

Duke University Hospital

Community Health Needs Assessment and Implementation Plan

FY15 Progress Report and FY16 Implementation Plan

INTRODUCTION

In 1925, James B. Duke willed \$4 Million to establish Duke University Hospital (DUH) and its medical and nursing schools. His goal: to improve health care in the Carolinas, then a poor rural region lacking in hospitals and health care providers. Duke Hospital has devoted itself to that goal ever since, making sure that people across the region are able to get the medical care they need regardless of their ability to pay. Duke is both the predominant health care provider in Durham and the county's largest employer. Part of a full-service tertiary and quaternary academic medical center, DUH is the largest hospital in Duke University Health System (DUHS). For the fiscal year ended June 30, 2015, DUHS provided \$409 million in community benefit and community investment. Of that figure, \$336 million represents the community benefit categories identified by the Internal Revenue Service.

James P. Duke's vision 90 years ago laid the cornerstone for today's Duke Hospital and serves as a guide as DUH reinvests in supporting the greater community. DUH's commitment extends beyond the health care services provided in DUH facilities. DUH also benefits the community through highly regarded medical education programs and through the research conducted to discover new ways to treat illness and disease and to facilitate the translation of that research into population health improvement. Even beyond that, DUH reaches out and is an active partner with patients, neighborhoods, community organizations and governments in innovative efforts to improve to create innovative efforts to improve health and healthcare.

COMMUNITY HEALTH NEEDS ASSESSMENT

DUH collaborates with the Partnership for a Healthy Durham (the State Certified Healthy Carolinians Group) and the Durham County Health Department to conduct the Durham County Community Health Assessment and develops strategies to address identified needs. Faculty and staff of the Duke Division of Community Health and appointed members of the DUH Senior Leadership Team officially serve on Partnership for a Healthy Durham Committees.

The most recent assessment process conducted in calendar year 2014 compiled valid and reliable information about the health of Durham. It included 354 citizen surveys from randomly selected households and 8 community listening sessions with 205 community members. The Community Health Assessment Team – comprised of more than 89 members representing, Duke University Hospital and Duke Regional Hospital (formerly Durham Regional Hospital), universities, local government, schools, non-profit organizations and businesses – worked to direct the activities of the assessment and provide written content and expertise on issues of interest. The assessment identified six health priorities for 2015 – 2017:

1. Access to medical and dental care
2. Mental health and substance abuse
3. Obesity and chronic illness
4. HIV and sexually transmitted infections
5. Poverty
6. Education

The full Community Health Needs Assessment can be found on the DUHS website at:

<http://corporate.dukemedicine.org/AboutUs/Community%20Health%20Needs%20Assessment>

and on the Partnership for a Healthy Durham Website:

http://www.healthydurham.org/index.php?page=health_recent

All of the programs described in the following implementation plan are aligned with the six health priorities with many of the programs addressing combinations of the six health priorities. A brief excerpt from the Community Health Needs Assessment describing each priority is included in this implementation plan. DUH considers this document to be a “working plan” that will continue to evolve over this three year period in order to ensure the efficacy of strategies intended to meet expressed community health needs. This implementation plan does not contain descriptions of the community health improvement work carried out by other components of the larger Duke Health System or Duke University. This implementation plan only represents Duke Hospital’s continually evolving activities and support to improve health with the Durham Community.

IMPLEMENTATION PLAN

Together, with its partners, DUH asks about and listens to concerns, explores barriers to care, analyzes healthcare utilization and costs, identifies partner needs and resources, plans/redesigns services, tracks outcomes, and shares accountability in order to develop effective programs to improve the health of the Durham community. As such this Implementation Plan includes new and long-standing programs.

1. Access to Medical and Dental Care Initiatives

Access to health care in a community refers to the ability of residents to find a consistent medical provider for their primary care needs, to find a specialty provider when needed and to be able to receive that care without encountering significant barriers. Although there are many medical providers, Durham County is particularly hampered by a lack of health insurance coverage (whether private or public, such as Medicaid) for many of its residents. In Durham County, 19% of adults less than 65 years are uninsured.

