations have to offer. This contributes to the interns and the organizations having a positive experience which meets HCC’s goals and enables students to promote the program and organizations to repeat as host organizations.
- Support from Foundations and key individuals
- Preceptors and host organizations willing to provide their time, resources and opportunities to ensure that interns have meaningful paid internships

The self-sufficient financial model is the backbone of the program, creating independence from grant money to sustain the program. Additionally, financial compensation makes this internship appealing to applicants who would likely have to work at paid jobs during the summer.
Impetus

The Health Workforce Transformation Program (HWT) of COPE Health Solutions (COPE) is a program for hospitals, health systems, biotechnology firms and others to recruit, train, hire and retain health care professionals. HWT was inspired by the need to address the overall shortage and the lack of diversity in today’s health workforce. COPE developed the HWT program to support many hospitals that are struggling with dramatic increases in both the diversity of patients and the acuity of their medical conditions.

To assist providers in managing their workload, COPE places college students in the hospital as volunteer “Clinical Care Extenders” (CCEs), providing much needed support to providers and patients. What began in 1995 as a volunteer internship to provide hands-on support to hospital nurses has since evolved into a formal pipeline program to increase the pool of prospective health professionals. Since the CCE program was first implemented at Citrus Valley Health Partners (CVHP), a three-hospital system in the San Gabriel Valley, on June 15, 2000, COPE has expanded the HWT program into a comprehensive workforce strategy that includes both short-term and long-term pipelines. The short-term pipeline focuses on the training of U.S. licensed and foreign educated health professionals to re-enter the health professions. The long-term pipeline provides support, including internships and scholarships, to high school and college students who are interested in the health professions.

A pivotal consideration in HWT programs is expanding the diversity of the healthcare workforce. The program goal is not diversity for diversity’s sake, but creating a workforce that will match the diversity of local communities. To accomplish this, HWT recruits heavily from urban high schools and community colleges as those student populations tend to reflect the diversity sought by the hospitals and other health care organizations.

Description

The goals of HWT are to:

1. Build a solid pipeline of diverse, highly qualified health professions candidates
2. Create unique training opportunities to cultivate health professionals from the pipeline
3. Build a supportive mentoring environment for health professionals through every stage of their career

The HWT goals are accomplished through the following programs:

Clinical Care Extender Internship Program

The CCE Program is a one year internship, designed to expose college students to direct patient care and various health care environments. As a CCE, the student is placed at a local hospital or other health care organization and puts in a four-hour shift each week for an entire year. At the end of the internship, students must accumulate at least 248 hours of volunteer service. Before volunteering, students attend a mandatory three-day training session, in addition to frequent trainings and competency checks along the way.

Red Shirt Mentoring Program

The Red Shirt Program is designed to expose high school students to both the health care field and to maximize interaction with college students from their community. As a Red Shirt, students are paired with a college-level mentor who helps them learn about what it takes to succeed in college and what it means to work in health care. As a Red Shirt, students serve one four-hour shift each week for four months. At the end of the commitment, students must accumulate at least 64 hours of volunteer service. Before
volunteering, students attend a mandatory two-day training session. Additional program support includes college application workshops, mock job interviews, and resume building workshops.

**Health Professions Re-entry Training Program**
The re-entry program works with a pool of U.S.-licensed and foreign-trained health professionals who are committed to entering or reentering nursing or other health professions. Over the ten to twelve month program period, support is provided on passing the Board exam, on overcoming language barriers, developing critical thinking, and improving test-taking skills. At program completion, the participants are licensed, functional and can effectively communicate with physicians, other health professionals and patients.

**Health Professions Training Expansion Program**
Through partnerships with local colleges and universities, HWT is expanding nursing and allied-health training programs. Top students from the pipeline programs are placed in these training programs. The support provided to these students by the hospital and COPE decreases program attrition rates and strengthens students’ resolve to return to work for the hospital upon graduation. Due to the inherent challenges with California’s community colleges and expanding their nurse training capacity, COPE is working with the State of California to develop an innovative US-Mexico nurse training program. Through this program, eligible California students who have completed nursing pre-requisites and are on a waiting list for nursing school will be assigned to cohorts that will receive a BRN pre-approved nursing education at the University of Guadalajara or the University Autonomo de Guadalajara in Jalisco, Mexico. Upon graduation nurses will gain licensure in California and return to their home community to work.

**Mentoring and Professional Development (MAP)**
The mentoring program MAP provides support for new graduate, returning and existing health care professionals through a residency and preceptor training program. The MAP Program currently focuses on RNs and LVNs, assuring that newly hired nurses are supported at partner hospitals and receive ongoing mentoring, pertinent continuing education and support. The program supports nurses in continuing their professional development and provides resources that include a senior mentor/educator. The development of an integrated clinical and cultural competency training and support program within MAP helps to address common patient complaints that their language and cultural needs and sensitivities are often overlooked, or even ignored, by nurses.

**Partners /Contributions**
COPE works closely with numerous community organizations on the HWT program. Over 100 high schools and colleges have enrolled students in HWT activities, and hospital and health system partners include major community health providers such as Citrus Valley Health Partners, Hoag Memorial Hospital Presbyterian, Riverside Community Hospital and St. Mary Medical Center. The hospital partners are located throughout Southern California and the program is designed for easy replication and expansion throughout California and the rest of the country.

All seven of the participating hospitals/health systems currently fund HWT out of their operational budgets. The program has also received grant funding from the UniHealth Foundation, the Annenberg Foundation and The California Wellness Foundation. In order to expand the program reach, COPE is also exploring new types of partners, including health plans, biotechnology, and pharmaceutical companies.

**Alignment with IOM / Sullivan Commission Recommendations**
The HWT program addresses the following IOM recommendations:

**IOM Recommendations**

2.6 Key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers.

4.1 Health professions schools, hospitals, and other organizations should partner with businesses, communities, and public school systems to a) provide students with classroom and other learning
opportunities for academic enrichment in the sciences; and b) promote opportunities for parents
and families to increase their participation in the education and learning experiences of their
children.

4.3 For underrepresented minorities who decide to pursue a health profession as a second career,
health professions schools should provide opportunities through innovative programs.

4.4 Baccalaureate colleges and HPEIs should provide and support “bridging programs” that enable
graduates of two-year colleges to succeed in the transition to four-year colleges. Graduates of two-
year community college nursing programs should be encouraged (and supported) to enroll in
baccalaureate degree-granting nursing programs.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college
students who express an interest in the health professions, and provide these students with an array
of support services, including mentoring, test-taking skills, counseling on application procedures,
and interviewing skills.

6.1 Health systems and HPEIs should gather data to assess institutional progress in achieving racial
and ethnic diversity among students, faculty, administration, and health services providers, as well
as monitor the career patterns of graduates.

Impacts to Date

Key HWT program impacts include:

- CCE program has trained 6,673 college students participate since 2000, with 1,810 currently
  volunteering
- 130 Full-Time Equivalent (FTE) CCE staff as of March 2007 (compared to 6.99 FTEs as of 2001)
- Improved inpatient satisfaction and staff satisfaction scores related to CCE program
- 95 CCE students hired by COPE and partner hospitals since 2000
- In a survey of 1,083 CCE alumni representing student groups from 2000 to 2007, results indicate
  that 53 percent are in undergraduate programs, 33 percent in post-graduate programs (with 24
  percent in either medical or nursing school) and 9 percent are working in health professions
- Health Professions Re-entry Training Program participants had 40 percent Board Exam passing in
  first cohort; pass rate now up to 80 percent
- Red Shirt program has had 178 program participants since 2005, with 72 students currently
  volunteering
- MAP Program trained 219 preceptors to date, 127 RN residents, and 102 total residency graduates
- MAP has helped to decrease new nurse attrition rate by as much as 50 percent in the hospitals
  where MAP graduates are employed

Challenges

The following are a summary of key challenges faced by the staff and leadership of HWT:

Data Systems

Tracking student movement after completing the various programs is important in order to prove that
the program’s are effective, however data collection has proved difficult. COPE is now creating a new system
of tracking student alumni with the goal of identifying where students end up after completing the Red
Shirt and CCE internships.

Recruitment

Finding interested students for the CCE and Red Shirt programs and recruiting them into the program is
extremely labor-intensive, and until recently has relied on word of mouth. Now, a leadership team has been
placed at each hospital, which consists of volunteer interns. The students go into the community and talk
about the program, including spreading the word at their own classes, and visiting other campuses. A
LISTSERV has also been created so that information can be obtained electronically.
Community College Nursing School Expansion
The community college system has a limited number of faculty and spaces to accommodate expanded nursing cohorts and the administrative bureaucracy does not encourage innovation or flexibility.

Lessons
During the HWT program development process, key lessons included:

The Importance of Data Tracking
In order to track alumni of the CCE program, an efficient and regularly updated database is necessary. The database is also needed to track the diversity and demographics of previous and currently active CCEs. As discussed above, COPE is currently in the process of upgrading its database to maximize its functionality.

Recruitment
Legwork and use of listervs are both necessary to get the word out about the program and to generate a sufficient number of applicants. A larger pool of applicants allows the program to be more selective in identifying the best students for the programs. Making connections with counselors and professors at colleges to get their buy-in for the program allows the word about the program to spread.

Centralization of Processes
With multiple hospitals spanning a large geographic range, centralization is necessary to assure the quality of every local HWT program. A policies and procedures manual is in development, which will standardize program operations and facilitate greater ease of program replication.

Student Alignment with Program Philosophy
The CCE internship not only gives students hands-on patient care experience within a hospital, but also trains students on work and life skills, such as interacting in a professional environment. COPE has found that not all students are a good fit for the CCE Program and has learned that those students that most strongly identify with the program philosophy will thrive within the program.
Overview

In 1997 Kaiser Permanente Northern California (KP) and the Coalition of Kaiser Permanente Unions forged a Labor Management Partnership Agreement (LMP), a contract later ratified by SEIU Local 250, the predecessor of SEIU UHW-West. The Partnership’s goal is to “produce superior health outcomes, market-leading competitive performance, and a superior workplace for KP employees.” The single most difficult issue negotiated between KP and SEIU UHW-West was employment security. Career Mobility Programs address this and other concerns.

In 2001 in partnership with KP, SEIU UHW-West, the AFL-CIO, and the Shirley Ware Education Center (SWEC) obtained a grant from the Center for Health Professions, University of California, San Francisco, to develop new healthcare career ladders at KP. Though the pathways leading to specific job classifications focused on KP’s model, SWEC produced a report on the Career Ladder Mapping Initiative, which remains a reference for workforce development personnel throughout the state. The career ladder provides a guide for all KP employees who wish to advance to healthcare jobs through education and job training.

Impetus

While the union was interested in providing opportunities for its members to advance their careers, its primary concern was to increase job security. The program would ensure that incumbent workers are retrained and redeployed and that their new positions would provide higher salaries. In addition, the union leadership recognized that retraining was an effective way to improve employee diversity in the delivery of clinical services.

At the height of the dotcom boom in 2001, workforce demands in the high tech industry reduced the pool of young people for recruitment and KP began to explore incumbent worker training to supplement the recruitment of new workers. While conditions have changed, KP continues to build on its partnership with the union, recognizing the benefits of filling job vacancies by developing and promoting from within the organization.

Overall Program Description

Career Mobility Programs are job training or career upgrade programs designed to retrain union members for new or upgraded healthcare positions at KP facilities. By working in partnership with SEIU UHW-West, KP has been able to retrain and retain most employees whose jobs have been at risk, due to restructuring or the implementation of new technologies, as well as provide training to those employees who want to increase their skills and advance within the organization. Training has been funded by grants and/or through KP’s participation in the union’s joint employer education fund. The programs use a multifaceted approach combining financial, academic, and personal support to ensure participants’ success. Participants are regular full- or part-time employees of KP who:

- Belong to SEIU UHW-West
- Are currently in a benefitted position (20 or more hours per week)
- Have completed their probationary period

---

101 Service Employees International Union-United Health Workers West
102 The union’s goal is for workers to earn a minimum of fifteen cents more per hour in the new positions for which they have been trained.
103 Program participants bid on an existing job or a newly-created position and are chosen based on union seniority. SWEC requires that a position is guaranteed upon the successful completion of the program.
• Have no written discipline within the last six months
• Meet other eligibility criteria required such as passing the TABE (Test of Adult Basic Education), attending information sessions with managers, job shadowing, and meeting HR deadlines for bidding
• If there are more applicants than training slots, the allocation of training positions is based on seniority

Program participants receive:

• Pre-training skills assessment
• Pre-training orientation to the new position, including job shadowing
• Mentoring, tutoring and support for completing prerequisites
• Reduction of work schedule by eight hours per week to accommodate class and study time
• Guaranteed benefited job at KP after successful completion of the program

The partners have capitalized on their Labor Management Partnership (LMP) to save jobs and cut hospital costs through employee training. It is noteworthy that leaders of traditionally adversarial organizations were able to identify common needs and interests and very quickly develop a win-win strategy to both parties’ satisfaction.

**Individual Program Descriptions**

In partnership with KP and Contra Costa Community College, SWEC pioneered a Career Upgrade training model providing training, college credit, and a guaranteed position upon successful completion of the program. From 2001-2003, 235 employees, primarily workers of color, participated in a federal, H1B Skills Training Grant program. Ninety-one percent of the trainees successfully completed the program. Some participants were non-patient care, front-line, entry-level workers, many of whom were non-native English speakers and took an ESL course through SWEC. Training for the following job categories was provided:

- Acute Care Nurse Assistant
- Acute Care Nurse Assistant Upgrade
- Unit Assistant
- Medical Assistant
- Surgical Technician
- LVN to RN

Collaborating on the H1B Skills Training Grant program helped SEIU UHW-West and KP to develop a model for future partnerships based on trust and confidence. SWEC’s executive director believes that this experience led to the founding of the Joint Employer Educational Fund in 2004.

For some years KP has outsourced its medical coding function. Recently, however, a decision was made to bring this function in house. An 18-month, distance-learning Medical Coding Program conducted in partnership with Santa Barbara City College was developed using a work-based learning model to train and place current KP employees in new positions as medical coders. As of May 2007, this popular program had 121 applicants for 60 student slots. This was the first Career Mobility Program solely offered online, available to employees at nearly all medical centers across the region, including SEIU-UHW-WEST members as well as a cohort of Local 29 union employees. The Medical Coding Program was also the first program to offer a 20/20 model of learning, enabling employees to work 20 hours per week and study 20 hours per week. Students in the program are supported by a stipend paid by both the Ben Hudnall

---

104 An alternative “20/20” work schedule is utilized by the online Medical Coding Program.
105 Career Upgrade training refers to intensive training leading to high-demand jobs. Programs are provided depending on current and projected labor market demands. Career counseling, case management, and short-term courses are offered and a job at KP is guaranteed upon successful completion of the program.
106 Demographic data on the ethnicity of participants in Career Mobility programs are unavailable with the exception of participants in the H1B Skills Training Grant (see Page 9).
Memorial Education and Training Trust\textsuperscript{107} and the SEIU UHW-West & Joint Employer Education Fund. Not only does this program create training and advancement opportunities for employees but reduced outsourcing will save KP money.

KP’s newly digitized medical record system is known as KP HealthConnect. HealthConnect is also the name of SWEC’s job-to-job training program\textsuperscript{108} for incumbent KP medical records workers. One thousand employees, most of whom are file clerks, will be retrained and redeployed, primarily in customer service roles, a step up the health career ladder.\textsuperscript{109}

KP workers participating in long term, intensive degree programs\textsuperscript{110} in order to train for hard-to-fill positions, e.g., RNs, respiratory therapists, radiology technicians, and pharmacists, receive a stipend of up to $6,000 for each of three semesters funded by SWEC’s Stipend Program. This allows employees to reduce their work schedule by eight hours per week in order to focus on studying and attending classes.

The H1B and Nurse Workforce Initiative grants helped pave the way for other grant- funded training programs. In 2004 KP and SWEC were awarded the Bay Area Workforce Collaborative (BAWFC) grant. This was the first time a private foundation—The San Francisco Foundation—provided half the funding for a joint KP/SWEC program. This grant provided Vocational English as a Second Language training to 18 employees as well as a Unit Assistant Training Program for 20 employees.

Currently 12 KP employees are enrolled in an LVN to RN Program funded by an Oakland Private Industry Council grant and are anticipated to graduate in December 2007. Finally, Skyline College received the Chancellor’s grant to train 30 incumbent KP workers in a Sterile Processing Technicians Program using innovative work-based learning models. KP, SWEC, and possibly other employer partners in the Education Fund will work together to implement this unique model.

**Partners/Contributions**

Service Employees International Union – United Health Workers West (SEIU UHW-West)
Nationally and locally SEIU is the largest union representing Kaiser Permanente employees. In 2005 SEIU Local 250, representing Northern California health care workers, merged with its Southern California counterpart, Local 399. The combined union is now known as Service Employees International Union–United Health Workers West (SEIU UHW-West).

**Shirley Ware Education Center (SWEC) & SEIU UHW-West & Joint Employer Education Fund**
SWEC was founded in 1998 by SEIU UHW-West. The Joint Employer Education Fund, a Labor/Management Education Fund that was created and merged with SWEC in 2004, is a benefit obtained through collective bargaining.\textsuperscript{111} Through the Education Fund the union provides educational and training opportunities as well as career counseling to enhance career advancement and employment security for its members.

Kaiser Permanente Northern California (KP)
Kaiser Permanente is a not-for-profit, integrated, managed care organization with hospitals throughout Northern California. As of June 2007, KP had nearly 3.3 million members in the region.

**SEIU UHW-West through the Joint Employer Education Fund and SWEC**
- Assesses basic skills
- Arranges pre-training orientation, including information sessions and job shadowing
- Provides tutoring and support to complete prerequisite courses

\textsuperscript{107} The Ben Hudnall Memorial Education and Training Trust, established in 2007, provides career counseling services and resources to education, training, and other career development programs across Kaiser Permanente Regions.
\textsuperscript{108} Job-to-job training refers to a job retraining program for existing or newly-created positions targeted to employees at risk of being laid off or displaced. Career counseling, case management, and short-term courses are provided along with a guaranteed job upon successful completion of the program.
\textsuperscript{109} A small number of KP employees will remain in the medical records department.
\textsuperscript{110} Long term is defined here as a program requiring a minimum of one year of study, for example, preparing LVNs for RN licensure.
\textsuperscript{111} For the purposes of this profile, SEIU UHW-West & Joint Employer Education Fund will be referred to as the “Education Fund” when referring to financial or funding activity and as “SWEC” when referring to programmatic activities.
- Co-designs curricula in partnership with KP and community colleges
- Conducts evaluations of individual participants
- Collects data, conducts program evaluations, and reports to funders
- Manages joint education fund
- Offers stipends of $6,000 per semester to Stipend Program participants

**Kaiser Permanente**
- Provides 0.22 percent of pay to SEIU UHW-West Joint Employer Education Fund commingled funds\(^{112}\)
- Gives other monies as needed to SEIU UHW-West Joint Education Fund non-commingled funds\(^{113}\)
- Provides up to 50 percent of program participant wages in grant programs
- Obtains buy in from management for training programs
- Identifies and facilitates preceptor training and clinical rotations
- Facilitates HR processes, including training program position postings, transfer tracking, bidding and seniority lists, and pay rates
- Co-designs curricula for various programs
- Ensures smooth execution of projects through job shadowing, information sessions, and logistics

**Community Colleges**
SWEC and KP have worked with many community colleges for the Upgrade Skills training program. These colleges have been flexible and willing to work with SWEC’s educational counselors and KP’s career mobility specialists to customize curricula. They have co-designed custom curricula for various programs and provided classroom space and instructors. Thirteen Northern California community colleges partner with SWEC and KP by offering programs that have enabled incumbent workers to obtain new positions, including but not limited to:

- Contra Costa College
- American River College
- Modesto Junior College
- Gavalion College
- Ohlone College
- City College of San Francisco
- Skyline College

Ten other community colleges have partnered with SWEC and KP in less formal ways, such as sponsoring individual classes or referring their own students to SWEC for support services, including:

- Santa Rosa Junior College
- Mission Valley City College
- Chabot College
- Laney College
- San Joaquin Delta College

**Alignment with IOM/Sullivan Commission Recommendations**
The Career Mobility Program addresses the following IOM and Sullivan Commission recommendations:

**Sullivan Commission Recommendation**
6.6 Community and civil rights organizations should collaborate with health care organizations to advance institutional diversity and cultural competence goals.

\(^{112}\) Commingled funds are used for the benefit of all eligible employees of the participating Fund employers.

