

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

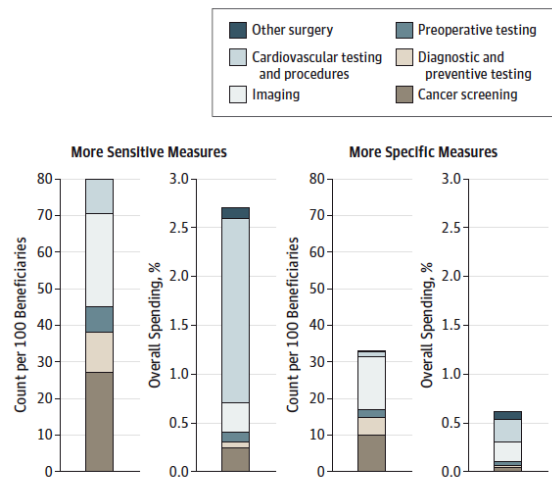
Johns Hopkins School of Medicine

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.

Figure. Utilization Rates and Associated Spending for Services Detected by Low-Value Care Measures Among Medicare Beneficiaries in 2009



Schwartz, 2014

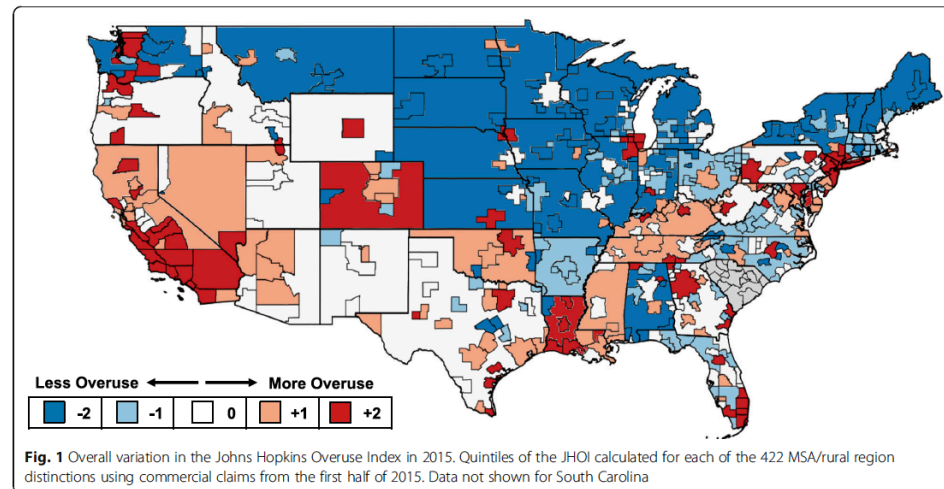
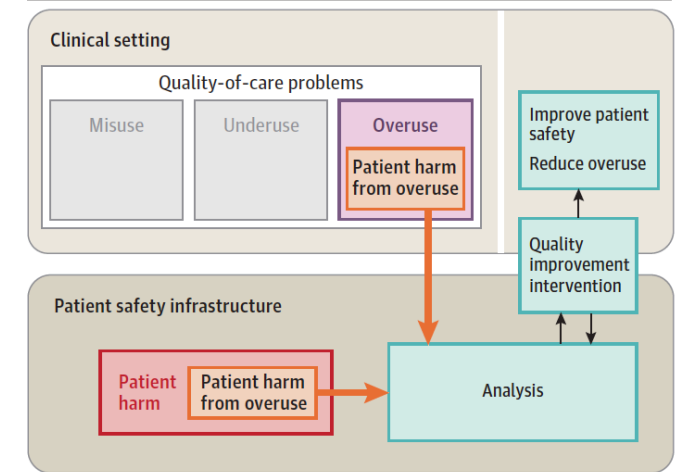


Fig. 1 Overall variation in the Johns Hopkins Overuse Index in 2015. Quintiles of the JHOI calculated for each of the 422 MSA/rural region distinctions using commercial claims from the first half of 2015. Data not shown for South Carolina

