

Health Disparities Working Group Report: Analysis of Existing Strengths, Critical Gaps, and Opportunities for Collaboration

May 2014

OVERVIEW

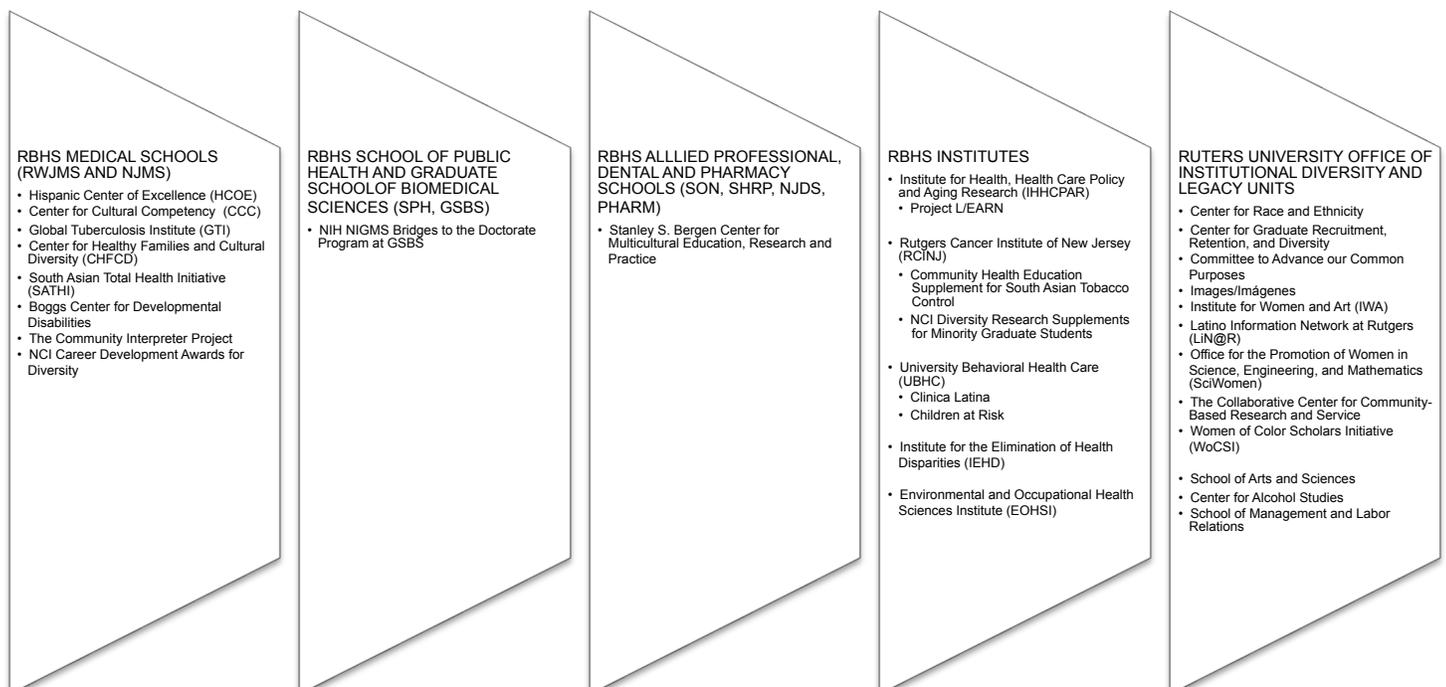
Healthy People 2020 defines a *health disparity* as “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.”

During the past decade, documented disparities have persisted for approximately 80% of the *Healthy People 2010 objectives* and have increased for an additional 13% of the objectives. Data from the REACH U.S. Risk Factor Survey of approximately 30 communities in the United States indicate that residents in mostly minority communities continue to have lower socioeconomic status, greater barriers to health-care access, and greater risks for, and burden of, disease compared with the general population living in the same county or state.

New Jersey is the most densely populated state in the U.S. with multiple social, ethnic, and racial groups, making it an ideal setting in which to conduct health disparities and health equity research as well as design culturally tailored and appropriate educational and training programs. The population of New Jersey is more diverse than the U.S. population.

Rutgers Biomedical and Health Sciences (RBHS) include New Jersey's largest behavioral health care network and New Jersey's only National Cancer Institute comprehensive designated cancer care center, Rutgers Cancer Institute of New Jersey. RBHS includes nine medical, nursing, and dental school units including their faculty practices, centers, institutes, and clinics. Together, these units serve as a vital resource for the varied and diverse communities across the State of New Jersey.