\(^{113}\) Non-commingled funds are provided by KP only for the benefit of its employees when KP wants to use more than its allotted share of student slots or to create a training program solely for KP workers. To date, KP has donated seventeen million dollars to the Fund.
Impacts to Date

SEIU UHW-West and SWEC
- Provide increased job security for union members employed by KP
- Mapped healthcare career ladder with opportunities for advancement
- Deliver customized training for union members, resulting in guaranteed jobs with pay increases
- Better educated membership, as some KP employees have continued their studies
- Improved labor-management relations with KP

Kaiser Permanente
- Upgraded over 400 employees to new job classifications through retraining
- Provide higher quality training through customized curricula and use of clinical facilities
- Increased recruitment of top new employees through mapped career ladder and job training
- Increased employee retention and satisfaction rate. Currently 100 percent of successful program participants are still on the job at KP after one year
- Improved labor-management relations with SEIU UHW-West
- Improved patient care at KP’s Northern California hospitals
- Increased diversity in KP’s healthcare workforce
- Key vacancies are filled with thoroughly trained incumbent workers

Of the 235 H1B Skills Training Grant Phase I participants, 55 percent are UR individuals, including 619 African Americans, 44 Latinos, and 2 Native Americans

Community Colleges
- Expanded clinical sites for students
- Receipt of donations of up-to-date supplies and technical equipment

Projected Impacts

SEIU-UHW-West and SWEC
- Continued retraining and/or upgrading of positions for members
- Continued increase in earnings for members who want to be retrained

Kaiser Permanente
- Through the HealthConnect program, more than 1,000 additional KP employees will be retrained and redeployed to new positions rather than laid off
- Continued savings due to lower training costs
- Higher rates of linguistic and cultural congruence between KP staff and patients, as more ESL and non-patient care, front-line UR employees move into patient care and customer service positions
- Improved patient care due to increased staff loyalty and satisfaction, quality of training, and retention
- Continuation of current funding base through employer participation in the Joint Employer Education Fund and the Fund’s grant-seeking activities
- SWEC’s core services, supported by the Fund’s commingled funds, are sustainable and institutionalized as long as SEIU UHW-West is bargaining

Challenges

Increasing Internal Buy-In
Unit and facility managers at KP need to be educated about the goals and benefits of the Career Mobility Program, including the strategy of backfilling positions. (The costs of backfilling to replace absent employees who take off time to attend classes are not borne by units.) Unit managers also need to be informed of the benefits of cooperating with an employee’s new work/school schedule.\textsuperscript{114} KP and SWEC

\textsuperscript{114} For example, an anatomy prerequisite course at a local community college began at 5:00 PM. The student/employee needed to leave KP at 3:00 PM, not 3:30 PM, in order to get to class and take exams on time. Career Mobility staff worked with the unit manager to help him understand the importance of supporting employees in the program.
managers meet with individual facility and unit managers on an as-needed basis to address these issues and they also utilize more formal communication methods to achieve buy in.

**Coordinating with Community College Leaders**
The autonomy built into the community college system results in differing levels of cooperation from partners, depending on the college.\textsuperscript{115} Some community colleges have been more willing than others to design innovative programs or open an additional section of an impacted science prerequisite course.\textsuperscript{116} This challenge is addressed on an individual basis as it arises with each new repeat program or planned course.

**Lack of Capacity**
Shortages of instructors and classroom space at partnering community colleges limit the number of courses that can be offered by Career Mobility Programs. This challenge is endemic to the California Community College system as described in Inquiry #2 of this report. Workarounds are arranged on a case-by-case basis. Until faculty shortages and community college space constraints are resolved on a systemwide level, KP provides classroom space, or appropriate classroom space is found in community settings, this challenge will remain.

**Articulation Problems**
Historically, course credits from one California community college have not always transferred to other California community colleges. This has made it difficult for some students to fulfill prerequisite requirements before entering a Career Mobility program.\textsuperscript{117}

**Lessons**

**Create Strong Partnerships**
Before a union and an employer can fund, plan, and implement a successful job training and career program, there must be a strong history of collaboration on projects in a non-adversarial manner. As Joan Branconi, Executive Director of SWEC stated, “You can have a fund but the likelihood of its being successful is diminished without a good relationship.” Negotiating the 2005 Labor Management Partnership Agreement between SEIU UHW-West and Kaiser Permanente Northern California and seeking grant funding together for the federal H1B Skills Training Program provided the foundation of trust needed to create Career Mobility Programs.

**Make Early Support at Multiple Levels**
Engage partners on many levels, especially the health organization’s facility and unit managers who need to plan for hiring backfill replacements and accommodating employees’ class schedules. Emphasize that the use of backfill positions allows unit managers to “afford” to have employees enrolled in training programs. Once they understand the benefits for Kaiser of employees’ participation in Career Mobility Programs, managers are generally willing to help solve any operational issues.

**Maintain Internal Communications**
“Don’t underestimate the need for internal communications,” recommends Barbara Norrish, KP’s Director of Education, Research, and Workforce. To educate unit and facility managers and other key hospital staff about program goals and operational processes, SWEC and KP held information and orientation sessions and one-on-one meetings with managers. They also ensure ongoing communication through email updates and conference calls.

\textsuperscript{115} Initially SWEC had difficulty convincing some community colleges to offer summer and weekend courses.
\textsuperscript{116} Impacted courses in community colleges normally enroll only some of the qualified students who seek admission.
\textsuperscript{117} Most of the articulation problems for science prerequisites between California’s community colleges and among California’s three systems of higher education have been resolved, but we have not been able to confirm that this problem no longer exists at each participating college for each program participant who has recently transferred course credits between colleges or systems.
Overview / Impetus

In 1991, in partnership with San Francisco State University (and later City College of San Francisco), Jewish Vocational Services (JVS) created a one-semester course to provide knowledge and understanding of nursing practice in the U.S. for Jewish immigrants who had been nurses in the former Soviet Union. The course strengthened students’ language and cross-cultural competencies through a combination of classroom and clinical work at local hospitals. This program became a model for the programs in the Nursing Career Ladder Initiative. JVS and its academic and hospital partners had two shared goals in the development of the initiative:

- To reduce the current critical shortage of nurses in the San Francisco Bay Area
- To help foreign-trained medical professionals obtain credentials needed to practice in the U.S.

In addition, leadership of CCSF’s RN Department became concerned about Associate Degree in Nursing (ADN) student attrition rates. However, the college lacked the capacity to offer the case management and wraparound services as well as the job-placement assistance that many of its students required, particularly UR students and low-English speakers. The college also needed help establishing relationships with area hospitals to acquire a sufficient number of clinical sites for its nursing students.

Description

The Nursing Career Ladder Initiative uses a multifaceted approach combining academic, financial, personal, and job search support to ensure program participants’ success. Participants include:

- Foreign-trained health professionals
- Licensed domestic reentry nurses
- Students enrolled in CCSF’s ADN program
- Incumbent workers whose jobs are being eliminated
- Employees seeking job retraining and career advancement

Nursing Career Ladder Initiative participants receive a combination of services, including assessment, case management, tutoring, mentoring, job placement assistance, and other support services as needed. What makes the Nursing Career Ladder Initiative an exemplary program is the adaptation of their initial model to accommodate different occupations and cultural groups. In recognizing the common issues that immigrants, displaced workers, and domestic reentry workers face, JVS has created a dynamic model that fits the changing needs of both job seekers and employers. There are four programmatic components in the Nursing Career Ladder Initiative, including:

The **LVN Refresher Program** is a four-month, full-time training program designed to help foreign-trained nurses become Licensed Vocational Nurses (LVNs). JVS has collaborated on the LVN Refresher Program for more than 15 years with CCSF’s Licensed Vocational Nursing Program and area medical facilities. LVN Refresher students learn nursing theory and communication and focus on lab skills work.

---

118 Wraparound services provided by Jewish Vocational Services address financial issues that may be barriers to academic success, e.g., child care, housing, health insurance, and “survival” employment.

119 Domestic reentry workers in this context are nurses who have left the workforce for at least three years for any reason and are now seeking to reenter their profession. Employers generally will not hire these workers unless they have upgraded their skills and knowledge through a recent refresher course.

120 Experience has shown that for many foreign-trained RNs, it is easier to take and pass the LVN exam prior to studying for the U.S. NCLEX-RN exam. While preparing for the exam, nurses have a chance to learn about the U.S. healthcare system, thereby improving their chances of on-the-job success.
Special emphasis is placed on cultural considerations in nursing practice and nursing care. Students spend four to five weeks in clinical rotations at local medical facilities and receive the full complement of services described above. Upon completion of the course, JVS helps students prepare for the board exam and provides job-placement services.121

Of the 216 LVN Refresher Program participants during 2005-2007, 21 percent were from UR groups. Twenty-seven percent of UR completers have become licensed as either LVNs or RNs.122 Nearly one quarter of licensed UR nurses have an average starting hourly wage of $26 (LVNs) and $39 (RNs).

The RN Refresher Program was initiated in 2005, and includes two clinical rotations and the full complement of services listed above. Of the 60 RN Refresher Program participants during 2005-2007, 13 percent were from UR groups. Twelve percent of these UR participants have completed the course to date. Participants are U.S. and foreign-trained nurses who already hold RN licenses prior to enrolling in the program.

The RN Educational Case Management Program serves students currently enrolled in CCSF’s two-year ADN program. JVS provides the same wraparound support services for ADN students as for the LVN and RN Refresher students. However, in this program, JVS case managers work with CCSF Nursing Mentors to provide academic, financial,123 and other support to students identified as “in trouble” by an “Early Alert” system. Students needing more assistance may receive additional tutoring, mentoring, subject-specific workshops, and financial assistance.

Of the 270 RN Educational Case Management Program participants in 2005-2007, 20 percent were from UR groups. Nearly one-fifth of these UR participants have completed the course to date. Twenty-two percent of UR completers have been licensed to date.

The Certified Nursing Assistant (CNA) Program is a partnership between JVS and the Jewish Home begun in 2003. In 2005 the Jewish Home signed a contract with the union representing its employees agreeing to provide retraining to workers about to lose their jobs. The CNA program has targeted food service workers and other employees who want to expand their access to better jobs and higher wages. Although the majority of participants now are Jewish Home employees, a few have approached JVS on their own as job seekers. CNA program participants receive a comprehensive range of academic and job-placement services, including a 12-week job readiness curriculum, eight weeks of full-time vocational training with clinical rotations, and academic and personal support.

Between 2003-2006, 72 participants enrolled in the CNA Program. More than three-quarters of participants were successfully placed in CNA positions. The average starting hourly wage for all CNAs placed between 2003 and 2006 was $13.49.

**Partners / Contributions**

**Jewish Vocational Services of San Francisco (JVS)** is a non-sectarian, nonprofit organization that offers job seekers the resources, training, and support necessary to find and retain good jobs. It also assists employers in hiring and retraining qualified workers. As part of JVS’s sector strategy, the agency focuses on high-growth areas of the local workforce, tailoring programs to meet the employment needs of three sectors: health care, nonprofit, and business services. This profile focuses on one healthcare sector program, the Nursing Career Ladder Initiative. JVS fulfills Jewish values by helping people regardless of their faith, particularly those with barriers to employment.

**Welcome Back Center: International Health Worker Assistance Center (WB)** is the product of a partnership between San Francisco State University and City College of San Francisco (see profile of

---

121 JVS offers clients job-placement services throughout their careers.
122 Some LVN Refresher Program participants sat for the NCLEX-RN exam upon completion of the LVN Refresher Program. These individuals had been RNs in their former countries.
123 Through foundation grants JVS has funding to provide scholarships for some nursing students. Scholarships range from $200 - $1,800, depending on client need and funding availability.
Community Health Works, Section II.A.8), and the lead center in a statewide initiative to help foreign-trained health workers gain language, technical skills, and any licensure required to return to their profession. Forty percent of the clients in JVS’ Nursing Career Ladder Initiative programs are referrals from WB. In turn, JVS refers clients, usually foreign-trained physicians, to WB for assistance. Welcome Back provides basic skills assessment, educational goals setting, and case management support.

**Jewish Home of San Francisco (Jewish Home)** is a not-for-profit, licensed, skilled nursing facility with 430 residents. The Jewish Home partners with JVS to train Certified Nursing Assistants (CNAs).

**Bay Area Hospitals** work with JVS either by referring employees or job applicants for further training in one of JVS’ Nursing Career Ladder Initiative Programs or by hiring program graduates. A few facilities support the initiative by providing clinical sites for nursing students.

**Alignment with IOM/Sullivan Commission Recommendations**

The Nursing Career Ladder Initiative addresses the following Sullivan Commission recommendations:

**Sullivan Commission Recommendations**

4.3 For underrepresented minorities who decide to pursue a health profession as a second career, health professions schools should provide opportunities through innovative programs.

5.2 To reduce the debt burden of underrepresented minority students, public and private funding organizations for health profession students should provide scholarships, loan forgiveness programs, and tuition reimbursement strategies to students and institutions, in preference to loans.

5.4 Businesses, foundations, and other private organizations should be encouraged to support health professions schools and programs to increase financial resources needed to implement the recommendations of the Sullivan Commission.

**Impacts to Date**

- The Nursing Career Ladder initiative has served over 800 clients to date. Thirteen percent are from UR groups.
- Customized training and job matching for employer-clients have resulted in strategic relationships, which have been leveraged to obtain clinical sites for JVS nursing student-clients at CCSF.
- Some graduates have continued their studies on their own, e.g., obtaining an associate’s degree.
- Program graduates have returned to JVS to participate as volunteers, speaking to nursing classes at CCSF or serving as JVS Nursing Scholarship Committee members.
- Program graduates have returned to JVS as employer-clients wishing to hire new graduates.124
- Presentations on the Nursing Career Ladder Initiative at conferences around the country.
- The Nursing Career Ladder initiative was replicated in Boston after the Boston Private Industry Council’s site visit to JVS.
- The LVN program has received numerous awards, including a program award from the International Association of Jewish Vocational Services.

---

124 Graduate employers report that they turn to JVS because they need employees with the cross-cultural competencies that Nursing Career Ladder Initiative programs instill in students through curricula emphasizing diversity and experiential learning. (Each class or cohort generally consists of bi- or multilingual participants from 14 or 15 countries.) Returning graduates seeking to hire new graduates emphasize their need for nurses who are able to communicate cross-culturally with patients as well as other nurses and health professionals.
**Projected Impacts**

Due to the projected long-term nature of the nursing shortage in the Bay Area, JVS will continue the Nursing Career Ladder Initiative, adapting the program as workforce requirements and the needs of its clients change.

The nursing program at CCSF has been institutionalized through funding from the Chancellor’s Office of the California Community Colleges. However, JVS’ wraparound support services for students have not yet been institutionalized, in spite of the agency’s continuing efforts to obtain permanent funding. JVS’ existing strategy of obtaining grant funding for Nursing Career Ladder Initiative programs will continue.

**Challenges**

**Maintain Stable Funding**
Since the first nurse refresher course was taught, it has received support from at least twenty funders. Grants are typically made for two-year cycles and are staggered so they don’t require renewal in the same year. However, JVS would like to maintain a stable funding base so that it can focus more on client services. The agency is seeking support for the institutionalization of its wraparound support services for the LVN program.

**Long Time Period to Secure Eligibility for Licensing Exam**
Often it takes longer for a foreign-trained nurse as long to get their educational transcript, foreign licensure, and application reviewed in order to receive permission to sit for the licensing exam than it does to complete a two-year nursing program. JVS seeks to work with the California Board of Registered Nursing to reduce the time between application and determination of eligibility.

**Differential Reporting Requirements for Multiple Funders**
So much time is spent on data collection to meet the requirements of the initiative’s various funders that the time JVS staff can spend serving clients is reduced. In addition, the agency’s database lacks the capacity to track all services JVS offers its nursing program participants, forcing staff to maintain their own spreadsheets for some key data. JVS seeks to solve this problem by implementing a more robust database this year.

**Strengthen Tracking of Graduates**
JVS needs to create new methods of staying in contact with its Nursing Career Ladder Initiative graduates in order to collect data required by funders and to encourage continuing relationships with the agency. JVS is working to create workshops that will appeal to graduates to be held onsite at the agency’s office.

**Manage Rapid Growth**
Both the RN Refresher and the RN Educational Case Management programs grew more rapidly than expected. Originally JVS’ goal was to provide services for one cohort of 45 students in the RN Educational Case Management Program. However, ADN students at CCSF also wanted to receive JVS’ support services. The agency’s contract for one cohort of 45 students soon grew to six cohorts totaling 160 students receiving services at the same time. This unexpected growth has made it difficult for JVS’ case managers to keep up with the number of students seeking support. It has also limited the agency’s ability to take advantage of opportunities for further program development and provide more intensive services for ongoing students.

**Lessons**

**Build Trust with Multiple Partners**
Initially CCSF’s RN Department was not attuned to the need for wrap-around services and didn’t collaborate on the RN Refresher Program. Although JVS had a long history of partnering with CCSF’s LVN Department, JVS leadership needed to start from scratch with the RN Department. Over time, JVS leaders were able to build credibility with all CCSF constituents—students, RN faculty, and the
administration—demonstrating small successes along the way. CCSF’s Dean of Health Sciences proved to be a crucial advocate for JVS and its health programs, always open to exploring new programmatic or funding ideas. Developing a relationship with a champion at the partnering college has been key to the success of the overall collaboration.

Clarify Partner Roles and Responsibilities
According to JVS executive director Abby Snay, “Great attention must be paid to role clarification and how we’re using language.” For example, while roles were initially clear, though fluid, between CCSF and JVS, issues eventually arose and a meeting needed to be held with staff from the Welcome Back Initiative to discuss the definition of “case management” and each agency’s role in the partnership.

Leverage Partner Core Competencies
Appreciating the core competencies each partner brings to the collaboration and leveraging those competencies has resulted in the partnership’s ability to solicit funding from new sources, acquire additional clinical sites at area medical facilities, offer one program during the evening, and increase the number of clients served.

125 Of the first RN Refresher Program cohort of 12, 11 students passed the NCLEX-RN exam within the first year.
9. Sonoma County Healthcare Workforce Development Roundtable
Napa-Sonoma Collaborative

Primary Author: Sylvia Sanchez, Stanford University medical student

Overview

The Sonoma County Healthcare Workforce Development Roundtable was established in 2001 by a group of local health providers, educators, policymakers, and community leaders, in recognition of the need to work together in order to build a more diverse and culturally competent workforce. The Roundtable and its Steering Committee meet on alternate months to coordinate, share information, assess progress, support existing programs, and explore new opportunities. One of the most significant accomplishments of the Roundtable was the creation of the Sonoma County Healthcare Workforce Development Program (HWDP), which is administered through Santa Rosa Junior College. The HWDP program will be the primary focus of this profile.

Impetus

The Sonoma County Healthcare Workforce Development Program began as a way to increase Latino and Spanish speaking applicants into California’s nursing programs. Key partners are Santa Rosa Junior College, Sonoma County Department of Health Services, Sutter Medical Center of Santa Rosa, St. Joseph Health System-Sonoma County, Pacific Foundation for Medical Care, Kaiser Permanente of Santa Rosa. Nationally, statewide, and locally, there is a crisis in healthcare. An aging population, retiring baby boomers, poverty-level wage earners, and an increase in monolingual Latino immigrants needing health care are all contributing factors. These trends are especially strong in California’s Sonoma County, which attracts both immigrant farm workers and retirees. While the non-Latino white population is decreasing, the Latino population is steadily increasing. These factors create a need to recruit, train, retain, and promote bilingual, culturally competent healthcare workers to meet the specific health needs of this population.

The Sonoma County Economic Development Board’s 2005 report, Economic Opportunity and Workforce Development in Sonoma County (EOWDSC) stated that its number one suggestion on how to improve the healthcare sector workforce was to train “bilingual, bi-cultural health workers to provide education and prevention services as well as direct patient care”. Several studies have found that while California’s population is 30 percent Latino, only 4 percent of California’s nurses are Latino.

Sonoma County recognized that individuals from diverse backgrounds are the very people who can help solve the problem of insufficient healthcare services for the underserved. They are also the ones in need of employment opportunities that offer a career ladder and progressive income. Thus, they began the work of the Sonoma County Healthcare Workforce Development Roundtable. After bringing together other key players in Sonoma County such as Red Cross, Sonoma County Job Link, and the Sonoma County Office of Education, they began to envision who the target population would be and how to leverage resources to attract young bilingual high school students to consider careers in healthcare, especially those that would lead them into career ladders of healthcare.

Description

The mission of the Sonoma County Healthcare Workforce Development Roundtable is, “To promote interest in the health professions and create opportunities to pursue health careers for a diverse population in Sonoma County.” The focus has always been to increase the number of bilingual and bicultural students entering nursing and allied health programs, as well as to identify, recruit and prepare high school students to explore health care careers and promote readiness for secondary education.