Oakes, 2019

Figure. Identification and Management of Overuse as a Patient Safety Problem



Lipitz-Snyderman, 2017

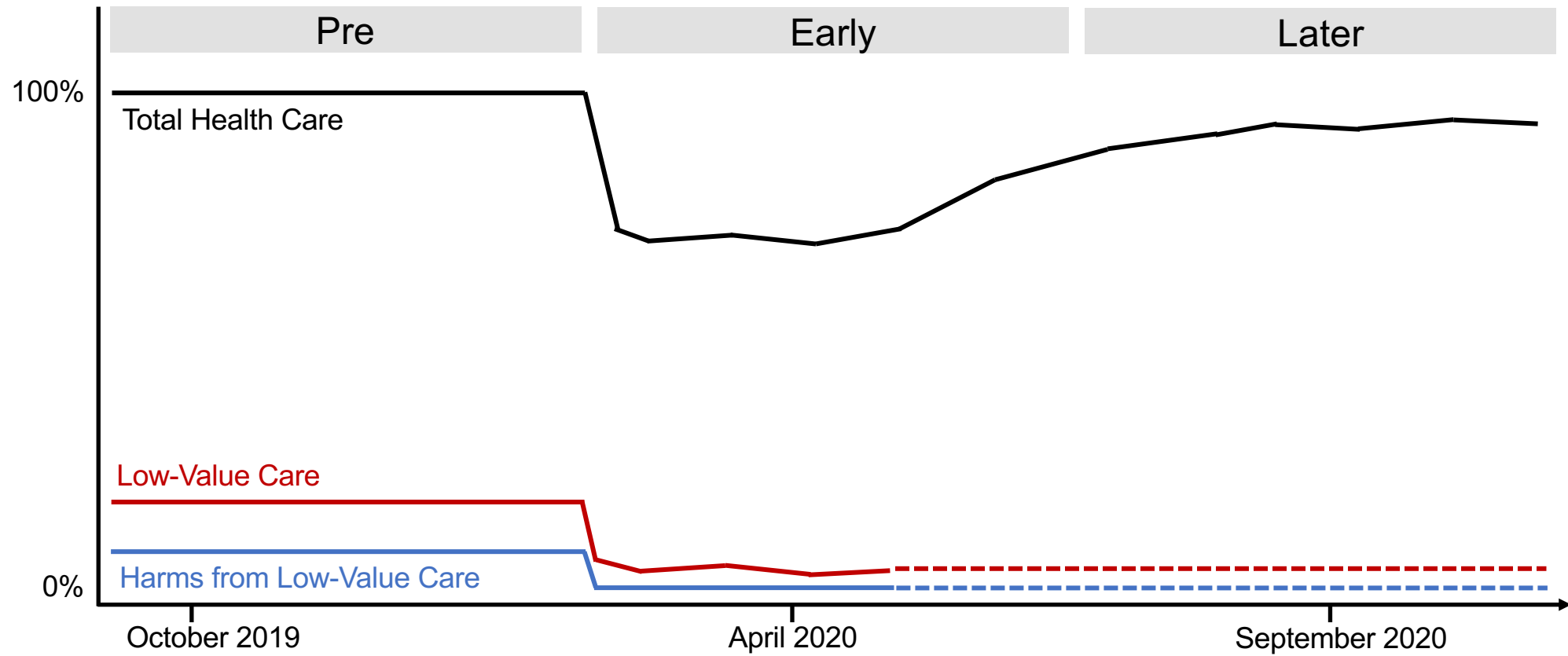
Outstanding Research Needs

- ▶ **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.

