From the Director

Anyone who has suffered a chronic injury or illness understands how they can damage relationships, sabotage working goals, and pervade one's entire life. Among society's most disadvantaged, the likelihood of experiencing such an illness or injury is greater, the ability to address it more compromised, and the ultimate effects often more devastating.

Consider this all too common situation. In a low-income neighborhood in San Francisco, a bright, high school-educated young woman finds her attempts at steady work hampered by chronic lower back pain and severe asthma attributable in part to local environmental conditions. Her children also suffer from asthma and miss too many days of school. Even if the family has some limited health insurance, it is difficult to get to the doctor during workdays and prescriptions are expensive. A downward spiral may be unavoidable.

In England, the response to the increasing prevalence of such stories was action. In 1998 the “Independent Inquiry into Inequalities in Health,” headed by Sir Donald Acheson, issued a report to the British government about how it could eliminate health disparities. The report stated that this was an issue of social justice for a country that had enjoyed increasing prosperity and longevity overall, but which had allowed the health gap between the more and less advantaged to grow to intolerable levels. In the five years since, a number of the Commission's recommendations have been made into policy.

The United States has no equivalent blueprint, but there are hopeful signs. For example, the National Cancer Institute is leading an effort to identify specific steps to eliminate cancer-related health disparities. Similar efforts may emerge for other diseases.
Forging Diverse Work Into One Strong Voice

Health disparities are now a national priority...and we have learned a great deal along the way,” says Eugene Washington, who directs the Medical Effectiveness Center for Diverse Populations. He points to a substantial uptick in the level of research funding from both the public and private sectors as evidence of the nation’s concern.

But Washington also issues this challenge: “Despite the increased research efforts, the impact on real-life disparities has not been demonstrable. There are a multitude of reasons, but one of them has to do with the lack of a coordinated voice from researchers.”

The Center for Health and Community is trying to coordinate those voices, in part by supporting interaction among individual researchers and groups dedicated to understanding and solving the problem of health disparities. Five of these groups are represented in this issue of Exchange.

— The Medical Effectiveness Research Center for Diverse Populations (MERC) conducts research on how medical interactions can reduce health disparities in heart disease, cancer, reproductive health and quality of care. MERC recently received a $10 million grant for a program called EXCEED (Excellence Center to Eliminate Ethnic/Racial Disparities) that is examining what MERC has identified as a core issue in health disparities: patient-provider communication and the way it affects health care decision-making.

— The Center on Social Disparities in Health (CSDH), created with funding from the Centers for Disease Control and Prevention, examines disparities in maternal, child, adolescent, and reproductive health and health care. It focuses both on research and ongoing monitoring to inform policies to reduce socioeconomic and racial/ethnic disparities. “At UCSF we have a critical mass of people whose entire research careers have been committed to this area,” says Paula Braveman, the CSDH’s director. “By working together we can do a better job of getting and keeping health disparities on the agenda of both government agencies and private foundations.”

— Jane Weintraub and colleagues created the Center to Address Disparities in Children’s Oral Health (CAN DO) in the wake of a 2000 Surgeon General’s report that found that dental caries (cavities) is the single most common childhood disease—five times more common than asthma—and that there are striking disparities in the prevalence of the disease among young children. Supported by a 7 year, $11 million grant from the National Institute of Dental and Craniofacial Research, CAN DO is focused on early childhood caries (ECC) which have an unusually high prevalence in the low income Asian and Latino populations in California.

— Similarly, because HIV-AIDS disproportionately affects racial and ethnic minorities, William Holzemer and colleagues created the Nursing Research Center on HIV-AIDS Health Disparities. The center, a 5-year, $1.5 million dollar project funded by the National Institutes for Health, links a research-intensive institution (UCSF) with a minority-serving institution (University of Puerto Rico). It is one of eight that the NIH chose nationwide to explore the topic of health disparities, but the only one to focus on HIV-AIDS.

continued on back page
"Health disparities are now a national priority... and we have learned a great deal along the way.”