To achieve this mission, Stephanie Thompson and Jeannie Dulberg of Santa Rosa Junior Colleges developed the Healthcare Workforce Development Program. The three components of the program include:
Summer Health Careers Institute
Non-traditional recruiting teams, including graduates of the SHCI and diverse health care professionals outreached to local bilingual and bicultural middle and high school students interested in health careers to secure their participation in the Summer Health Care Institute (SHCI). An average of 75 students apply each year for the 22 positions. The 22 selected students participate in a five week health career training program and receive 5 college credits, 15 high school credits and a stipend of $500.

Health Career Pipeline Program
Upon graduation from the SHCI students are automatically enrolled in the Health Career Pipeline Program. In addition, 40 other college age students are recruited to participate. Students are provided with academic counseling, tutoring, and psychosocial support. They also participate in field trips to universities and colleges and family college information nights. When they complete the requirements they are awarded a $200 stipend.

HOPE Center
Funding was secured in July 2007 to support Health Science Students on the Santa Rosa Junior College Campus. Enhancements will be made to an existing website, which serves as an electronic portal for potential students to read success stories of SHCI graduates, profiles of professionals in health care, financial and other support services that are offered through the Health Occupations Preparation and Education (HOPE) Center. The HOPE Center is an on-campus health professions learning community for current and prospective students. While there are almost twice as many applicants to the nursing program than there is capacity, many of the applicants fail to meet the minimum qualifications for the program. The HOPE center aims to expose these students to other health professions in careers that may be of interest to them. Support services offered through the HOPE Center include:

- Academic support through tutorials, time management workshops, study skills and support in math, science and VESL courses
- Exposure to health career options through workshops with a variety of health professionals
- Exposure to health care experiences through internships, work experience and mentorship programs
- Social support in a central location that is a gathering place for like-minded students who are passionate about health care and can exchange information, resources, and create supportive synergy among their peer group

The HOPE Center houses a computer lab with up to ten computers with appropriate software, links to allied and nursing program courses and instructors, links to financial and other resources, links to the work experience and tutorial offices, and access to a health sciences student blog/discussion board.

The Center is staffed with one full-time dedicated counselor. The counselors assist with the development of Educational Plans, advising on supportive services, and providing case management services. In addition to workshops on health career options, the Center covers other topics of importance to students such as financial management. The selection of workshop topics is informed through the feedback of allied health program faculty and students through electronic surveys.

Partners/Contributions
Over 30 health care providers, high schools, the Sonoma County Office of Education, post-secondary education institutions, local government, and community based organizations are engaged in and support the Healthcare Workforce Development Program (HWDP).

Together these partner organizations form the Sonoma Healthcare Workforce Development Roundtable. The Steering Committee of the Roundtable meets every other month. The larger body of the Roundtable (about 25 members) meets every month on the month that the Steering Committee doesn't meet. Because the HWDP originally received the state community college grant from the Chancellor's office that dictated that it would be put in place by SRJC, the lead role fell to the SRJC. Thus, the SRJC implements the programs and reports back to the Roundtable, while receiving direction from Roundtable members.
Hospital partners have strong commitment to the program and the development of a workforce that is aligned with the increasingly diverse of the community they serve.

**Relevance to IOM / Sullivan Commission Recommendations**

The Sonoma County Healthcare Workforce Development Roundtable and the Healthcare Workforce Development Program address the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

3.4 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health care workforce.

**Sullivan Commission Recommendations**

2.2 There should be increased recognition of underrepresented minority health professionals as a unique resource for the design, implementation, and evaluation of cultural competence programs, curricula, and initiatives.

2.5 HPEIs should work to increase the number of multilingual students, and health systems should provide language training to health professionals.

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4.3 For underrepresented minorities who decide to pursue a health profession as a second career, HPEIs should provide opportunities through innovative programs.

4.4 Baccalaureate colleges and HPEIs should provide and support “bridging programs” that enable graduates of two-year colleges to succeed in the transition to four-year colleges. Graduates of two-year community college nursing programs should be encouraged (and supported) to enroll in baccalaureate degree-granting nursing programs.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

5.3 Public and private entities should significantly increase their support to those health professions schools with a sustained commitment to educating and training underrepresented minority students.

6.1 Health systems and health professions schools should gather data to assess institutional progress in achieving racial and ethnic diversity among students, faculty, administration, and health services providers, as well as monitor the career patterns of graduates.

**Impacts to Date**

**Summer Health Careers Institute**

- During summer 2005 and 2006, 42 students commenced and completed the program.
- There were only 8 absences out of 1000 possible attendance days.
- 38 students received A’s and 4 received B’s.
- Over 400 community and family members attended the graduation ceremonies.
- Students interfaced with over 200 volunteer healthcare professionals.
- 165 students were nominated in over the two years of operation.
Tutoring
- Decrease in withdrawal rate for physiology from 28 percent to 17 percent
- Decrease in the withdrawal rate for anatomy from 21 percent to 8 percent
- Increase in Chemistry GPA from 2.39 to 2.54; decreased withdrawal rate from 14 to 0 percent

Outreach
- Gave away 1000 pens, 1000 band aid holders and over 4,500 brochures at the following events
- 27 Community Presentations
- Conducted classroom presentations to 13 high schools
- Conducted classroom presentations to 4 middle schools
- Average of 3 classrooms per school
- Average of 27 students per class
- Approximately 1400 students heard classroom presentations this year
- 10 College Outreach Activities reaching over 200 individuals
- Outreach Campaign (all items in Spanish and English)
- Created a mailer for top 7 high schools with the largest Latino population
- Designed and disseminated scholarship brochures, bus posters, classroom/community posters
- Created a radio spot for Exitos
- Published article in La Voz
- Designed a web page located at www.santarosa.edu/healthcareers
- Monthly orientation for the community titled, “Your Future is in Healthcare, We Can Get You There!”

Scholarships for Students
- Established an Endowment Fund at Community Foundation of Sonoma County
- Awarded two $500 scholarships for Fall of 2006
- Disseminated scholarship brochures to over 350 people
- In collaboration with Roundtable Partners awarded 6 other scholarships each year

Funding and Awards
- Over the last 5 years the Roundtable has fully internalized the task of “growing our own” healthcare workforce.
- 2003—The California Endowment awards SRJC, on behalf of the Healthcare Workforce Development Roundtable, funding to develop a strategic plan to address the workforce shortages in the local healthcare industry, including the lack of ethnic diversity. The planning process resulted in the report, Supply and Demand of Healthcare Workers in Sonoma County. The report revealed that the demographics of Sonoma County are gradually changing. At that time Latinos comprised 19 percent of the population. (Just 3 years later, the Press Democrat reports that Latinos now represent 21.1 percent and by 2050 Latinos will make up 31 percent of Sonoma County.) The strategic plan was completed in January 2004.
- 2004—California Community College’s Chancellors Office awards SRJC, on behalf of the Roundtable, a grant to implement the recommendations contained in the strategic plan. The main components include the Summer Health Careers Institute, tutoring for health sciences prerequisites, job shadowing and work experience development for high school students in health career pathways and an extensive outreach campaign to the Latino Community. Successfully completed June 2006.
- 2006—California Wellness awards SRJC, on behalf of the Roundtable, a grant for core operating support to continue the programs mentioned above. The Roundtable raised over $100,000 in cash contributions from the local healthcare organizations, with over $200,000 of in-kind match.
- The collaboration on this workforce diversity project is unprecedented and earned the Roundtable the honor of Volunteer Business Group of the Year for Sonoma County, 2006. There is tremendous support for the Healthcare Workforce Development Program. The staff and volunteers are committed to the success of the new phase of this program.
Projected Impacts

The initiative recently received several grants that are split between different governmental and private resources to expand the program. There are plans to expand the program locally, and duplication is an option. Plans to expand the program were put in place when applying to the new sources of funding and since the grants have been received, the plan is to concentrate on the new funding by fulfilling the expectations of the funding sources first.

Challenges

Managing Rapid Growth and Student Tracking
One of the biggest challenges is how to effectively manage the rapid growth of the program. As the program grows, the number of participants increases incrementally and presents a challenge to provide the continuous contact and support that is essential for the program. Currently, staff have been able to follow some students from their high school years up until the beginning of their college years, but the one-on-one support may be difficult to achieve with the increase in students.

Building Sustainability
The program has received funding for the next five years. Certain aspects of the program have been institutionalized, such as the Summer Health Careers Institute, which is a class recognized by the Santa Rosa Jr. College. The program is sustained for the next five years and part of the funding is to find a sustainability strategy. More research is needed, however, to justify long term investment.

Lessons

Strengthen Career Advising in High School
In retrospect, one of the things that could have been done differently was to acquire a trained academic advisor or counseling staff to support students as they graduated from high school. This form of direct intervention near the time of graduation would capture many youth who may have an interest, but do not have the resources and understanding to determine how to proceed.

Importance of Intersectoral Engagement
One of the key factors in the success of the program has been broad support from a diverse range of local stakeholders, particularly the health care provider organizations. Health care leaders played a key role in leveraging the participation of the educational system, the government, institutions, and other non-profits. Often, problems cannot be solved because there is either a lack of a clear vision or clear funding sources, and in this case, the program came together both with a clear plan and clear funding, which led to increased support from collaborative partners and funders. The strength of the collaboration was unique and greatly helped make this program become a success from the start.
The Greater Bay Area Mental Health and Education Workforce Collaborative (the Collaborative) was developed by the Greater Bay Area Mental Health Directors Association—representing thirteen county mental health departments—to anticipate and meet public mental health workforce needs.

In early 2000, a group of leaders in the mental health field attended a conference on the workforce needs of public mental health. From the very first meeting, increasing diversity and cultural competency of the workforce was identified as a high priority. The conference stimulated a conversation and agreement that a formal effort was needed to strengthen the public mental health workforce in California. As a result of these conversations, several of the attendees came together to establish what would eventually become the Collaborative.

While participation was entirely voluntary, the Alameda County Mental Health Department soon provided a half time staff person to support the Collaborative, including the identification and engagement of additional stakeholders and convening monthly meetings. The scope and mission of the Collaborative expanded with the passage of the Mental Health Services Act (MHSA) in November 2004, which substantially increased mental health services funding across California. Many of the Collaborative participants were also key informants in the development of the MHSA, which included a mandate to create regional collaboratives.

In 2006 the Zellerbach Family Foundation funded a full-time staff person to focus strategically on the Collaborative’s formal mission—supporting the development of a culturally and linguistically competent workforce that employs and supports consumers and family members. This position is housed at California Institute for Mental Health (CIMH), a statewide training and technical assistance agency for California.

The Collaborative is a voluntary partnership, rather than a private nonprofit or county agency. The participants attend meetings and share experiences and lessons on behalf of their organization. The primary focus of the Collaborative is to develop career and educational pathways to increase the diversity of the workforce in the public mental health profession. The Collaborative is led by a twelve-member Steering Committee of providers, educators, consumers, and other stakeholders. Collaborative meetings are held once a month. The meetings include speakers who cover a variety of topics, including consumer employment, cultural competency, human resources, staff training, college certificates and degree programs, and statewide workforce initiatives.

The full time staff person supported by the Zellerbach Family Foundation enabled the Collaborative to transition from a high level networking effort to a much more focused entity capable of directing regional workforce efforts. The Collaborative’s organizational development activities from April – September 2006 coincided with the development of the Department of Mental Health’s Education and Training Unit. DMH convened a statewide advisory group and several special topic work groups as a means of developing an MHSA statewide workforce plan. There was nothing like the Collaborative anywhere in the state or nationally. The county mental health directors provide limited, but critical financial support, as well as legitimacy. The chairperson is a respected county mental health director, which gives the Collaborative credibility among other directors across the state. The Collaborative is also the flagship for MHSA regional partnerships, which will provide statewide workforce infrastructure.
Currently, the Collaborative is starting to engage in more project-based work, and has made workforce diversity a primary focus. The Collaborative is also exploring the development of a Regional Consumer Employment Advisory Committee and a Multi-Cultural Advisory Committee.

Efforts are underway to create a project that expands the participation of consumers, family members, youth, and representatives from the Bay Area’s diverse communities. Projects are based upon regional county mental health workforce and training priorities, with key stakeholders involved in the actual design and implementation of each project. The Collaborative recently launched two pathway projects to increase student interest in the public mental health professions:

1. **Community College Pathway Program** The Collaborative is developing a regional community college taskforce to increase the number of community college students in the mental health workforce. The Taskforce meets quarterly to share best practices and ideas for program development and works in partnership with community college resource programs and the Regional Health Occupation Resource Center.

2. **High School Pathway Program** A partnership has been formed with the Life Academy of Health and Bioscience, an Oakland high school, to create a pathway to community colleges. The collaborative is working with teachers to create a curriculum that facilitates matriculation at community colleges.

**Increasing Workforce Diversity**
Every effort is made to promote diversity within the workforce, so as to better serve the minority populations with mental health needs. The typical mental health professional is Caucasian and has an average age of 55, leaving a significant discrepancy between the people in field and the people needing services. The Collaborative is now creating the necessary infrastructure to support recruiting of diverse students into the mental health field.

**Partners/Contributions**
The Collaborative is led by a Steering Committee, which includes representatives from each of the key stakeholders. Each Steering Committee member provides linkages to their organizations, key information, technical assistance and resources, with all of the members offering a particular area of expertise or knowledge that is essential to successful regional efforts. Members represent county mental health, community-based providers, consumer and family member organizations, and educational institutions including:

- Mental Health Managers in Recovery
- California Association of Social Rehabilitation Agencies
- California Department of Rehabilitation
- California State University East Bay
- San Francisco State University
- UC Berkeley School of Social Welfare/ California Social Work Education Council
- Saybrook Graduate School
- Northern California Consortium of MFT University Programs
- Life Academy of Health and Bioscience
- Several Bay Area community colleges

**Alignment with IOM / Sullivan Commission Recommendations**
The Greater Bay Area Mental Health and Workforce Education Collaborative addresses the following Sullivan Commission recommendations:

**Sullivan Commission Recommendations**

2.6 Key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers.
4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

6.1 Health systems and HPEIs should gather data to assess institutional progress in achieving racial and ethnic diversity among students, faculty, administration, and health services providers, as well as monitor the career patterns of graduates.

Impacts to Date

To date the Collaborative has limited data on program impact, but the recent addition of full-time program staff creates the opportunity to improve data collection efforts. Partners are actively investigating how to improve data collection, analysis, and the development of benchmarks.

The Collaborative has had a substantial impact on other collaboratives in California and across the country. California is the only state with an operational mental health workforce collaborative and many organizations are looking to the Collaborative for guidance on how to implement a similar model in their own communities.

In late 2006, the Annapolis Coalition selected the Collaborative as the nation’s leading innovative workforce practice. The Coalition, funded by the Substance Abuse and Mental Health Services Administration (SAMHSA), developed the national Action Plan for Behavioral Health Workforce Development, and the Collaborative was selected as national model and best practice.

The idea for statewide regional partnerships, now mandated by the MHSA, was based upon the Collaborative and its success in bringing a wide variety of workforce stakeholders together. While there was no dedicated funding for projects or initiatives, the Collaborative sparked interest in workforce development. Recognizing the Collaborative as a potential regional workforce model, the California Mental Health Planning Council’s Human Resources Committee – which has been a leader in public mental health workforce development – used the Collaborative’s model to draft language on partnerships for Proposition 63 (now the MHSA).

Challenges

Limited Staff Resources
Operating a large collaborative is labor intensive and increased state funding brings media and political scrutiny. With multiple stakeholders at the table, decision-making can be a long process. As a result, the Collaborative has taken a realistic approach to what staff can do and the necessary timelines for reaching goals.

Educational Institution Engagement
Partnering with educational institutions is a challenge, with no single template that can be applied to creating the partnerships. All institutions vary in their staffing availability, bureaucracy, and mission, and sustaining on relationships and identifying champions within each institution has been extremely time consuming.

Sustainable Funding
Since Collaborative members are not paid, it may be difficult to sustain their interest as other priorities emerge at their organizations. To overcome this challenge, the Collaborative is cultivating a core team that will consistently be active in the Collaborative and seeking funds to compensate members for their participation.

Mental Health Stigma
The stigma in certain populations around mental health creates a real challenge in recruiting a diverse workforce. Significant education needs to occur to reduce this stigma—both in the professional environment and in the individuals needing care.
**Lessons**

**Importance of Strong Leadership**
Success of the collaborative can be attributed to a high degree of buy-in from well-respected leaders.

**Consumer Engagement**
The Collaborative has involved consumers in program development as required by MHSA, which has proved to be educational and inspiring to the participants. Working closely with the people that use mental health services has revealed the real barriers to those receiving care. After becoming involved in the Collaborative, one university faculty member recognized the need to develop a public mental health focus in the Marriage Family Therapy (MFT) curriculum and launched an effort among several universities to consider development of a specialty certificate. As a result of his leadership and vision, the Northern California Marriage and Family Therapy programs have agreed to develop a formal public practice certificate – the first in California.
III. Admissions

Overview of Whole File Review

An increasing number of HPEIs have restructured their admissions processes and criteria to assess applicant qualifications, experience, and potential in a more holistic manner. Rather than focusing exclusively or even primarily on more traditional metrics of grade point averages and standardized test scores, admissions committees give significant weight to factors such as leadership, likelihood to practice in a needy community, and a concept called “distance traveled,” which considers factors such as parents’ education level and academic improvement. Admissions committees also consider outside demands on the student, such as parenting or full-time work during school.

By utilizing the whole file review process, each of the following three universities has successfully integrated their mission of recruiting a qualified, diverse class. Stanford University, the University of California, Davis and the University of California, San Francisco have all implemented and managed the whole file review process in different ways, each of which is outlined in the next three profiles.

1. Stanford University School of Medicine

Primary Author: Kimberly Jackson

Impetus

In 1968, Stanford University School of Medicine initiated a process to increase the number of students who are under-represented in the health professions. In that year, the medical school faculty increased the number of seats in the school from 72 to 86. As the need for more diverse clinicians has increased over the past several decades, Stanford has continuously amended the admissions process to place more weight on “distance traveled” criteria.

Description

Stanford University School of Medicine, like more traditional schools of medicine, requires the submission of MCAT scores and academic transcripts. Stanford also invites every applicant to submit a supplemental application that asks the student to address what practice type they will most likely go into and why he or she is suited for that practice; what preparation they have had for their future goals, and how specifically Stanford’s curriculum can advance the applicant toward these goals.

In addition to these questions, Stanford asks their applicants to identify unique, challenging factors in their background, which can include culture, race, ethnicity, education and work experience factors, and describe how these factors have influenced their lives and their decision to apply to medical school.

Members of the admissions committee are instructed to assess the “distance traveled” of every applicant. Each reviewer must assess the applicant’s ability to enhance the incoming class’ diversity, by factors such as hours per week of work during college, where the applicant grew up, parents’ education levels, and other family circumstances.

While the admissions committee makes the decisions, two advisory committees for diversity contribute their insights to the process. One is the Medical Scientist Training Program Committee and the other is the Diversity Advisory Committee.
**Partners/Contributions**

**Stanford University**
The School of Medicine and Stanford University jointly set up recruitment activities on campus, to combine resources and appeal to students who might be considering several options for their academic careers.

**Community Colleges and Undergraduate Universities**
Dr. Gabe Garcia, the director of admissions for the medical school, visits a number of California community colleges and universities, meets with pre-medical academic advisors, and conducts outreach on these campuses to encourage students to apply to medical school.

**Center of Excellence in Diversity**
The COE at Stanford works independently with admissions counselors at the undergraduate level on recruiting efforts. Also, members of the COE serve on the diversity committee, which weighs in on admissions decisions.

**Alignment with IOM/Sullivan Commission Recommendations**

**IOM Recommendations**
2.3 Admissions should be based on a comprehensive review of each applicant, including an assessment of applicants’ attributes that best support the mission of the institution (e.g., race/ethnicity, background, experience, multilingual abilities). Admissions models should balance quantitative data with these qualitative characteristics.

2.4 Admissions committees should include voting representation from UR groups. In addition, HPEIs should provide special incentives to faculty for participation on admissions committees and provide training for committee members on the importance of diversity efforts and means to improve diversity within the committee purview.

**Sullivan Commission Recommendations**
4.6 Key stakeholders in the health system should work to increase leadership training and opportunities for UR minority physicians and dentists.

4.9 Dental and medical schools should reduce their dependence upon standardized tests in the admissions process in the admissions process, and the Dental Admissions Test and the Medical College Admissions Test should be utilized, along with other criteria in the admissions process as diagnostic tools to identify areas where qualified health professions applicants may need academic enrichment and support.

