The COVID-19 Pandemic Can Help Us Understand Low-Value Health Care

Allison H. Oakes, PhD
Crescenz VA Medical Center
Penn Medicine Nudge Unit
@oakes_ah

Jodi B. Segal, MD, MPH
Johns Hopkins School of Medicine
Johns Hopkins School of Public Health
Overuse

Overuse is the provision of health care services for which potential harms outweigh potential benefits. More expansively, a service may be labeled as low-value or wasteful when it does not provide proportional benefits relative to its costs.

Overuse is prevalent, costly, and harmful.
Outstanding Research Needs

► **Quantify:** We still directly measure only a fraction of the low-value services that are delivered; overuse is not included as a standard component of quality reporting.

► **Drivers and Determinants:** Understanding the important drivers of low-value care is a pressing research priority, as there are patient factors, clinician factors, characteristics of the health care system and the environment, which interact to contribute to waste.

► **Outcomes:** The full impact of overuse on patients and the health system is yet to be quantified.
COVID-19 as a Natural Experiment

The COVID-19 pandemic has changed the health care landscape in ways that can be leveraged to advance the low-value care research agenda:

1) **Forced reductions in low-value service use** have created the right conditions to test hypotheses about the consequences of low-value care.

2) The disruption caused by COVID-19 has created a **resource limited environment**, which should motivate diverse stakeholders to measure and eliminate low-value service use.

3) **Abrupt changes to the structures and processes of care delivery** have created the right conditions to test hypotheses about the drivers of low-value care.
Hypothesized Natural Experiments

- Total Health Care
  - Pre
  - Early
  - Later

- Low-Value Care
  - October 2019
  - April 2020
  - September 2020

- Harms from Low-Value Care
Hypothesized Natural Experiments

- October 2019
- April 2020
- September 2020

**Harms from Low-Value Care**

Forced reductions in low-value service use
Hypothesized Natural Experiments

Identify new low-value service measures; quantify harms of overuse; quantify clinical cascades
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Resource scarcity as a motivator
Hypothesized Natural Experiments

- Identify new low-value service measures; quantify harms of overuse; quantify clinical cascades

- Quantify trends in overuse over time; prospectively monitor reemergence of overuse in real time

**Graph:**
- Total Health Care
- Low-Value Care
- Harms from Low-Value Care

**Timeline:**
- October 2019
- April 2020
- September 2020
Hypothesized Natural Experiments

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**Pre**

**Total Health Care**
- 100%

**Low-Value Care**

**Harms from Low-Value Care**
- 0%

**Examples:**
- CMS waivers (e.g., telemedicine payment parity)
- State elective procedure bans
- Limited health care supply
- Health insurance disruption

**Immediate Changes**
- Identify new low-value service measures; quantify harms of overuse; quantify clinical cascades
- Examples: Payment reform
- Market consolidation
- Practice closures
- Heterogeneous organizational responses

**Long-Term Changes**
- Quantify trends in overuse over time; prospectively monitor reemergence of overuse in real time

**Abrupt Changes**

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**Early**

**Later**

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October 2019

April 2020

September 2020
Hypothesized Natural Experiments

Examples: CMS waivers (e.g., telemedicine payment parity), State elective procedure bans, Limited health care supply, Health insurance disruption

Examples: Payment reform, Market consolidation, Practice closures, Heterogeneous organizational responses

Identify new low-value service measures; quantify harms of overuse; quantify clinical cascades

Quantify trends in overuse over time; prospectively monitor reemergence of overuse in real time

Identify drivers and determinants
Low-Value Care Research Opportunities Post-COVID

► Quantify

*Sudden Shutdown of Elective Procedures*
- Identify new low-value service measures

*Resource Scarcity*
- Quantify trends overuse nationally, regionally, and across health systems, before, during and after COVID-19
- Prospectively monitor the reemergence of overuse in real time, even incorporating overuse as a standard component of quality reporting

► Drivers and Determinants

*Abrupt Changes to Health Care Structures and Processes*
- Identify factors that contribute to overuse

► Outcomes

*Sudden Shutdown of Elective Procedures*
- Describe and quantify the physical, psychological, and non-clinical harms attributable to low-value care
- Describe and quantify the effect of low-value service use on downstream clinical cascades
- Examine if receipt of low-value care disproportionately harms certain patient populations