CHC researchers:

- Map policy interventions and their effect across the country
- Analyze the effects of governmental programs that expand access to care
- Help improve enrollment and retention in Healthy Families and Medi-Cal

Informing Policy

CHC researchers recognize that health disparities are a broad societal issue and have begun to pursue ways to assure that the results of their research reach those who make social policy.

As one example, Harkness Fellow Mark Exworthy is developing a “health disparities map” for the U.S. Exworthy, who completed a similar project in England, will identify what policies and programs are being developed in different parts of the country for addressing health disparities. In doing so, he hopes to illuminate gaps and, more ambitiously, discover which programs provide more “bang for the buck.”

Beyond Expanding Access to Care

Similarly, CSDH Co-Director Paul Newacheck and Dana Hughes have been analyzing how the expansion of Medicaid over the last 15 years and the establishment of the State Children’s Health Insurance Program (SCHIP) in 1997 have influenced health disparities for children.

Midway into their analysis, Newacheck and Hughes found that the expansion of these programs had not significantly diminished health disparities. Now they have begun to examine why not. Hughes’ initial hypothesis is that the expansion of these programs is a necessary first step, but the improved access to care is not enough to eliminate disparities.

“For kids, having an ongoing source of health care is crucial,” she says. “They need to have a health-care provider monitor their growth so they can avert health problems that can plague them for a lifetime. That’s why we put the emphasis first on health insurance. But under-enrollment in public programs, the inability to mitigate the health effects of low socioeconomic status, and non-insurance barriers to health care, such as transportation and child care all play a role as well.”

Policy Influence and Education

Another example of a policy intervention on which Hughes is working is CORE (County Outreach, Retention and Enrollment), a program that began with the recognition that many families that qualify for California’s Healthy Families and Medi-Cal programs fail to enroll or re-enroll, because of the often cumbersome, confusing process for doing so. CORE brings together six California counties in the greater Bay Area to streamline their enrollment and renewal systems.

The project uses a quality improvement method to describe county processes, identify improvement opportunities, and redesign procedures. Sometimes the improvements can be as simple as switching the type of envelope or marking clearly those spots where things must be signed and sent back, as banks and realtors now do on their documents.

“We not only help counties understand and implement this quality improvement method, but we also document if it makes a difference,” says Hughes.

Hughes hopes initiatives like CORE and other research emanating from the CSDH “will help policy makers think more holistically about the problem of disparities. Right now, the health system itself is terribly fragmented; at the same time, health policy makers don’t talk to those in food, housing, or education... We hope by bringing together our disparate activities, we can have a greater impact.”
Documenting Disparities, Identifying Causes

Documenting health disparities and identifying their causes are often complicated by many pathways and moving parts. One important area is the intersection of socioeconomic status (SES) with race and ethnicity. Patterns of low birth weight for African-Americans and whites (see box) demonstrate this interaction. Within each group, there is a marked increase in low birth weight for women Braveman and her colleagues at CSDH. "These studies do not ask about such factors as a woman's income level in the past or about total wealth, which ultimately may be more important for maternal-infant health," says Braveman. "A big piece is left out if you fail to think in terms of causal pathways when measuring SES. This could lead to erroneous conclusions about the role of race or ethnic group or other factors," says Braveman.

The MacArthur Network is also addressing these causal pathways. Researchers there note that SES—and its interaction with race and ethnicity—affects all aspects of people's lives from where they live and work to what they eat and drink and how they relate to others. As a result, the pathways linking SES and health include physical and social environments, access and quality of health care, health behaviors, social networks and social supports, and physiological responses to stressful life circumstances.

Access to Care, Quality of Life

At the Nursing Center for HIV/AIDS Health Disparities, Carmen Portillo is

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**Low-birthweight live births among mothers 20 years of age and over by mother's education and race: United States, 1996**

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Percent of live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 12 years</td>
<td>18.5%</td>
</tr>
<tr>
<td>12 years</td>
<td>15.0%</td>
</tr>
<tr>
<td>13-15 years</td>
<td>12.0%</td>
</tr>
<tr>
<td>16 or more</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

White, non-Hispanic

Black, non-Hispanic
Unfortunately, even when they do make it to the doctor’s office, poorer patients and ethnic minorities may receive poorer health care.

