U.S. Census Bureau’s Survey Methods for Measuring Evolving Health Services

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Center for Economic Studies, Business Research Group
U.S. Census Bureau

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Disclaimer
The views expressed in this presentation are those of the author and not the U.S. Census Bureau. All results have been reviewed to ensure that no confidential information is disclosed (CBDRB-FY19-EWD-B00002).
Evolving Health Services

1. Management Practices
2. Telemedicine
3. Retail Health Clinics
Cognitive Testing

OBJECTIVES
Questionnaires and supplemental materials support a balance

• Collecting high-quality data
• Minimizing respondent burden
Cognitive Testing

OBJECTIVES
Questionnaires and supplemental materials support a balance
• Collecting high-quality data
• Minimizing respondent burden

PROCESS
• Draft or adapt existing survey questions
• Identify businesses and schedule respondents
• Conduct interviews: Probe after respondent reads questions(s)
• Edit content based on feedback and retest
• Edit again...and again...
Evolving Health Services: Collections and Status

<table>
<thead>
<tr>
<th>Topic</th>
<th>Collection</th>
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<td>2. Ambulatory health care providers</td>
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<td>Promotions</td>
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<td>EC(3)</td>
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<td>Tenure</td>
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<td>Number of licensed hospital beds</td>
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<td>Management training</td>
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<td>Management of team interactions</td>
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<td>Staffing and allocation of human resources</td>
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<td>Standardized clinical protocols</td>
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<td>Documentation of medical records</td>
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Management Practices
Cognitive Testing: MOPS-HP

• Survey forms
  (1) Chief Nursing Officer: 37 questions
  (2) Chief Financial Officer: 18-20 questions
Management Practices
Cognitive Testing: MOPS-HP

• Survey forms
  (1) Chief Nursing Officer: 37 questions
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• 2 Rounds

• Recruited 30 hospitals
  • Urban, suburban, rural
  • District of Columbia, Georgia, Massachusetts, Maryland, Michigan, New Hampshire, Ohio, Texas
Management Practices
Cognitive Testing: MOPS-HP

• Survey forms
  (1) Chief Nursing Officer: 37 questions
  (2) Chief Financial Officer: 18-20 questions

• 2 Rounds

• Recruited 30 hospitals
  • Urban, suburban, rural
  • District of Columbia, Georgia, Massachusetts, Maryland, Michigan, New Hampshire, Ohio, Texas

• Interviewed 31 respondents
  • 18 CNO and 13 CFO
  • 18 In-person and 13 by telephone
### Performance Monitoring by Managers

**3.** During 2010 and 2015, how frequently were the key performance indicators reviewed by managers at this establishment?

A manager is someone who has employees directly reporting to them, with whom they meet on a regular basis, and whose pay and promotion they may be involved with, e.g., Plant Manager, Human Resource Manager, Quality Manager.

**Mark all that apply.**

- Yearly
- Quarterly
- Monthly
- Weekly
- Daily
- Hourly or more frequently
- Never

**Examples of KPIs:** metrics on production, cost, waste, quality, inventory, energy, absenteeism, and deliveries on time
### Performance Monitoring by Managers

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<thead>
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- Yearly
- Quarterly
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- Never

**Examples of KPIs:** metrics on production, cost, waste, quality, inventory, energy, absenteeism, and deliveries on time

**Examples of KPIs:** metrics on cost, waste, clinical quality, financial performance, absenteeism, and patient safety.

Note: A manager is someone who has employees directly reporting to them, with whom they meet on a regular basis, and whose pay and promotion they may be involved with. A manager is involved with clinical/operational decision making and is not a frontline clinical worker (see Question 4).

Same responses as 2015 MOPS.
## Performance Monitoring by Managers

### 2015 MOPS

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3. In 2012 and 2017, how frequently were key performance indicators reviewed by MANAGERS [CLINICAL MANAGERS] at this hospital? | |

CFO: A manager is someone who has employees directly reporting to them, with whom they meet on a regular basis, and whose pay and promotion they may be involved with. **CNO:** A clinical manager is someone who has employees directly reporting to them, with whom they meet on a regular basis, and whose pay is and promotion they may be involved with. A clinical manager is involved in patient care decision-making.

Mark all that apply.