**Impacts to Date**

Since 1968, roughly 20 percent of Stanford Medical School’s student body has come from UR groups despite the fact that the School of Medicine does not have an annual target number of diverse admissions. In the past few years, this number has increased to about 25 percent, which reflects the demographics of Santa Clara County, where Stanford is located. Having a class whose composition reflects that of the community is important to the Medical School. Stanford also measures diversity by how many were born outside the United States (28 percent in 2006.) Dr. Garcia noted that they consider diversity as race and ethnicity, as well as gender, being born outside of the United States, and first-time learners, which means neither of the student’s parents attended college. (According to Dr. Garcia, “Anything less would be a disservice.”) Two years ago, the dean of the School of Medicine created an Associate Dean for Diversity and Leadership position. This position is charged with promoting Stanford as the top destination for diverse faculty.
Projected Impacts

Stanford University School of Medicine’s focus on qualified, diverse students is projected to impact:

- The number of diverse students entering the medical professions, particularly in primary care specialties and in underserved areas.
- The ability for UR students from the School of Medicine to populate Stanford residencies, fellowships, and faculty, reflective of the school’s “grow your own” philosophy
- A continuing focus of the need for increased diversity in the health professions. COE and the School of Medicine are planning a creative regional consortium to look at diversity issues in the medical workforce. Dr. Garcia also heads a patient advocacy program at Stanford, which will be administered in both California and Mexico in 2007.

Challenges

Intensive Admissions Review Process
The comprehensive review process demands willingness from the admissions committee, paid and volunteer, to thoroughly read every application. This requires orientation and training to the process for each reviewer.

Reliance on Traditional Admissions Metrics
There can be pushback from more traditional members of an admissions committee, who feel that the inclusion of non-academic admissions criteria will compromise academic excellence.

Lessons

Establish a Process to Reflect Policy Decisions
Inconsistency in reviewing applicants leads to ad-hoc decision-making. Admissions committee members must account for the specific reasons why individual admissions decisions are made.

Ensure Commitment to the Process
While the admissions process has not been officially institutionalized by the faculty senate, the medical school has published guidelines for admission that committee members are required to follow, including the inclusion of “distance traveled” in their admission decisions.
2. University of California, Davis School of Medicine

Primary Author: Kimberly Jackson

Impetus

UC Davis’s comprehensive review process began over three years ago in 2004 when Dr. Amerish Bera became the dean of admissions at the UC Davis School of Medicine and initiated a review of diversity. The panel found that even though the medical school’s historic mission is to train primary care practitioners to practice in Northern California, the demographics of the class did not reflect those of the area. Dr. Bera and his colleagues began researching ways to enhance the diversity of the class, while remaining compliant with Proposition 209, which bars public universities in California from granting preferential treatment on the basis of race, gender, or ethnicity. One key realization was that the incoming students were largely from upper-income levels. Acknowledging that could be driven by a combination of rising costs of medical education and the traditional emphasis on MCAT and GPAs, the committee began to alter its admissions criteria.

Description

UC Davis focuses its efforts on increasing the incoming class’ diversity in the screening process; they focus on distance traveled criteria during the initial review of an application, where the decision is made whether to interview a student. This ensures that students with lower metrics have the opportunity to discuss their backgrounds and associated challenges. Out of 4900 applicants, UC Davis will interview 500 and accept 200 into the medical school’s incoming class.

The whole file review process at UC Davis has been modified annually since its inception. During the first year of the process, UC Davis attempted to standardize the admissions process by providing guidance to each of the five faculty members independently reviewing the applications in order to reduce selective bias. Additionally, the reviewers were directed to use “screening sheets,” so if someone were to appeal the admissions decision, UC Davis had documentation of how the decision was made.

The following year, 2005, the admissions committee decided to lower the weight of GPA to 20 percent and the weight of MCAT scores to 17-18 percent. Then, for the incoming class of 2006, UC Davis emphasized research and clinical experience, commitment to service, leadership characteristics and extracurricular activities. Although the admissions committee had de-emphasized academics and placed more weight on life experience, they found that the incoming class of 2006 was both the most academically accomplished and affluent class they had ever admitted. Understanding that the most affluent applicants were most often those that had the means to perform these leadership and service activities, the admissions committee once again revised their strategy and focused on the “distance traveled” criteria for the incoming class of 2007.

In addition to the traditional GPA and MCAT scores, UC Davis requires letters of recommendation and a personal statement. The admissions committee specifically asks students if they are coming from a disadvantaged background—whether socially, economically, educationally, or medically, and to discuss why they feel that way.

Partners/Contributions

- **The California Endowment**, which provides funding for the post-baccalaureate program
- **Faculty** at UC Davis School of Medicine, who provide feedback and support for the changes in the admissions process
- **Office of the President**, which provides funding for training programs for students seeking to practice in underserved communities
Alignment with IOM/Sullivan Commission Recommendations

The UC Davis SOM Admissions process addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

2.3 Admissions should be based on a comprehensive review of each applicant, including an assessment of applicants’ attributes that best support the mission of the institution (e.g., race/ethnicity, background, experience, multilingual abilities). Admissions models should balance quantitative data with these qualitative characteristics.

2.4 Admissions committees should include voting representation from UR groups. In addition, HPEIs should provide special incentives to faculty for participation on admissions committees and provide training for committee members on the importance of diversity efforts and means to improve diversity within the committee purview.

**Sullivan Commission Recommendations**

4.6 Key stakeholders in the health system should work to increase leadership training and opportunities for underrepresented minority physicians and dentists.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

4.9 Dental and medical schools should reduce their dependence upon standardized tests in the admissions process, and the Dental Admissions Test and the Medical College Admissions Test should be utilized, along with other criteria in the admissions process as diagnostic tools to identify areas where qualified health professions applicants may need academic enrichment and support.

**Impacts to Date**

Prior to last year, only 15 percent of medical students came from disadvantaged backgrounds. In 2007, the number grew to 25 percent.

Additionally, to promote diverse students at UC Davis School of Medicine, the school operates a post-baccalaureate program (see Profile, II.A.3) that assists individuals who have already completed their undergraduate educations prepare for applying to and meeting the requirements of medical school. These students are predominately UR and lower-income, and learn how to study more efficiently and take advantage of available resources. Each year, UC Davis accepts about 15 students who have completed the program. This program is also conducted in several other UC schools.

**Projected Impacts**

UC Davis participates in the UC PRIME (PRograms In Medical Education) Initiative, an initiative to train doctors and nurses for California’s underserved communities, and will start the Rural PRIME program that will specifically focus on training students likely to go into rural practice. The program will increase enrollment in the medical school by twelve students. PRIME is funded by a combination of institutional funds from Office of the President and targeted State allocations. Other UC schools are beginning similar initiatives: for example, University of California in San Francisco will focus on serving urban populations and University of California at Irvine will train students to practice in Latino communities.

UC Davis has initiated discussion at the institutional level to recruit more students from the California State University schools to apply to medical school. The number of CSU students that apply to the UC Davis School of Medicine is very low. Dr. Bera emphasized the need for additional outreach, as well as more emphasis in academic advising on premedical preparation. Additionally, there has been some interest in a
possible faculty exchange program, where UC Davis faculty would go to CSU, Sacramento and teach courses such as chemistry to expose students to UC faculty and medical careers.

Both initiatives are expected to significantly increase the number of qualified UR applicants to the UC Davis School of Medicine.

**Challenges**

**Meeting Varied Institutional Goals**
It is difficult to meet the multiple goals of the medical school, which are to advance research, increase diversity, provide service, and train primary care and some specialty physicians. The applicant that the school is looking for to fulfill each goal can be very different, and often one student’s contributions and achievements cannot satisfy all the goals simultaneously. Additionally, certain members of the faculty and the administration have expressed concern that the overall academic standards of students might be compromised in order meet the goal of recruiting a high number of diverse, lower-income students.

**Complying with Proposition 209**
The law prohibits public universities in California from using race as a factor in admissions. However, UC Davis has a commitment to address the need for diversity in the health professions. In order to fulfill their mission and still be compliant with the law, the admissions committee focuses on admitting students who are likely to serve in their own communities and places emphasis on “distance traveled,” as well as academic metrics, rather than explicitly focusing on race and ethnicity.

**Lessons**

**Maintain an Open and Transparent Admissions Process**
Clearly stated goals and a defined decision-making process add to the transparency that is necessary to maintain the integrity of the process. According to Dr. Bera, while there will always be critics of this type of admissions process, the best defense is to make the decisions as open and well-documented as possible.

**Be Flexible**
The admissions process has been amended over the last several years to better achieve UC Davis’s goals. Each year the admissions committee convenes and reassesses what worked, and what did not. Any changes to the admissions process require an official faculty vote.
3. University of California, San Francisco School of Dentistry

Primary Author: Kimberly Jackson

Impetus

The UCSF School of Dentistry initiated a comprehensive review process in 1995 for two primary reasons; to comply with recent changes in laws and regulations and to help address the public need for diversity in the field of dentistry. In 1995, the University of California Board of Regents declared that, “The University of California shall not use race, religion, sex, color, or national origin as criteria for admission to the university or to any program of study.” The following year, Proposition 209 was passed, and the UC Regents’ declaration was mandated into law.

At the same time, key UCSF leaders concluded that the admissions process gave disproportionate weighting to academic metrics. There was increasing concern that use of such narrow criteria would contribute to rejection of talented students who could contribute to the knowledge, cultural competence and overall quality of the educational process for the incoming class. UCSF School of Dentistry leaders also wanted to emphasize the training of oral health care providers who would be most likely return to practice in underserved areas.

Description

Screening Process

The admissions committee first conducts a summary audit to ensure all applicants meet the baseline criteria, including a) a GPA of at least 2.4 for residents and 3.0 for nonresidents; b) a minimum number of hours completed at a four-year university, and c) a total number of semester hours completed. Then, applicants who meet the minimum standards are invited to submit a second application along with letters of recommendation. This application is reviewed based on the following criteria, which are scored and value weighted:

- Grades on transcripts
- Dental Admissions Test (DAT) scores
- Letters of recommendation
- Work experience
- Career exposure and related observational experiences
- Severity of economic or social disadvantage
- Probability of professionally serving an underserved community

The review process is carefully documented to ensure that the school can effectively communicate the reasoning if the decision is challenged.

Interview Process

If the second application is accepted then the applicant is invited to interview with UCSF. The interviewers do not have access to the applicant’s file until after he or she has been interviewed and assessed on a standardized scale of personal qualifications. The admissions committee then re-evaluates the initial scores based on an applicant’s economic or social disadvantage and their probability of practicing in an underserved community. The weight on admissions criteria breaks down as follows:

- Overall grade point average 30 percent
- Dental Admissions Test Academic Average 30 percent
- Severity of economic or social disadvantage 10 percent
- Probability of serving an underserved community 10 percent
- Interview Score 15 percent
- Perceptual Ability Test Score (PAT) 5 percent

121
The admissions committee then selects its incoming class from a pool of the highest-ranking applicants.

**Partners/Contributions**

**Faculty and Ranking Administration**
The faculty and administration at UCSF have been strongly supportive of the admissions committee’s mission to recruit highly qualified students who contribute to the diversity of the student body. They have done this by publicly advocating for the program.

**Funders**
The California Endowment and the Robert Wood Johnson Foundation have provided critically important support for UCSF’s post-baccalaureate program (see profile, Section II.A.3) and their participation in the Dental Pipeline Collaborative (see profile, Section II.A.4). Both initiatives have significantly expanded the pool of qualified UR applicants to UCSF who are more likely to practice in CA underserved communities.

**Alignment with IOM/Sullivan Commission Recommendations**

The UC San Francisco School of Dentistry admissions process addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

2.3 Admissions should be based on a comprehensive review of each applicant, including an assessment of applicants’ attributes that best support the mission of the institution (e.g., race/ethnicity, background, experience, multilingual abilities). Admissions models should balance quantitative data with these qualitative characteristics.

2.4 Admissions committees should include voting representation from UR groups. In addition, HPEIs should provide special incentives to faculty for participation on admissions committees and provide training for committee members on the importance of diversity efforts and means to improve diversity within the committee purview.

**Sullivan Commission Recommendations**

4.6 Key stakeholders in the health system should work to increase leadership training and opportunities for UR minority physicians and dentists.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

4.9 Dental and medical schools should reduce their dependence upon standardized tests in the admissions process, and the Dental Admissions Test and the Medical College Admissions Test should be utilized, along with other criteria in the admissions process as diagnostic tools to identify areas where qualified health professions applicants may need academic enrichment and support.

**Impacts to Date**

Due to funding cuts, UCSF has not been able to track the careers of recent graduates. However, they were able to track the classes of 2000-2003, and found that the groups tended to practice in underserved areas, such as Indian reservations and rural areas.

Also, UCSF was awarded a federal grant that required at least 15 percent of an incoming class would be from low-income, UR backgrounds. From 2000, UCSF has achieved that goal. The school does not set a target number for underrepresented students in each class; instead, UCSF tries to have a pool of applicants large enough so they can select the best students and hopefully have their student population reflect the demographics of the greater community.
UCSF has also had success with its post-baccalaureate program. The post-baccalaureate program, in operation since 1999, is intended to prepare students who were denied entry into dental school the previous year. The students tend to be from low-income, UR backgrounds and have a demonstrated desire to practice in underserved communities. During the program students learn applied study skills, ways to make their applications more competitive, and how to increase their standardized test scores. Each year, about 75 students go through the program, and almost all are accepted into a dental program the following year. UCSF has no agreement to accept a certain number of post-baccalaureate students, but tries to retain the top students for its own dental program.

**Projected Impacts**

**Replication of the Expanded Admissions Criteria Process**
UCSF was the first dental school to implement a comprehensive admissions process of this nature. However, other dental schools in the nation have taken notice, and now there are similar admissions criteria at the University of California, Los Angeles and Ohio State University. The overall impact on admissions processes nationwide is not yet known, but the replication is promising.

**Replication of the Post-Baccalaureate Program**
The program showed so much success in preparing students for dental school that the Robert Wood Johnson Foundation funds 15 similar programs nationwide. Several of these schools are in California, including Loma Linda University, University of the Pacific, University of California at Los Angeles, and the University of Southern California (see Profile II.A.4).

**Challenges**

**Expand Diversity Within the Confines of Proposition 209**
While the admissions committee is focused on enhancing the diversity of their incoming class, they have to consider criteria outside of race and ethnicity due to Proposition 209. Because of this, UCSF refrains from establishing demographic quotas in their classes, but focuses instead on “distance traveled” criteria.

**Small Pool of UR Applicants**
The number of UR students applying to dental school is very small, so UCSF has a very small pool of applicants to draw from. The admissions committee has to balance the mission of advancing diversity in the profession with accepting only the most promising candidates, which is difficult considering the number of diverse students in the pipeline.

**Lessons**

**Get Buy-In from Top Faculty and Administrators**
Since the faculty make the ultimate decision on who is accepted into the program, it is essential that they support the mission of the comprehensive admissions process. High-ranking university officials can help promote the aim of the admissions committee by speaking highly of the program in public and garnering broad-based support.

**Focus on the Positive**
Even though UCSF did not meet much resistance in their efforts to remedy the issues of diversity in the dental pipeline, occasionally critics claim that the work UCSF and similar schools are doing lacks impact and that the focus should be on students who are the best prepared. While these attitudes can be discouraging, it is important to focus on the vast network of support surrounding whole file review admissions instead.
IV. Reduce Financial Obstacles

The cost of health professions education has steadily increased in recent decades, at the same time that scholarships and associated support from the public sector have remained steady or declined. One of the most significant impacts recently documented (cite sources) is that class cohorts, particularly in medicine and dentistry, come predominantly from affluent families. The most prestigious medical and dental programs use growing endowments (cite source) to cover costs for the very small pool of UR students who can meet the highest academic criteria, but many others with equal potential may defer such career pursuits given the scale of debt they would have to assume.

The costs of education in other disciplines, while not as high as medicine and dentistry have also increased significantly, which has contributed to reduced representation of students from disadvantaged backgrounds. There are a number of excellent State funded programs in California to help address financial obstacles to health professions education, such as the Song-Brown Program; but in general, current State-funded programs lack the scale to reverse recent trends.

Given these trends, one of the biggest challenges associated with increasing diversity in the health professions is reducing financial obstacles. The IOM report devoted an entire chapter to the issues, challenges, and opportunities, and there are increasing calls by federal legislators for increased financial support for both K-12 and higher education in general, but little substantive action has been taken to date.

As evidenced in a number of the profiles in Section II of this report, many HPEIs are finding creative ways to provide an array of supports for UR students, including small pools of financial assistance. Much more is needed to address this issue in a more systemic and sustainable manner. We include one profile in this section that has done a particularly good job of making optimal use of limited financial resources to reduce obstacles to nursing education in a region with a high concentration of UR youth.

1. Bridge to Nursing
   Department of Nursing, East Los Angeles College

Primary Author: Alexandra Alznauer and R. Ruth Linden, Ph.D.

Overview

Bridge to Nursing is a multifaceted program that combines financial, academic, and personal support for nursing students. It is a product of a regional partnership between East Los Angeles College (ELAC), TELACU, a nonprofit community development corporation that serves the East Los Angeles region, Downey Regional Medical Center (DRMC), and the UniHealth Foundation.

Impetus

A key factor in the development of Bridge to Nursing was a drop in retention rates among Latinos due to financial difficulties. Lurlene Gaines, Chair of the Department of Nursing at ELAC discovered that this trend was particularly acute among males; Latinas tended to proactively communicate their financial needs and seek assistance. This was a major concern, given the large Latino student population; in 2003, 67 percent of ELAC students self-identified as Latino. Ms. Gaines began to reach out to previously untapped community sources to secure scholarship funding to ensure that male students would complete the program, graduate and sit for the registered nursing licensure exam (NCLEX-RN).

One of these sources was the CEO of TELACU, who recognized the need for increased educational opportunities for UR young people in East Los Angeles in order to prepare them for careers that would take them beyond the minimum-wage sector. TELACU, through its educational foundation, LINC TELACU
(hereafter referred to as TELACU), has increasingly focused on supporting nursing education for low-income, Spanish-speaking, bicultural students to address East Los Angeles’ nursing shortage, especially in specialty services such as critical care, obstetrics, and surgery.

At Downey Regional Medical Center (DRMC), the leadership recognized that the population in their service area had evolved from being primarily English speaking to 58 percent for whom Spanish is their first language. At the same time, only 14 percent of their hospital nursing staff could speak Spanish. Moreover, nursing registry costs at DRMC had surpassed $1 million annually. There was a clear need to hire a large number of Spanish-speaking, bicultural nurses who would commit, at least in the short term, to employment at DRMC.

**Description**

Second-year ELAC nursing students with financial need that meet the following criteria a) minimum 2.5 GPA, b) documented U.S. citizenship or permanent resident status, c) volunteer ten hours at TELACU or DRMC, d) take the NCLEX-RN within three months of graduation, and e) commit to two years of employment at DRMC are invited to apply for funding from Bridge to Nursing. They may receive book grants of $200 and/or stipends of up to $1,500 and/or scholarships of up to $10,000.

ELAC selects recipients after an interview process involving representatives from the nursing department, TELACU, and the hospital. Students who are not awarded a scholarship of up to $10,000 may nonetheless receive a book grant and/or stipend. In addition to receiving up to $10,000 in their fourth (and last) semester of study that can be put toward any use, e.g., rent, utilities, or daycare, scholarship recipients also receive:

- On-loan notebook computers
- One-on-one personal, academic, family, and career counseling
- Tutorials, workshops, and other support in preparation for the NCLEX-RN, including reimbursement for a Kaplan preparation course
- Introductions to the leadership and staff of the partnering organizations
- Hands-on experience and training in various areas of nursing and healthcare
- Participation in two community health fairs per year
- Reimbursement for the NCLEX-RN licensure exam
- Reimbursement for the Board of Registered Nursing application fees
- Two-year nursing employment offer at DRMC
- Support services during the first year of employment to ensure a successful school to work transition

**Partners/Contributions**

**LINC TELACU Education Foundation Health Careers Program (TELACU)**

- Acts as manager of scholarship funds;
- Provides personal and professional development workshops that enhance the likelihood of a smooth transition from school to the hospital environment;
- Provides counseling to scholarship awardees both during their senior year and during their first-year transition into the hospital setting as an RN. This includes visits to ELAC’s campus to speak with students experiencing difficulties and meetings at TELACU initiated by individual graduates in their first year of employment at DRMC;
- Provides students with opportunities to meet with the community, including junior high and high school UR students at its annual health fair in order to promote careers in the health professions;
- Coordinates a luncheon to honor scholarship awardees to which each student may invite one family member or friend. This experience helps to involve the family member or significant friend in the student’s studies and career aspirations.

---

126 Attrition rates in the first two years of hospital employment are particularly high, generally 50-60 percent. Support services, including mentoring, during the first transitional year, reportedly increase retention.
East Los Angeles College Department of Nursing (ELAC)

- Assists with identification and selection of qualified, second-year nursing students;
- Provides faculty; classroom and lab space; tutorial and educational support; and personal and family counseling before and after applying to the Bridge to Nursing Program during the senior year, while studying for the NCLEX-RN. Counseling may continue during the first year as a DRMC employee;
- The chair often meets with graduates at the hospital during their fourth-semester preceptorship to ensure a smooth transition from the classroom to the hospital setting;
- Gives presentations at high schools to promote health careers and encourage students to study science and math. Students are then invited to visit ELAC to further explore nursing as a profession.