CHC researchers:

- Improve research methodologies
- Discover how socioeconomic status influences disease
- Examine cultural barriers to dental care
- Uncover the role of provider-patient communication in health disparities

Also studying SES and ethnicity, she is trying to determine whether there are cultural or socioeconomic reasons that account for quality of life differences in HIV/AIDS patients by investigating symptom experience in Latina women in both San Francisco and Puerto Rico.

Many of the same issues also come into play in dental care. Though often overlooked as a disparity issue, the late Patricia Evans, medical director of maternal and child health at the San Francisco Department of Public Health, saw tooth decay as a major problem facing San Francisco kids. Through CAN DO she was identifying cultural and other barriers to accessing preventive oral health care by working with focus groups of African American, Chinese, Filipino and Latino caregivers to children age 1 to 5. The work will continue despite her untimely death.

As part of her effort, Evans had created community advisory boards, drawn from key community stakeholders. “She had found the boards to be a very helpful link between the community and investigators,” says Jane Weintraub, CAN DO’s director.

Communication the Link?

Unfortunately, even when they do make it to the doctor’s office, poorer patients and ethnic minorities may receive poorer health care.

For example, through MERC, Celia Kaplan is studying 1700 women in San Francisco to see if there are differences in the amount of counseling women of different ethnicities receive about breast cancer prevention techniques. “The data suggests that white women get more counseling than other ethnic groups, even when controlled for level of risk,” says Kaplan.

Similarly, in looking at genetic testing, Miriam Kupperman found that African-American and Latina women were considerably less likely to use a prenatal diagnostic test than white or Asian women, even though the tests are universally available and paid for. “As we looked further into this,” says MERC Director Eugene Washington, “we realized that it was not race that was driving the disparities, it was perception of risk—at least in part, a communication issue between doctors and patients.”

This recognition has led to a series of studies where MERC researchers are observing and analyzing doctor-patient interactions to understand components that may lead to more effective communication.
Designing Health Care Interventions

To meet the challenge of having a demonstrable impact on disparities, CHC researchers are going beyond documenting their existence or identifying causes; they are designing effective interventions.

Testing New Approaches

For a number of reasons, CAN DO’s intervention efforts are focused on prevention. “Early childhood caries (ECC) can lead to eating problems, difficulties with speech, and a host of other health problems that can last a lifetime,” explains Jane Weintraub.

In addition, literally millions of school hours are lost each year due to problems with oral health. Finally, the treatment for ECC can be difficult and painful; very young children may require anesthesia and treatment in the operating room.

At two sites in San Francisco, Weintraub is looking at the efficacy of fluoride varnish treatments for young children from different ethnic groups. (Fluoride varnish is a topical fluoride in a resin base that adheres to the teeth and slowly releases fluoride. Though used in Europe for 30 years, it is not widely used here.) One site is the Chinatown Public Health Center, the other is the San Francisco General Family Dental Center, where the patients are primarily Latino.

The study is in progress, but Weintraub and her colleagues recently presented intriguing initial results. “Though both groups have similar low income levels, we’ve found distinct differences in what might be causing the problems,” she says.

In Chinatown, for example, the mothers are less likely to brush their children’s teeth or if they do brush, they are less likely to use a fluoride toothpaste. At SFGH, more mothers give their children pacifiers sweetened with honey.

“This indicates to us that health promotion and prevention efforts must be tailored to each community,” says Weintraub.

Fluoride varnish also plays a role in the MAYA (Mother and Youth Access) program, a study headed by Francisco Ramos-Gomez that is working to prevent dental problems among predominantly migrant and Hispanic families. MAYA provides care for pregnant women, mothers and their new babies at the San Ysidro Community Health Center at the U.S.-Mexican border, a traditionally underserved area with widespread poverty.

Ramos-Gomez and his colleagues are evaluating the relative effectiveness of proactive counseling and different treatments for preventing dental decay, including the fluoride varnish for the children and an antibacterial, chlorhexidine rinse for the mothers. The mothers are treated because some studies have shown that the decay-causing bacterial is transferred from the mother to the baby.

