PROVIDER COMPETITION: CONSOLIDATION, MARKET POWER AND POLICY RESPONSES

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1. More than half of Americans get their insurance coverage in the private market where prices (reimbursement rates) are agreed upon between providers and insurers.

2. Research shows that spending growth in the U.S. is driven largely by prices charged to commercial insurers by providers (Cooper et al. 2019; Health Care Cost Institute 2019).

3. Prices vary substantially across markets, across providers within markets, and even within providers, across insurance contracts (Cooper et al. 2019, Sinaiko et al. 2019).

4. While input cost, productivity and quality differences may account for a small share of this variation, market power is key to explaining price dispersion.
Implied Price by Hospital Service Area

Prices were 69%-129% higher in the highest price Hospital Service Area relative to the lowest.
# How Much Variation Per Service?

<table>
<thead>
<tr>
<th>Service Line</th>
<th>Across Provider-insurer prices</th>
<th>Across Providers</th>
<th>Across Insurers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Across Provider-insurer prices (SD)</td>
<td>Mean Coefficient of variation (SD)</td>
<td>N</td>
</tr>
<tr>
<td>Overall Service Line</td>
<td>177.68 (355.20)</td>
<td>0.50 (0.22)</td>
<td>12549</td>
</tr>
<tr>
<td>Ambulance/Transportation Services</td>
<td>654.15 (760.08)</td>
<td>0.79 (0.26)</td>
<td>255</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>88.62 (36.60)</td>
<td>0.35 (0.19)</td>
<td>7146</td>
</tr>
<tr>
<td>Colonoscopy and Endoscopy</td>
<td>2097.17 (888.71)</td>
<td>0.31 (0.05)</td>
<td>91</td>
</tr>
<tr>
<td>Emergency Department Visits</td>
<td>537.63 (351.89)</td>
<td>0.49 (0.10)</td>
<td>67</td>
</tr>
<tr>
<td>Eye exams</td>
<td>154.49 (86.59)</td>
<td>0.50 (0.07)</td>
<td>714</td>
</tr>
<tr>
<td>Laboratory and Pathology Testing</td>
<td>26.86 (26.89)</td>
<td>0.64 (0.12)</td>
<td>713</td>
</tr>
<tr>
<td>Maternity*</td>
<td>4132.35 (990.94)</td>
<td>0.24 (0.01)</td>
<td>99</td>
</tr>
<tr>
<td>Office Visits</td>
<td>164.81 (84.44)</td>
<td>0.38 (0.23)</td>
<td>4034</td>
</tr>
<tr>
<td>Physical and Occupational Therapy</td>
<td>42.96 (38.69)</td>
<td>0.70 (0.31)</td>
<td>1392</td>
</tr>
<tr>
<td>Radiology</td>
<td>471.11 (532.57)</td>
<td>0.42 (0.17)</td>
<td>518</td>
</tr>
</tbody>
</table>
VARIATION: ACUTE HOSPITALS VS OTHER PROVIDERS

- Overall: 76%
- Office Visits: ~...
- Eye exams: 37%
- Colonoscopy and Endoscopy: 53%
- Behavioral Health: 51%
- Radiology: 67%
- Laboratory and Pathology Testing: 100%
- Physical and Occupational Therapy: 199%
Horizontal consolidation: combinations of firms in the same product and geographic market – at the same level of the market (e.g., two Boston hospitals merge)

Vertical consolidation: combinations of firms at different levels of the market (e.g., a Boston hospital acquires an independent medical group that serves the same geographic and product (e.g. commercially insured) markets)
HORIZONTAL CONSOLIDATION HAS BEEN INCREASING

Source: Leemore Dafny presentation to the MA Health Policy Council, 10/6/15
Hospital-physician integration is trending upwards

47% growth in vertical integration for multi-specialty practices between 2007 and 2017 (Nikpay et al, 2018)

29% of physicians are employed by hospitals or hospital-owned practices; compared to 16% in 2007
WHAT DO WE KNOW ABOUT THE IMPACT OF CONSOLIDATION?

- Horizontal mergers: mergers of competing hospitals lead to higher prices and lower quality (Gaynor and Town 2012); relatively deep and consistent literature.

- Evidence about vertical consolidation is less comprehensive and more varied:
  - Price and total spending increases in areas with increases in physician-hospital financial integration (Bundorf et al 2014).
  - Referral patterns shift toward acquiring hospital, and patients more likely to select high-cost, low-quality hospitals (Baker et al 2015).
  - Hospital-owned Skilled Nursing Facilities lead to lower lengths of stay in post-acute care and lower costs without increased hospital admissions (Rahman et al 2016).
OUR PROJECT ON VERTICAL INTEGRATION IN MASSACHUSETTS

- **Motivation:** better understand the cost and quality tradeoffs inherent in vertical integration in a market with global/value-based payment where providers have incentives to manage and reduce acute care utilization, costs and quality

- Examine changes in consolidation 2013-2017

- **Outcomes:** prices, total costs, preventable acute care utilization, redundant testing and quality that is sensitive to coordination of care

- **Measures of vertical integration:** organizational structure – financial integration; ownership of physician practices and long-term care
### Vertical Integration in Massachusetts: 2013

**All Providers**  
*N = 24,074*

#### Network  
*N = 18,320 (76%)*

- Partners: 30.20%
- Steward Health: 8.50%
- Beth Israel Deaconess: 8.40%
- New England Quality Care Alliance: 8.20%
- UMass Memorial: 6.70%
- Atrius: 6.70%
- Baycare: 4.70%
- Lahey Hospital: 2.50%
- Berkshire Health: 0.40%

#### Independent Medical Group  
*N = 5,754 (24%)*

- Physician Hospital Organization: 7.3%
- Associated with a hospital: 6.8%
- Associated with hospital network: 4.0%
- Associated with a clinic or clinic network: 0.4%

*Note: % are out of all providers in the state*

Source: Massachusetts Health Quality Partners (MHQP) Survey
VERTICAL INTEGRATION IN MASSACHUSETTS: 2017

All Providers
N = 30,146

Network
N = 21,860 (73%)

Independent Medical Group
N = 8,286 (27%)

- Partners
- Beth Israel Deaconess
- Steward Health
- New England Quality Care Alliance
- UMass Memorial
- Baycare
- Lahey Hospital
- Atrius
- Berkshire Health

- Physician Hospital Organization: 4.6%
- Associated with a hospital: 7.1%
- Associated with hospital network: 2.8%
- Associated with a clinic or clinic network: 0.3%

Note: % are out of all providers in the state

Source: Massachusetts Health Quality Partners (MHQP) Survey
VERTICAL INTEGRATION IN MASSACHUSETTS: 2013 - 2017

Proportion of Provider Membership over Time

Source: Massachusetts Health Quality Partners (MHQP) Survey

Year

2013

2015

2017

Proportion of Provider Ownership

0%

5%

10%

15%

20%

25%

30%

35%

Independent Medical Groups

Atrius Health, Inc.

Baycare Health Partners

Berkshire Health Systems

Beth Israel Deaconess Care Organization LLC

Lahey Hospital and Medical Center

New England Quality Care Alliance

Partners Community Health Care (PCHI)

Steward Health Care Network

UMass Memorial Health Care, Inc
POLICY LEVERS

- Price and quality transparency
- Steering: tiered copayments, reference pricing
- Anti-trust enforcement
- A place to learn more and explore the legal and policy environment: https://sourceonhealthcare.org/price-transparency/