Project Access of Durham County (PADC) links eligible low-income, uninsured, Durham County residents with access to specialty medical care fully donated to the patients by the physicians, hospitals including DUH, labs, clinics and other providers participating in the PADC network. In FY15, PADC provided services to more than 1,000 patients.

Plans for FY 16: Enroll and care manage at least 1,000 patients; Re-establish the Medical Director Committee to review and finalize outcome metrics; Continue care management assistance of medical respite program.

Local Access to Coordinated Healthcare (LATCH) was initiated in 2002 with Healthy Communities Access Program (HCAP) funding from the US Health Resources and Services Administration (HRSA) to Duke's Division of Community Health, Department of Community and Family Medicine. The founding and sustaining LATCH Partnership includes DUH (which now provides the majority of operating funds), Lincoln Community Health Center, the Durham County Departments of Health and Social Services, El Centro Hispano, and a number of CBOs. Through community-based, linguistically and culturally-relevant care management, LATCH aims to improve health knowledge and self-care, access to health care and health services utilization outcomes among Durham County's uninsured. Care Management services include: health services coordination and navigation (medical, social, behavioral); post-hospitalization follow-up; patient education; chronic disease management; psycho-social support; access to benefits (Medicaid/SSI/SSDI); bills assistance; interpretation/translation; and, transportation coordination. In partnership with other community stakeholders—health care and social service providers, local government and community-based organizations—LATCH monitors health care trends, identifies barriers facing uninsured patients, and, working as a consortium, addresses and eliminates barriers. In FY15 LATCH provided more than 6,000 care management service encounters with patients. Pre- and Post- analysis of patients served by LATCH shows a 17% decrease in hospitalizations.

Plans for FY 16: Reach out and enroll new refugee/immigrant populations arriving in Durham from East Asia, Middle East, East Africa, and Burma; Continue engagement with El Centro Hispano and the Latino Roundtable; Continue enrolling uninsured in the Health Insurance Exchange promoting the United Way "special discount" for Durham residents ; Continue enrolling uninsured and underinsured in LATCH Case Management services.

The Complex Child Program (CCP) provides the coordination of medical and co-management of medical care for children with multiple medically complex issues that require the interaction with multiple specialists. On average these children work with 13 specialists. Before the Complex Child Program care was very fragmented and patients/families have no central "quarterback" helping to oversee the big picture.

Through the CCP parents now have direct phone access to a complex care service (CCS) provider or RN 24/7. The CCP team works with parents to create a comprehensive "complex care plan" that placed in the Child's EPIC record and given to the parents. In addition, the CCP team coordinates inpatient intensive care transitions prior to discharge and conducts intensive outpatient between-visit contacts (phone, clinic visits, and in some cases, home visits). In FY15, CCP served 22 children and their families.

Plans for FY 16: Development of a complex care clinic and enroll 50 new children in the service

Duke- Durham Foster Care Clinic Program is a highly effective partnership between Duke and Durham County. In September of 2013 the Duke Child Abuse and Neglect Medical Evaluation Clinic (CANMEC) partnered with Durham County Department of Social Services (DSS) to formalize a Foster Care Clinic. This clinic provides the Initial Screening and Comprehensive Health Assessment according to the AAP standards for children in foster care in Durham. Children receive a comprehensive medical evaluation including complete physical exam, medical record review as well as screening for dental, developmental,

mental health, and social concerns. Unmet medical needs are identified and the clinic identifies a medical home; arranges medical, mental health, and social referrals; provides follow up care until a medical home is established; and supports social workers with navigating the complex health system

Children in Durham County foster care who have completed a comprehensive assessment at the Duke Foster Care Clinic are current on immunizations, are enrolled in a medical home, are referred for mental health treatment if needed, and are having their ongoing medical, developmental and social needs addressed. The Duke-Durham Foster Care Clinic serves all children in the Foster Care system in Durham County. Unfortunately, the need for this clinic continues to grow each year.

Plans for FY 16: Enable DSS Social Worker to be able to contact Foster Parent(s) regarding upcoming medical appointments, and follow up with Foster Parent(s) in the event of a cancellation and to reschedule child for primary care and specialty visits; Assist CANMEC and PCP exchange medical and psych-social patient information; Provide PCPC with a toll box for assessing at risk kids.