- Yearly
- Quarterly
- Monthly
- Weekly
- Daily
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- Never

**Examples of KPIs:** metrics on production, cost, waste, quality, inventory, energy, absenteeism, and deliveries on time

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Same responses as 2015 MOPS.
### Performance Monitoring by Managers

#### 2015 MOPS - Manufacturing

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<td>A CLINICAL KEY PERFORMANCE INDICATOR is a quantifiable metric used to evaluate the success of any clinical activity or function. For Questions 3, 4, and 5, consider key performance indicators that are used in any clinical activities at this hospital.</td>
</tr>
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<td>Same responses as 2015 MOPS.</td>
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#### Examples of KPIs:
- metrics on production, cost, waste, quality, inventory, energy, and deliveries on time
- metrics on cost, waste, clinical quality, financial performance, absenteeism, and patient safety.
Cognitive Testing: Management Practices

Key Takeaways

2019 Management and Organizational Practices-Hospitals

1. CNO
2. 5-Year recall period
3. Question order
4. Providers
5. Number: Key performance indicators, Protocols
6. Staffing ratios

2017 Economic Census

1. Board of Directors
2. Senior managers

2015 Annual Survey of Entrepreneurs

1. Economy-wide applicability
2. Small businesses
Telemedicine: 2018 Medical Expenditure Panel Survey-Insurance Component (MEPS-IC)

**Respondents**: Sampled employers who report offering health insurance to employees
**Telemedicine: 2018 Medical Expenditure Panel Survey-Insurance Component (MEPS-IC)**

**Respondents:** Sampled employers who report offering health insurance to employees

---

**Which of the services listed were covered by this health plan?**

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<tr>
<th>Service</th>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
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<tr>
<td>Chiropractic care</td>
<td></td>
<td></td>
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<tr>
<td>Routine vision care</td>
<td></td>
<td></td>
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<tr>
<td>Routine dental care</td>
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<tr>
<td>Mental health care</td>
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<tr>
<td>Substance abuse treatment</td>
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Telemedicine is the delivery of health care through telecommunications to a patient from a provider who is at a remote location.
Telemedicine: 2019 Services Annual Survey (SAS)

**Scope:** Physicians, dentists, other health care practitioners (e.g., mental health, therapists), outpatient care centers, and home health care services
Telemedicine: 2019 Services Annual Survey (SAS)

**Scope:** Physicians, dentists, other health care practitioners (e.g., mental health, therapists), outpatient care centers, and home health care services

10.1. **What was the total number of patient encounters in 2019, including office-based visits, home-based visits, telemedicine visits, and visits in other health care settings?**

a. **Were any of the encounters reported in part 1. billed as telemedicine services?**
   - Yes □
   - No □

   Telemedicine services are billable visits that use live interactive audio-visual telecommunication to deliver patient healthcare services by a physician or practitioner at a remote location.

b. **Of the total number of billable patient encounters provided in 10.1.a., approximately what percentage were billed as telemedicine services?** ____%
Cognitive Testing: Telemedicine

Key Takeaways

2018+ Medical Expenditure Panel Survey-Insurance Component

Employer-sponsored health insurance coverage

• Overall the concept and definition were well understood

2019 Services Annual Survey

Ambulatory health care visits

• Respondents familiar with the term
• Industry-specific synonyms such as teledentistry and telepsychiatry
Retail health clinics: 2017 Economic Census

Scope

Supermarkets and grocery stores

Pharmacies and drug stores

Department stores

Warehouse clubs/Supercenters
Did this establishment operate or lease space to a retail health clinic in 2017?

A retail health clinic is an in-store clinic with a health care professional who provides medical care (e.g., vaccines, health screenings, treatment of minor injuries and illnesses, or management of medications and treatments).

☐ Yes  ☐ No
Retail health clinics (RHC): 2017 Economic Census

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- [ ] Yes
- [ ] No

**Operate own RHC?**

**Partner/jointly operate RHC?**

**Lease space for RHC?**
Retail health clinics (RHC): 2017 Economic Census

Did this establishment operate or lease space to a retail health clinic in 2017?

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- Yes
- No

Operate own RHC?
Partner/jointly operate RHC?
Lease space for RHC?

- Total patient care revenues
- Patient care services (flu shots, other immunizations, lab tests, mild acute care, chronic disease screening, behavioral health screenings, weight management programs, pharmacotherapy management, health insurance information)
- Use of electronic health records, ePrescribing, telemedicine, mobile coaching apps, interactive software
Retail health clinics: 2017 Economic Census

Scope:
- Offices of physicians
- Other health practitioners (e.g., mental health, therapists)
- Outpatient care centers

Was this establishment involved in the operation of a retail health clinic in 2017?

Yes  

No   

(Census Bureau 2017 Economic Census)
Cognitive Testing: Retail Health Clinics
Key Takeaways

Retailers

• ‘Retail health clinic’
  • Wide range of interpretations
  • Added definition
• Revenue from patient-care services
  • Specified what to include and exclude

Health Care Service Providers

• Overall question performed well
• Originally: “..operating a health care location in a pharmacy or a retail establishment” – confusion about two types of establishments
• Final: Was this establishment involved in the operation of a retail health clinic in 2017?
Concluding Remarks

Management practices

*Improve measurement of factors related to performance*

Telemedicine

*Increase understanding of how health care is delivered*

Retail health clinics

*Collect data on emerging business formations*
Thank you

Alice.M.Zawacki@Census.gov