

# The Cecil G. Sheps Center for Health Services Research

## The University of North Carolina at Chapel Hill

*Providing evidence  
to improve the US  
healthcare system  
through*

RESEARCH

PRACTICE

POLICY



January 2017

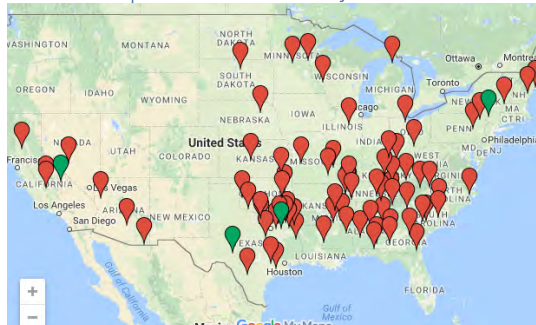
The Cecil G. Sheps Center for Health Services Research, founded in 1968, is one of the nation's leading institutions for health services research. Our interdisciplinary team undertakes innovative research and program evaluation to understand health care access, costs, delivery, outcomes and value. This research provides the evidence base to improve health through a more effective and efficient health care system.

We link small NC physician practices to large health systems for better tools to fight heart attacks and stroke, the number one killer of North Carolinians.



We collect and disseminate data showing where rural hospitals close and how closing hospitals can impact health care and jobs in the area.

80 Rural Hospital Closures: January 2010 – Present



<http://bit.ly/ruralclosures>

We developed a statewide network of providers, academic institutions and patients to improve delivery and solve problems in primary care in North Carolina.



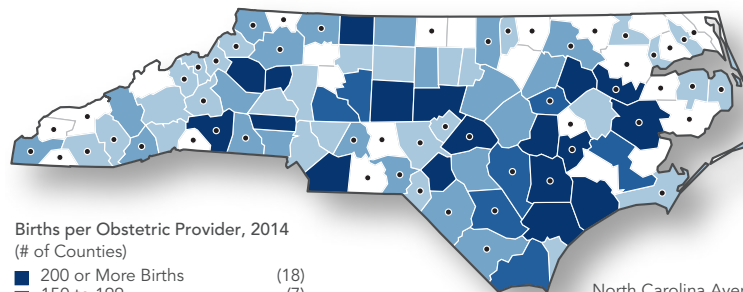
We study how to better manage the symptoms of dementia and create healthy aging experiences for our growing elderly population.



We calculate the return on investment, health improvement and effectiveness of payment policies in public programs such as Medicaid, Medicare and public health.

We have collaborated with RTI International for more than 20 years to find evidence to determine which healthcare tests and treatments are most effective.

Resident births per obstetric care provider\*, North Carolina, 2014.



North Carolina Average:  
103 births per provider  
Total # Births: 120,948  
Total # Providers: 1,178

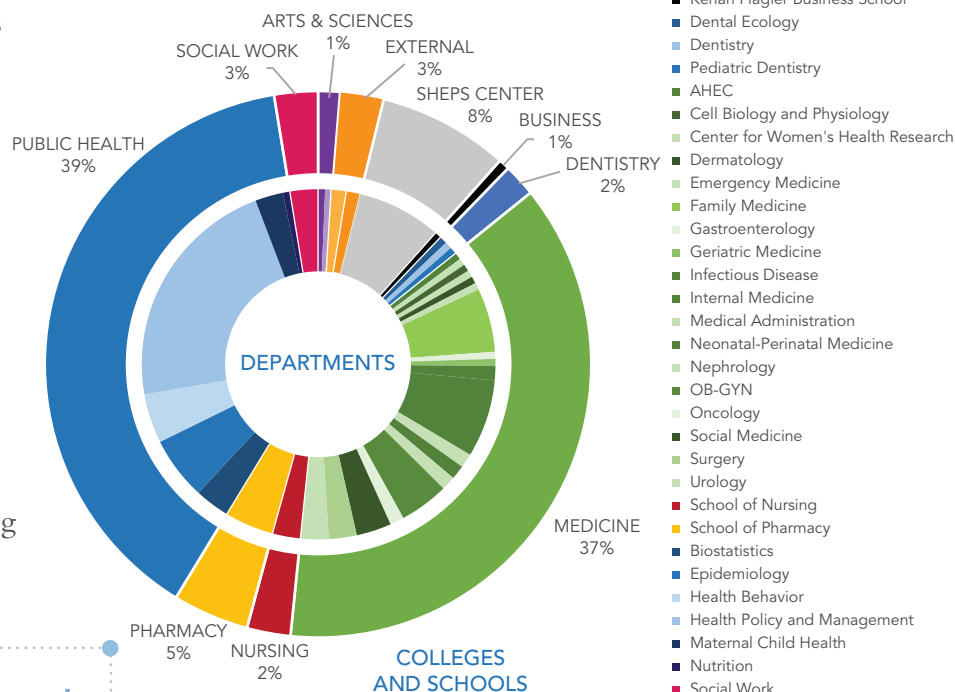
Note: Data include active, in-state Certified Nurse Midwives (CNMs) and active, in-state, non-federal, non-resident-in-training physicians who were licensed in North Carolina as of October 31, 2014 and reported that they provide obstetric deliveries. Sources: NC HPDS; NC DHHS Vital Statistics; US Census Bureau and Office of Management and Budget.