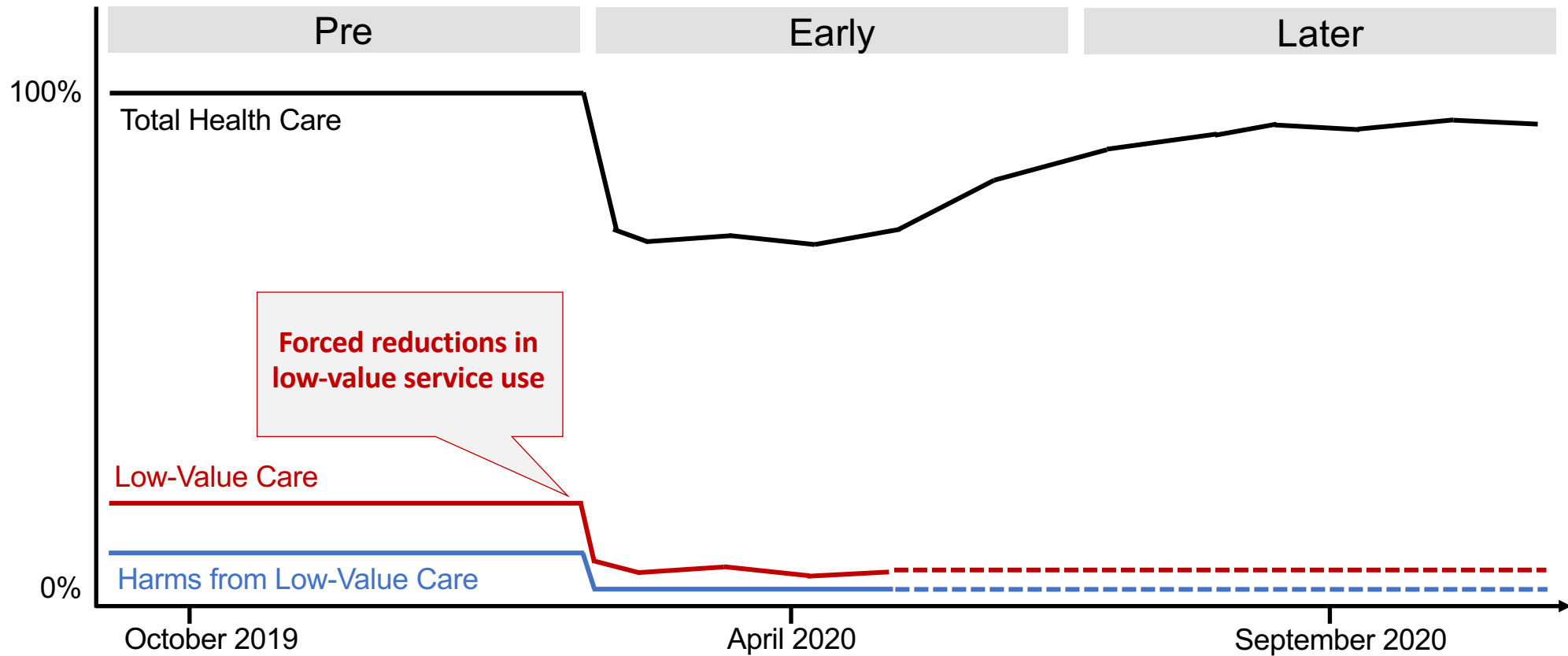
COVID-19 as a Natural Experiment

- ▶ 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.

