4.5 Our Health

Major Finding: UNC should lead in improving the health and wellness of all people and communities in our state.

The University of North Carolina at Chapel Hill has a wealth of resources to promote and protect health, and a rich history of using these resources to benefit the citizens of North Carolina. Each of UNC-Chapel Hill’s five health affairs schools: medicine, dentistry, public health, nursing and pharmacy, as well as the UNC School of Social Work, has achieved national prominence for academic excellence and research productivity. Multiple health-related centers and institutes provide linkages and support for cross-disciplinary work in partnership with communities. All are grounded in a mission of providing service to the residents of North Carolina through patient care, applied research, educating health professionals to meet community needs, and engaging faculty and students in the work of state and local agencies and communities to improve the quality of health care and health promotion in North Carolina. Given the increasing complexity of health-related issues in our state and country, it is imperative that we harness these resources and apply them most effectively to the expressed needs of our population. Building on existing infrastructures and initiatives, Carolina proposes innovative and collaborative solutions to the findings and recommendations of the UNC Tomorrow Commission about the most pressing health needs of North Carolina.

4.5.1 UNC should lead in improving health and wellness in North Carolina.

A myriad of factors beyond access to health care - education, income/wealth, social and physical environmental conditions, and health behaviors - create both barriers and facilitators to improving health and wellness among North Carolinians. We propose several expanded and new initiatives, many in collaboration with ideas presented in other recommendation areas that address health improvement from multiple levels of influence. The following ideas are proposed to be undertaken with existing and proposed infrastructure, including the Center for Community and Economic Development, and the Center of Excellence for Training and Research Translation.

1. Carolina-Community Connection for Health

a. Community Development: Building on existing and proposed infrastructure we will support pilot efforts to improve health care access and the efficiency (cost effectiveness) of delivery while creating jobs in low wealth communities. (Example: disease management call centers linked with primary care practices to promote health health-related self management)

b. Two-Way Connection Portal: A recent 18 month “Engaged Institutions Initiative,” which brought together university researchers with community partners, recommended (highest priority) formation of a two-way “connection portal” - combined web and human interface system - to facilitate identification of university resources available to address community
identified needs (e.g. Epidemiologic expertise to explore and the causes of elevated cancer rates in a geographic region) and also help inform the research agenda (e.g. public health practitioners need better approaches to addressing childhood obesity in preschools) We recommend creation of this portal in partnership with proposed infrastructure in Carolina’s Clinical Translation Science Award (CTSA).

c. Research to Practice: The Center of Excellence for Training and Research Translation (Center –TRT) uses a practical web-based tool to identify and support training and implementation of evidence-based health promotion interventions. Funded by the CDC, and currently serving two national programs addressing obesity and cardiovascular disease, the Center TRT has developed and implemented a process for reviewing both research and practice-based interventions in order to determine those most likely to have a positive health impact in the community. We propose: a) adapting and expanding Center TRT work to address a broader range of health-related needs specific to North Carolinians; and b) building on the dissemination strengths of Lineberger Cancer Center and other centers, schools, and institutes to determine the most effective strategies to disseminate research to practice.

2. North Carolina State Employees Healthy Workforce Initiative

The importance of worksite programs for improving health and wellness is underscored by a recent North Carolina House Resolution which mandates that each state agency develop a wellness program and identify a wellness coordinator. Building on several UNC research studies (UNC's WAY to Health Project) that have worked collaboratively with NC community colleges and universities to develop effective worksite wellness programs, the North Carolina State Employees Healthy Workforce Initiative will take to scale a sustainable and comprehensive model health promotion program that can be used for all state employees. This effort will be coordinated with the State Health Plan initiated NC HealthSmart Program. Drawing on the expertise available at UNC-Chapel Hill, and among collaborators at key universities, community colleges and other state government agencies around the state, we will use evidence-based approaches to develop and implement a comprehensive worksite wellness effort to improve employee health and create a supportive environment for health promotion and safety activities. We will evaluate the effects of the programs on health and productivity of employees who work in the UNC system (16 universities), the community colleges (59), HBCUs (11), and other state government offices.

4.5.2 UNC should educate more health professionals.

1. Expansion of Institutional Capacity to Train Health Professionals

A 2007 NC Institute of Medicine task force observed that growth in the physician workforce is not keeping pace with the state's population growth. While increasing the number of physicians trained is a necessary first step in meeting the needs of the state's growing population, it is not sufficient to solve the problem. A 2006 American College of Physicians report addresses the "impending collapse of primary care medicine." As our aging population accrues chronic diseases the need for primary care doctors will increase. In the meantime current systems of reimbursement discourage debt laden students from entering primary care fields. The impending
retirement of 35% of the primary care work force who are over the age of 55 further threatens a strained system.

To address the workforce shortage needs in many of the health and allied health professions, we will use information generated from the NC Health Workforce Advisory Board (described below) to inform the expansion of health professions training at UNC-CH. Similar to the example described here regarding medical student training, we will carefully evaluate the need for primary care training balanced with training in specialty areas.