Southern High School Wellness Center provides comprehensive primary care and mental health services at Southern High School to students at the school and is open to all students and staff of Durham Public Schools. Operated by Duke's Division of Community Health on behalf of DUH, the Southern High School Wellness Center will celebrate its 20th anniversary in 2016. In FY15 the Southern High School Wellness Center had to scale back hours due to staffing issues, but still completed 188 patient visits.

Plans for 2016: Continue Primary care and mental health services; continue nutritional counseling; Enroll 520 new students. Add services for faculty and staff of the school and employees of Durham Public Schools.

Durham Child Health Assessment and Prevention Program (CHAPP) was created to close gaps in access for children who have missed preventive visits. In addition, the program seeks to reconnect these children and their families to supportive medical homes.

Together, DUH through the Duke Division of Community Health, the Durham County Department of Public Health, and Durham Public Schools converted three DUH Elementary School Based Health Centers and opened two additional ones utilizing Enhanced Role Registered Nurses (ERRNs) to deliver well-child care to children who are overdue for their well-child checkups. The five schools are in areas of the County that demonstrate significant gaps in pediatric care and the CHAPP clinics operate as satellites of the Durham County Department of Public Health. DUH continues to support mental health services at all five of the sites and provides medical back up.

Plans for FY 16. FY 16 will be the first full year of operation for CHAPP. It is anticipated that the program will reduce the cost of well-child visits while expanding access to physicians for complex acute and chronic needs by ensuring that both enhanced role nurses and primary care physicians are working at the top of their licenses. CHAPP evaluation metrics will include: number of well child care visits; number of children referred to a medical home; number of vaccinations administered; number of dental, hearing, vision referrals; and financial inputs and outputs to determine fiscal efficacy, sustainability, and ideally, expansion opportunities.

Just for Us (JFU) provides in-home care program for low-income, frail elderly and disabled. JFU was launched in 2002 as a collaboration of Duke, Lincoln Community Health Center, Durham Department of Social Services (DSS), the local area mental health entity, and the Durham Housing Authority. DUH

provides the majority of ongoing support for the program. Through Just for Us, an interdisciplinary team of providers serves clients in their homes, providing medical care, management of chronic illnesses, and case management. Each participant receives a home visit every 5 weeks unless there is an acute episode or a hospital discharge, for which a visit is scheduled immediately. Visits include medication reconciliation, social issues, support services, chronic disease management, and post-hospital care. The health care team consists of a clinical provider (PA, NP or MD), occupational therapist, registered dietitian, social worker, phlebotomist, and community health worker. In FY15, Just for Us provided transitioned to EPIC (electronic medical record system) and experienced the typical decrease in productivity associated with such transitions. In addition, Just for Us lost one of its team members causing a further reduction in the ability to provide services. In FY15 Just for Us completed 841 patient encounters.

Plans for FY16: Enroll 112 new patients; Expand geography of service to outside of the existing service sites buildings; Establish provider linkage and support to patients of the homeless shelter and the Duke CHF clinic.

Community Clinics: DUH in partnership with Lincoln Community Health Center collaboratively operates three community health clinics; the Lyon Park Community Clinic, the Walltown Neighborhood Clinic and the Holton Wellness Center. The clinics were designed to provide primary care, health education, and disease prevention to the underserved populations of Durham. The clinics provide medical care for persons with and without health insurance. Those without insurance are seen based on a sliding fee scale. No patient is denied care based on inability to pay for services. The Lyon Park Clinic was the first of the collaborative neighborhood clinics, opening its doors for patient care in April 2003. The Walltown Clinic opened in January 2005 and the Holton Clinic opened in August 2009. Each clinic received start-up funds through a Duke Endowment grant. Clinics generate revenue through a contract with Lincoln Community Health Center and receive significant support from DUH. The clinics operate as Family Medicine Practices and are 5 days a week. Staffing includes Physician Assistants, Nurse Practitioners and Family Physicians, who serve as supervising doctors. Each clinic is supported by nursing staff: Certified Nursing Assistants, Licensed Practical Nurses, or Certified Medical Assistants and a staff assistant. The staff assistant performs all administrative tasks for the clinic including answering incoming phone calls, registration, scheduling, etc. In FY2015, the community clinics transitioned to EPIC (electronic medical record system) and experienced the typical decrease in productivity associated with such transitions. In FY15, the clinics completed 11,000 patient visits.