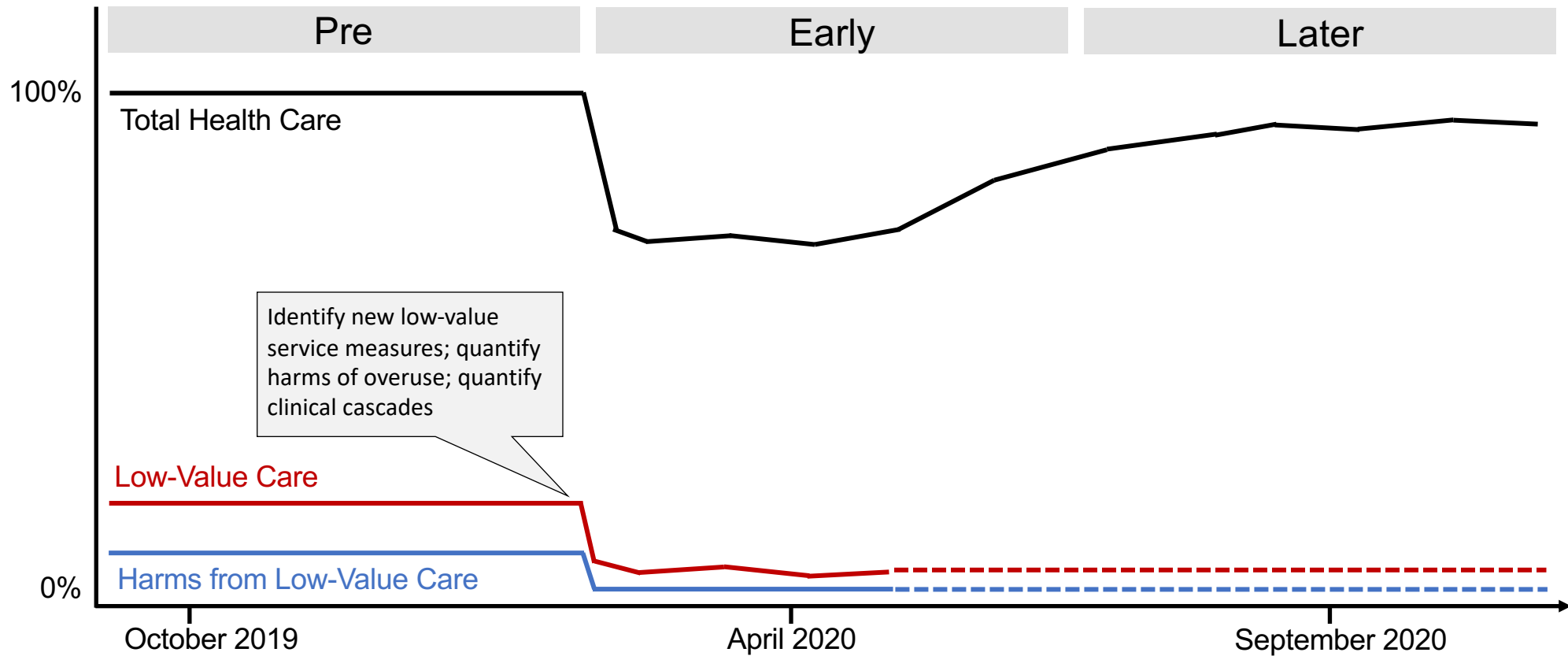
Hypothesized Natural Experiments



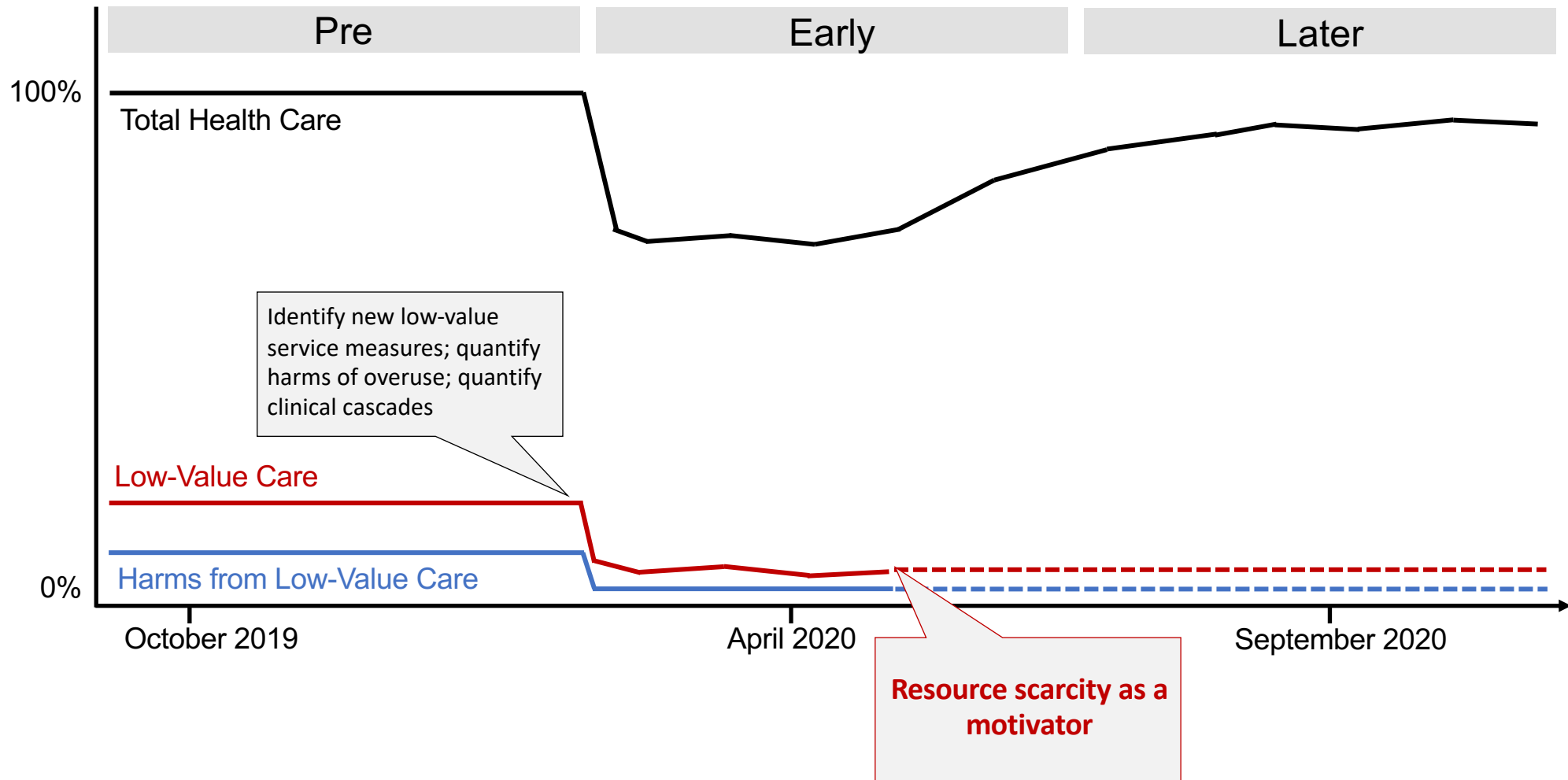
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