- **School of Medicine (SOM).** The approved plan to expand medical education by a total of 117 students, starting in 2009, is based on a collaborative effort between the UNC-Chapel Hill School of Medicine (70 additional students) and the Brody School of Medicine at East Carolina University (47 additional students). The UNC-Chapel Hill expansion will involve partnerships in Charlotte with Carolinas Medical Center and UNC-Charlotte and partnerships in Asheville with Mission Hospital, the Mountain Area Health Education Center, and the Western North Carolina Health Network.

- **Allied Health Sciences Department, SOM.** Allied Health is a comprehensive grouping for more than 100 different disciplines that, together, make up over half of the total health care workforce in North Carolina. Carolina currently offers degree programs in seven of these allied health disciplines: Clinical Laboratory Science; Cytotechnology; Occupational Therapy; Physical Therapy; Radiologic Science; Rehabilitation Counseling; and Speech and Hearing Sciences. The School of Medicine has submitted a *Strategic Program Plan for Allied Health Sciences* to Provost Gray-Williams that calls for targeted enrollment growth from 409 students in 2007-2008 to approximately 710 students in 2015. The plan offers expanded models for health care delivery in underserved communities that will involve collaborative partnerships with the NC Community College System and other campuses in the UNC system.

- **School of Pharmacy.** Over the next three-to-four years, the School anticipates a 20% growth in enrollment in its professional and graduate programs with increase in funding to support competitive stipends and fees. Expansion of AHEC, Community Based Faculty, and UNC based clinical faculty will be needed and planned over the next four years.

- **School of Dentistry.** Construction on the UNC-Chapel Hill Dental Sciences Building, scheduled to begin in spring 2009, is a component of the approved Joint Plan for Dentistry, between UNC-Chapel Hill and East Carolina University. The larger and more flexible education space will enable the School to expand the DDS class to 100 students (beginning in 2012) from an average class enrollment of 81 students and will contribute to collaboration among faculty and students and enhance continuing education opportunities for NC dentists.

- **School of Nursing (SON).** In response to the severe nursing shortage in NC, the SON has begun admitting students twice a year to both generic and accelerated BSN program options. The SON graduated 183 pre-licensure students vs. 156-160 prior to the expansion. Enrollment growth will continue, as funding permits, up to a potential total of 220 graduates per year on the Chapel Hill campus. In addition, we expect to double the number of RN-BSN graduates per year from 20 to 36 (and could expand further if funding allowed). The SON recently submitted a proposal to create a Raleigh satellite
campus that could begin graduating at least 76 additional pre-licensure BSN graduates annually within two years of acquiring adequate space to house the program. Graduate program plans include implementation of two new options in our MSN program: an oncology nurse practitioner program and a clinical nurse leader program.

- **School of Public Health.** The Nutrition Research Institute (NRI) is a world class research institute sited on the new Kannapolis campus and devoted to discovering why people differ greatly in metabolism and nutrient requirements. The NRI's building will house a metabolic kitchen, clinical facilities, a cognitive assessment suite, state-of-the-art laboratories, ample office space, and tentatively a body composition laboratory. We are recruiting three research teams who will work together (as they would in a program-project) on Nutrition and Obesity/Eating Disorders, Nutrition and Cancer, and Nutrition and Brain. Each team will consist of a lead scientist and four other principal scientists and their associated research groups.

- **School of Social Work** [need information]

- **Area Health Education Centers (AHEC).** A new AHEC center will be based in Elizabeth City, potentially on the campus of Elizabeth City State University (ECSU). To save on infrastructure and administrative costs, the Elizabeth City center will be a sub-unit of Eastern AHEC headquartered in Greenville and associated with East Carolina University. The new center will service the eight most northeast counties that are part of the 23-county service area currently served by Eastern AHEC. An AHEC Center in Elizabeth will create a much stronger health professions education presence and contribute to the success of existing programs such as PharmD (joint program with UNC School of Pharmacy and ECSU) and future programs.

- **Health Scholars Program.** To increase the number of high-quality health professionals practicing in underserved communities, we propose a new educational scholarship program to develop a network of rural healthcare providers and health professionals in North Carolina's economically disadvantaged counties. Each year, four Health Scholars in each of the five health sciences schools (20 Health Scholars matriculating each year) would receive interest-free loans covering all cost associated with earning their degrees. In turn, Scholars would commit to practice in these economically disadvantaged counties for the same number of years required to earn their degrees and loan obligations forgiven for each year of practice. Health Scholars would take special interdisciplinary courses addressing the challenges of rural and underserved practice and related topics. Students' practica could be coordinated. For example, interdisciplinary "SWAT" teams under the direction of faculty could conduct onsite participatory health needs assessments, community asset mapping, and asset-based community development in economically disadvantaged communities.

