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The Time to Reduce Low-Value Care is Now

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Across the United States, people are extremely worried about being able to afford healthcare and many have experienced hardship either because they delayed getting care due to cost concerns or they struggled to pay the bill after they got the care they needed.[1] Efforts to address the high cost of healthcare by "giving consumers skin in the game" have been conclusively proven to increase hardship while failing to drive value in the healthcare marketplace.[2]

To address consumers' affordability concerns, we must adopt a multi-stakeholder approach that targets the root causes of high healthcare spending. A comprehensive approach would include reducing low-and no-value care, lowering high unit prices, ensuring that care is coordinated and increasing the use of high-value care to avoid larger expenses down the line.

This paper focuses on low-value care and the strategies to reduce it.

How Does Low-Value Care Harm Consumers?

A shocking amount of healthcare is considered unnecessary. In fact, over 500 routinely-provided services have been identified as low- or no-value, according to the Choosing Wisely campaign.[3] Examples of these services include:

- An EEG for a patient with a headache or a CT scan or MRI for a patient with lower-back pain and no signs of a neurological problem
- Emergency room visits for non-emergencies
- Surgery when physical therapy would be equally or more effective
- Inappropriately prescribed antibiotics

By definition, spending on low-value care could be eliminated without worsening health outcomes, freeing funds for investments proven to improve health, like increasing the provision of high-value care and services to address health-related social needs. Failure to curtail low- and no-value care raises premiums and causes patients to endure unnecessary cost-sharing for services, inconvenience and even medical harm.[4]

Addressing Low-Value Care Will Require a Targeted Approach

Examining just a handful of these low-value services, researchers have studied the prevalence of low-value care in the Medicare, commercial and Medicaid (adult and child) populations and found that high rates of overuse tend to be geographically concentrated.[5] After controlling for locality, rates of overuse do not vary significantly by insurance type.

A new study from Altarum that examined 20 low-value services using commercial claims data found that the worst performing states (Florida, New Jersey, North Carolina, New York and Alabama) had twice the prevalence of low-value care than the best performing states (Alaska, North Dakota, Utah, Idaho and Oregon).[6]

Moreover, some low-value services are more common than others. For instance, the over-prescription of antibiotics (which contributes to high costs and growing antibiotic resistance) is highly prevalent, with the CDC estimating that as many as half of all antibiotic prescriptions are unnecessary or ineffective.[7] Similarly, providing opioids to patients with migraine headaches and using antipsychotics to treat dementia are two low-value services provided to as many as one in four patients with the relevant diagnoses. Other services, such as unnecessary cervical cancer screenings, are less common, depending on the population.[8] A study of low-value services provided to children revealed that unnecessary prescriptions were most prevalent, followed by diagnostic tests and imaging tests.[9]

Reducing Low-Value Care

While proven approaches for reducing low-value care are still being developed,[10] it is likely that the most effective interventions will address both patients' and clinicians' roles in driving low-value care. Promising studies show that a standardized protocol from a trusted entity accompanied by supports can decrease low-value services. Accountable justification[11] and providing peer comparisons can also reduce the prevalence of inappropriate care—a randomized clinical trial discovered that these two techniques significantly reduced unnecessary antibiotic prescribing.[12]

Physicians frequently cite patient expectations as a reason for ordering low-value care. Yet patient demand seems to account for only a small portion of the low-value care that has been identified.[13] For unnecessary services that are likely to be driven by patient demand (like antibiotic prescriptions for a viral infection), research has shown that educational sheets alone were not enough to change a patient's demand.[14] A more effective approach is patient shared decision-making. More than just the use of a decision aid, true shared decision-making requires clinician-patient engagement to ensure that both the provider's guidance and the patient's values and preferences are reflected in the treatment decision.[15]

Despite promising evidence, shared decision-making has not been widely implemented in clinical practice. In a study of more than 1,000 office visits in which more than 3,500 medical decisions were made, less than 10 percent of decisions met the minimum standards for shared decision-making.[16]

Insufficient Data Impairs Our Ability to Measure Low-Value Care

A key barrier to reducing low-value care is the dearth of methods for reliably assessing when and where it is being provided. While some services are unnecessary most of the time, others may be appropriate for some patients or in certain situations. Different measurement criteria—in addition to an unwillingness to share claims data—prevents payers and other stakeholders from understanding the prevalence of low-value care in their communities. It also inhibits efforts to address low-value care, for example, through county-wide provider peer comparisons.[17]