Downey Regional Medical Center (DRMC)

- Provides partial funding, clinical opportunities, and introductions to nursing staff and the hospital CEO;
- Offers fourth-semester preceptorship, two-year employment contract upon graduation and licensure, mentoring, and opportunities for professional development and advancement.

UniHealth Foundation (UniHealth)

UniHealth provides the majority of funding for Bridge to Nursing.

Alignment with IOM/Sullivan Commission Recommendations

The Bridge to Nursing Program addresses the following IOM and Sullivan Commission recommendations:

IOM Recommendations

3.4 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health-care workforce.

5.4 HPEIs should be encouraged to affiliate with community-based health-care facilities in order to attract and train a more diverse and culturally competent workforce, and to increase access to health care.

Sullivan Commission Recommendations

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4.3 For UR individuals who decide to pursue a health profession as a second career, HPEIs should provide opportunities through innovative programs.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions and provide these students with an array of support services, including mentoring test-taking skills, counseling on application procedures, and interviewing skills.

5.2 To reduce the debt burden of UR students, public and private funding organizations for health professions students should provide scholarships, loan forgiveness programs, and tuition reimbursement strategies to students and institutions in preference to loans.

127 During hospital-based preceptorships, students are under the direct supervision of one or more nurses. The clinical setting offers exposure to areas of nursing more appropriately taught outside of the nursing college.
**Impacts to Date**

During the 2006-2007 school year the following, estimated number of awards was made:

- Twenty-five book grants of $200
- Thirty stipends of $1,500
- Twelve scholarships of $4,000 - $10,000. The size of each scholarship was based on relative need.

Since its inception in 2001 through 2007, Bridge to Nursing has made 200 awards. Of the program participants:

- 100 percent graduated from ELAC’s nursing program
- 75 percent became employees of DRMC after licensure
- 25 percent prepare for the NCLEX-RN exam and plan to work for at least two years at DRMC
- One graduate applied to an MSN program after completing a BNS at a four-year college
- 100 percent of students who took the NCLEX-RN passed on their first attempt

Of the 200 scholarship recipients to date, 80 percent are UR individuals; specifically, 75 percent are Latinos, and 5 percent are African American.

Without this support scholarship recipients would either not have been able to finish ELAC’s ADN program or would have had to work during their senior year and while studying for the NCLEX-RN, increasing the probability of failing the exam.

- Bridge to Nursing has met TELACU’s goal to graduate nurses who successfully pass their boards within three months of graduation and fulfill their two year commitment to work at the hospital.
- Bridge to Nursing has helped meet ELAC’s goal of retaining male UR students.
- The retention rate at DRMC of program graduates is 60 percent over four years. Many stay beyond two years. Some serve as mentors to graduates during their first year at DRMC.
- In 2003 TELACU established other scholarship programs in collaboration with other college nursing programs, hospitals, and funders based on the Bridge to Nursing model.

In 2007, 226 students were enrolled in the Department of Nursing at East Los Angeles College. Of these 57 percent were Latino and 12 percent were African American or African (mostly the latter).128

**Projected Impacts**

- Continued growth in recruiting and retention, especially among Spanish-speaking RNs at DRMC
- Higher rates of linguistic and cultural congruence between nursing staff and DRMC clients
- Improved health outcomes for bilingual, bicultural clients at DRMC and for the community

**Challenges**

**Expand Funding Support**

The program has not met ELAC’s goal to provide scholarships for all students with financial need. While renewal of funding is always uncertain, current relations among the four partner organizations are effective, projected outcomes are being met, and the need for registered nurses at DRMC remains high. At the same time, there is always the possibility that the primary funder, which is also a supporter of other nursing education collaborative partnerships in the region, may not renew its commitment to ELAC and DRMC. Partners will continue to collaborate with the UniHealth Foundation to prepare proposals for grant renewal.

---

128 Exact demographics are not available.
Retention of Hospital Nursing Staff
Of the 200 Bridge to Nursing graduates who have reported to DRMC after passing their boards, 40 percent have left to work at other area hospitals or relocated out of the region after meeting their two-year commitment. The majority have done so because of the high cost of housing near DRMC.

Recruitment of Nursing Faculty
In order to expand both the numbers of nursing students enrolled in the department and admitted to the Bridge to Nursing program, ELAC would require additional nursing faculty, particularly those qualified in specialty areas. Graduates have expressed reluctance to earn an MSN and teach because academic salaries cannot compete with clinical salaries.

Lessons

Translate Individual Leadership into Institutional Commitment
Bridge to Nursing has been brought to scale. The CEOs of TELACU, LINC TELACU Educational Foundation, and DRMC are fully committed to the success of the Bridge to Nursing program. However, the success of the program no longer depends on specific individuals. The program would most likely survive—even thrive—if one or more of these individuals changed roles within their respective organizations or even left.

Succession Planning
ELAC’s current nursing department chair has served for 30 years. It is likely that she will retire from her position in the foreseeable future. However, she has implemented a succession plan by mentoring a former student, now a master’s-prepared ELAC instructor.
V. Institutional Climate

One of the most important, yet least understood issues in the effort to increase health professions workforce diversity is the creation of an institutional climate that supports shared learning across students and faculty from different backgrounds.

Much of the public dialogue about diversity in higher education focuses on structural, or compositional diversity; in essence the numbers of UR students, employees, or practitioners in an institution or region. Limiting the focus to compositional diversity, however, provides a clear and unambiguous, yet woefully inadequate measure of progress for HPEIs. In fact, to the degree that the focus of efforts in higher education and the public dialogue is limited to numbers, it reinforces a divisive, zero-sum interpretation of the diversity agenda. In the campus context, progress in structural diversity can even lead to an increase in conflict in the absence of a comprehensive strategy to foster interaction and shared learning across students and faculty from diverse backgrounds. While the numbers are needed to achieve a “critical mass” of diversity, it is important to determine what institutions do to facilitate the accrual of the benefits of diversity for ALL students in academic environments.

In this regard, HPEIs must give substantial attention to creating an environment of shared learning, both in the formal curriculum and in the broader academic environment, which we have labeled as the informal curriculum. The informal curriculum covers the range of experiences from general social interactions among students to faculty and alumni mentoring, community service learning, and external field training. Building capacity in this regard in HPEIs requires strategic planning and coordination that together create a complex web of inter-related conditions that foster shared learning among students (and faculty). Ongoing assessment and refinement is also needed to respond to changing circumstances, dynamics, and needs.

The IOM report outlined eight principles for institutions of higher learning to guide the development of an institutional climate that fosters the optimal accrual of the benefits of diversity.

1. Make a conscious effort to rid the campus of its exclusionary past and adopt proactive goals
2. Involve faculty in activities that are consistent with their roles as educators and researchers
3. Create collaborative and cooperative environments to enhance interactive learning
4. Incorporate students into research and teaching activities with faculty
5. Initiate curricular and co-curricular activities that build bridges across communities of difference
6. Create a student-centered orientation among faculty and staff
7. Coordinate activities and support services to increase UR student involvement in campus life
8. Increase knowledge and understanding of staff members who work with diverse students

These principles apply to activities on campus and in the community context. In the formal curriculum, a “holistic” approach is needed; one that focuses on the broad integration of diversity/cultural competence content across the curriculum, as well as a critical examination of pedagogical approaches to learning. HPEIs are challenged to move from traditional didactic, passive approaches to instruction to “active” learning techniques that include group problem solving, student presentations, and other strategies that foster shared learning. In the informal curriculum, opportunities must be created to learn and share the products of off campus learning experiences with other students and faculty.

The five profiles in this section represent a sampling of systematic efforts by HPEIs to create an institutional environment for shared learning among diverse students and faculty. Much more is needed, however, both to strengthen and sustain the accomplishments of these institutions, and to extend these practices to other HPEIs in California.

---

129 As referenced by Justice O’Connor in the Supreme Court ruling on Grutter v. Bollinger in 2004.
130 2004, Institute of Medicine, In the Nation’s Compelling Interest, Chapter 5, pp. 155-6
1. Program in Medical Education for the Latino Community (PRIME-LC)  
University of California Irvine-College of Medicine

Primary Author: Margie Powers, M.S.W., M.P.H.

Impetus

The University of California Irvine College of Medicine (UCI-COM) Program in Medical Education for the Latino Community (PRIME-LC) was developed to respond to the increasing demand for culturally and linguistically competent physicians who can address the health needs of the Latino population. Conceived in 2002, the five-year program also serves as a magnet to attract Latino students to UCI-COM for their medical education.

Following the passage of Proposition 209 in 1996, there were increasing concerns about the decline in enrollment of UR students at California universities. Media coverage in Orange County was not always flattering, with some newspaper editorials pointing to UCI-COM as one of the least diverse medical schools in state. Internal pressure at UCI, combined with external pressure from the media and Latino professional medical groups to increase the representation of UR students at the College of Medicine, contributed to the creation of the PRIME-LC program.

A driving force in the creation of PRIME-LC was Alberto Manetta, M.D., Senior Associate Dean of Educational Affairs, who recognized that health care access was a huge problem, especially for the Latino population. A concerted effort was made to gather support from all spheres: the community, medical students, alumni, and university leadership. In 2003, The California Endowment awarded a planning grant for the program, and UCI-COM made plans to begin the program in Fall 2005. The program resonated so strongly with the university and community that the timeline was accelerated to begin PRIME-LC a year earlier. In 2004 the program began to actively recruit across the state and, in the Fall of that year, the program was inaugurated with the enrollment of eight students.

Description

The PRIME-LC program provides both rigorous clinical training and cultural immersion in the health care needs, behaviors, and experiences of Latinos. The goals of PRIME-LC are to:

1. Address the health needs of underserved Latino communities in California
2. Create a new breed of physicians committed to a career of public service
3. Provide specialized training that goes beyond the patient-doctor relationship to encompass culture and community
4. Enrich the educational experiences of the larger community through ongoing integration of PRIME-LC student expertise and experiences into the medical school curriculum.

The goals are accomplished through the following activities:

Student Recruitment
At the crux of program success is student recruitment. The recruitment process attempts to identify those students with a sincere, abiding interest in helping the Latino community, a demonstrated commitment to service (which will most likely include a history of volunteer work), a solid foundation in Spanish, and sensitivity to the complexities and differences of the Latino community.

Curriculum
The PRIME-LC coursework serves as a supplement to the traditional curriculum. At the end of the program, students receive a dual degree, an MD degree and a master’s degree such as an MBA with an emphasis on non-profit management, an MPH with emphasis on community medicine, or an MPP with an emphasis on health policy. The curriculum is reviewed in an ongoing manner with student feedback,
including how to organize clinical rotations and consideration of which graduate courses should be available for selection.

**Cultural Immersion**
Before starting the program, PRIME-LC students attend a Spanish immersion program in Cuernavaca, Mexico for five weeks. While there, they live with Mexican families, attend Spanish courses, and are supervised and trained by clinical preceptors for a minimum of 10 hours per week in community clinics. Upon returning to medical school, the students continue to be immersed in Latino culture and health care needs through class content, ongoing Spanish language instruction, clinical experiences, and special electives in Latin American countries.

**Post-Graduate Residency Period**
PRIME-LC graduates remaining at UCI for their residency and continue their emphasis on Latino health care. UCI works with students seeking residencies elsewhere to ensure that their residency experiences will supplement and support the curriculum of PRIME-LC.

**Faculty Recruitment**
An important part of the funding for the PRIME-LC program covers the hiring of faculty to cover the net increase in student enrollment. The goal is to hire up to 17 faculty members for the maximum program size of 60 students (a ratio of one new faculty member for every 3.5 students). The new faculty positions provide an opportunity to recruit UR faculty and/or those with relevant research interests and expertise.

**Partners/Contributions**
From its inception, PRIME-LC leadership has worked closely with the communities it is trying to serve. To ensure that the program is embraced by the community, two advisory boards were formed. The professional advisory board is composed of UCI-COM faculty, non-medical faculty with expertise in Latino culture, representatives from Latino medical societies, medical students, a health policy analyst, physician residency program directors, and representatives from other professional stakeholder associations. The community advisory board includes representatives from health care institutions with an interest in the Latino health care market, representatives from organizations such as the Latino Coalition for a Healthy California and Latino Health Access, state representative designates, and Latino community leaders.

Multiple academic departments participate in PRIME-LC. In addition to the School of Medicine, the Department of Chicano/Latino Studies helps develop the program curriculum, beginning with the immersion program in Mexico and continuing through selection of program graduate courses. The Office of Research in Medical Education (RIME), a unit of the Office of Educational Affairs, provides expertise in program evaluation design and statistical reporting measures. Executive direction of the program is provided by the Dean for Educational Affairs.

**Alignment with IOM / Sullivan Commission Recommendations**
The PRIME-LC program addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**
5.1 HPEIs should develop and regularly evaluate comprehensive strategies to improve the institutional climate for diversity. These strategies should attend not only to the structural dimensions of diversity, but also to the range of other dimensions (e.g., psychological and behavioral) that affect the success of institutional diversity efforts.

**Sullivan Commission Recommendations**
2.5 Health professions schools should work to increase the number of multilingual students, and health systems should provide language training to health professionals.
Key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers.

To reduce the debt burden of underrepresented minority students, public and private funding organizations for health professions students should provide scholarships, loan forgiveness programs, and tuition reimbursement strategies.

Public and private entities should significantly increase their support to those health professions schools with a sustained commitment to educating and training underrepresented minority students.

Businesses, foundations, and other private organizations should support health professions schools and programs to increase financial resources needed to implement the recommendations of the Sullivan Commission.

Community and civil rights organizations should collaborate with health care organizations and health professions schools to advance institutional diversity and cultural competence goals, including community needs assessment and evaluation.

**Impacts to Date**

PRIME-LC has a total of 44 students enrolled in the program, including the pilot class of eight students, and an additional 12 students per year in the subsequent three years. The program goal is to continue to add 12 students per year, up to a maximum of 60 enrolled students.

A significant success for PRIME-LC was approval by the State for permanent funding of the program. In July 2005, Governor Schwarzenegger signed the 2005-2006 budget, providing State support for all enrolled students. With the inclusion of PRIME-LC as a line item in the State budget, the expectation is that the program will continue to receive stable funding, and thus will continue to grow and expand.

PRIME-LC has had a very positive effect on the general medical student population at UCI, particularly with respect to assessing language and cultural competence. By enrolling students in PRIME-LC who have a strong commitment to the underserved, PRIME-LC has successfully disseminated a more humanistic, multicultural approach to medical care and education throughout the entire School of Medicine, and the PRIME-LC students have had a ripple effect on the entire university, including the faculty. As an example, all UCI medical students have shown an increased interest in doing overseas work in Central America and Mexico and in working in the university free clinic.

Students enrolled in PRIME-LC are also taking on greater leadership roles within the School of Medicine through their active participation in the student leadership group.

**Projected Impacts**

After initial delays in the faculty recruitment and hiring process, the program is in the process of hiring their second faculty member. The process will continue until the ultimate hiring of 17 additional faculty members.

Of a broader impact, the program is now being implemented throughout the UC system, with the expectation that all medical schools will have their own PRIME program. Each PRIME program will focus on a specific type of underserved community or area. With the goal of 12 graduating students per year from each of the schools, between 60-70 PRIME students each year will be entering and working in underserved communities.
Challenges

The following are a summary of key challenges faced by the staff and leadership of PRIME-LC:

Level of Effort Required of Program Champion
The PRIME-LC program was fortunate to have an outstanding program champion who had the necessary political capital to enlist sufficient program support. The champion campaigned at all levels with key stakeholders to gain support for the program. Without this champion, it is doubtful that the program would have been implemented, and received sustained State funding.

Financial Support
It is critical to be able to provide financial support to students in the form of scholarships to ensure that they are able to continue working in underserved communities. Students from underserved communities are more likely to go back to those communities to work, yet many must grapple with extremely large medical school debts. It is important to provide incentives to engage graduates who may otherwise choose more lucrative practices in order to manage their financial pressures.

Complete Faculty Hiring
Strong leadership is needed to give sustained attention to faculty hiring. Recruitment, review, and hiring is time consuming for faculty and administration, and delays in the process would permit the use of funds allocated for new faculty members to be used to address other programmatic needs. PRIME-LC represents an opportunity to build a critical mass of diversity within both student and faculty bodies, serving as a shining example for other HPEIs in the field.

Lessons

Early Engagement of Key Partners
Early in the program planning process, UCI SOM leaders identified and secured support from key stakeholder partners. University leaders, community organizations, students and government officials were all included in the planning and development process. The breadth of the stakeholder network substantially contributed to the success of PRIME-LC.

Timing of Program
The PRIME-LC program was proposed at a time when stakeholders and funders were receptive and ready. Political issues such as Proposition 209 were in the forefront of the media and public opinion, the Latino population was growing and demonstrating an enormous unfilled need for healthcare, and the academic community was recognizing the need to create a more diversified workforce to serve this population.
2. Students of Color for Public Health  
UCLA School of Public Health

Primary Author: Claire Colón-Hopkins, M.B.A., M.S., doctoral candidate, CSU East Bay

Overview/Impetus

Students of Color for Public Health (SCPH) began in 2001 as an informal support network of several graduate students at the UCLA School of Public Health, who bonded over their common background and interests, including a commitment to work on behalf of populations of color. They met to talk about their classes and work and to support each other as they progressed through the program. The next year the students decided to become more organized in order to have a collective voice and advocate as a group for themselves and the communities in which they worked.

Description

In 2002, the group formalized itself by becoming a recognized, graduate student-led organization dedicated to the recruitment, retention, and graduation of students of color at the UCLA School of Public Health (SPH).

The mission of Students of Color for Public Health (SCPH) is to strengthen social support, career networking, and advocacy efforts for UCLA SPH students and alumni of color. The group is dedicated to enriching students’ academic experience by providing academic, social, and community outreach opportunities for all students interested in working with underserved communities.

The primary objective of SCPH is to help entering students of color feel welcome at the School. Members strive to ensure that students know they have a community at the School that is committed to supporting them during their time as students, committed to public health as a profession, and committed to working with disenfranchised populations. In 2006 the group had approximately one hundred members, including 50 percent doctoral students, 40 percent master’s students, and 10 percent UCLA SPH alumni. SCPH is dedicated to enriching students’ academic experience by providing academic, social, and community outreach opportunities for all students interested in working with and conducting outreach to underserved communities.

The organizational structure of SCPH is comprised of an executive board and a general membership. The executive board consists of seven positions: two co-chairs, two co-secretary/historians, a treasurer, and two co-directors of communications.

SCPH provides opportunities for students across the School’s departments to discuss health issues of concern to populations of color, including the need for health systems to offer culturally and linguistically appropriate services for communities of color, as well as the elimination of racial/ethnic health disparities.

SCPH activities fall into two categories: recruitment/community outreach and student support/retention.

Recruitment/Community Outreach

SCPH helps to organize the UCLA Youth into Health Professions (YIHP) course, an introductory public health course that meets in South Los Angeles at the Watts Labor Community Action Committee (WLCAC) community center. The course is offered free of charge each summer to approximately twenty community college students and high school juniors and seniors. It is designed to expose youth of color to the public health field and to introduce them to the university setting.

The course meets from early July through early August on Tuesdays and Thursdays for four hours a week—the equivalent of one summer session at UCLA. Students who complete the course receive four college credits, which increases their chance for acceptance at a college or university. SCPH student-instructors are paired with youth to whom they serve as mentors. The graduate students provide guidance
about pursuing undergraduate and graduate degrees in the field, followed by advisement about careers in 
public health.

While YIHP is the group’s primary activity, SCPH members also:

- Speak with high school students in the community about the field of public health and coordinate
  field trips to UCLA to introduce teens to careers in public health
- Present information about the School of Public Health, the individual departments, and the
  application process to prospective, undergraduate students at pre-health panels—informational
  forums for undergraduates interested in pursuing a career in the health professions
- Participate in other community service/volunteer activities, such as health fairs and toy drives

**Retention/Support**
SCPH maintains its own listserv and website to disseminate information relevant to the social, physical,
and emotional health of individuals and communities of color and about the academic community at the
School of Public Health. These electronic forums enable members of the organization to discuss program
planning activities and conference information and to distribute job announcements.

SCPH has a mentoring system through which second-year students mentor new students and second-year
MPH students are mentored by doctoral students.

SCPH encourages its members to participate in academic activities, such as lectures, conferences, and
health-initiative brown bag discussions. Examples of past activities are: the Filipinos for Community
Health Panel, CSU Northridge Pre-Health Panel, 4th Annual Women of Color Conference at UC Santa
Barbara, and the California Forum for Diversity in Graduate Education. SCPH also organizes social
events, such as Bowling Night and the End-of-Year BBQ.