Plans for FY16: Provide 15,000 patient encounters; Continue the Breast and Cervical Cancer Prevention Program for uninsured woman; Continue Health Department HIV/STD screening program; Continue evening clinic hours.

2. Mental Health and Substance Abuse Initiatives

An estimated 17,000 residents of Durham County need mental health treatment and 19,000 need substance use treatment.ⁱ Alcohol is the primary substance abused by Durham County residents seeking crisis detoxification services and by adolescents in Durham's middle and high schools.ⁱⁱ Respondents in the *Community Health Opinion Survey* identified addiction to alcohol, drugs or prescription pills as the number one community health problem. DUH has partnered with and supports a number of collaborative initiatives to improve access to mental health services and reduce substance abuse.

Project Lazarus in conjunction with Community Care of North Carolina (CCNC) and DUH seeks to reduce opioid-related overdoses; optimize treatment of chronic pain; and manage substance abuse issues related to opioids. The core components of the Project Lazarus model are: 1) Public Awareness, 2) Coalition Action, and 3) Data & Evaluation. Strategies of the model include: Community Education; Provider Education; Hospital ED Policies; Diversion Control; Pain Patient Support; Harm Reduction; Addiction Treatment. DUH is a key partner in supporting the following activities:

Community Coalitions: Durham Crisis Collaborative; Partnership for a Healthy Durham Substance Use/and Mental Health Committee and Durham Together for Resilient Youth.

Naloxone Outreach: Pharmacies (Duke South, Clinic Pharmacy, Main Street, Gurley's, Josef's, & Duke Cancer Specialty); Durham County Department of Public Health; Durham Mobile Crisis Unit.

Provider Education: Provider Toolkits and CME Education; Use of Pain Agreements; Use of Controlled Substance Reporting System (CSRS); Chronic Pain Provider Consultation Calls.

Diversion Control: Permanent Drop Boxes in 5 of 6 counties (Durham, Franklin, Person, Granville, & Vance).

Chronic Pain Patient Support: Chronic Pain Self-Management Workshops; Chronic Pain Management Resources; Key community presentations.

FY15 accomplishments include:

- **62** naloxone kits provided to pharmacies
- **7** clinics with providers prescribing naloxone
- **35** providers received CME training for Project Lazarus
- **6** monthly chronic pain telephone consultations for primary care providers held reaching **20** providers
- **20** patients received Chronic Disease Self-Management education (Stanford Model)
- **120** pharmacies received announcement for CME training opportunities
~**50** providers received information on chronic pain resources and telephone consultation at NPCC bi-annual meeting session
- **180** provider educational handouts disseminated
- **70** referrals for chronic pain resources
- **60** patient reminder calls for DUH -DOC Pain Classes
- **5** patients to complete 8 week DUH - DOC Pain Class

Plans for FY16: Launch an integrated care assessment and screening program for Medicaid and uninsured adult patients in a Durham high volume adult clinic that screens for depression, anxiety, substance abuse and chronic trauma; Continue Project Lazarus and distribution of naloxone kits through PCPs, pharmacies, community partners and community Mental Health/substance Abuse providers; Continue Provider Education, Diversion Control, Community Coalitions and Chronic Pain Support.

HOMEBASE: is an integrated model of primary care and mental health delivered by a dually- trained PA and supported by in the DUH Outpatient Clinic (DOC). The goals of the program are to improve care and outcomes for DOC patients with co-morbid mental health conditions; encourage and enable patients to seek services at the DOC first and not the ED; reinvent a Care Team Model at DOC to increase patient-provider continuity, provider accountability for patient outcomes, use of best practice; and improve transitions of care from hospital and ED settings to clinic and home, particularly for high utilizer (HU)

patients. During its last two pilot years, HOMEBASE served 44 patients decreasing their Emergency Department use by 53% and their hospitalizations by 36%.

Plans for FY16: Continue enrollment of high risk patients with a goal of 100 care plans.

