

COMMENTARY

Building A Better Health Care System Post-Covid-19: Steps for Reducing Low-Value and Wasteful Care

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The Covid-19 pandemic has disrupted the provision of routine care, forcing providers and patients to postpone many services and adopt virtual and non-contact strategies. These changes present an unprecedented opportunity to re-evaluate the necessity of services our health system provides, embracing and enhancing the ones that provide the most value and finally reducing or eliminating those that provide little or no benefit. Immediate action is essential as reopening occurs; force of habit and financial stresses may otherwise counteract some positive recent changes and move the health care system back toward business as usual. We suggest aligned strategies for providers and health systems, payers, policymakers, employers, and patients that can help seize this opportunity to build a better health system.

In just months, the coronavirus (Covid-19) pandemic upended significant portions of the U.S. health care system.¹ Postponed elective procedures and services for non-emergency care significantly reduced overall health care utilization,² and the rapid shift to telehealth dramatically altered care delivery. Recent months have also exposed long-standing flaws of our health care system, marked by fragmentation, inefficiencies, high rates of chronic illness, and glaring health disparities.

Reopening offers a critical opportunity to create a “new normal” — one that not only considers the continuing health and economic realities of Covid-19, but also reflects the insights and best practices gained during the pandemic to achieve better population health and a system that is more resilient, coordinated, equitable, and sustainable. The speed at which providers and health systems have responded to the pandemic shows that our often-lumbering health care system can in fact make swift, innovative payment and care delivery changes. There is no reason to go back

to the system we had before, and this is an ideal time to build something better. But the window is already closing. In-person care has rebounded — outpatient care visits in June were about 11% lower than the baseline level, compared to 58% lower in March.² Without continued momentum, organizations risk reverting to “business as usual,” especially with so many health care providers under intense financial strain from lost fee-for-service revenues.

One key focus area for reopening should be identifying and reducing low-value care: medical services that provide little to no clinical benefit or may cause harm to patients, such as antibiotic use for a likely uncomplicated viral infection or imaging for non-specific low-back pain. Use of low-value care is pervasive, accounting for 10% to 20% of annual health spending.^{3,4} We should be spending this money instead on providing high-value care that benefits patients; building stronger prevention, public health, and pandemic preparedness capabilities; and, addressing health disparities and the systemic inequalities that underly them.

To date, low-value care has been stubbornly difficult to reduce, due to a complex range of barriers.⁵ However, the system-wide disruption and resource scarcity brought forth by Covid-19 has provided maybe the strongest impetus yet for rethinking how best to prioritize what and how much care to provide, to and by whom, and in which settings. Recent reopening guidance from the CDC and CMS highlights the importance of prioritizing services that most benefit patient health and reduce exposure to both Covid-19 and broader care complications.^{6,7}

The coming months offer a unique and critical window for providers and health systems, and the stakeholders who support and interact with them, to take short- and long-term steps to reduce waste and build a better system that prioritizes high-quality, high-value care. We discuss these steps in more detail below.

Provider and Health System Actions

As a first step, providers and health systems should prioritize the safety of patients and health care workers alike by triaging treatment for high-need patients, helping them avoid the emergency department (ED) whenever possible. More broadly, providers should work with all patients to develop immediate care plans, or “care blueprints.” Such plans should weigh the benefits and harms of different therapeutic pathways while incorporating Covid-19 risk. Emerging guidance from professional associations and clinical experts can serve as important resources for development.⁸⁻¹⁰ These care protocols offer an immediate opportunity to spur provider and patient discussion on the harms of unnecessary care.

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Table 1.

Resource	Description
Choosing Wisely ^{T1}	<ul style="list-style-type: none"> Developed by professional societies, lists over 600 commonly used tests or procedures by clinical area whose necessity should be questioned and discussed Offers education materials to facilitate conversations between providers and patients on unnecessary care
U.S. Preventive Services Taskforce ^{T2}	<ul style="list-style-type: none"> Panel of medical experts that reviews the evidence for and effectiveness of clinical services Issues evidence-based recommendations on the use of preventive services, using a letter grade system based on the balance of benefits and harms Lists almost 20 Grade D “discourage use of service” recommendations
Task Force on Low-Value Care’s “Top-Five” Services ^{T3}	<ul style="list-style-type: none"> Based on harms, costs, prevalence, and opportunity for change The five services include: diagnostic testing and imaging prior to low-risk surgery; vitamin D screening; prostate specific antigen (PSA) screening in men ages 75 and older; imaging in the first six weeks of low back pain; and use of branded drugs when generics are available
Milliman MedInsight Health Waste Calculator ^{T4}	<ul style="list-style-type: none"> Proprietary tool available to health care organizations to identify and quantify unnecessary services using their own claims, billing, or electronic medical record data
Low Value Care Visualizer ^{T5}	<ul style="list-style-type: none"> Free, open-source, web-based tool that helps organizations identify low-value care via their processed claims data and creates user-friendly visualizations of data
Publicly-Available Algorithms ^{T6, T7}	<ul style="list-style-type: none"> Code sets or specifications to measure a range of low-value care services in Medicare, Medicaid, and commercial claims data