We provide expertise to the North Carolina General Assembly regarding anticipated changes in the availability of and demand for health providers to inform policy decisions related to funding, education, regulation and scope of practice.

## Our Work is Interdisciplinary

Our projects thrive on interdisciplinary collaboration among disciplines such as medicine, public health, nursing, dentistry, social work, allied health and the social sciences. In addition to a rich and varied library of data sets, the Center's most valuable asset is its professional research staff of data analysts, librarians, IT professionals, research administrators and other experts enabling investigators to pursue innovative solutions to the most pressing questions in health services delivery. The Center has a long-standing reputation for conducting high-quality, objective research that informs science, practice and policy.

### Home Departments of Sheps Research Fellows



- Clinical Psychology
- Geography
- Community Care of NC
- RTI International
- Sheps Center
- Kenan Flagler Business School
- Dental Ecology
- Dentistry
- Pediatric Dentistry
- AHEC
- Cell Biology and Physiology
- Center for Women's Health Research
- Dermatology
- Emergency Medicine
- Family Medicine
- Gastroenterology
- Geriatric Medicine
- Infectious Disease
- Internal Medicine
- Medical Administration
- Neonatal-Perinatal Medicine
- Nephrology
- OB-GYN
- Oncology
- Social Medicine
- Surgery
- Urology
- School of Nursing
- School of Pharmacy
- Biostatistics
- Epidemiology
- Health Behavior
- Health Policy and Management
- Maternal Child Health
- Nutrition
- Social Work

## Three Key Areas of Impact

Our Center conducts health services research to understand health care access, costs, delivery, outcomes and value, and to provide evidence to improve the US health care system. Within this framework, our three key areas of impact are research, policy and practice.

### RESEARCH: WE ANSWER QUESTIONS TO PROVIDE KNOWLEDGE AND EVIDENCE.

**How can we combat the number one killer in our state and country?** Our Heart Health Now! project seeks to prevent heart attacks and stroke, the leading cause of death in NC and the US, by giving small NC physician practices access to resources and tools that are typically only available to larger groups. The \$15.4 million, 3-year project funded by the Agency for Healthcare Research and Quality (AHRQ) reached nearly 600,000 NC residents in 2016 through 245 practices.

**Are mental health services available to vulnerable groups?** Our mental health research program is learning how to best serve members of the Latino community who need mental health services by forming an advisory group of parents and caregivers to help inform research projects and programs. The group recently completed a video highlighting the mutual benefits of the advisory process.



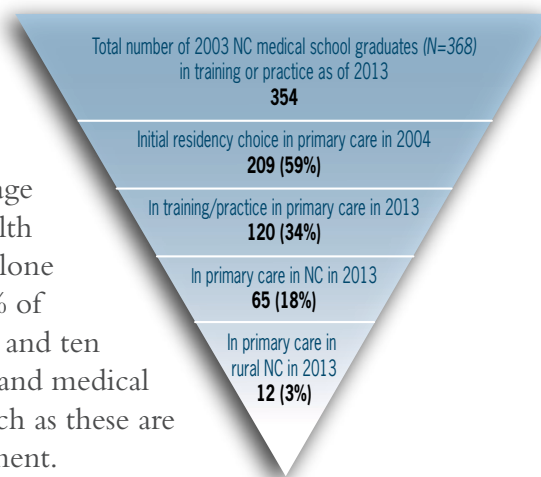
[https://youtu.be/9Ri\\_oYz1mvc](https://youtu.be/9Ri_oYz1mvc)