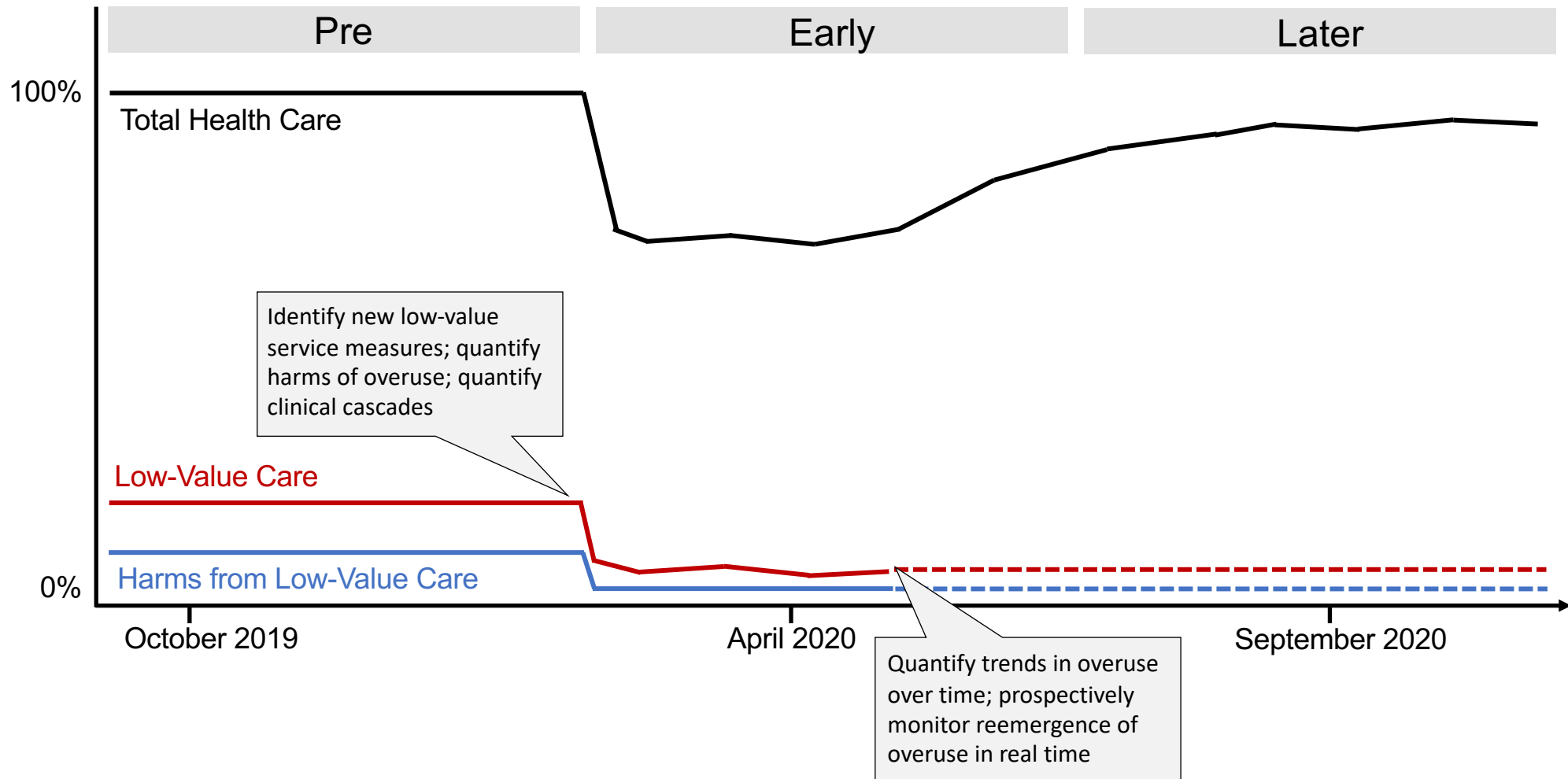
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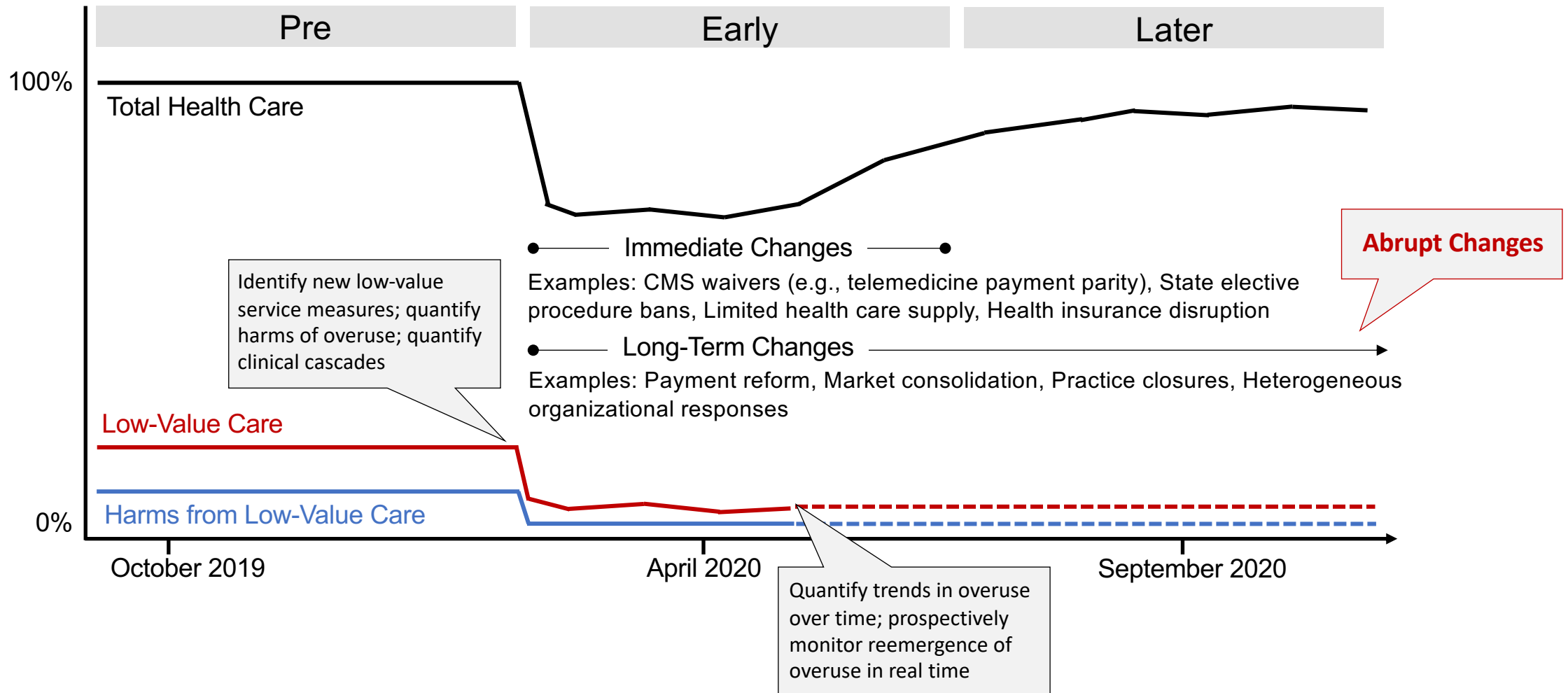
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