**Partners/Contributions**

**Campus Partners**
Faculty and administrators from the School of Public Health and the School of Nursing support SCPH by
providing mentoring, teaching, and research opportunities for student members of the group. Faculty are
not compensated for their involvement. SCPH has also partnered with other UCLA student organizations,
including those that support students of color, work in student health education, and advocate for UR-
related issues.

**Community Partners**
SCPH alumni play an important role as advocates for increasing diversity in public health by recruiting
graduating students of color to the workforce and providing jobs. They are also an important source for
building professional networks and partnerships in the field and mentoring in the workplace.

The Watts Labor Community Action Committee provides a classroom for offering the YIHP course to the
community. Other community partners include:

- California Latinas for Reproductive Justice
- Latino Issues Forum, Healthy African American Families
- The Clean Air Coalition
- The Children’s Defense Fund
- Venice Family Clinic
- Maternal and Child Health Journal Club
- LA Best Babies Network
- Latino Health Access

These partners provide internship opportunities for graduate students. Representatives of these groups also
lecture at UCLA SPH and have invited students to visit their organization to gain a better understanding of
the work being done by community-based organizations. SCPH students have, in turn, volunteered at events including fundraisers, health fairs, and conferences and promoted the organizations by word of mouth or through the organization’s listserv.

**Alignment with IOM/ Sullivan Commission Recommendations**

Students of Color in Public Health addresses the following Sullivan Commission recommendations:

**Sullivan Commission Recommendations**

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to provide students with classroom and other learning opportunities for academic enrichment.

4.7 Colleges, universities, and HPEIs should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.

**Impacts to Date**

SCPH tries to build a relationship with all students of color who enter the School. However, because the two-year training for master’s-level students is brief and intense, it is difficult to quantify the impact that the organization has had on the overall well-being of UR youth and students. Nevertheless, by creating a supportive environment, the SCPH’s qualitative impact has been significant. What started out as a group of twelve determined students, so committed to making a difference in their communities and in each other’s lives that they funded their initial activities out of their own pockets, has grown to almost one hundred members in just five years. This rapid growth illustrates the need for support systems for UR graduate students. SCPH members identify with UR student challenges to balance school, family, and work. Having a substantial cohort of other students to count on for understanding and encouragement is extremely valuable.

Winning the confidence of the Dean of the School, Dr. Linda Rosenstock, has enabled the organization to write successful grant proposals to the California Wellness Foundation (TCWF). TCWF funding has supported the YHIP course and provided four scholarships to SCPH students in 2006. Financial support from the School’s discretionary fund will replace TCWF funding when the grant term ends. “This extraordinary organization was built from within from the passions of several students and their knowledge that we as a school could do better,” stated the Dean. “In a few short years, SCPH has grown and become increasingly influential and respected.”

**Projected Impacts**

SCPH plans to continue to meet its major organizational objectives and to expand recruitment and community outreach efforts.

**Challenges**

**Schedule/Time Limits for Students**

As with any student organization it is difficult to find an accommodating time when all members can meet and to hold events that all members are able to attend. As a result, many members are unable to participate fully in the organization.

**Lack of Tracking Systems**

To date, SCPH lacks the infrastructure to develop and implement tracking systems to document or assess its outcomes. Therefore, it not known to what extent its community outreach efforts have been effective in recruiting UR students into the field of public health.
Long Term Institutional Support
While the recent commitment by the Dean of the School of Public Health to provide development assistance and plans to provide continuing support through the school’s discretionary fund at the end of the current TCWF grant, long term support for SCPH is less clear, particularly in the absence of more definitive measures of success. Further investment in infrastructure, both to strengthen the program and to develop tracking systems is needed to ensure the long term effectiveness and sustainability of SCPH at UCLA.

Lessons

Build Inter-Campus Partnerships
While reaching out to other student groups is not part of SCPH’s mission, its members have learned the value of building partnerships in order to increase the organization’s visibility. In the future, the group plans to continue to nurture the relationships it has built and expand its contact and partnerships with other School- and campus-wide organizations to further establish itself as a permanent presence in the University community.

Convene, Plan, and Document
Since its membership changes annually, SCPH has held transitional planning retreats every August for the outgoing and incoming executive boards to reassess the organization’s vision and objectives and make preliminary plans for the upcoming academic year. SCPH’s historian documents the year’s activities and accomplishments. The group also compiles an end-of-year report. These activities have helped to ensure the sustainability of past work and provide a foundation to build upon for future endeavors.

Engage External UR Community Stakeholders
SCPH members note that the effort to eliminate racial/ethnic health disparities involves significant grassroots, community-level strategies. Thus, the engagement of more people of color from affected communities is crucial because they understand the barriers to, challenges of, and dynamics involved in implementing health-promotion strategies.
3. Pediatric Advocacy Program (PAP) and Scholarly Concentration in Community Health and Public Service (CHPS)
Stanford University School of Medicine

Primary Author: Ed McField, Doctoral Candidate, Loma Linda University

Overview/Impetus

The Pediatric Advocacy Program (PAP) was designed in 2000 as a response to a general requirement of the Pediatrics Residency Review Committee that pediatricians develop competency in advocacy and community issues. While it was customary to fulfill this requirement through electives and optional seminars, the Pediatrics program leadership at Stanford decided to strengthen the residency program by designing and implementing a comprehensive, required first- and second-year rotation. A driving consideration in the development of the program was the need for pediatricians to understand how community issues influence child health and to learn how to be effective community partners.

The Scholarly Concentration in Community Health and Public Service (CHPS) was initiated in 2003 and is a structured program of study in the Medical Student Curriculum that promotes in-depth learning and scholarship in community health. It was developed as part of the undergraduate medical curricular reform.

These two programs are profiled together because they are guided by a common, public health perspective and reflect innovative additions to the undergraduate and graduate medical curricula at Stanford University School of Medicine. Both are designed to introduce medical students and residents to the community forces that affect population health. Students/trainees in both the Scholarly Concentration in Community Health and Public Service and the Pediatric Advocacy Program develop research, community engagement, advocacy, and partnership-building skills. PAP offers both trainees and students an opportunity to work with community organizations. Students in the CHPS concentration and residents in the first and second year Pediatric rotations commonly interact as they work with community-based organizations to respond to particular health needs. Dr. Lisa Chamberlain, a founder of PAP, is the faculty director of both programs.

Description

The mission of the Pediatric Advocacy Program (PAP) is “to advocate for improving the health status of children while reducing health disparities in Silicon Valley and its surrounding communities.” The program provides pediatric residents with a structure for implementing local advocacy efforts and building community partnerships to reduce health disparities in low-income, ethnically diverse communities. Activities such as designing obesity prevention programs and nutrition and wellness policies have been undertaken. As Dr. Chamberlain explains, the program’s main goal is to “bring a population health perspective and an understanding of health disparities to pediatric residents and an understanding of the physician’s role in addressing these disparities.”

Pediatric residents work with community partners to address community needs, while developing their advocacy skills by participating in the month-long Community Pediatrics and Child Advocacy rotation during PGY1. Approximately twenty pediatric interns each year are introduced to different children’s services in the community and work in various settings to develop policies and projects that target local health concerns.

Building upon skills developed in the first year, residents engage in an advocacy project designed to impact child health during PGY2. The focus of this Adolescent Medicine and Advocacy Rotation is policy change and media awareness. Residents develop skills in the following areas: testifying in court or at hearings, coalition building, drafting resolutions, and developing media strategies. What makes PAP unique is that it

132 The Pediatrics Residency Review Committee of the Accreditation Council for Graduate Medical Education oversees the accreditation of pediatric residency programs.
provides residents and medical students with opportunities to work in the community and learn about policy and the media as part of their medical training.

After each community health project or at the end of the rotation, participants complete a journal that captures their experience and assesses the program’s significance. While PAP is one of 13 Pediatrics rotations offered during the course of a year, it could be viewed as a minor part of a resident’s overall training. Yet its value is captured in the reflections of a participant who stated “The advocacy project provided a window into the world we will join after residency and that someday we will be the ones advocating for those same children we treat.”

**Community Health and Public Service (CHPS)**

Scholarly concentrations are a key innovation in the undergraduate medical curriculum. Students are required, in their first year, to declare a scholarly concentration, or major, in one of 11 areas ranging from Bioengineering, Biomedical Ethics, and Cardiovascular Pulmonary to Health Services and Policy Research, Molecular Basis of Medicine, and Community Health and Public Service. The mission of CHPS is to “empower future physicians to improve the health of diverse communities and reduce health inequities through innovative scholarship and community engagement.” The program enables students to gain the knowledge and skills necessary for addressing the health challenges of diverse and often underserved communities. The curriculum examines the following topics:

- Organization of healthy communities and their development
- Social, economic, and geographical determinants of health
- Measurement and assessment of community health
- Practice and politics of health-focused public service
- Cultural competencies necessary for working in diverse communities

The concentration encourages cultural competence and the development of physicians with the commitment and capacity to become effective, life-long leaders in community health and community-focused health policy.

**Partners/Contributions**

PAP has received funding from the David and Lucile Packard Foundation, the Hearst Foundation, and The California Endowment as well as individual donors. It has built partnerships between the Stanford University School of Medicine and its surrounding communities to improve the health and well being of children. The program has developed over twenty active partnerships with local nonprofits and community-based organization, community clinics, departments of public health, and school districts to design a variety of programs that directly benefit the community. All projects conducted result from participatory community assessments and planning. Likewise, partners have participated in program evaluations and findings have been published in the *Journal of Pediatrics* and *Archives of Pediatrics and Adolescent Medicine*. The following is a sample of PAP and CHPS partners:

- County of San Mateo Child and Family Services
- County of Santa Clara Office of the Board of Supervisors
- East Palo Alto Asthma Task Force
- First Five Santa Clara County
- Institute for Human and Social Development, Inc.
- Institute of Health Policy Studies
- Mayfair Improvement Initiative
- Mountain View/Los Altos Adult School
- Mountain View/Whisman School District
- Palo Alto Unified School District
- Ravenswood City School District
- San Mateo County Asthma Coalition
Alignment with IOM / Sullivan Commission Recommendations

The Pediatric Advocacy Program and Scholarly Concentration in Community Health and Public Service address the following IOM and Sullivan Commission recommendations:

IOM Recommendations

5-4 HPEIs [should] be encouraged to affiliate with community-based healthcare facilities in order to attract and train a more diverse and culturally competent workforce and to increase access to health care.

Sullivan Commission Recommendations

2-6 Key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers.

4-1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4-11 Health systems and health professions and HPEIs should use departmental evaluations as opportunities for measuring success in achieving diversity, including appropriate incentives.

6-6 Community and civil rights organizations should collaborate with health care organizations and HPEIs to advance institutional diversity and cultural competence goals, including community needs assessment and evaluation.

Impacts to Date

A total of 49 medical students have participated in the Community Health and Public Service concentration through May 2007. By the end of June 2007, 120 interns participated in the first-year Community Pediatrics and Child Advocacy rotation. Eighty residents participated in the second-year Adolescent Medicine and Advocacy rotation since its inception in 2004. There has also been an increased awareness of community forces and health disparities among students, pediatric residents, and faculty. This is reflected to some extent in the start of a monthly journal club dedicated to discussing community health issues as well as the creation of the Office of Community Health within the Stanford School of Medicine.

Other program impacts include:

- Design and implementation of a bilingual asthma prevention project in the Ravenswood City School District, which includes placement of asthma case managers and indoor air quality assessment at seven schools; and training of 190 teachers/staff, 134 parents, and 26 children in asthma management.
- Development of a parent-designed obesity prevention program to improve dietary and physical activity behaviors of Latino, preschool-age children and their families, in collaboration with Head Start in East Palo Alto and the Lucile Packard Children’s Hospital.
- Development of health and wellness policies, including obesity prevention and nutrition guides for the East Palo Alto School District.
- Completion of an evaluation of the first three years of the Pediatric Advocacy Program.
- Development of a Media and Policy Advocacy module as part of the Pediatric Advocacy Program.
- Publication of six scholarly articles in peer-refereed, scientific journals.
- Students in the CHPS concentration were instrumental in getting a bill before the California State Senate and Assembly that permits the redistribution of unused prescription medications. SB 798, which was signed into law by the Governor on September 30, 2005, authorizes counties to establish a repository and distribution program of surplus unused medications to financially challenged persons to ensure access to necessary pharmaceutical therapies.
Projected Impacts

- Implementation of an endowed, postdoctoral fellowship in Pediatrics, Policy, and Community Health for which the program director is actively seeking funds. Through the training of future leaders, the Pediatric Advocacy Program could be replicated.
- Publication of additional articles on the residency program, including an evaluation of the curriculum, could strengthen interest in the Pediatric Residency at Stanford and galvanize interest in adding an advocacy dimension to other medical training programs.
- Both PAP and CHPS will catalyze organizational cultural change, as faculty, students, and community organizations learn to acknowledge the structural forces that affect health disparities and communities.
- Both PAP and CHPS will continue to have a positive impact on community health as a result of policies and programs implemented by school districts, including reduced child obesity and improved asthma management.

Challenges

Securing Stable Funding/Institutionalization
An important factor in ensuring the long-term sustainability of PAP and CHPS is the ability to secure funding to recruit additional faculty interested in community-based research. Additional support is also needed to endow a fellowship in Pediatrics, Policy, and Community Health. It will be essential to diversify the advocacy program’s funding base with additional revenue from the School of Medicine and other units of the University to expand community partnerships.

Student Tracking
In order to justify long term support for PAP and CHPS, comprehensive tracking systems are needed to document UR student/trainee participation, career preferences, and ultimate career choices.

Lessons

Demonstrated Commitment from Senior Leadership
Program success is attributed to strong support from senior leadership, which allocated financial resources, faculty lines, and staff and guided the initial phase of implementation. Other programs that wish to implement similar curricula would do well to ensure that their dean or division chief provides similar support in the form of FTEs and other resources necessary to ensure the successful start up of a new program.
Primary Author: Ed McField, Doctoral Candidate, Loma Linda University

Overview/Impetus

The Family Practice Residency program at Scripps Mercy Hospital-Chula Vista admitted its first cohort of six interns in 1998, after an extensive three year planning period. Dr. Marianne McKennett, founding Program Director, indicated that the primary impetus was a “growing recognition of the need for family and preventive medicine in a community-based setting to provide border health and primary medical care to the underserved population.” The Family Practice Residency program was formed through a partnership between the Family Preventive Medicine program in the School of Medicine in the University of California San Diego (UCSD), San Ysidro Health Center, San Diego Border Area Health Education Center (AHEC), and Scripps Mercy Hospital Chula Vista.

Description

The program combines clinical services and community-based health education to serve the city of Chula Vista, located approximately four miles from the United States-Mexico border in the South region of San Diego County. A significant proportion of the patients served are uninsured and Limited English Proficient (LEP). The mission of the residency program, reflecting an academic-community contract, indicates a commitment to “train family practice physicians to provide comprehensive primary medical care to patients in underserved communities.”

Residents provide care at the Chula Vista Family Clinic, which serves as the home of the three year program. Dr. McKennett emphasizes the purpose and strengths of the program by stating that “It’s all about community immersion, exposing residents to a population that has great needs, is diverse, and underserved.” Each four week rotation (e.g., Surgery, Behavioral Medicine, Pediatrics, Obstetrics, Gynecology) includes a community-based health and prevention component. For example, residents lead community workshops on themes selected by the community, such as nutrition, women’s health, and care for the elderly, in collaboration with community-based organizations. They also engage in mentoring activities such as “Meet the Doc”, and “Youth Into Health Career”, both designed to expose high school students from UR groups to health sciences and increase their interest in health careers. As a culminating activity for their residency, resident physicians are required to develop and implement a longitudinal health community-based project known as the Community Oriented Primary Care project (COPC).

Applicants undergo comprehensive evaluation and are selected based on a) evidence of significant desire to work with underserved population, b) interest in serving within the geographic region, c) language skills or willingness to learn languages relevant to the area, and d) a strong academic standing. Every year, the program admits 5 or 6 residents, of which, approximately 50 percent are from UR groups, mainly of Latino heritage. There is an intentional emphasis on students that reflect the diversity of the region, including multi-lingual skills. Approximately 1/3 of participating residents completed high school in the area, increasing the likelihood that they will remain and serve their community once they complete medical training. Fifty percent of the core faculty are also from UR groups.

Partners/Contributions

Key partners with Scripps Mercy Hospital-Chula Vista and the Family Preventive Medicine program at the University of California at San Diego School of Medicine include the San Diego Border Area Health Education Center (AHEC) and the Chula Vista Family Clinic, which provide the venue, financial and human resources for community-based health education. The program has also established several partnerships with other community clinics, local K-12 schools, and the San Diego County Department of Public Health. These partners offer residents the opportunity to develop and implement community education programs, such as STD clinics, immunization campaigns, programs for victims of domestic violence, and implement school-based clinic sites, particularly for orthopedics and sports medicine.
Alignment with IOM / Sullivan Commission Recommendations

The Scripps Mercy Hospital Family Practice Residency Community Immersion program addresses the following IOM and Sullivan Commission recommendations:

IOM Recommendations

2-1 HPEIs (and in this case, teaching hospitals) should develop, disseminate, and utilize a clear statement of mission that recognizes the value of diversity in enhancing its mission and that of the relevant health professions.

2-2 HPEIs (and in this case, teaching hospitals) should establish explicit policies regarding the value and importance the institution places on the teaching and provision of culturally competent care and the role of institutional diversity in achieving this goal.

3-4 Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health professions workforce.

5-4 HPEIs should be encouraged to affiliate with community-based health care facilities in order to attract and train a more diverse and culturally competent workforce and to increase access to health care.

Sullivan Commission Recommendations

2-4 Health systems should set measurable goals for having multilingual staff and should provide incentives for improving the language skills of all health care providers.

2-5 HPEIs should work to increase the number of multilingual students, and health systems should provide language training to health professionals.

2-6 Key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers.

4-1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.

4-10 HPEIs (and in this case, teaching hospitals) should ensure that their mission statements reflect a social contract with the community and a commitment to diversity among their students, faculty, staff, and administration.

6-6 Community and civil rights organizations should collaborate with health care organizations and HPEIs to advance institutional diversity and cultural competence goals, including community needs assessment and evaluation.

Impacts to Date

A total of 39 residents have graduated from the Family Practice Residency since 1998. In 2006, over 20,000 patient and educational contacts were made and the program provided family practice training for eighteen (18) Family Practice Medical Residents, placement for five (5) Physician Assistants and six (6) medical students. Additional program impacts include:

- The Scripps Family Practice Residency Program was the recipient of the 2002 San Diego County Health and Human Services Agency Public Health Champion Award for the Southern Region.
- Fifty percent of residents are from UR groups.
- Eighty percent of graduates serve in medically underserved regions.
Increased awareness of community forces and health disparities among students, pediatric residents, and faculty as a result of the extensive community immersion.

Over 35 longitudinal projects or community interventions have been implemented.

Support a school-based clinic at Palomar High School, where physician residents have provided health education and medical care to 922 youth and their families students in 2006.

Partnered with the San Diego Workforce Partnership to provide ‘Job Skills’ training for sixty (60) youth enrolled in the mentoring program.

In 2006, Scripps Family Practice Residency Program and the Primary Care Clerkship Program at UCSD SOM placed a total of six medical students in South Bay Community-based settings.

Seven (7) graduates (100 percent) in 2006 secured jobs in underserved communities.

**Projected Impacts**

The program is not expected to expand beyond 18-21 residents in all three classes of the residency in the near future, primarily due to budgetary constraints. However, there are plans to implement a 4th year Fellowship position for one resident that demonstrates exceptional dedication to community-based family medicine practice. This fellow would act as a formal mentor to selected high school students and coordinate school-based activities. Long-term program impacts include:

- Increased in number of health providers and access to health care by placement of additional physicians serving a medically underserved area.
- Increased participation of UR individuals in health careers.
- Strengthening of cultural competency among residents and faculty, including a better understanding of social factors that affect health.

**Challenges**

**Securing Long Term Funding**

In 2006, the Scripps Mercy Hospital Chula Vista invested approximately $1.5 million in the Family Residency Program through its Community Benefits Services. The California Area Health Education Center, funded by the Health Resources and Services Administration (HRSA), provided initial seed funding of approximately $75,000 to launch the program and continues to support. Since then, program supporters include the Susan G. Komen Breast Cancer Foundation and the Community Action Partnership. Program leadership is currently seeking to diversify funding sources to sustain the program.

**Build Research and Instructional Capacity**

Moving forward, there is a need to recruit additional faculty and staff in order to maintain the high level of quality. This requires both resources and the identification of appropriate faculty with interest and expertise in community-based research. There is also a need to secure funding for the fellowship in community-based family medicine. Building capacity in this regard will facilitate the design and implementation of a comprehensive program evaluation to assess the impact on learning and local communities.

