Getting Safe, Effective Drugs to Those Who Need Them
Pharmacoepidemiology evaluates drug benefits and harms

Understanding “What Works” in Heath Care
Creating a successful health care model is one of the most urgent priorities of our time. One means for assessing success is through “comparative effectiveness research”—determining benefit-to-harm ratios for different treatment options. In spite of pre-marketing proof of effectiveness in randomized clinical trials, often not enough is understood concerning the possible benefits and harms that await the very segment of the population that will receive prescriptions for these drugs.

Universal Access to Safe, Effective Drugs

• **Older Adults Are Often At Risk**
  Older adults diagnosed with several medical conditions, using multiple medications are the most vulnerable to possible harms from drug therapies because they are often excluded from clinical studies for new drugs.

• **A Rich New Source of Information**
  Prescription drug claim data for the elderly, collected nationally since the introduction of Medicare Part D subsidies in 2006, have only recently been made available to academic institutions by the Centers for Medicare & Medicaid Services. These data, de-identified to protect patient privacy and linked to Medicare data on other health claims, can be analyzed using state-of-the-art pharmacoepidemiology methods to assess the benefits and harms of drugs in a population.

• **UNC at the Forefront of Analysis**
  UNC will be among the first academic centers to receive Medicare Part D national-level data to assess the best options in drug therapy, especially in older adults. This Innovation Lab will permit the pharmacoepidemiology program at the UNC Gillings School of Global Public Health to build the expertise and capacity necessary to draw valid conclusions about optimal drug treatment decisions. Analysis of these data will help to fill a gap in understanding and provide potentially life-saving information.

**IMPACT!**
**Trusting the Drugs We Take**
Drugs are a mainstay of today’s healthcare, but pre-marketing drug trials must be followed up with post-approval studies on drug benefits and harms in order to make optimal treatment decisions, avoid unnecessary treatments and improve public health.

**GOAL**
To improve drug treatment decisions by employing the latest pharmacoepidemiology methods to assess drug benefits and harms in the population.

**PARTNERS**
UNC School of Medicine, UNC Eshelman School of Pharmacy, UNC Sheps Center, National Institute on Aging, US Federal Agency for Healthcare Research and Quality (AHRQ), UNC-GSK Center of Excellence in Pharmacoepidemiology and Public Health

**Leadership**
**Til Stürmer**, MD, MPH, associate professor of epidemiology and Director of the UNC-GSK Center of Excellence in Pharmacoepidemiology and Public Health, will lead an interdisciplinary team in evaluating epidemiologic methods and studying the treatment of chronic disease in elderly using prescription drugs from the perspectives of pharmacoepidemiology, clinical medicine, biostatistics, and health services research.

Anticipate. Accelerate.  
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