

# Identifying Trends and Drivers of RI Professional Health Care Spending from 2016-18 Using the RI All-Payer Claims Database (APCD)

Brown University, RI

### Background

- RI has invested in a robust primary care system.
- Recent analyses reveal large and increasing professional health care spending, which represents over 25% of total spending (2018 data) in both commercially insured (COMM) and Medicaid Managed Care (MMC) groups.
- To our knowledge, there are no existing efforts to quantify costs attributable to primary and specialty care over time, nor to identify which types of specialty care and service categories within them are the largest contributors to professional spending and spending growth.

# **Objectives**

We analyzed COMM and MMC claims data for 3.5 and 2.8 million person-months, respectively, from the RI All-Payer Claims Database (APCD). Our study questions were:

- (1) What are the trends in professional spending in primary and specialty care, and are trends attributable to changes in price or utilization?
- (2) What provider specialties and service categories are driving these spending trends?
- (3) How are spending trends and drivers different across COMM and MMC lines of business?

### **Methods**

- We extracted COMM and MMC professional medical claims (representing 2.8 billion dollars and over 15 million claim lines), insurance eligibility data, and provider data from the RI APCD for 2016-18.
- We used Berenson-Eggers Type of Service (BETOS) codes to classify professional services into broad service categories.
- Professional claims were stratified by line of business (COMM and MMC) and provider specialty.
- Areas with spending growth were further divided into service categories to identify trends and to determine if increases were driven by price or utilization.

Alexander Philips, Yoojin Lee MS MPH, Hannah James MS, Ira Wilson MD MS

### Results

Spending is measured in dollars per person per month (PMPM). Trends refer to the two-year period from 2016 to 2018 and are shown for both COMM and MMC lines of business.



#### Figure 1: PMPM Trends in Professional Spending by BETOS Group

#### Figure 2: PMPM Trends in Surgical Professional Spending









# Discussion

- In COMM, specialty care spending increased more than primary care spending (+7.3% vs. -2.4%). In MMC, primary care spending increased more than specialty care spending (+32.6% vs. +18.6%).
- Professional spending increased the most in radiology, orthopedics, neurology, and family medicine.
- Price rather than utilization was a consistent driver of increased professional spending across various types of specialty care.
- In radiology and orthopedics, for both COMM and MMC, both price (increases of up to 20%) and utilization (increases of up to 20%) contributed to spending increases.
- Increases in neurology spending for both COMM and MMC were driven by price and utilization increases for a few expensive drugs used to treat multiple sclerosis.
- Increases in family medicine spending MMC were driven by increased spending (increases of up to 200%) on methadone treatment.
- PMPM professional spending in MMC was ~70% of that in Commercial, but the percent increase from 2016-18 was higher in MMC than COMM (+17.8% vs. +7.6%).

### Conclusions

- Some trends, such as increased utilization of methadone therapy, are appropriate responses to increased need.
- Others, such as increased prices and utilization of radiology and orthopedics procedures may represent actionable targets for efforts to reduce spending and ensure high-value care.
- Controlling the spending on new and expensive biologics remains an ongoing challenge.

### Implications

- The RI APCD can be used to understand health care spending trends and drivers of those trends.
- Understanding professional service spending is a clinically relevant means by which to understand cost in the health care system.
- Continued work in this area will inform evidence-based state policy to control rising health care costs.

Visualizations were created by Bruce Campbell PhD and research was supported by Peterson Center on Healthcare