Figure 1: Rutgers University Resources for Health Disparities and Health Equity Research, Training, Education and Community Service



Rutgers University and the RBHS units and institutes have a long standing commitment to the production of robust health disparities and health equity research, teaching, education and community service programs. There are more than 20 independent entities within Rutgers University (see figure 1 above) that address some component of health disparities, health inequalities and/or health equity. There is currently, however, no one organization, office or group that is tasked to coordinate efforts in this area. Without some level of coordination, identification of collaborators, initiation of new projects and response to calls for patient centered outcomes, research is inefficient at best.

The development of this *Health Disparities and Health Equity Strategic Plan* was influenced by the recommendations from the Rutgers University Strategic Plan. Consistent with two key core values and themes described in the Rutgers Strategic Plan related to: (1) Cultures, Diversity, and Inequality – Local and Global and (2) Improving the Health and Wellness of Individuals and Populations. We propose Health Disparities and Health Equity (HDHE) as a complementary program to leverage RBHS's many outstanding programs, research units, and clinical practices to strengthen biomedical education and research and foster new public-private partnerships with industries that are critical to New Jersey's and the nation's economic prosperity. Specifically, we propose that RBHS leverage existing strengths in HDHE research, training and education and access to the state's diverse population to build and strengthen infrastructure to facilitate HDHE collaboration.

STRENGTHS OF THE RBHS AND RUTGERS LEGACY HDHE PORTFOLIO

Grant Analysis

Rutgers administrative grant management databases were queried using the following search terms: healthcare disparities, medically underserved, cultural competence, socioeconomic factors, Cross-Cultural Comparison, African Americans, Hispanics, Aged, Female, Obese, minority groups, racial minority, ethnic minority, and health literacy. Two searches were conducted: (1) RBHS grant portfolio and (2) Rutgers Legacy grant portfolio.

A Historical Look at Health Disparities and Health Equity (HDHE) Research, Training and Education Funding

The RBHS administrative databases list over 40 grants that were received and administered during the past 5 years by Rutgers Legacy and RBHS faculty and staff. Eleven were in the area of aging and 39 in health disparities. Historically strengths of the program include: (1) racial/ethnic minority focused work particularly around Latinos/Hispanics, African Americans and South Asians; (2) Women's Health focused work; (3) disease focused work in the areas of cancer and overweight/obesity; and (4) public health initiatives focused around providing educational programming at the provider, patient and community levels.

Active Grant Portfolio

The following key areas of funding for health disparities and health equity related research, training, education and community outreach are strong and growing in the RBHS active grant portfolio: (1) research and educationally focused initiatives to address socioeconomically disadvantaged populations such as **low income, uninsured, and Medicaid**; (2) racial/ethnic minority focused work particularly around Hispanics, African Americans, South Asians; (3) women focused work; (4) disease focused work in the areas of cancer, overweight/obesity; and (5) public health initiatives focused around educational programming at the provider, patient and community levels. Primary funders are the National Institutes of Health (i.e., the National Cancer Institute), Health Resources and Services Administration, private foundations, such as the Robert Wood Johnson Foundation, American Heart Association and Bill and Melinda Gates Foundation, with limited funding from local sources such as New Jersey Department of Health and Senior Services and The Health Care Foundation of NJ. A total of 21 awards were identified totaling approximately \$7.5 million in active grants in health disparities (n=16, \$6,088,033) and aging (n=5, \$1,520,898) focus areas. Committee members were asked to identify additional grants that were not captured in the search. Twenty-two additional active grants were identified by committee members. These grants come from various units across RBHS and Legacy Rutgers with notable increases based on the HDHE portfolios from the Institute for Health, Health Care Policy and Aging Research (~\$8 million) and Center for Alcohol Studies (~\$700,000). The additional 22 grants almost double the HDHE

portfolio adding approximately \$13,000,000 to the portfolio. Combined, these data sources suggest there are *at least* 42 actively funded health disparities and health equity related projects headed by 34 individual PIs that are currently ongoing across RBHS (i.e., Environmental and Occupational Health Sciences Institute (EOHSI), Rutgers Cancer Institute of New Jersey (RCINJ), New Jersey Medical School (NJMS), Robert Wood Johnson Medical School (RWJMS), School of Health Related Professions (SHRP), School of Nursing (SON), School of Public Health (SPH) and other Rutgers Units including the Rutgers School of Arts and Sciences (SAS) Center for Alcohol Studies. The majority of the funding is research based (78%) or training/education focused (42%). Some initiatives are captured in both categories such as the 2.8 million dollar NJMS Hispanic Center of Excellence, which has a primary goal of improving the health status of Latino and other underserved populations by increasing the number of Latinos in the health professions and in particular medicine cross both mission categories as they are funded to enhance education and access while providing research exposure to participants.