2. **North Carolina Health Workforce Advisory Board**

With its nationally-recognized health professional data system, North Carolina is better positioned than many states to examine impending health workforce shortages and develop workable strategies for responding, yet current capacity to collect and analyze the necessary data is insufficient. We propose developing a mechanism to insure continuous use of this information for collective, informed decision making. UNC-Chapel Hill is positioned to provide leadership
for organizing this endeavor. As recommended by a recent NC Institute of Medicine task force we propose to work with the NC General Assembly to create a North Carolina Health Workforce Advisory Board to include representation from diverse health professional disciplines and a broad array of agencies, organizations, and institutions including those from other UNC system schools and community colleges. This Board would report its findings and proposed recommendations annually to the UNC Board of Governors, NC State Board of Community Colleges, and the NC General Assembly.

The Board would identify strategies to:

- Increase the overall supply of physicians, nurse practitioners, physician assistants, and certified nurse midwives to meet the unmet health needs of the state’s growing population;
- Increase the overall supply of public health professionals such as epidemiologists, environmental health specialists, nutritionists, health educators, social workers, health administrators, health policy analysts, health economists.
- Encourage more health professionals to practice in health professional shortage areas;
- Establish priorities for which types of provider specialties are most needed to meet the public health and healthcare needs of the state;
- Increase the supply of underrepresented minorities in the profession; and
- Address barriers that affect entry into the health professional workforce or continued practice.

3. **Consortium for Health Workforce Diversity**

Numerous programs across the UNC system directed at rural and minority students from high school through the post-doctoral level successfully encourage and prepare these students to pursue careers in a variety of health-related fields. However, these programs are not well coordinated. For example, the AHEC Health Careers and Workforce Diversity Program helps prepare middle and high school students from diverse backgrounds to enter and successfully complete a health professional training program. Similarly, North Carolina Health Careers Access Program (NC-HCAP) since 1971 has worked to increase the number of individuals from disadvantaged backgrounds to enter the health professions. The NC Access, Retention and Completion Program (NC-ARC) operates through a partnership between the Department of Allied Health Sciences and NC-HCAP, and works with undergraduate students at a number of minority serving academic institutions. Most recently, the General Administration of the UNC System through the Competitiveness Fund has provided initial funding for a new program within the TraCS Institute that will encourage students form North Carolina A&T State University and North Carolina Central University that participate in clinical translational research to enter all of the health professions. We propose the creation of a Consortium for Health Workforce Diversity to:

- Provide structure and leadership for finding synergies and fostering collaboration, coordination, and expansion among the multiple programs from university and community college campuses; and
- Identify specific needs, find resources, and link them to university and community college based training programs for health professionals.
Housed within the AHEC system, the Consortium would be comprised of representatives from the five health affairs professional schools and other health related programs at Carolina and across the University and Community College systems.

Implementation: The person responsible for implementing the Consortium for Health Workforce Diversity is Margaret Dardess, Tom Bacon?

4.5.3 UNC should lead in utilizing health information to improve health and wellness in North Carolina.

1. Interdisciplinary Health Communications to Benefit North Carolina.

Through voluntary efforts, the UNC-Chapel Hill Interdisciplinary Health Communications Center (IHCC) originated with scholars from the schools of Journalism and Mass Communication, Public Health, Information and Library Science, and the Department of Psychology and later expanded to include affiliates from the schools of Nursing, Medicine and Social Work. IHCC pioneers innovative approaches to health communication through graduate education, local and global outreach, and research. In fall of 2007, IHCC established a graduate Certificate in Interdisciplinary Health Communication. Faculty from the Schools of Public Health and Information and Library Science collaborated with community library partners on pilot projects that identified health and job opportunities as the two types of internet-based information most desired by new patrons. The pilot projects demonstrated:

- NC public librarians' interest in being trained to access and provide health information to patrons and to train patrons to use computers and obtain information over the internet;
- Improved recruitment of new patrons (including low-income, minority individuals) into the public library to obtain information and training.

Web-based and designed to reach rural and underserved areas of the state, the AHEC Digital Library (reaching professionals) and NC Health Info (reaching the public) based at the UNC-CH Health Sciences Library, are collaborations with UNC system institutions, Duke University, AHEC Information and Library System, public libraries, and the State Library. NC Health Info is a national model for "go local" systems funded by the National Library of Medicine to link local health services with reputable health information in MedlinePlus. To build on this work and take it to scale, we propose a Interdisciplinary Health Communication Center to develop strategic initiatives with affiliate scholars and partners, pursue grants for training and education, and develop strategies for practice and dissemination of research to accomplish its objectives to:

- Promote access and use of health information through the state's public libraries, community based organizations, community based education programs, and other venues that can reach out to those who suffer from health disparities (e.g., certain racial and ethnic groups, low-income and rural residents).
- Use multi-disciplinary and multi-institutional approaches to improve the focus, timeliness, and readability of health communications.
Ensure that the right communications are reaching the right audiences, for example, consumers, news media, support groups, service providers, lay health advisors, business and industry, and policymakers.

**Implementation:** The person responsible for implementing the Interdisciplinary Health Communications to Benefit North Carolina is Dr. Jane Brown, …who for the library piece-list more than one person?