Mandi Bishop

A hardcore data geek with a Masters from FSU and a passion for analytics, Mandi fell in love with BASIC and her PCjr early. She continues to be a patient engagement advocate, healthIT innovator and dreamer.

Jacksonville, FL

@MandiBPro

Nick Kypreos

A music school dropout, Nick persued a PhD in Physics from UF. Eventually working as a data scientist with CERN, Microsoft and Amazon, he now hacks on challanging public data sets. For fun. In R.

Seattle, WA

@DoomSuckle

Lauren Still

Jack of all trades, master of some, Lauren is a health IT generalist. Currently handling all things policy related for DICOMGrid, she fills her days talking FDA regulations and avoiding picture oppertunities.

San Franciso, CA

@LaurenCStill

> " We shape our tools and thereafter our tools shape us."
>
> — Marshall McLuhan

The Beginnings:

While we take health care, and data science seriously, #TeamFloriduh also wanted to have some fun with the challenge, and explore ideas outside of the predictable ho-hum fraud analysis. As three relative strangers with completely different backgrounds, we started throwing hypotheses at the wall. Soon it was clear we needed some domain branding and organization or else our database tables would end up with unpublishable names. The #TeamFloriduh moniker started as a joke, partly in homage to the world's worst superhero (FloridaMan) and partly due to the unique factors that make healthcare in Florida such a puzzle. This central focus on local problems was a driving factor in our overall analysis, and the unifying aspect of our team. Realizing that many of the competitors hail from enterprise healthcare organizations, the name stuck, embodying our indi spirit, and relaxed attitude, while allowing our data analysis to shine unclouded and remain accessible to the the public.

Data science should be fun. Healthcare should be approachable. Information should be accessible.

Issues to address:

Like all states, Florida must contend with increasingly high rates of chronic illness that will require highly coordinated, preventive care to improve outcomes and lower costs: 10.4 percent of adults in the state have diabetes; 63.4 percent are either overweight or obese; 8.3 percent have had asthma. Furthermore, 17.3 percent of Florida residents are over the age of 65--and 30.1 percent over the age of 55--and as such Florida must be capable of meeting the increased healthcare needs of its residents. Meanwhile, Florida places in the top 10 regarding obesity and ranks 43rd when it comes to how well its healthcare system works for low income families and more than one in five residents are without insurance while some 41 percent of Floridians fall into the low income category (earning less than S47,000 a year for a family of four and less than $23,000 a year for an individual).

Additionally, Florida ranks among the highest cost of malpractice coverage. For example, the cost of malpractice coverage for a Miami based obstetrician-gynecologist is about $200,000. Moreover, the state is highly litigious. In 2009,there were 770 paid medical malpractice claims compared to a national average of 180.

Florida has had a rapidly growing diabetic and obese population since 2001, meanwhile, Medicare covers 3,334,266 Florida residents, but it's unclear if the current distribution of healthcare services are meeting population needs. Healthcare systems and ACOs are adjusting to meet a growing population need, and our goal is it identify care deserts and provider voids to better address community needs.

Many Florida residents may have difficulty accessing the healthcare services they need because of workforce shortages that providers, medical schools and universities and labor must work to address. According to the Health Resources and Services Administration (HRSA), in Florida, there are currently:

- 253 primary medical care health professional shortage areas (HPSAs);
- 218 dental health professional shortage areas;
- 147 mental health professional shortage areas;
- 36 medically underserved areas (MUAs); and
- 87 medically underserved populations (MUPs).

Case Study:

Imagine you're a 67 year-old man with newly-granted portal-based access to your clinical data, a Blue Button advocate who's already downloaded your past 2 years of claims data from your local Blue Cross plan, and an enlarged prostate who'd like to retire to Florida. You've researched cost of living, retirement communities, gas prices, and hospital facilities in Jacksonville, Tampa, West Palm Beach, Boca Raton, and Miami. You've researched healthcare providers who claim to be urologists and accept Medicare, but your wife and kids are concerned that you're making an arbitrary choice. How do you determine whether these providers routinely perform the services you know you'll need, and are within bladder-controlled driving distance of your target neighborhoods?

Next, imagine you're a payer network management director, reviewing the next ACO provider contract proposal. To effectively address reimbursement rates and manage cost of care throughout the care continuum for an attributed member population, you have to ensure each product and service required for your attributed patient-member population is adequately covered, and that patients have access to provider-member care within geographic proximity. How do you identify potential gaps in ACO network coverage, requiring new provider contracts to address?

#TeamFloriduh is approaching the newly-released CMS data set from a consumer empowerment perspective, by geographically analyzing The Void between available routine service-providers and the consumer, as well as population health issues created when there is a Health Service Desert. By identifying geographic voids in particular specialties and procedures, consumers are empowered to make better choices about their health provider options, as well as to engage and inform policy decisions driving such agendas as PCMH certification.

Team Roles and Responsibilities:

Mandi Bishop: Healthcare IT domain expereince, UI/UX development, research, new media
Nick Kypreos: Patient and consumer voice, statistical programming, analysis, data science
Lauren Still: Clinical insight, team logistics, platform development, dataviz design, content

Questions? Email us or tweet to us