Table 1: Active HDHE Grant Portfolio Summary (N=42 funded projects, \$20,987,466)

	IHHCPAR N=11	EOHSI N=1	RCINJ N=4	NJMS N=7	RWJMS N=8	SHRP N=1	SON N=4	SPH N=5	Rutgers Legacy/ SAS/ Alcohol Studies N=1
Populations									
Latino/Hispanics		X		X			X	X	
African-Americans/Blacks			X	X	X				X
South Asian			X		X			X	
Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ)							X		
Neonatal/Youth		X		X	X	X	X		
Socioeconomically Disadvantaged Populations: Low Income, Uninsured, Medicaid	X							X	
Women			X		X		X		
Disease									
Cancer			X	X	X		X	X	
HIV/AIDS							X		
Mental Health	X				X				
Obesity	X		X	X	X				
Health Promotion									
Health Literacy			X	X	X		X		
Language/Medical Interpreters				X	X				
Patient Navigation				X				X	

Note: Some grants addressed multiple topics. There were also some grants that could not be classified; therefore, this table provides a conservative picture of the HDHE expertise in our RBHS and Legacy Rutgers units.

Analytic Limitations

Analyses were based on information that could be discerned from grant titles and committee members' knowledge of the grants. No further information or abstract was provided on the actual projects, which limits the degree to which accurate classifications could be achieved. Pilot funds and internal grant awards within RBHS did not appear to be reflected in the lists and, therefore, were difficult to systematically capture. Funding for a number of previous health disparities/cultural competency CME programs developed by the Center for Continuing Outreach and Education and the RWJMS Center for Healthy Families and Cultural Diversity as well as other cultural competency educational programs at other RBHS units were also not included results generated from the RBHS and Rutgers Legacy databases.

Publication Analysis

RBHS HDHE Publications in the Past 5 Years

Librarians conducted a Pub Med search using the following parameters: (1) affiliation was listed as UMDNJ, NJMS, RWJMS, or CINJ; and, (2) topics or terms included health disparities, access to health care, health literacy, cultural competency, background/cultural comparison, cross cultural. A total of 159 publications were identified in that initial search. A survey of committee members added 30 items to this list. Areas of strength noted in the grants were duplicated in the publications.

Table 2: HDHE Publications (N=189)

	Overall Total
Populations	
Latino/Hispanics	20
African Americans/Blacks	34
South Asian	7
Lesbian, Gay, Bisexual, Transgendered, Queer	4
Neonatal/Youth	13
Socioeconomically Disadvantaged Populations: Low Income, Uninsured, Medicaid	5
Women	19
Disease	
Cancer	10
Diabetes	3
HIV/AIDS	6
Mental Health	40
Obesity	5
Health Promotion	
Health Literacy	9
Language/Medical Interpreters	8
Patient Navigation	1
Cultural Competency	7
Miscellaneous	
	48
Total	239

Note: Some papers addressed multiple topics; therefore, totals per category in the table sum to more than the total of 189 papers.

Analytic Limitations

Rutgers faculty in RBHS units such as the Institute for Health, Health Care Policy and Aging Research which were not part of UMDNJ prior to the merger were not well captured in the search because Rutgers was not included as part of the search terminology. Additionally, many Rutgers Legacy colleagues publish in journals that are not indexed in PubMed which makes identifying and tracking their HDHE relevant publications particularly difficult. Because article affiliation was listed for the first author only in PubMed, a number of collaboratively authored papers from senior researchers and 2nd authors affiliated with UMDNJ may have been missed.

AREAS OF STRENGTH RELATED TO POTENTIAL RBHS SIGNATURE PROGRAMS

Our workgroup identified several potential signature programs which would benefit from strong collaborators in health disparities and health equity including: (1) Alcohol, Tobacco and Other Drugs; (2) Cancer; (3) Clinical Research; (4) Community and Urban Health; (5) Environment and Occupational Health; (6) Global Health; (7) Infection and Inflammation, particularly focused on HIV/AIDS related topics; (8) Mental Health and Substance Use; (9) Nutrition; (10) Obesity and Diabetes; (11) Pediatric Health; (12) Public Health; and, (14) Women's Health. Below we focus on three of the strongest areas and provide examples of how health disparities and health equity contribute to the portfolios in Cancer, Mental Health and Substance Use, and Infection and Inflammation.