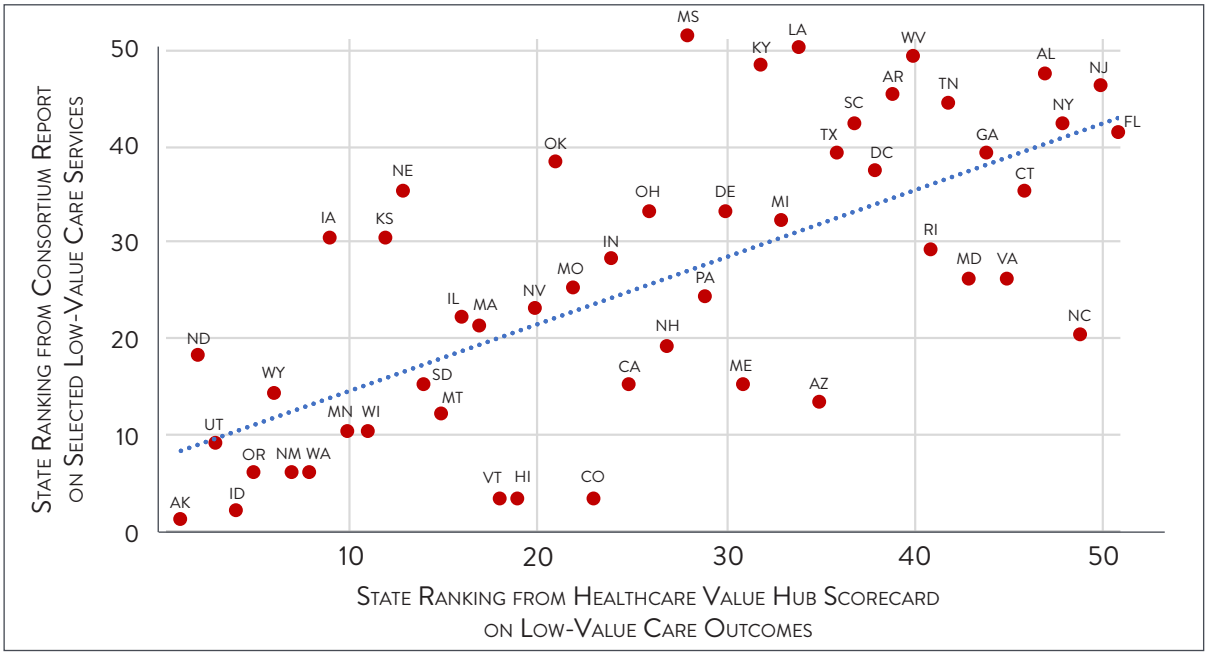
A recent effort to score states on their efforts to address low-value care by Altarum's Healthcare Value Hub found almost no publicly available data that could be used to compare states' low-value care policies and outcomes.[18] Ultimately, the Scorecard focused on four policies to address low-value care and two outcomes measures:[19]

- **Policies**:
  - Whether the state requires reporting for two types of medical errors (central line-associated bloodstream infections and catheter-associated urinary tract infections) and whether the reports are validated.
  - Whether the state followed Medicare's lead in refusing to pay for services related to "never events"— serious reportable events, as identified by the National Quality Forum, that should never occur in a healthcare setting.
  - Antibiotic stewardship, measured by the percentage of a state's acute care hospitals that have adopted the CDC's 'Core Elements' for hospital antibiotic stewardship.
  - Whether the state (or multi-sector collaboratives within the state) have attempted to measure low-value in claims data and/or EHRs.
- **Outcomes**:
  - Cesarean section rates among births to first-time, low-risk mothers
  - Antibiotic prescribing per 1,000 residents

A subsequent report by Research Consortium for Health Care Value Assessment used non-publicly available, commercial-sector data to compare states in terms of overuse.[20] It is important to recognize, however, that claims and other administrative data can be limited for this purpose because they often lack the clinical nuance needed to identify whether a service was truly of low or no value.

On a more promising note, evidence suggests that the provision of different low-value services may be driven by common factors, therefore, narrow measures may reliably signal a larger problem with overuse.[21,22] Indeed, there was a surprising degree of correlation between the rankings of the Consortium's low-value care report and the rankings of the Hub's low-value care outcomes scorecard (Figure 1). These findings suggest that claims-based measures—although limited in what they can detect—could be useful as a signal for broader problems regarding overuse of low-value care.