DUHS Safe Opioid Task Force was created to improve the safety of pain management by encouraging clinical practice standardization, where clinically appropriate, when opioid therapy is designated for treatment. The Opioid Safety Task Force provides recommendations for the initiation and management of opioid therapy across Duke University Health System (DUHS) to improve personal and community safety and reduce harm associated with the high risk treatments while engaging patients in their own care. DUH along with Duke Regional and Duke Raleigh Hospitals serves as a pivotal player in all aspects of the work of the Task Force. Over the last two years, all three hospitals engaged in the standardization of NC Medical Board Guidelines; helped to develop 12 smartphrases developed in EPIC; created 12 patient education videos ; and provided 35 advanced practitioners education on pain management & safe opioid prescribing.

Plans for FY 16: Conduct provider education with every primary care, specialty care and hospital service unit adopting and practicing the policy; Operationalize system to track and monitor providers adherence to policy; Continue monthly provider learning collaborative with pain clinic.

3. Obesity and Chronic Illness Initiatives

Four of the 10 leading causes of death in North Carolina are related to obesity: heart disease, type 2 diabetes, stroke and some kinds of cancer. Overweight and obesity were the second leading causes of preventable death in North Carolina in 2010.ⁱⁱⁱ Obesity rates continue to rise across all ages, genders and racial/ethnic groups in Durham County. The most recent combined obesity and overweight rates are: adults, 65%;^{iv} Durham Public School high school students, 32%,^v and entering kindergarteners, 19%.^{vi} Diabetes is the 7th leading cause of death in Durham County and 8% of adults have diabetes.

Kohl's Bull City Fit is a community-based wellness program and is part of the larger Duke Children's Healthy Lifestyles program. The Healthy Lifestyles program seeks to address weight-related health problems for children by offering caring providers, family-centered treatment programs, highly trained educators and researchers, and strong community partnerships. Kohl's Bull City Fit helps in this effort by offering free evening and weekend activity sessions for the larger community. These sessions cover various themes that encourage and promote active living, such as fitness games, sport lessons, exercise routines, swimming, cooking, and gardening. Each activity is facilitated with the support of energetic staff and volunteers to create a positive and fun environment for all.

Kohl's Bull City Fit empowers the whole family to increase knowledge and practice of physical activity and healthy eating ; address current weight-related illness and prevent chronic disease through increased activity levels; Improve quality of life by promoting healthy behaviors; Increase confidence, support positive change, and build a lifelong commitment to a healthy lifestyle.

Partners include: Durham Parks and Recreation; Durham City Government; Durham County Department of Public Health; East Durham Children's Initiative; Lincoln Community Health Center; Community Nutrition Partnership; Veggie Van; Blue Pointe Yoga; Durham Public Schools; Partnership for a Healthy

Durham; Duke Service Learning; Duke Family Medicine; Duke Children's Hospital and the UNC School of Social Work

DUH also supports initiatives through the Neighborhood Clinics, School-Based Health Centers, Just for Us and the Duke Outpatient Clinic (all described earlier in this document) that target chronic illness.

Plans for FY16: Continue to collaborate and look for opportunities to expand the programs.

4. HIV and Sexually Transmitted Infections

Sexually transmitted infections may lead to premature death and disability and can result in significant health care costs. Chlamydia, gonorrhea, and syphilis are the three most common STIs in North Carolina and Durham County. Although HIV is not as common, Durham ranks fourth highest in North Carolina, with an average rate of HIV disease (29.9 per 100,000) well above the state rate (16.4 per 100,000).

While DUH through the programs described in this document supports mechanisms to address HIV and Sexually Transmitted Infections, it does not include specific strategies in this plan to address the rate of HIV and sexually transmitted infections, because considerable work is already being done through organizations within the community. Through the Partnership for a Healthy Durham, the HIV/STI Advisory Council brings together community members and agencies to focus on strategies to prevent the spread of syphilis and HIV/AIDS. In addition, Lincoln Community Health Center operates an Early Intervention Clinic for patients with HIV/AIDS at the Durham County Health Department.

Plans for FY 16: DUH will continue to partner with the many organizations working on addressing HIV and Sexually Transmitted Infections. DUH will also be key partner in the soon to launch Durham Knows public health campaign designed to increase routine HIV testing; increase early diagnosis of HIV-infected persons and enhance linkages to care for individuals who are HIV positive.