Through two pilot programs, the Nursing Center for HIV/AIDS Health Disparities is also testing new approaches for reducing disparities. “One looks at culturally sensitive interventions for the risk-taking behaviors of adolescent women in Puerto Rico and one examines how healthcare providers can effectively improve the adherence to treatment protocols of women with HIV/AIDS,” says Carmen Portillo.

Responding to Diversity

Typical quality of care models tend to measure preventive efforts like the ones described above, or other more “technical” measures such as the percentage of patients who receive cancer or blood pressure screening. But, says Eugene Washington, “For minority patients we’ve found that interpersonal...
We know that the best way to keep young people healthy is to ensure some form of a strong adult mentor, a sense of safety in their community.

CHC researchers:

- Test ways to prevent early childhood caries in diverse populations
- Create culturally sensitive interventions for HIV-AIDS patients
- Create better ways for delivering and measuring quality of care in diverse populations
- Help change health behaviors among at-risk teens

Keeping Disparities on the Agenda

CHC Researchers Train the Next Generation of Health Disparities Researchers

The Nursing Center for HIV-AIDS disparities is working both to “expand the number of nurse researchers involved in research on HIV/AIDS health disparities and enhance the career development of minority nurse investigators,” says its director, William Holzemer. One of the program’s three cores is a mentorship core led by Geraldine Padilla from the School of Nursing.

The Center on Social Disparities in Health is a training site for the Kellogg Foundation’s Health Disparities Scholars, a program that awards postdoctoral fellowships to minority scholars interested in studying health disparities and how to reduce them.

The Robert Wood Johnson Health & Society Scholars Program is a new joint program between the CHC and the School of Public Health at UC Berkeley. The program trains scholars to conduct interdisciplinary work on the broad determinants of health and on how to translate that work into policy and practice.

processes are just as important as whether or not they received a test.” In response, MERC has developed and published a model for delivering and measuring quality of care for diverse populations. They are now testing the model in the field.

And in Vallejo, Mary-Anne Shafer, a CHC-affiliated physician and researcher is involved in a project attempting to close the health gap among at-risk teens. Along with other UCSF colleagues, Shafer has joined the Synergy Coalition in Vallejo, a group drawn from many aspects of the Vallejo community—one of the most ethnically balanced communities in the entire state. The group believes that by encouraging the positive traits most teens possess—their strength and resilience—the teens can better steer around social risk factors for poor health that include lack of education, violence, substance abuse, and teen pregnancy.

“We know that the best way to keep young people healthy is to ensure some form of a strong adult mentor, a sense of safety in their community, and a sense of purpose,” says Shafer. Consequently, the Synergy Coalition intends to create what it calls Vallejo Corps, a program aimed at developing young adult community leaders. These young leaders will serve as mentors to their younger peers in high school and middle school, generating an ever-expanding group of young people who are leading healthier lives.
And researchers at the Center for Health and Community (CHC) are helping to lay the foundation for the U.S. equivalent of an Acheson Report. As you’ll see in this issue, CHC researchers document the existence of and help uncover the causes for disparities. We create and measure the effects of interventions. We contribute to policy initiatives and monitor the effects of these initiatives. And we train the next generation of health disparity researchers to look candidly and responsibly at this topic.

It is my hope that the CHC’s work can help speed the evolution to a more equitable health system and better health for all people.

Nancy Adler

One Strong Voice continued from page 2

— Finally, the MacArthur Network on Socioeconomic Status (SES) and Health, an international collaboration of scientists tracing the mechanisms by which SES affects disease, is headquartered at UCSF. Supported by an 8-year, $9.6 million MacArthur Foundation grant, the investigators are augmenting significant longitudinal studies including the Whitehall Study of British Civil Servants and CARDIA, a National Heart, Lung, and Blood Institute study with multiple sites across the U.S. “We are using these populations to investigate how lower SES and its ongoing stresses exposes people to a greater risk of poor health,” says Nancy Adler, director of both the CHC and the MacArthur Network.

Together, these groups represent a body of work and a model of collaboration that can create a credible and coordinated roar. That roar might be the first step in demonstrably closing the health gap between society’s more and less advantaged.