## **Hospital Charge Variation + ACA Impact**

Problem #1: What are some of the factors relating to the variation in hospital charges for similar services provided? Does quality of care play a role? Is there a distinction between different types of healthcare services (diagnostic, preventive, acute care, elective surgery, etc.)?

Problem #2: How have hospital charges been affected by the ACA?

Who cares: Payors (government, insurance, healthcare consumers); providers

Hypothesis #1: Regions with higher insurance coverage, especially Medicare coverage, charge more for similar services.

Hypothesis #2: Since the ACA, hospital charges have increased for treatment of conditions that have a high readmission rate, with a less noticeable increase where the provider's patient-mix has more Medicare patients than average.

Data: Provider Utilization and Payment Data, by insurance type; CMS Provider Quality Data; Regional Insurance Coverage and Plan Data

## **Chicago Crime**

Problem: What are some of the factors contributing to crime? How have different neighborhoods evolved over time? How has the recent politicization of police shootings related to crime? Does a lack of arrests for violent crimes beget more violent crimes?

Who cares: Chicago PD; Chicago residents; regional and national political organizations

Hypotheses: Districts and beats with a larger share of less-educated minorities have seen the largest increases in crime, with the trend being more notable over the past 2-3 years. These same areas have had fewer arrests for crimes. Controlling for other factors that lead to increased crime, fewer arrests in one period lead to more crime the next period.

Data: Crimes in Chicago 2001-2017; Chicago Census data by neighborhood

Bonus: Anything interesting with conviction data?