5. Poverty

People with higher incomes, more years of education, and a healthy and safe environment to live in have better health outcomes and generally have longer life expectancies. In Durham County, 16.6% of individuals live in poverty. Female single-parent families are disproportionately at risk for poverty than married couple families (41.5% to 8.7%) and 40.6% of female single-parent families with related children under 18 years are living in poverty.^{vii} Nearly one-half of Durham's renters are paying 30% or more of their income for housing.

Durham's Bull City Connector Is a fare-free Connector Bus Service that continuously loops through stops from Downtown Durham all the way to the Duke Hospital, Duke Clinics, and Duke Eye Center campuses. On average, Bull City Connector buses accumulate 1,500 riders every weekday and complete their loops in 17 minute intervals. Safe and effective transportation is a key correlate in health and economic well-being. The Bull City Connector has proven to be an asset for Duke employees, students, and patients.

Plans for FY16: Continue to support the Bull City Connector and help to increase ridership.

SSI/SSDI Outreach, Access and Recovery (SOAR): helps patients who are chronically homeless, or at risk of homelessness access health insurance, a stable income, and medical care by assisting these individuals in applying for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI). The homeless population and those reentering the community from an institution face numerous challenges in accessing services. Approval on initial SSI and SSDI applications for these at-risk populations, who have no one to assist, is about 10-15 percent. For those with mental illness, substance abuse issues, and/or co-cognitive impairment, the application process is even more difficult. Even with assistance, the application process can take up to six months. Through SOAR, these individuals with complex needs are provided case management for home, hospital, and clinic visits; provided with a step by step explanation and completion of all applications for federal disability benefits; receive expedited applications for monthly income and Medicaid/Medicare; and linked to community resources. DUH currently funds two SOAR Case Managers who have successfully helped more than 100 patients in the last 3 years.

Plans for FY16: Continue and expand the SOAR Program

Durham Medical Respite Program is pilot program for homeless patients that emanated out of the work of PADC (noted earlier in this plan) in 2014. The Medical Respite Pilot Program operates 24/7 and provides participants with clean and safe housing which will meet the standards that hospitals use when planning for discharge to home. Depending on participant needs and demographics, potential sites include transitional housing (Just a Clean House), motels, or Healing with CAARE, Inc. per diem housing. Room and board is funded by Durham County Department of Public Health through a contract with Project Access of Durham County (PADC), along with private donations. As the program becomes fully operational, each program participant will work with a transitional nurse care manager (provided by Duke's Division of Community Health) to maximize their health and connect with appropriate community resources and services.

Plans for FY16: Achieve full operational status for the program and continue to collaborate on potential expansion opportunities.

6. Education

Quality child care and early education predict a child's future success and the academic success of young adults is strongly linked with their health throughout their lifetime. The importance of a high school diploma and higher education cannot be overstated. College graduates age 25 and over earn nearly twice as much as workers who only have a high school diploma. The unemployment rate for workers who dropped out of high school is nearly four times the rate for college graduates.^{viii} In Durham County, the four-year high school graduation rate is 79.6% compared to North Carolina's rate of 82.5%. The overall 4-year cohort graduation rate has increased by nearly 10% since 2010-11, but there is still a disparity in the percentages of White versus minority students who are graduating from high school. For example, 84.7% of Whites graduated in 2011-2012 compared to 74.7% of Blacks and 73% of Hispanic students

Learning Together provides training and opportunities for Duke students (learners) to participate in health-related community service activities. Service opportunities may include providing health education to elementary school children, helping frail seniors complete the application process for Food Stamps, and conducting workshops to teach patients how to effectively communicate with their doctor. Through Learning Together, learners work with a variety of populations, experience the interdisciplinary nature of community work, and develop competence for working with diverse communities and cultures. Learners who participate gain skills they can use to work effectively with any community. In FY15 Learning Together trained 126 Duke learners who in turn volunteered for community services activities which provided assistance for 300 adults and 1,125 children.

Plans for FY 16: Continue to operate the Learning Together Program with a special focus on partnering with Durham Public Schools and other education and health and human services entities.