Cancer

Cancer is one of the strongest RBHS Health Disparities and Health Equity disease content areas in which there are active grant funding (n=13, \$2,257,216), participation from investigators from multiple units (RCINJ, RWJMS, NJMS, SPH, SON) and growing publications. Most of the cancer related grants and papers identified in the HDHE portfolio for Rutgers were generated by either resident (n=4 awards) or external members (n=5 awards) of Rutgers Cancer Institute of New Jersey (RCINJ). They include: (1) a \$1 million dollar Minority Community Clinical Oncology Program housed at NJMS which seeks to increase minority accrual numbers in cancer research studies through increased patient and physician education about available clinical research studies; (2) 2 diversity training grants to support a faculty member and graduate student and 1 community health education grant focused on cancer prevention and control among South Asians supported by the NCI's Center to Reduce Cancer Health Disparities; and, (3) 8 research projects covering topics ranging from HPV Vaccination to Prevent Cervical Cancer among Ethnically Diverse Hispanic Mothers to Epidemiology of Ovarian Cancer in African American Women.

Rutgers Cancer Institute of New Jersey is one of only 41 comprehensive designated National Cancer Institute (NCI) centers in the U.S. and has great potential to become best in class given the diverse population and range of health disparities and solutions across New Jersey communities. RCINJ is a prominent member of the NCI's Region 5 Geographical Management of Cancer Health Disparities Program (GmaP), developed with American Recovery Reinvestment Act (ARRA) administrative supplements, which provides a systematic and comprehensive approach to facilitating collaboration, cooperation, information- and resource-sharing, and capacity-building among cancer health disparities researchers, trainees, outreach workers, and organizations, with the key goal of advancing cancer health disparities research and training. In order to build these bridges, six regional networks or "hubs" were developed that link CRCHD's four NCI flagship programs—the Community Networks Program (CNP), the Comprehensive Partnerships to Advance Cancer Health Equity (PACHE), the Continuing Umbrella of Research Experiences (CURE), and the Patient Navigation Research Program (PNRP). The program is a conscious paradigm shift from a siloed—to a partner-based approach to the study of cancer health disparities, using multidisciplinary and transorganizational team science. Leveraging the strengths of people, programs, and resources within and across regions enables greater access to research participants from underrepresented communities and tissue collection from disparate populations. Access to comprehensive cancer centers also offers training and research opportunities, which help grow the talent pool of investigators, including those from underrepresented populations, skilled in cancer health disparities.

Mental Health and Substance Use

Across RBHS and within Rutgers Legacy there are a number of programs that address health disparities in the contexts of mental health and substance use. Within the School of Health Related Professionals (SHRP) there are several existing resources, which address the health disparities of persons with mental health conditions and substance use disorders. Persons with behavioral health issues of mental illness or substance use are at greater risk for health disparities as compared to other groups. While the number of active or past grant funded projects (n=3) is still growing within the school, a large amount of consultation and technical assistance funding has been secured. Two large federal grants explored substance use in the Center of Alcohol Studies: a National Institute on Drug Abuse grant is studying racial differences in the predictors and consequences of

marijuana use from early adolescence into young adulthood (\$700,000 active); and a National Institute on Alcohol Abuse and Alcoholism grant examined the associations between heavy drinking and violence from childhood into young adulthood and whether they differed for Blacks and Whites (\$720,000 past).