**Lessons**

**Early Engagement of Community Partners**

A major factor in the success of the program is the application of a shared governance model that called for the broad participation of community partners in the program design and development process.

**Understand the Community**

An important antecedent to the development of the program was a community assessment to identify needs and assets, establish a baseline, and build a comprehensive understanding of the community.

**Careful Planning**

One key to the success of the program was careful planning and incremental growth with a solid foundation. (For example, program was launched by only filling PGY1 of the residency).
5. Community Health Programs
USC School of Dentistry (USCSD)

Primary Author: Claire Colón-Hopkins, M.B.A., M.S. Doctoral Candidate, CSU East Bay

Overview/Impetus

The inception of the USCSD Community Health Programs was the establishment of a Mobile Clinic Program in 1965 by a faculty member, with the support of his family and a few dental students. The group visited a remote site in Mexico to provide its residents with practice in emergency dental care and health education on oral health and hygiene. The services offered by the USC group were well received and the program quickly expanded.

In 1968, students identified an underserved population closer to home, and the program shifted to serving the dental needs of migrant workers in Central and Southern California. The program expanded in 1969 with the support of donations and a grant to purchase equipment. Soon after a new faculty advisor conferred with students and made a decision to focus treatment on children. The geographic service area expanded in 1976 from chiefly agricultural areas to include local urban inner city schools. Since then, the Mobile Clinic has become an important resource that responds to the oral health needs of children from urban and rural low-income families in California and serves as a valuable educational resource for USC dental and dental hygiene students. Partnering with community groups, government agencies, private foundations, service clubs, and corporations has enabled USCSD to expand its community outreach through numerous service centers, most of which are in community-based settings.

Description

The USC School of Dentistry has a long history of participating in community outreach programs that target underserved populations in the Southern California community. In its new strategic plan, the school renewed its commitment to reducing oral health disparities in the eight counties of the Southern California region. The school manages a wide range of community-based oral health programs that treat the homeless, disadvantaged children, frail elders, developmentally disabled persons, and people living with physical and mental illnesses. The major programs include:

- Three outreach programs, including The Sealant Project, The Neighborhood Mobile Clinic, and The QueensCare/USC Mobile Clinic, all of which serve thousands of inner-city children in the Los Angeles area.
- Services include oral examinations, dental cleaning, application of dental sealants, fluoride treatments, and referral for treatment of existing dental diseases.
- Faculty-student teams treat children in the second grade, most of which are seeing a dentist for the first time.

The Doctors Out to Care (DOC) program was integrated into the USCSD freshman curriculum in 1997. In this program, first-year dental students visit second-grade classrooms at one of seven local elementary schools. The dental students “adopt” the second graders during their four years of dental school, concluding when the children are in fifth grade. Students visit classrooms five times per school year and engage in assessment activities that measure the program’s impact. During the first visit, second graders are tested to determine their “dental I.Q.” Over the course of the first four class sessions, the children are engaged in a variety of oral hygiene instructional activities designed by the dental students. At the conclusion of the fourth instructional session, the children are retested to see how much they have retained. The fifth and final session is an oral screening. Oral screenings are conducted every year to determine if the program is an effective tool for improving oral health.

USCSD students and faculty also serve the community at Children’s Dental Center in Inglewood. In addition to providing dental care, the facility offers programs that combine a variety of highly interactive, culturally- and age-appropriate learning activities for low-income children, their parents, and siblings.
USCSD operates an on-site dental service at Hollenbeck Palms (formerly Hollenbeck Home), a non-profit, multi-tiered retirement community located near downtown Los Angeles. This service provides onsite access to dental care for residents within the skilled nursing facility and opportunities for USC dental and dental hygiene students to learn about the special oral health needs of elders.

In 2000 USCSD opened a dental clinic at the Union Rescue Mission, a non-profit organization that serves poor and homeless residents of inner-city Los Angeles. The clinic is the first comprehensive dental clinic on Skid Row and the first clinic to provide care for the oral health needs of homeless children and adults in the area.

In 2005-2006, almost 2,000 individuals received services provided by volunteer USC dental and dental hygiene students, staff, and faculty at 25 health fairs in the greater Los Angeles area sponsored primarily by USC, local government and social service agencies, and faith-based and other organizations. Volunteers promoted oral health with free oral screenings, preventive care instruction, and educational materials. These health fairs continue to be an important vehicle for community outreach in local neighborhoods.

USCSD onsite dental clinics also provide comprehensive oral health care to all community residents. General dentistry procedures are performed by student dentists and dental hygienists under the supervision of faculty.

**Partners/Contributions**

The USCSD Community Health Programs are rooted in community partnerships. The clinical, operations, and administrative staff who run the programs are primarily student, faculty, and community volunteers who assist at clinic sites during their free time. As part of their training, dental students are required to perform one week of community service per year but dental and dental hygiene students devote many hours of additional volunteer time at outreach sites such as the Mobile Clinic.

Participating school personnel are key partners in the school-based USCSD outreach programs. Schools provide space to set up portable equipment, electricity to operate the dental units, and storage for equipment between school visits. School personnel assist the project by organizing assemblies to explain the project to participating children and distribute parental consent forms. School personnel collect consent forms and arrange for a student from an upper grade to act as a guide, escorting students from their classrooms to the designated treatment area.

Other partners include government and social service agencies, faith-based organizations, hospital-school collaboratives, health-related non-profit organizations, local police and fire departments, radio and television stations, and the staff and volunteers at facilities such as Hollenbeck Palms and Union Rescue Mission.

**Alignment with IOM / Sullivan Commission Recommendations**

The USCSD Community Health Programs address the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

2.2 HPEIs should establish explicit policies regarding the value and importance the institution places on the teaching and provision of culturally competent care and the role of institutional diversity in achieving this goal.

**Sullivan Commission Recommendations**

4.1 HPEIs, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.
4.10 Diversity should be a core value in the health professions. HPEIs should ensure that their mission statements reflect a social contract with the community and a commitment to diversity among their students, faculty, staff, and administration.

6.6 Community and civil rights organizations should collaborate with health care organizations and health professions schools to advance institutional diversity and cultural competence goals; including community needs assessment and evaluation.

**Impacts to Date**

USCSD has integrated service learning into its community dentistry programs, providing free preventive care, treatment, and education to children, families, elders, and homeless residents of the surrounding multiethnic communities who otherwise would have little or no access to dental care. USCSD students and residents served more than 300,000 individuals during the 2005-2006 academic year.

In 2003, The California Endowment funded USCSD as part of a collaboration among California’s five dental schools, the Pipeline, Profession & Practice: Community-Based Dental Education (Dental Pipeline) program (see profile, Section II.A.4). Now embarking on its second phase beginning in September 2007, The Endowment’s grant has enabled USCSD to:

- Invite community and other oral health professionals to participate in the development of PBL case studies to emphasize cultural competency.
- Investigate, develop, and pilot “Spanish for Dentistry” selective course sessions, emphasizing language skills for patient communication.
- Design special activities (“Dental Detectors” and “Dental Explorers” summer session) to expose over 180 minority, middle- and high-school students and their parents to the field of dentistry.
- Collaborate with pre-health advisors and pre-dental clubs CA colleges to recruit UR students.
- Develop a three-year DAT/dental school admission prep program for UR college students to augment the Dental Pipeline program with California Wellness Foundation funding (2005-2008).
- Increase Latino and African-American student enrollment. Sixteen UR freshman were admitted in 2006, a four-fold increase since 2003.
- Partner with dental societies, foundations, and alumni to raise $250k in UR scholarship funds.
- Work with dental societies, primary care associations, public health departments, and others to develop strategies to increase the dental workforce and reduce oral healthcare disparities.

**Projected Impacts**

The USC School of Dentistry is currently investigating a partnership with Federally Qualified Health Centers and organizations such as the National Health Service Corps. These relationships would enable graduates to continue to work in underserved communities, while repaying part or all of their dental school tuition, in addition to having part or all of their loans forgiven for service. It is hoped that these partnerships would also encourage young dentists to consider working in public health settings as a viable career option upon repayment of their educational debt.

**Challenges**

Since USCSD has a longstanding history of and commitment to community service, there will continue to be institutional support for Community Health Programs as codified in the School of Dentistry’s strategic plan; however, challenges to sustainability are ongoing in the daily operation of the programs.
Coordination of Community-Based Programs
A major challenge involves the coordination of each outreach site, including logistics, staffing, volunteers, and scheduling. Each site has its own director who is responsible for managing daily logistics and troubleshooting problems that arise. For the most part, these types of challenges are manageable at the site but once in a while a situation arises where external resources are needed. Some examples are technical difficulties, where onsite resources are insufficient to solve the problem and the rare exposure of dental students to diseases such as HIV and hepatitis through needle sticks. The School of Dentistry maintains a post-exposure protocol but outside resources are needed to carry out the protocol in community-based settings.

Securing Faculty Buy In
Some faculty members still do not support the community health programs. Gaining their buy-in and recognition of CHP as an important learning experience for students and invaluable benefit to the community is still sometimes a challenge. The school manages this by regularly exposing faculty to positive messages about the important work being done in the community. In addition, when site directors and volunteer faculty come to campus, they often meet with and have the opportunity to discuss issues affecting the community directly with in-house faculty. These conversations have affected faculty opinions and persuaded unsupportive faculty to participate at off-site clinics in addition to providing opportunities for them to learn who among their colleagues already participates in CHP.

Building Student Support and Commitment
Just as some faculty are skeptical about the benefit of the programs, so too are some students. CHP can sometimes be challenged to obtain students’ appreciation of the community benefit experience. When some students apply to dental school, they may not adequately research each school and its foci or they may forget about different schools’ specialization during the application process. Hence, they sometimes arrive without full knowledge or understanding of USC’s emphasis on community programs. Most students do eventually learn the lessons that community experiences are intended to teach. The challenge, however, lies in ensuring that graduates incorporate community service into their practice.

Funding Limitations
The CHPs are well-funded and supported by contracts and grants from government agencies, private foundations, and service clubs as well as individual contributions from USC alumni. This funding is matched by in-kind contributions from the School of Dentistry and the University as well as other internal funding and salary support for the program director and administrative staff. Yet there are still funding limitations that prevent the CHPs from achieving all of their goals, including providing dental care to every child who does not have access.

Lessons
Full Partnership with the Community
The most important lesson learned by the USCSD Community Health Programs has been to create equal partnerships with community agencies. More has been accomplished with community partners through collaboration and shared planning of outreach programs and events than with a we-know-what’s-best-for-you attitude and approach. The Program Director recounts how time and again, faculty or students come to her with a great idea for an outreach opportunity to which the host organization initially agrees. Yet the arrangement inevitably falls through, due to lack of true commitment and buy-in from the host. Alternatively, when invited by an organization such as the Union Rescue Mission to collaborate and plan an outreach program, the results were successful and long lasting.
VI. UR Faculty Recruitment and Retention

Increasing UR faculty recruitment and retention is a fundamental component of any strategy to increase health professions workforce diversity. UR faculty serve as valuable role models for UR youth who may not otherwise envision a career for themselves in the health professions. UR faculty also play a central role in student mentoring. In fact, experience indicates that UR faculty carry a disproportionate burden of mentoring; not only of UR students within their program and other students with similar interests, but for UR students in other programs across academic institutions.

Research also indicates that UR faculty are more likely to play an important role in the design and implementation of cooperative and “active” learning techniques and the integration of diversity-related content throughout the curriculum. Given these factors, the recruitment and retention of UR faculty is of central importance in any efforts to increase the diversity of HPEI students and creating an institutional environment that fosters shared learning and the accrual of the benefits of diversity for all students.

One of the challenges in efforts to recruit UR faculty is the perception that there is a very small pool of qualified candidates. It is a logical assumption that the lack of a critical mass of diversity among students of HPEIs translates into a lack of UR faculty candidates. Given this assumption, HPEIs with “elite” status would have both an identity and resource advantage in recruitment from this relatively small pool. Research indicates, however, that the pool is larger than perceived, many highly qualified UR academic researchers are not recruited, and UR faculty candidates rarely juggle offers from multiple institutions. It has been suggested that this is a “myth” used by both faculty and administrators to justify a lack of progress. That having been said, our inquiry suggests that these kinds of competitive dynamics do emerge a times in efforts to recruit senior UR faculty. We also learned that some HPEIs seeking “elite” status are reluctant to recruit UR candidates who lack the volume of peer-review research publications viewed as necessary to elevate the reputation of the program.

Some HPEIs have embarked upon a focused strategy to “grow their own” UR faculty through ongoing mentoring of students and post-doctoral fellowships. Others focus on the recruitment of UR junior faculty, and create an infrastructure that will foster career development and retention. In the recruitment process, it is important to build expanded networks beyond senior faculty and administrators, identify and advertise in journals that focus on issues of interest to UR faculty and researchers, as well as other non-academic institutions that work on diversity-related issues. It is also important to engage and educate members of recruitment committees on the range of experience and expertise to look for with UR faculty candidates, as well as the institutional needs that can be addressed.

In the retention of UR faculty, attention must be given to creating a system of support that will help manage the disproportionate burdens of mentoring and other administrative responsibilities, as well as help to develop a research portfolio that is consistent with UR faculty interests and is valued by the academic institution.

The profiles in this section outline efforts at two University of California campuses to increase UR faculty recruitment and retention; one that focuses on the recruitment of faculty with diversity-related research interests and development of a campus-wide, inter-disciplinary research agenda, and the other that focuses on the creation of an infrastructure to support and retain UR faculty.

---


134 Smith, D., How to Diversity the Faculty, 86 Academe 48 (Sept.-Oct. 2000; Smith, D., Lisa Whole, and Bonnie Busenberg, Achieving Faculty Diversity; Debunking the Myths (Association of American Colleges and Universities, 1996.
Berkeley Diversity Research Initiative
University of California at Berkeley

Primary Author: Don Matsuda, undergraduate student, Stanford University

Impetus

The Berkeley Diversity Research Initiative (BDRI) is the product of a series of discussions among the Berkeley Diversity Project Coordinating Committee, who identified the need for campus-wide diversity leadership and research. The committee identified priority issues and recommendations for the development of diversity-related research and policy change.

The Diversity Project Coordinating Committee was part of a campus community initiative led by former Berkeley Chancellor Berdahl. The Committee was housed in the Office of the Vice Provost for Academic Affairs and headed by Professor Gibor Basri (Academic Senate) and Angelica Stacey (Office of the Chancellor), representing the faculty and administrative sectors. When the Committee was convened, student, faculty, and staff member participants began evaluating the University’s stance on diversity related issues and discussing the ideal scenario for promoting greater diversity research and policies in the future. The Committee held roundtable discussions in the Spring of 2004, with representatives from groups across the University to facilitate a campus-wide discussion of diversity related issues. By the Fall of 2004, the Committee had distilled the information and developed a set of goals and priorities. When the new Chancellor Robert Birgeneau arrived, he expressed strong support for the diversity-related work and declared his commitment to help move forward.

The Committee’s first recommendation was the creation of a high level administrative position, the Vice Chancellor of Equity and Inclusion, to oversee the campus-wide efforts to promote diversity. Following the development of this position, the BDRI was created to provide a place on campus for faculty and students from various departments to discuss and research a host of different diversity related issues.

Description

The BDRI was created to provide a central place on campus for faculty and students from various departments to conduct diversity related research. Findings from this research will shape recommendations for policy changes that will reduce ethnic disparities in the State of California and the nation. The BDRI has two major goals:

- To generate an in-depth understanding of the similarities and differences among multi-cultural societies and identify factors that contribute to their success;

- To generate specific recommendations for policy changes and practices that draws upon the strengths and assets of diverse communities and reduces ethnic/racial disparities in California and the United States.

To achieve these goals, the BDRI will support diversity-related research throughout a broad range of disciplines on the UC Berkeley campus. The research will span disciplines such as health care and community health, education, career and business opportunities, information access, justice within the courts system, housing, environmental justice, upward mobility, economic well-being, political representation, and civil rights.

By increasing the number of faculty who will lead diversity-related research and policy change, the initiative will also increase the capacity of the university to create a more supportive environment for UR students. Incoming faculty will be required to demonstrate a prior commitment to mentoring UR students and advancing understanding and support for diversity through research and policy analysis.
In June 2006, Chancellor Birgeneau announced the selection of three projects/clusters for funding under the BDRI. Each cluster included funding for two full-time faculty. The three clusters are as follows:

- **Diversity and Democracy Cluster** will focus on how liberal democratic principles and practices adapt to an increasingly diverse population.

- **Diversity and Health Disparities Cluster** will promote a broad-based program of teaching and research on health disparities and the social determinants of health.

- **Educational Policy Collaboration Research Cluster** will focus on racial inequities in urban public schools.

A campus-wide competitive proposal process was used to identify the programmatic homes for projects/clusters to receive BDRI funding. The proposal outreach process included various activities to identify potential applicants and to promote application submission. First, the Diversity Project Coordinating Committee created a spreadsheet of faculty members that were currently conducting diversity related activities and research. The spreadsheet was not only used to invite faculty to submit proposals, but was also published campus-wide to enable faculty members to more easily identify other faculty conducting diversity research. Second, to generate interest in diversity research and to encourage more faculty members to submit proposals, the Committee held a multi-disciplinary diversity guest lecture series. Finally, a town hall meeting was held for potential applicants to discuss their proposal ideas and get questions asked regarding the application process.

The Committee received approximately 20 proposals and consolidated some, yielding a net total of 10 full proposals. An external committee named the Blue-Ribbon Committee was formed to evaluate the submitted proposals and choose the clusters that would receive faculty slots.

Faculty and administrative leadership in Sociology, Law, Political Science, and Philosophy were awarded the Diversity and Democracy Cluster. Areas of focus for research include, but are not limited to the relationship between increasing diversity and liberal democratic principles and practices, addressing issues of civic participation, communal identity, and the allocation of rights and benefits to different groups.

Faculty and administrative leadership in Public Health, Public Policy, Social Welfare, and Anthropology were awarded the Diversity and Health Disparities Cluster. Areas of focus for research include, but are not limited to the root causes of health disparities, including an examination of neighborhoods, social determinants, and the impact of public policy and related political power dynamics.

Faculty and administrative leadership in Education, African American Studies, Ethnic Studies, and Law were awarded the Educational Policy Collaboration Research Cluster. Areas of focus for research include, but are not limited to K-12 policy and school reform related to inequities, community collaboration and public policy, and poverty and social mobility among immigrants.

Faculty and administrative leaders are encouraged to work collaboratively both within and across each of the three clusters to help increase understanding of the inter-relationships and dynamics associated with these complex issues.

**Partners/Contributions**

The following academic and administrative departments currently form the BDRI Executive Committee: Academic Senate, Sociology, Public Health, Political Science, Geography, Law, Women's Studies, Ethnic Studies, Psychology, African American Studies, History, Film Studies, Dean of Law, and the Vice Provost of Academic Planning & Facilities. These academic and administrative departments were brought together to form the Executive Committee due to their past involvement in diversity research. The goal of including such a diverse group on the Executive Committee was to make BDRI an interdisciplinary initiative that brings together members campus wide.

BDRI Executive Committee activities include:
• Play a consultative role in vetting requests for additional faculty FTE beyond those allocated
• Foster and enhance diversity research on campus
• Raise money and support grant writing for the BDRI in general and individual diversity clusters
• Oversee the organization of diversity-related efforts to engage the campus intellectual and social community

Alignment with IOM / Sullivan Commission Recommendations

The University of California at Berkeley Diversity Research Initiative addresses the following IOM and Sullivan Commission recommendations:

IOM Recommendations
5.1 HPEIs should develop and regularly evaluate comprehensive strategies to improve the institutional climate for diversity. These strategies should attend not only to the structural dimensions of diversity, but also to the range of other dimensions (e.g., psychological and behavioral) that affect the success of institutional diversity efforts.

5.2 HPEIs should proactively and regularly engage and train students, house staff, and faculty regarding institutional diversity-related policies and expectations, the principles that underlie these policies, and the importance of diversity to the long-term institutional mission. Faculty should be able to demonstrate specific progress towards achieving institutional diversity goals as part of the promotion and merit process.

Sullivan Commission Recommendations
4.12 Health systems and HPEIs should have senior program managers who oversee: a) diversity policies and practices; b) assist in the design, implementation, and evaluation of recruitment, admissions, retention, and professional development programs and initiatives; c) assess the institutional environment for diversity; and d) provide regular training for students, faculty, and staff on key principles of diversity and cultural competence.

4.13 HPEIs should increase the representation of minority faculty on major institutional committees, including governance boards and advisory councils. Institutional leaders should regularly assess committee/board composition to ensure the participation of underrepresented minority professionals.

