

Emerging Signature Program

Community Health and Health Systems has been selected as an emerging signature program. While RBHS does not currently have the capacity to develop a program in this area that is likely to compete with the top programs nationally within the next five years, expertise exists within RBHS specifically and the balance of Rutgers more broadly as well, and large numbers of faculty have interests and expertise in areas of relevance. Most importantly, work in this area will address a vital RBHS/Rutgers mission and is of great consequence to the state. Further, RBHS is well-situated to take advantage of funding opportunities.

Community Health and Health Systems

Health care in the U.S. and New Jersey is undergoing its most significant changes in half a century, and the integration and emergence of RBHS offers a singular opportunity for Rutgers to emerge as a regional and national leader guiding health system change. The federal government and major philanthropies, including the New Jersey-based RWJF, are investing significant resources to shift from a health care paradigm that focused solely on the patient-provider dyad to one that emphasizes a more holistic, population health perspective. National health reform is also fueling this shift by making health care systems broadly accountable for disease prevention and improvement of the health of communities. These forces create new opportunities for Rutgers to advance as a leader in designing, implementing, and evaluating new strategies to improve health and reduce system costs.

Rutgers-wide, more than 300 faculty members identified themselves as having interests in community and urban health, health disparities, health services research, and/or quality and safety, each of which is relevant for this emerging signature program. Further, more than 100 Rutgers faculty members receive extramural funding in these areas. Examples of Rutgers substantial capacity include: University Behavioral Health Care (UBHC); The Institute for Health, Health Care Policy and Aging Research (IFH); the RWJMS Department of Family Medicine and Community Health; the Rutgers School of Dental Medicine (RSDM) Department of Community Health; the School of Nursing (SON)-led community service programs; and the Eric B. Chandler Health Center.

UBHC provides academically-based clinical programs and services throughout the State of New Jersey and is one of the largest providers of behavioral health care services in the country, including services that reach underserved populations. UBHC develops and supports New Jersey initiatives, public sector programs, and programs for employers and the corporate community.

IFH is a national and international leader bringing together the social and behavioral sciences, clinical disciplines, basic sciences, and related fields to promote research on critical health and mental health issues. IFH has substantial extramurally funded multi-disciplinary research programs making nationally acclaimed scholarly and applied contributions. Notably, three of Rutgers' elected members of the National Academy of Sciences' Institute of Medicine are currently IFH core members; in 2013, two IFH associate members, an historian and a physician, were awarded MacArthur Fellowships. Extramural support for research and training in FY 2013 totaled \$12.5 million.

RWJMS' Department of Family Medicine and Community Health is a nationally recognized leader in medical practice transformation, having conducted intervention trials in more than 1,000 medical practices across the country resulting in more than 150 scientific publications. This work is being applied to the development of Robert Wood Johnson Partners, a Medicare Shared Savings Program ACO; and New Brunswick Health Partners, an emerging Medicaid ACO. These and other initiatives create within RBHS laboratories of innovation and reform, to help reshape healthcare delivery in New Jersey and offer lessons for the nation.

RSDM is a national leader in community-based service-learning. The school's Community Oriented Dental Education program enables to students to live and learn in community based practice settings. With existing clinics in Newark, Northfield, Stratford, and Galloway and planned operations in New Brunswick and Camden, RSDM, which is already the largest provider of oral health care to low-income underserved populations, will have a state-wide presence. In addition, the school's From Practice to Preceptor program, funded by the Health Resources and Services Administration, enables the dental school to address the acute shortage in dental school faculty, preparing essential manpower required to educate the next generation of oral health professionals. The proposed New Jersey Center for Oral Health Policy will provide an advocacy voice for oral health and serve as a resource for dental public health and oral health services research initiatives.

SON has a strong commitment to the Newark and New Brunswick communities. The FOCUS Wellness Center, a partnership between SON and the FOCUS Social Service agency in Newark, provides primary care and interprofessional services, including social work, pharmacy, behavioral health, and domestic violence counseling. The New Jersey Children's Health Project is a mobile van project that provides primary health care services to underserved and uninsured residents of Newark. The Jordan and Harris Community Health Center in Newark facilitates community empowerment and participation in health promotion programs designed to reduce health disparities. The François Xavier Bagnoud Center's mission emphasizes its commitment to improving the health of vulnerable women, children, youth, and families and to build capacity in the communities and systems that serve them. SON also leads a community health worker/promotoras de salud training program for immigrant Hispanic women in New Brunswick. This began as a NIH-funded intervention to promote physical activity among immigrant women. The intervention was highly successful and was subsequently adopted as a standing community program sponsored by Lazos America Unida, a Mexican-American organization headquartered in New Brunswick and the Mexican Consulate of New York City. The promotoras are currently assisting SON faculty in developing and pilot testing physical activity, nutrition, and acculturation stress reducing intervention to address obesity among Mexican immigrant women. In partnership with the consulate and the National Alliance of Mental Illness, SON faculty have also trained community men as promotores de salud to deliver research-based primary prevention programs aimed at decreasing the incidence of depression related to acculturation stress among immigrant Mexican men in New Jersey. Other SON programs include collaborations with community organizations to promote health, including AIDS service organizations and community social service agencies.

The Eric B. Chandler Health Center, one of approximately 1,300 federally qualified health centers (FQHCs) and one of 26 in New Jersey, is operated by RWJMS in conjunction with a community board. It is one of the few FQHCs operated by a medical school. The Chandler center provides primary medical and dental care to the most needy New Brunswick residents, is a training site for RBHS health professions students, and serves as a site to develop and test innovative strategies to improve the health care safety net.