A pilot project developed by the Department of Psychiatric Rehabilitation and Counseling used an 8 week multi-disciplinary intervention (Psych Rehab, Dept. of Rehabilitation & Movement Sciences, Dept. of Allied Education, Occupational Therapy Assistant Program, Dietetic Internship, & Physician Assistant) to address metabolic syndrome in persons with mental illness, which indicated significant changes in blood pressure, waist circumference and strength measures (\$25,000 past). There is also extensive expertise and funding for providing national consultation and technical assistance to improve health outcomes of persons with psychiatric disabilities and substance use issues. The Department of Psychiatric Rehabilitation and Counseling Professions developed new health promotion practices for persons with mental illness, "Wellness Coaching", which assists in self-management of chronic health conditions and developed a new "peer" wellness coaching role. This methodology led to an academic certificate program and multiple in-state and out-of-state consultation contracts (\$1,054,783 past). Further, the Center of Alcohol Studies has created specialized training funded from State and private granting agencies (for more than \$3 Million) to provide training for a co-occurring substance and mental illness populations "Addiction Counselor Training Program", continuing education training series on addiction, and specialized addiction services targeted to the LGBTQ community. One additional external program targeting this population is: RWJMS, Division of Addiction Psychiatry received targeted federal funding to establish a specialized Tobacco Dependence program in collaboration with the Center for Tobacco Surveillance and Evaluation Research- School of Public Health, which studies smoking cessation in persons with mental illness and nicotine replacement therapy in this population.

Infectious and Inflammatory Disease

The signature area of infectious and inflammatory disease is one of the top NIH-funded areas of research excellence at Rutgers with total funding in the last 5 years up to \$149,349,008. The current programs are competitive with a number of peer institutions belonging to the Consortium of Institutional Cooperation both in terms of publications and NIH grant support in this field. Rutgers currently has a critical mass of NIH-funded investigators in this specific area. The research in infectious and inflammatory diseases has culminated in some of the most effective commercialization of patents and licensing at Rutgers through work at nationally recognized Institutes such as the Public Health Research Institute, the Center for Emerging Pathogens and the Global TB Center.

Disease areas of focus in this signature area include HIV, TB, parasitic diseases and others. Disparities in health access and outcomes are reported in several of these diseases with immense public health impact. The principles of cultural competence need to be applied to all these areas of research from bench to clinical trial recruitment and community outreach and engagement. As examples, NJMS has an NIH-funded HIV Clinical Research Site (CRS) conducting HIV basic and clinical research with a strong community engagement with the Newark civic leadership as well as Global HIV clinical research. The South Asian Total Health Initiative at RWJMS has developed an Infectious Disease Outreach project focusing on the South Asian community with the goal to promote HIV testing through development of culturally tailored HIV outreach programs. The Global TB center in NJMS has developed a TB and Cultural Competence New letter for community health workers working in diverse communities which include emphasis on diverse South Asian communities such as the Burmese community ([http://globaltb.njms.rutgers.edu/downloads/products/Newsletter%20\(Spring%2008\).pdf](http://globaltb.njms.rutgers.edu/downloads/products/Newsletter%20(Spring%2008).pdf)).

Obesity

Obesity is a well-funded area in the RBHS Health Disparities and Health Equity portfolio. There are 4 grants, totaling \$1,054,818. Grants in this portfolio have multi-level targets. NIH funded investigators in RWJMS are investigating efficacy of an intervention for health care providers to reduce weight bias in community health care settings. At the community and patient level there is an IHHCPAR initiative funded by NIH and RWJF to

conduct a controlled evaluation of the impact of changes in the food and physical activity environments on childhood obesity and related behaviors in four New Jersey cities – Newark, Camden, Trenton, and New Brunswick. These cities have been targeted for interventions by major initiatives, affording the opportunity to conduct a natural experiment. The study aims to advance our understanding of the relationship between elements of the environment and childhood obesity and related behaviors, assess the impact of specific environmental interventions, and demonstrate an innovative methodology for controlled evaluation of community interventions. The research design relies upon a prospective, longitudinal study of a randomly selected panel of 1,200 children in these cities. The research team collected comprehensive baseline data on obesity-related behaviors and body mass index in 2009-2010 in a study funded by the Robert Wood Johnson Foundation. The data also include documentation of the food and physical activity environments in the community and schools to which these children were exposed (geo-coded for analysis). Comprehensive data collection on children will be repeated in four years and relevant changes in the environment will be monitored over the same period. Changes may include presence of new opportunities for healthy eating or physical activity (e.g., new supermarkets, playgrounds); significant enhancement of existing ones (e.g., addition of healthy foods to convenience stores, expanded physical education in schools), as well as non-intervention related change (e.g., retail outlets that close). Individual-level exposure will be measured by proximity of the environmental change to each child's residence (using geo-spatial methods). The analysis will evaluate the impact of exposure to these changes on a comprehensive set of outcomes including behaviors relevant to food consumption and PA as well as weight status. The research design facilitates an exceptional degree of control in isolating the effects of particular intervention strategies and promises to make a significant contribution to enhancing prevention efforts.