**How can we better manage the symptoms of dementia?** As many as 7 out of 10 adults in assisted living facilities have some form of cognitive impairment, and almost 70% of assisted living communities use antipsychotic drugs off-label to control residents' behaviors. Our Aging, Disability and Long-Term Care research team is examining the inappropriate and excessive use of antipsychotic medications and looking for alternative therapies to manage behavioral symptoms of dementia for adults in assisted living through a \$3.4 million grant from the National Institute on Aging.

## POLICY: WE TRANSLATE RESEARCH AND DATA INTO INFORMATION THAT POLICYMAKERS CAN USE TO MAKE EVIDENCE-BASED DECISIONS.

**Will we have enough physicians to meet patients' needs in the future?** Research from the Program on Health Workforce Research & Policy found that there is not a coming physician shortage in NC, but that physicians need to be better distributed to meet health needs. They also found that expanding medical student enrollment alone is unlikely to improve the distribution of physicians because only 3% of medical students end up practicing in rural primary care in NC five and ten years after graduation from medical school. As the state looks to expand medical school enrollment or develop new medical school programs, data such as these are needed to design better strategies to maximize the return on investment.

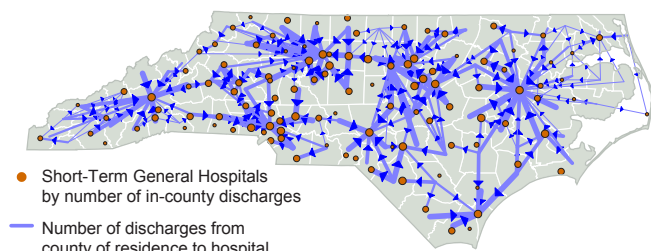
North Carolina Medical Graduates: Retention in Primary Care in North Carolina's Rural Areas Ten Years After Graduation



## Do North Carolina's health facilities have the capacity to meet patients' needs?

Each year, the Sheps Center provides data to the Division of Health Services Regulation (DHSR) in the NC Department of Health and Human Services. We examine the number of hospital discharges, number of beds, patient volume and other indicators of facility capacity. These data help DHSR maintain their NC Medical Facilities Plan and support Certificate of Need decisions.

Patient Origin for North Carolina Residents Inpatient Discharges by County of Residence and Hospital, 2014



For full map, notes and sources see page 6, <http://www.shepscenter.unc.edu/wp-content/uploads/2013/05/dhsr2014maps3.23.16.pdf>

## PRACTICE: WE DISSEMINATE BEST PRACTICES AND TOOLKITS IDENTIFIED THROUGH RESEARCH TO HEALTH CARE PROVIDERS.

**Are we performing the right tests and providing the right treatment to lower costs, improve care and enhance patient safety and outcomes?** The collaborative RTI-UNC Evidence-based Practice Center (EPC) has conducted systematic reviews and meta-analyses to inform clinical practice for more than 20 years. Their reviews directly inform policy decisions, recommendations and clinical practice guidelines from many national organizations, such as the Centers for Medicare & Medicaid Services, the NIH Pathways to Prevention Program, the NIH Office of Medical Applications of Research State-of-the-Science proceedings, the American Psychological Association and the US Preventive Services Task Force (USPSTF). For example, the EPC conducted systematic reviews for the USPSTF to develop recommendations on screening and counseling for unhealthy alcohol use, screening for carotid artery stenosis, screening for latent tuberculosis, serologic screening for genital herpes and screening for obstructive sleep apnea.

**How do we test new models of healthcare delivery and disseminate research and best practices to clinicians to improve patient care?** The North Carolina Network Consortium (NCNC) is a diverse statewide consortium of providers, academic institutions and patients whose mission is to address pressing questions related to the delivery of primary care health services and the management of primary care problems. Seven practice-based research networks have combined resources in forming the NCNC. They represent more than 2,100 providers in over 350 practices across the state, including all three primary care specialties (family medicine, internal medicine and pediatrics), and have a strong representation of minority patient populations.