Figure 1: Affordable Scorecard Low-Value Care Outcome Score vs. Selected Low-Value Services, by State



Researchers at Johns Hopkins University recommend that policymakers and health system leaders "address structural and system-wide drivers of overuse, which may be more impactful than a focus on individual overused procedures."[23] Additionally, they caution against using larger geographic units, such as state or even metropolitan statistical area, for targeting action, as a narrower focus on healthcare systems or networks of clinicians might be better targets for low-value care interventions.

Nonetheless, collecting data on overuse at the state-level can help galvanize action. As explained in the Healthcare Value Hub's affordability scorecard, policymakers at the state level are particularly well suited to facilitate all-payer approaches to eliminate unnecessary healthcare spending.[24]

In Summary

Grave affordability problems in the U.S. dictate the need to immediately enact a multi-stakeholder approach that targets the root causes of high healthcare spending. A key component of this approach includes reducing low- and no-value care. Best practices to date include data systems that allow us to target healthcare systems and networks of clinicians, and using evidence-based practices to nudge physicians (and, when appropriate, patients) to use care in accordance with medical guidelines. Additional research is needed, including comparative-effectiveness studies to further our understanding of the interventions that improve health outcomes[25] and studies to help successfully change behaviors when low-value services are being provided.

Notes

1. Altarum Healthcare Value Hub, *What Do Consumers Say?*, https://www.healthcarevaluehub.org/cost-and-quality-problems/what-do-consumers-say (accessed on April 2, 2020).
2. Altarum Healthcare Value Hub, *High Deductible Health Plans Don't Work*, https://www.healthcarevaluehub.org/improving-value/browse-strategy/high-deductible-health-planshealth-savings-accounts-hsas (accessed on April 2, 2020).
3. While not the only source for identifying low-value care, the American Board of Internal Medicine (ABIM) Foundation's Choosing Wisely initiative is one of the most widely recognized. The campaign aggregates recommendations from industry experts on how to reduce low-value care and distributes that information to clinicians and patients. Other efforts to identify low-value care include the U.S. Preventive Services Task Force (services rated "D") and the National Institute for Health and Care Excellence's ("do not do" recommendations) in the UK. Low-value care has also been identified in health assessments performed by the Canadian Agency for Drugs and Technologies and various peer-reviewed medical journals.
4. Altarum Healthcare Value Hub, *Medical Harm*, https://www.healthcarevaluehub.org/cost-and-quality-problems/browse-cost-driverquality-issue/medical-harm (accessed on April 2, 2020).
5. Altarum Healthcare Value Hub, *Low-value Care*, https://www.healthcarevaluehub.org/cost-and-quality-problems/browse-cost-driverquality-issue/low-value-care (accessed on April 2, 2020).
6. Research Consortium for Health Care Value Assessment, *Low-Value Care is Everywhere. What is Driving It and How Can We Intervene?*, Research Brief No. 2 (January 2020). https://www.hcvalueassessment.org/application/files/5615/8050/0804/Research_Consortium_Research_Brief_No._2.pdf
7. The U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, *Antibiotic Resistance Threats in the United States*, Atlanta (2013). https://www.cdc.gov/drugresistance/pdf/ar-threats-2013-508.pdf
8. While Colla found low rates of unnecessary cervical cancer screening in the Medicare population, Beaudin-Seiler found unnecessary cervical cancer screening to be one of the more common services among the 22 they looked

for in a commercial population. See: Colla, C., et al., "Choosing Wisely: Prevalence and Correlates of Low-Value Health Care Services in the United States," *Journal of General Internal Medicine*, Vol. 30, No. 2 (Nov. 6, 2014). https://link.springer.com/article/10.1007/s11606-014-3070-z and Beaudin-Seiler, Beth, et al., *Estimating State-Level Prevalence of Low-Value Care Services Among the Privately Insured, 2015*, Research Consortium for Health Care Value Assessment, Ann Arbor, M.I. (January 2020). https://www.hcvalueassessment.org/application/files/5615/8050/0804/Research_Consortium_Research_Brief_No._2.pdf

