

# HEADGames

The NFL's centennial season began with shocking news: 29-year-old quarterback Andrew Luck was retiring after just seven years in the league.

Luck had been stuck in an injury-rehab-repeat cycle for years. A concussion and a lacerated kidney were just a few of a long list of medical ailments the star quarterback battled over his short career.

Athlete health and wellness have always been a public health concern. But now, says Dr. Jeff Milroy, the conversation is louder, and even more public, than ever before.

As an assistant professor of public health education and associate director of UNCG's Institute to Promote Athlete Health and Wellness, Milroy is one of the leaders pushing this conversation forward. His research centers on improving health outcomes for athletes.

While stories of professional players grab our attention, Milroy is focused on a much larger group with much more potential for public health impact: youth and college athletes.

According to data from the Sports and Fitness Industry Association, 56.5% of U.S. children, ages 6 to 12, played a team sport at least one time during 2017. Nearly 8 million students participate in high school athletics, and on the collegiate level, there are more than 500,000 student-athletes nationwide.

Recently, Milroy and his colleagues received a National Institutes of Health grant to investigate how parents

and coaches affect young athletes' concussion disclosure behavior. Studies show that over 50% of sport-related concussions go unreported, resulting in delayed care and long-term health impacts.

The new study builds off a 2016 study, funded by the NCAA and U.S. Department of Defense, in which Milroy and Dr. David Wyrick explored the impact of athlete-coach relationships on concussion disclosure in college athletics.

They found that communication from coaches matters. When athletes receive concussion-related messages from their coaches that specifically support disclosing symptoms, says Milroy, athletes are more likely to report problems.

But Milroy's mission is much broader than concussions. His work is about creating a sport culture in which athlete mental and physical health is prioritized by coaches, parents, school administrators, and athletes themselves.

The Institute to Promote Athlete Health and Wellness, led by Milroy and Wyrick, is recognized as a national leader in this space and currently serves as the educational partner of the NCAA Sport Science Institute. The two institutes work closely together on a variety of issues – including mental health, sexual violence, and alcohol and drug misuse – that impact college athletes.

"When it comes to the student-athlete population, we have more data than any other group out there, besides the NCAA," says Milroy.



## DOES YOUR PREMIUM PAY OFF?

When you're paying an insurance premium, the question "Does my health insurance actually make me healthier?" might be more exasperation than genuine curiosity.

But for Assistant Professor of Economics Martin Andersen this question fuels a unique set of research questions at the nexus of health insurance and health.

### WHAT THE DOCTOR ORDERED

The National Institutes of Health recently awarded Dr. Andersen \$275,000 to study prescription drug utilization and health outcomes, as they relate to diabetes, urinary tract infections, and pneumonia.

He's exploring the effects of utilization management – restrictions that insurance companies can place

on medications, treatments, and procedures – on beneficiaries' health outcomes.

"UTIs and pneumonia are quite common for Medicare subscribers – and major causes of morbidity and mortality. We track diagnoses, drugs dispensed, and patient outcomes. Different plans use different utilization management strategies, so we can compare how they're doing," he says.

"Since 2006, more than 30 million Americans have been enrolled annually in various Medicare Part D plans. Almost half of all drugs in these plans have some type of utilization management. Understanding these effects will provide insight into whether we should regulate utilization management."

The Bryan School researcher is

*Milroy, seen here at a Greensboro youth sports event, leads the research team, which includes Dr. Wyrick, Ph.D. student Pauline Privitera, Dr. Emily Kroshus at Washington State University, and Dr. Bill Hansen of Prevention Strategies, LLC, a UNCG spinoff company.*

The UNCG institute, which has received over \$1.8 million in funding since it launched in 2013, also works with the NFL Foundation and other organizations that advocate for the health and wellness of student-athletes.

While the work often involves specific interventions for specific populations, the end goal is much bigger.

“When I have conversations with schools that are ahead of the curve, they’re talking about creating cultures to spur the holistic success of their athletes,” Milroy says.

While sport often gets a “bad rap,” he says, positive sport cultures have the power to do a lot of good. “It’s not just about wins and losses. It’s about developing and fostering a culture that views human development as paramount and encourages athletes to become their best selves, on and off the field.”

*By Alyssa Bedrosian*

*Learn more at [athlethewellness.uncg.edu](http://athlethewellness.uncg.edu)  
[phe.uncg.edu/team/jeff-milroy](http://phe.uncg.edu/team/jeff-milroy)*



also exploring how the process is impacting prescribed opioid use, and by extension overdose rates. Preliminary results show that Medicare manages drugs with overdose risks more tightly – a positive impact. “Having a prior authorization or therapy requirement means you’re less likely to have an overdose.”

But, he adds, economists always look for the trade-offs. “This may mean some patients suffer more pain.”

#### **PROOF OF CONCEPT**

One of Andersen’s early successes in illustrating the connections between insurance and health came from an analysis of the 1973 expansions of Medicare coverage – specifically their effects on individuals with end-stage renal disease, in terms of insurance coverage, health care utilization, and mortality.

“Suddenly, people who could never have

afforded lifesaving dialysis were receiving this treatment,” says Andersen. “Because Medicare was paying dialysis clinics, more could enter the market, giving many more people access to treatment – a classic example of the supply-side effect.” From 1973 through the late 1970s, there was a huge reduction in kidney disease deaths.

His paper on the subject appeared in one of the top journals in health economics.

#### **RECOVERING INVESTMENT BANKER**

Andersen’s passion for these topics began in his previous life as an investment banker. He covered pharmaceutical companies, sparking his interest in the economics of the drug and health care industries. To delve into the big questions he saw facing health care, he decided to pursue graduate studies in public health and health policy.

In 2017 the U.S. spent \$3.5 trillion on health care, or 18% of the national economy. “There’s no prospect of this number going down in the near future. So my fundamental question is: Are we getting value – longer, better, healthier, happier lives – as a result of that spending?”

“My hope is my research will help decision makers understand that health insurance is not a luxury. It can genuinely affect people’s lives for the better – making them healthier and more financially secure.”

*By Susan Poulos*

*Learn more at [go.uncg.edu/andersen](http://go.uncg.edu/andersen)*