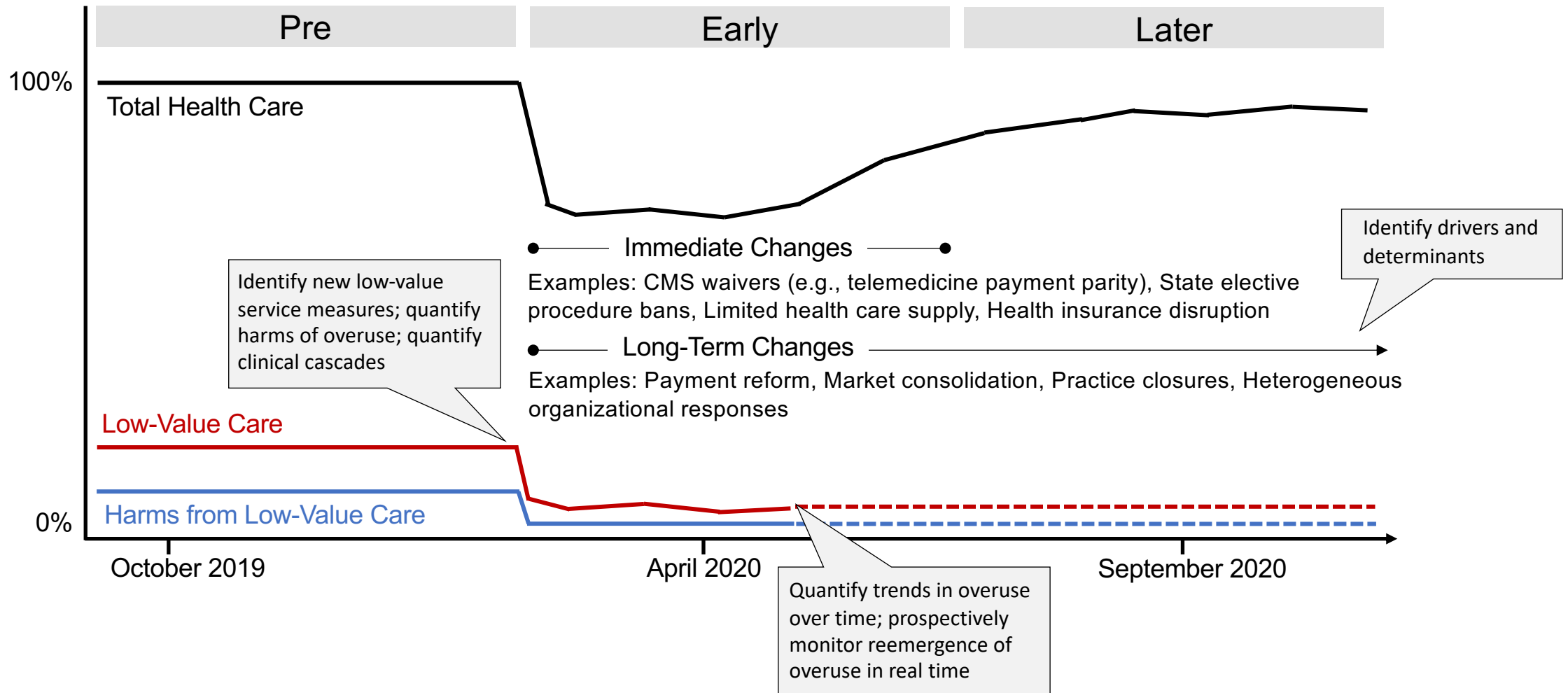
Hypothesized Natural Experiments



Hypothesized Natural Experiments



Hypothesized Natural Experiments



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



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Q&A



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