9. Chua, Kao-Ping, et al., "Differences in the Receipt of Low-Value Services Between Publicly and Privately Insured Children," *Pediatrics*, Vol. 145, No. 2 (February 2020). https://pediatrics.aappublications.org/content/145/2/e20192325
10. Beaudin-Seiler, Beth, Lynn Quincy, and Rebecca Cooper, *Reducing Low-Value Care: Saving Money and Improving Health*, Altarum Healthcare Value Hub, Washington, D.C. (November 2018). https://www.healthcarevaluehub.org/advocate-resources/publications/reducing-low-value-care-saving-money-and-improving-health/
11. Accountable justification is an electronic health record prompt that asks clinicians seeking to prescribe an antibiotic to justify, in a free text response, his or her treatment decision.
12. Meeker, Daniella, et al., "Effect of Behavioral Interventions on Inappropriate Antibiotic Prescribing Among Primary Care Practices: A Randomized Clinical Trial," *JAMA Network*, Vol. 315, No. 6 (Feb. 9, 2016). https://jamanetwork.com/journals/jama/fullarticle/2488307
13. Schwartz, Aaron L., et al., "Changes in Low-Value Services in Year 1 of the Medicare Pioneer Accountable Care Organization Program," *JAMA Internal Medicine* (2015). See also: Cutler, David M., et al., *Physician Beliefs and Patient Preferences: A New Look at Regional Variation in Health Care Spendin*g, National Bureau of Economic Research Working Paper Series (2013).
14. Malani, Preeti, and Jeffrey T. Kullgren, "To Curb Overuse of Low-Value Health Care Services, Engage Older Patients," *Health Affairs* Blog (March 13, 2018). https://www.healthaffairs.org/do/10.1377/hblog20180308.855164/full/ Educational materials combined with other interventions can increase the effectiveness of each, compared to being used alone. See: Meeker, Daniella, et al., "Nudging Guideline-Concordant Antibiotic Prescribing: A Randomized Clinical Trial," *JAMA Internal Medicine*, Vol. 174, No. 3 (March 2014). https://www.ncbi.nlm.nih.gov/pubmed/24474434
15. Across several studies, as many as 20 percent of patients who participated in shared decision-making chose less invasive surgical options and more conservative treatment than patients who did not use decision aids. See: Beaudin-Seiler, Quincy, and Cooper (November 2018).
16. Braddock, Clarence H., et al., "Informed Decision Making in Outpatient Practice," *JAMA Network*, Vol. 282, No. 24 (Dec. 1999). https://jamanetwork.com/journals/jama/fullarticle/192233
17. Altarum Healthcare Value Hub, *Provider Peer Comparisons*, https://www.healthcarevaluehub.org/improving-value/browse-strategy/provider-peer-comparisons (accessed on April 2, 2020).
18. Altarum Healthcare Value Hub, *Healthcare Affordability State Policy Scorecard*, https://www.healthcarevaluehub.org/affordability-scorecard (accessed on April 2, 2020).
19. Quincy, Lynn, Amanda Hunt, and Sabah Bhatnagar, *Healthcare Affordability State Policy Scorecard: Methodology*, Altarum Healthcare Value Hub (Jan. 7, 2020). https://www.healthcarevaluehub.org/application/files/9215/7859/4748/Healthcare_Affordability_Scorecard_-_Methodology_v2.pdf
20. Research Consortium for Health Care Value Assessment (January 2020).
21. Schwartz, Aaron L., et al, "Measuring Low-Value Care in Medicare," *JAMA Internal Medicine*, Vol. 174, No. 7 (July 2014). https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/1868536 See also: Oakes, Allison

H., Hsien-Yen Chang, and Jodi B. Segal, "Systemic Overuse of Health Care in a Commercially Insured U.S. Population, 2010–2015," *BMC Health Services Research* (May 2, 2019). https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-019-4079-0

22. Researchers have cautioned, however, that "...a single measure cannot reliably characterize overuse as a broad phenomenon." A collection of overuse "bellwethers" is preferred. See: Oakes, Chang, and Segal (May 2, 2019).
23. Ibid.
24. Quincy, Lynn, Amanda Hunt, and Sabah Bhatnagar, *Healthcare Affordability State Policy Scorecard: Summary Report*, Altarum Healthcare Value Hub, Washington, D.C. (Jan. 7, 2020). https://www.healthcarevaluehub.org/application/files/5715/8162/2389/Healthcare_Affordability_Scorecard_-_Summary_Report.pdf
25. Altarum Healthcare Value Hub, *Comparative Effectiveness Research*, https://www.healthcarevaluehub.org/improving-value/browse-strategy/comparative-effectiveness-research (accessed on April 2, 2020).

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The Research Consortium for Health Care Value Assessment is a partnership between Altarum and VBID Health, with funding from the PhRMA Foundation as part of its Value Assessment Initiative, established to promote the pursuit of value in health care delivery in the U.S.

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