These entities will collaborate with each other and with other Rutgers units to address important community health issues. For example, IFH and faculty based in arts and sciences departments can work together to address questions in two interacting translational research programs: applications of genetics and cellular biology to the clinic and community, and applications of cultural and cognitive sciences to the clinic and community.

Environmental factors play a critical role in gene expression affecting human development from in utero through adult life. Analysis of these environmental factors and differences in their frequency and content in diverse communities can lead to development of treatments targeted to environment-gene

interactions both common and specific to ethnic communities and across generations in these communities.

Non-adherence to treatment and failure to initiate and maintain use of available, effective, and often relatively low cost treatments for asthma, diabetes, hypertension, depression, and other cardiovascular conditions are estimated to drive 70% of the costs of care for the U.S. health care system. Although non-adherence to treatment impacts all sectors of the population, its adverse effects are felt more strongly among black and Hispanic citizens and the elderly. Multi-disciplinary teams can address the cultural and cognitive factors underlying non-utilization of effective medication and address and improve the very mixed findings of information technology for addressing non-adherence.

Matching technology to the brain's system for processing information is poorly understood. These issues range from the selection of the sensory channel for delivery of information to procedures allowing patients to see the connection between adherence behaviors and understandable changes in biomarkers, function, and other health outcomes.

Additional productive units across RBHS include many service programs that offer substantial capacity on which to build this emerging signature area. Further, over 40 projects funded by NIH, AHRQ, and private foundations currently provide over \$20 million in extramural research support for studies addressing health disparities and equity. Numerous additional projects support scholarly and applied work for community health and health systems' quality and safety.

A community health and health systems program will be initiated to develop and sustain capacity to generate high-impact, rigorous research; attract significant extramural support; effectively translate research to policy and practice; and make major contributions to improving population health, eliminating health disparities, and promoting health equity. The program's goal will be to move Rutgers toward becoming a best-in-the-nation academic institution in community health and health systems by promoting evidence-based population health improvement, engaging diverse communities, and advancing delivery system innovation.

A director for this emerging signature program will be identified in year 1. Other development activities, also to be addressed in the program's first year, will focus on identifying and building capacity within Rutgers and refining programmatic targets and metrics. Capacity building will include the development of new models of interprofessional care, new platforms for population health, including the Robert Wood Johnson Partners ACO, and sites to deliver community oriented care, including programs that encompass both traditional care models and mobile and community-based models run by SON programs and School of Health Related Professions.

Metrics and measurement strategies will be developed in three domains: the number of high-impact, peer reviewed publications in specific fields; the extent of extramural funding, including, in addition to the NIH, support from AHRQ, CDC, other relevant federal entities, and private foundations; and efficacy of engagement with diverse communities as well as practice and policy audiences. Options will be examined and metrics will be selected during the early months of plan implementation.

Initial objectives, key tasks, and a timeline have been developed for year 1. *The first objective* is to engage Rutgers scholars in a community health and health systems working group. Key tasks include inviting participation from strategic planning groups, including health disparities and equity, quality and safety, community and urban health, under-represented minority training, and relevant complementary areas (especially public health and clinical research); establishing communication mechanisms; and creating a steering committee and other subgroups as needed. These tasks will be completed during the first month.

The second objective is to identify and implement clearly defined metrics to compare Rutgers to other institutions. Tasks include identification of appropriate metrics for: extramural funding productivity (e.g., NIH, AHRQ, CDC, HRSA, and public and private foundations); high-impact publication productivity; and effective community/delivery system/policy engagement. These will be accomplished during months two to five and reported annually.

The third objective is to identify and investigate AAU aspirational peer institutions. Tasks could include selected site visits and identification of characteristics of highly effective institutions and to draw lessons for Rutgers. These tasks will be accomplished during months three to seven.

The fourth objective is to build an interprofessional learning community across Rutgers and enhance Rutgers' capacity to engage effectively in high-impact research. Tasks include creating a list-serve, hosting symposia and other collaboration opportunities, identifying skill-building needs (e.g., community-based participatory research, patient centered outcomes research, etc.), and initiating skill improvement strategies; and identifying and filling other gaps in research capacity (e.g., data sources). These tasks will begin in the third month and continue throughout the year.

The fifth objective is to identify and pursue funding opportunities. Tasks include: tracking and distributing funding opportunity announcements; engaging in dialogue with funding agency leaders; and developing capacity to pursue large scale collaborative research opportunities. These tasks will begin in the second month and continue throughout the year.

The final objective is to enhance engagement with local communities and practice and policy audiences. Tasks will include: broadening collaborations with community leaders in New Brunswick, Newark, Camden, and other communities; identifying/implementing opportunities to build skills of Rutgers faculty and staff in translation of research to practice and policy (e.g., through workshops or symposia); identifying near-term and long-term opportunities to build real community collaborations.

First-year activities will continue through year 5. Additional objectives will be pursued in years 2-5:

- identifying and implementing strategies for RBHS to be a “learning healthcare system” by promoting a culture of collaboration and methodologic development;
- building data and analytic capacity; building partnerships with other delivery systems/networks, state governments (e.g., Medicaid agencies, departments of health), and other entities to engage in collaborative work;
- working with other RBHS signature and complementary programs to advance excellence in community health and health systems;
- identifying, developing, and evaluating the most promising and feasible conceptual approaches for promoting population health and delivery systems innovation using the most up-to-date science;
- supporting, through an internal competition, priority investments (e.g., pilot project and selected faculty hires) for two or more focused initiatives that rapidly advance Rutgers on the path to “best-in-class;”
- pursuing other capacity building efforts based on lessons from the assessment of aspirational peer institutions and other initial activities; and
- significantly improving programmatic metrics to be selected relative to peer academic institutions.