# About the Sheps Center

## History

The Cecil G. Sheps Center for Health Services Research was started in 1968 with funding from the National Center for Health Services Research (now the Agency for Healthcare Research and Quality, AHRQ). It was one of the first five health services research centers in the country. The Center is named for Cecil G. Sheps, MD, MPH — an internationally known health services researcher. Since then, the Center's work has expanded greatly, achieving state, national and international visibility.

## Leadership

The Center is led by **Mark Holmes, PhD**, an economist who is an Associate Professor in Health Policy and Management in the Gillings School of Global Public Health. Dr. Holmes has worked at the Sheps Center since 1997 when he started as a graduate assistant. The Sheps Leadership Team also includes Deputy Director for Policy **Erin Fraher, MPP, PhD** (Family Medicine) and Deputy Director for Research **Dan Jonas, MD, MPH** (Internal Medicine), both faculty members in the UNC-CH School of Medicine. Other Deputy and Associate Directors handle research support services such as research administration, information technology and proposal development. These support services serve as a hallmark of the Center by enabling investigators to develop successful competitive proposals.

## Research Programs

- Aging, Disability and Long-Term Care
- Child and Adolescent Health
- General Health Services Research
- Health Disparities
- Health Workforce Research and Policy
- Healthcare Economics and Finance
- Healthcare Organization Research
- Medical Practice and Prevention
- Mental Health and Substance Abuse Services and Systems
- North Carolina Institute of Medicine
- Primary Care Research
- Rural Health Research

## Research Services

- Analytic Programming
- Communications
- Computer Support
- Data/Infrastructure Security
- Data Stewardship
- Data Visualization
- GIS/Cartography
- Graphic Design
- Library Services
- Research Administration
- Web/Database Systems
- Development



**UNC**  
THE CECIL G. SHEPS CENTER  
FOR HEALTH SERVICES RESEARCH

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# Sheps Center by the Numbers

In a typical year the Sheps Center has:

**\$18 Million**  
research funding  
in FY 2015-16

including

**8%**  
from state appropriations  
in FY 2015-16

support

**220**  
staff and faculty

from

**35**  
home departments

in

**8**  
UNC-CH schools

**64%**

average funding  
success rate

results in

**70**  
funded research grants  
and service contracts

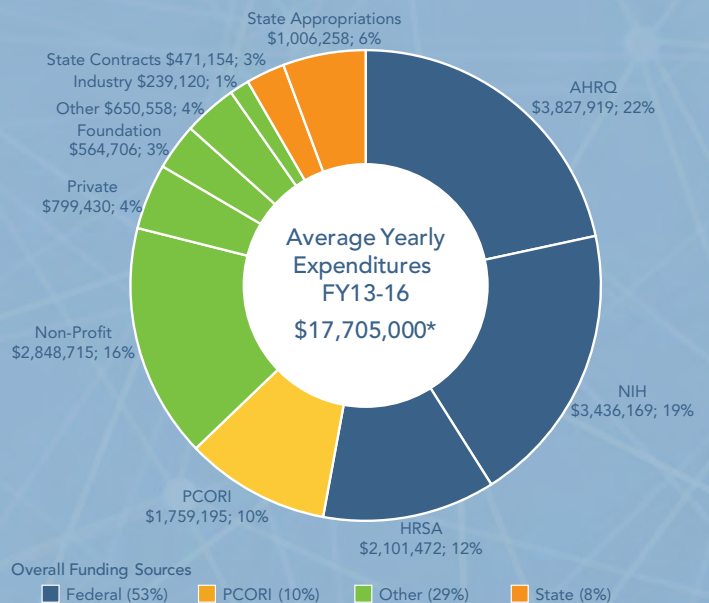
which produce

**100 or More**  
peer-reviewed  
publications

and

**75 or More**  
other publications,  
presentations and  
products annually

Average Yearly Expenditures by Major Funding Source  
Sheps Center, July 1, 2013 - June 30, 2016



Note: Data and chart do not include "Other Federal" funds of \$14,979 expended in FY2015-16.  
Source: Business Office, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Credits: Photo on front: "Last Station Nursing Home" by Ulrich Joho, <https://www.flickr.com>; Blue background design: adapted from Freepik, <http://www.freepik.com>; UNC Old Well photo (below): Jon Gardner, UNC-CH.