Impacts to Date

Creation of Vice Chancellor for Equity and Inclusion Position
In 2006, after the creation of the BDRI, a new cabinet level position was created to lead this initiative: the Vice Chancellor for Equity and Inclusion (VCEI). This is one of the first positions of its kind in the nation. The new Vice Chancellor will have tools to enhance access, climate, and inclusion for all underrepresented minorities, including disabled people and members of the Lesbian/ Gay/ Bisexual/ Transgender community.

The process to select the new VCEI was chaired by Chancellor Birgeneau and a 15 member committee. They gathered input from various members of the Berkeley campus including students and faculty about the qualities the VCEI should embody, as well as taking into account the potential challenges he/she could face in the coming years. On July 19, 2007, Professor Gibor Basri was selected to fill this position.

Selection of Projects/Clusters and Hiring New Staff
The BDRI allocated long term funding for six faculty FTEs; two each for the three clusters. The hiring process for new faculty is currently underway.

Projected Impacts

If the three clusters already in place are successful in creating an environment that is geared towards diversity, then the Chancellor plans to increase funding to expand the program and create more clusters.
with additional faculty members. The BDRI is expected to accept and review more applications for programs supporting diversity on campus. Upon approving these additional programs, the BDRI will provide funding and additional faculty FTEs. Additionally, the Committee is working on another project entitled BILD that is similar to the BDRI in form, except that it is directed towards faculty members.

The BDRI will help UC Berkeley become a national leader in scholarship on diversity, which will in help both in the recruitment of additional faculty and create a supportive and dynamic environment that draws an increasingly diverse student population.

**Challenges**

**Recruiting BDRI Faculty**
Final approval of BDRI funding was not completed until the Spring of 2007 and the timing has delayed the hiring of new faculty. A further challenge is presented by the pursuit of senior faculty, who are highly sought after by other leading academic institutions. Last but not least, recruitment is complicated by the need to build consensus among different schools, departments, and programs participating in each cluster; each with different priorities and approaches to recruitment. After a few initial missteps, Cluster members are beginning to come together, and there are a number of candidates under consideration.

**Engagement and Accommodation of Other Relevant Faculty**
Interviewees noted that some faculty who had applied for funding and were not ultimately selected for clusters have expressed concerns that the BDRI will siphon support away from related work they have done for many years. Efforts are needed by Cluster leaders to engage, accommodate, and support other faculty with a demonstrated commitment to the shared goals of BDRI.

**Start Up Funding**
One factor in the recruitment of BDRI faculty is the availability of an initial pool of funds to build research infrastructure. This is particularly important in the recruitment of senior faculty, who expect a base of support that will enable them to maintain continuity and advance current tracks of research, as well as hire administrative support staff to assist with the management of activities and resource development.

**Lessons**

**Strong Leadership**
The most significant factor in the successful development of the BDRI is strong and vocal leadership from the Chancellor. UCB benefited from the fact that despite the establishment of the BDRI during a leadership transition period, both the outgoing and incoming Chancellors demonstrated equally strong commitment. This commitment is reflected not only in frequent public statements of support and active participation in the developmental process, but the allocation of six permanent faculty FTEs.

The Deans of the schools, departments, and programs who participate in the three Clusters have also demonstrated strong leadership. Their on-going vocal support will be needed to garner necessary support from faculty, as well as to facilitate inter-disciplinary linkages in scholarship and student mentoring.
2. National Center for Leadership in Academic Medicine  
University of California, San Diego

Primary Author: Margie Powers, M.S.W., M.P.H.

Impetus

In the mid 1990s, faculty committed to faculty development and mentorship at the University of California, San Diego (UCSD) School of Medicine (SOM) received federal funding to create the UCSD National Center for Leadership in Academic Medicine (NCLAM). The purpose of the program is to increase the academic success rate of junior faculty with a specific focus on UR groups and women. In 1996 the Hispanic Center of Excellence awarded a grant to the SOM to increase the representation of Latino faculty. In 1998, the Office of Woman’s Health of the United States Department of Health and Human Services funded UCSD as one of four National Centers of Leadership in Academic Medicine, also with a focus on increasing the number of Latino faculty at the university.

To prepare for these efforts, the SOM collected extensive baseline data on UR and women faculty. The data revealed that even though university departments were recruiting UR faculty, there was a high attrition rate. SOM found that faculty either left UCSD to work at another university, or left academic medicine altogether. In interviews at the university, they discovered that many junior faculty members were disenchanted with academic medicine—either feeling that they didn’t belong in an academic setting, or that they couldn’t meet the rigors or demands of the university. Junior faculty also described what they needed from the university to succeed, including a) to strengthen their skills and knowledge in leadership, teaching, learning, and research, b) provide support to develop and implement an academic strategic plan focused on the University of California, c) establish stronger relationships with senior faculty mentors and other colleagues within the university.

With these findings, UCSD SOM identified an opportunity to diversify its faculty, and chose to use the NCLAM program to provide an environment where junior faculty could acquire the skills needed to succeed in academic medicine. Due to the success of the program, UCSD School of Medicine institutionalized NCLAM in 2000 in the Office of the Vice Chancellor for Health Sciences.

Description

The primary goal for NCLAM is to provide junior faculty with the knowledge, attitude, skills and resources necessary for successful careers in academic medicine. The NCLAM program has the following key components:

Structured Mentorship

The foundation of the NCLAM program is a structured, proactive mentoring program. Senior colleagues collaborate with junior faculty on multiple aspects of their career—providing advice on their research or teaching projects, nominating them for awards, and promoting their visibility by arranging for them to chair conference sessions or submit manuscripts. Through their mentors, junior faculty are also provided with information and guidance to better understand UCSD requirements for academic advancement and the history and background of the UCSD culture.

Formal Curriculum

UCSD designed and implemented a program curriculum for NCLAM participants. The curriculum incorporates a) twelve half-day faculty development workshops on goal setting and preparing the academic portfolio, principles of teaching and learning, leadership styles, negotiation skills, stress management, UCSD academic resources, UCSD grant resources, grant-writing, conflict resolution, curriculum development, performance evaluation, and effective presentation skills; b) the structured seven-month, one-on-one instrumental mentoring program (averaging 12 hours per month); c) a two-hour academic performance counseling session; and d) a professional development project.
Junior faculty from all departments and schools are eligible to participate in NCLAM. Approximately 15 junior faculty members enroll in the program each year and about two to four each year are from UR groups. There are now three core NCLAM faculty members. The faculty teaches the workshops and invests significant time in matching junior faculty with the appropriate mentor. The NCLAM staff also maintains a database on every participant, including individuals that are not participating in the program but may be contacted in the future.

The program benefited from a strong and early emphasis on data collection. Three formal studies of the program demonstrated that: NCLAM has saved the university money by improving faculty retention rates in general, and UR faculty in particular; and NCLAM junior faculty indicate significantly increased confidence in their skills in the areas of administration, medical education, research and professional development (statistically significant advantage over junior faculty who did not participate in the program). Once the program was recognized in peer review journals, NCLAM began to introduce information in a more directed way to the Vice Chancellor of Health Sciences and his executive council. Three years ago, NCLAM was institutionalized as a faculty development program, and is now part of the Health Sciences budget.

**Partners/Contributions**

Within UCSD, all departments in Health Sciences center participate in NCLAM, including SOM, Pharmacy, and all Health Sciences graduate schools. The departments provide faculty for mentoring, and identify junior faculty that may be good candidates for the program.

NCLAM has strong ties with community organizations. As NCLAM leaders have worked for more than 20 years in the community, many strong relationships were in place prior to the start of the program. These relationships greatly benefit junior faculty as the community organizations are very supportive of the work students do in the community, and frequently participate in community based research projects.

**Alignment with IOM / Sullivan Commission Recommendations**

The National Center for Leadership in Academic Medicine addresses the following IOM and Sullivan Commission recommendations:

**IOM Recommendations**

5.1 HPEIs should develop and regularly evaluate comprehensive strategies to improve the institutional climate for diversity. These strategies should attend not only to the structure dimensions of diversity, but also to the range of other dimensions (e.g., psychological and behavioral) that affect the success of institutional diversity efforts.

**Sullivan Commission Recommendations**

2.6 Key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers.

4.6 Key stakeholders in the health system should work to increase leadership training and opportunities for UR physicians and dentists.

6.1 Health systems and HPEIs should gather data to assess institutional progress in achieving racial and ethnic diversity among students, faculty, administration, and health services providers, as well as monitor the career patterns of graduates.

**Impacts to Date**

Key program impacts include:

- As of 2005, 87 percent of UR junior faculty who completed NCLAM remained on the faculty of UCSD (compared to 58 percent in 1991-1992). The retention rate for women was 84 percent, and
for men was 87 percent. The retention rate for MDs was 82 percent and 94 percent for PhDs, MD/PhDs.

- As of 2005, 93 percent of junior faculty who completed NCLAM remained in academic medicine at a school of medicine and/or health sciences center (compared to 75 percent in 1991-1992). Of the faculty completing NCLAM 89 percent of the women and 97 percent of the men remained in academic medicine.

- By the end of 2005, 114 junior faculty had enrolled in the NCLAM program. Of the 112 junior faculty who completed the program, 13.4 percent are UR and 86.6 percent are Non-UR.

- NCLAM participants have greater confidence in their skills after completing the program, compared to their peers.

- Program is of cost-benefit to the institution: for every dollar invested in the NCLAM program the institution receives $1.49 return on their investment.

**Challenges**

The following are a summary of key challenges faced by the staff and leadership:

**Institutionalization**
Developing NCLAM and convincing university leadership of its value was extremely labor intensive. NCLAM staff invested significant amounts of time in one-on-one meetings with Department Chairs to solicit their support for the program in general, and specifically to convince them to support and mentor junior faculty.

**Demonstrating Long-Term Impact**
As the NCLAM staff did not want to rely on grant funding to sustain the program, it was critical that they demonstrate long-term program effectiveness to secure institutional funding from the university. This required gathering program data over multiple years, and NCLAM founders thoughtfully and methodically laid the groundwork for the program to demonstrate these outcomes. While their strategy ultimately demonstrated the program to be effective and valuable, it was a challenge in the early years of the program to explain to external funders why there were no short-term results.

**Recruiting Junior Faculty**
It is surprisingly difficult to recruit minority junior faculty to apply to the program. Some feel that it is a remediation program and it is not immediately clear to the faculty that there is value in participating. The NCLAM staff has found that the faculty who were most interested in the program are already successful, and thus the ones that least need it. To overcome this challenge, NCLAM staff interview every UR faculty member to discuss the program and encourage them to apply. Often staff visits the same faculty two or three years in a row before they decide to apply.

**Lessons**
As NCLAM develops, some key lessons are emerging:

**Program Acceptance Takes Time**
Developing credibility and trust among university colleagues and supervisors is not a swift process—in the case of NCLAM, the period from program inception to institutionalization was close to ten years. The NCLAM staff has invested enormous amounts of time into delivering consistent messages including accurate and compelling information about their program.

**Social Network for Junior UR Faculty**
UR junior faculty can feel isolated within the academic community, which may contribute to their decision to leave academic medicine. The NCLAM junior faculty are integrated into UCSD through a social
network that consists primarily of other junior faculty and alumni of the program. The mentoring program focuses not only on improving academic abilities, but also on the development of professional networks.

**Support in Negotiating UC System**

Universities are complex institutions, and this can impede junior faculty’s ability to achieve promotion and career success. The NCLAM curriculum is designed to demystify the UC bureaucracy for all junior faculty. Junior faculty are provided with specific information about the institutional culture of the university, including detail about promotion and tenure, which assist the junior faculty in making informed decisions about their role and career path at the university.
VII. Summary

This report is intended for use as a resource by individuals and institutions that seek to play a substantive role in the societal imperative to increase health professions workforce diversity. Consistent with the theme of Connecting the Dots, most of the profiles in the report involve extensive partnerships among a broad spectrum of stakeholders in the private and public sector. As stated previously, our intent in the documentation of these exemplary practices is as follows:

- Acknowledge the efforts of committed individuals and organizations to date
- Inspire others to take action
- Provide a more comprehensive picture of the scope of activities

In essence, our intent is to make it clear that the current call to action is not simply based upon an abstract concept, but is supported by the substantial practical accomplishments of these stakeholders and many others across the nation.

The most common factor across the exemplary practices profiled in this report is leadership and commitment by passionate individuals. They have undertaken an array of innovations at all stages of the health professions pipeline, and while the positive outcomes to date are not at the scale needed to produce measurable improvement in the aggregate, they offer considerable promise. In some cases, there is evidence of understanding and commitment to the following as keys to success:

- Leadership sets the tone for organizational systems change
- Establish formal plans of action
- Designate formal responsibility and accountability
- Engage key external stakeholders
- Use of metrics to validate progress
- Use of incentives to encourage change in behavior

In many cases, however, significant challenges remain. While not all of these challenges apply in each profile, they are common themes among these and other exemplary practices in play in California and across the nation. They include:

- Lack of institutional core support (beyond general statements)
- Insufficient scale to produce meaningful change
- Over-reliance on short term soft money
- Missed opportunities to engage other stakeholders (most often due to a lack of infrastructure to support collaboration)
- Narrow band of committed allies
- Marginal identity within organization
- Passive and active resistance from internal entrenched interests
- Lack of external constituency to demand change
- Complexity of issues make it difficult to engage diverse audiences

Key lessons identified by exemplary practice interviewees, and important considerations for others seeking to replicate efforts to date include:

- Secure formal buy-in from leadership, and build on it
- Develop a comprehensive and coordinated approach that addresses all key elements
- Build commitment to long term process
- Create mechanisms for frequent dialogue and problem solving (or anticipation and prevention!)
- Establish incentives to foster desired behavior, and metrics to validate
- Engage key external constituents as supporters
- Engage external partners from various sectors and establish clear principles and expectations
- Be in a position to “make the case” to different audiences
Despite the current public sector fiscal challenges, there is much that can be done with a more thoughtful and strategic investment of public and private sector resources. Particular attention is needed to provide the guidance and support that will move a larger number of the critical mass of UR students that currently exist in our undergraduate institutions into our health professions education institutions. There is also a need for shared advocacy and strategic investment by the full spectrum of health professions employers, both to expand the pipeline of UR youth interested in the health professions, and to press for K-12 reforms that will turn our country’s rhetoric of equal opportunity into a reality for members of our inner city and rural communities.

These forms of investment and partnerships at the local and regional level can be effectively implemented with targeted regulatory and financial support from state and federal policymakers. Private sector philanthropy should increase its focus on the development of an infrastructure at the local and regional level that supports intersectoral collaboration, and help develop the evidence base that will support the institutionalization of innovative programs and practices. Much has been learned from our experiences to date; we’re now faced with the responsibility to translate what we have learned into sustained commitment in our institutions and communities.
Appendix A: Statewide Advisory Committee

Charles J. Alexander, Ph.D., M.A.
Associate Vice Provost for Student Diversity
UCLA Academic Advance Program

Lupe Alonzo-Diaz
Executive Director
Latino Coalition for A Healthy California

George Bo-Linn, M.D.
Senior Vice President/Chief Medical Officer
Catholic Healthcare West

Lonnie Bristow, M.D.
Consultant
Chair of IOM CTE on Healthcare Workforce Diversity

Linda Burnes Bolton, DrPH, R.N., FAAN
Chief Nursing Officer
Cedars Sinai Medical Center

David Carlisle, M.D., Ph.D. (Ex-oficio)
Director
Office of Statewide Health Planning and Development

Carmela Castellano-Garcia, J.D.
President/CEO
California Primary Care Association

James Allan Crouch
Executive Director
California Rural Indian Health Board

Michael Drake, M.D.
Chancellor
University of California, Irvine

Arthur Fleming, M.D.
Past President
Golden State Medical Association
Charles Drew Medical Society

Hector Flores, M.D.
Co-Chair
White Memorial Hospital Family Practice Program

Philip García, Ph.D.
Senior Director, Analytical Studies
California State University
David Hayes-Bautista, Ph.D.
Professor
UCLA School of Medicine

Sherry Hirota
Executive Director
Asian Health Services

Deloras Jones, R.N., M.S.
Executive Director
California Institute for Nursing and Health Care

James Kyle, M.D., Mdiv
Vice President, Strategic Development
Charles Drew University

Laurence Lavin, J.D.
Director
National Health Law Program, Los Angeles Office

Marianne McKennett, M.D.
Director
Chula Vista Family Practice Residency Program, Scripps

Fernando Mendoza, M.D., M.P.H.
Professor of Pediatrics
Stanford Medical School

Jamillah Moore, Ph.D.
Interim President
Los Angeles City College

Ed O’Neil, M.P.A., Ph.D.
Director
Center for the Health Professions, University of California, Berkeley

Edgar Quiroz
Director, Workforce Diversity
Kaiser Permanente

Steve Shortell, Ph.D.
Dean
UC Berkeley School of Public Health

John Yuasa
Independent Consultant
Appendix B: Author Biosketches

Alexandra Alznauer
Alexandra Alznauer holds an A.B. in German Studies from the University of Southern California and has studied at the universities of Vienna and Munich. A writer, genealogist, and medical translator, her work has appeared in international rheumatology journals. A recipient of the Konrad Adenauer Fellowship, in a former life she was a banker and fundraising professional. Alexandra holds the Wine Spirit & Education Trust of London (WSET) Intermediate Certificate and is currently preparing for the Advanced WSET exam and the Certified Sommelier exam offered through the Court of Master Sommeliers. She lives in San Francisco.

Claire Colon-Hopkins, M.B.A.
Claire Colon-Hopkins is a graduate student in Speech Pathology at CSU East Bay. She holds an undergraduate degree in Biology from Brooklyn College, and an MBA from the University of Phoenix. Before returning to graduate school, Claire has worked as a Healthcare Data Analyst at San Francisco Health Plan and Stanford University Medical Center. She lives in Oakland, California and is a mother of three.

Patrice Esser, M.P.H.
Patrice Esser, MPH currently serves as a Project Coordinator for the Medical Effectiveness Research Center at the University of California, San Francisco. He is a Global Health graduate from the Loma Linda School of Public Health. His interests lie in health policy, economic and health disparities, and global health. Patrice recently worked in Madagascar with the Adventist Development and Relief Agency (ADRA) and their Title II Food Security Program, where he assisted in research with community mobilization and the use of geographic information systems (GIS) in rural development projects.

Kimberly M. Jackson
Kimberly Jackson is a graduate student at UC Berkeley, pursuing a dual degree in public health and public policy. She holds an undergraduate degree in journalism from the University of Minnesota. Prior to entering graduate school, Ms. Jackson was a defense and national security legislative advisor in the United States Senate. She is currently the Editor in Chief of PolicyMatters, the public policy journal at UC-Berkeley.

R. Ruth Linden, Ph.D.
R. Ruth Linden, a medical sociologist, is Research Program Director of “Increasing Health Professions Workforce Diversity in California.” She co-led Inquiry 2, the component of this study based on interviews with the leadership of nearly 70 health professions educational institutions, healthcare employers, and state agencies. Dr. Linden received her Ph.D. in sociology from Brandeis University and also completed graduate work at Harvard, MIT, and UCSF. She was awarded a Mellon Humanities Fellowship at Stanford University in the history of science with a focus on the biopolitics of breast imaging. Dr. Linden has held numerous faculty positions in the social sciences, humanities, and medicine; served as a dean; and contributed to medical curricular reform initiatives at Stanford, UCSF, and UC Berkeley. Dr. Linden has consulted on the design of expanded access clinical trials for the Food and Drug Administration, the pharmaceutical industry, and CBS’ “60 Minutes.”

Donald Matsuda
Donald Matsuda is a third year medical student at Stanford University School of Medicine, concentrating in Community Health and Public Service. He holds a BS in Human Biology from
Stanford and spent several years working in the public health sector before entering medical school.

**Edward McField, M.S.A., Ph.D. Candidate**
Edward McField holds a master's in community development with over eight years experience in community capacity building. He has worked with multiple international non-government organizations including Habitat for Humanity International, where he served as International Program Advisor and Organizational Development Specialist throughout Latin America and the Caribbean. Mr. McField is a candidate for a PhD in Social Policy and Social Research with a dual interest in sustainable community development and health care policy. He is married to Jennie Milliner and together they have a 7-year old, Edward Jesiah.

**Margie Powers, M.P.H., M.S.W.**
Margie Powers is an independent health care consultant, working with commercial and safety net organizations to design and improve their chronic care delivery systems. In 2001, she founded Margie Powers Consulting, which provides consulting services in quality improvement, clinical information systems planning and implementation support, and the management of complex, multi-agency projects for health care organizations. She holds a Masters in Public Health and Social Work from Columbia University, and an undergraduate degree in Accounting from Santa Clara University.

**Silvia Sanchez**
Silvia Sanchez is a senior undergraduate student in Communication at Stanford University. She has worked as a Spanish translator for the Stanford Medical School, where her interest in Hispanic immigrant families has grown. She was born and raised in the Bay Area, and plans to settle in California upon her graduation on June 2008.