T1. Choosing Wisely: Clinician Lists. Accessed May 27, 2020. <https://www.choosingwisely.org>. T2. U.S. Preventive Services Task Force Grade D Recommendations. Accessed May 28, 2020. https://www.uspreventiveservicestaskforce.org/uspstf/topic_search_results?topic_status=P&grades%5B%5D=D&searchterm=. T3. The Top Five Low-Value Services. VBI Health. Accessed May 20, 2020. <http://www.vbid-health.com/low-value-care-top-five-services.php>. T4. Milliman MedInsight. Milliman. Accessed May 20, 2020. <https://www.medinsight.milliman.com/en/>. T5. Low Value Care Visualizer. Research Consortium for Health Care Value Assessment. Accessed May 21, 2020. <https://www.hcvalueassessment.org/resource-tool.php>. T6. Swartz A. Replication Code/Data for Medicare Low-Value Care Measurement. Harvard Dataverse. Accessed May 22, 2020. <https://doi.org/10.7910/DVN/DEW0UO>. T7. Washington State Choosing Wisely Task Force. Choosing Wisely Claims-Based Technical Specifications. Accessed May 22, 2020. https://wahealthalliance.org/wp-content/uploads/2013/11/Choosing_Wisely_Specifications_2014.pdf.

On a macro-level, guidance and broader reopening plans could also include “Do Not Restart” lists. For example, a group of expert oncologists recently called for eliminating treatments with marginal benefit in their recommendations for modifying oncology care due to Covid-19.¹¹ Suggestions include discontinuing the use of certain drugs and having shared decision-making discussions for continuing intensive treatment for incurable cancers. Other experts have identified overuse practices in hospital medicine that can lead to harm of both patients and health care workers.¹²

A range of resources are available to help providers and health systems develop these lists, including Choosing Wisely and the U.S. Preventive Services Task Force recommendations and the Task Force on Low-Value Care’s “top five” services to.¹³⁻¹⁵ Existing tools such as the Milliman MedInsight Health Waste Calculator and the Research Consortium for Health Care Value Assessment’s Low Value Care Visualizer can also be employed to measure and track known low-value care services.^{16,17} There are also publicly available algorithms that can be used to analyze select low-value services in administrative data.^{18,19} Once care returns closer to a steady-state, these tools can help monitor use, track progress, and identify new low-value care targets. (Table 1)

To support “Do Not Restart” lists, providers and health systems can encourage guidelines for concordant care and make it easier for physicians and other health care professionals to avoid low-value services and identify higher value alternatives. Organizations could integrate appropriate care guidelines into point-of-care decision supports, such as alerts embedded into electronic health records, which would give front-line providers rapid access to evidence-based protocols. They could also offer regular provider reports, ideally with peer comparisons,²⁰ on use of low-value care with recommendations on how to improve.

Table 2.

Target	Overarching Approach
Care planning	<ul style="list-style-type: none"> • Work with high-risk and high needs patients to develop “care blueprints” that focus on avoiding ED utilization and other high-risk interventions
Re-opening priorities	<ul style="list-style-type: none"> • Identify low-value services for a “Do Not Restart” list as the health system reopens and measure and track use
Point-of-care decisions	<ul style="list-style-type: none"> • Build care guidelines into clinical decision supports, such as EHR alerts
Shared decision making	<ul style="list-style-type: none"> • Engage patients in conversations around risks and benefits of treatment, incorporating Covid-19 work
Alternative care pathways	<ul style="list-style-type: none"> • Expand telehealth platforms and home- and community-based services to deliver care safely to patients

Source: Authors' compilation

Leveraging alternative care pathways and care sites, such as telehealth, home-based care, and community-based care, can also help keep patients out of the ED and provide alternatives to low-value and wasteful care. ED visits and hospitalizations are frequently preventable and, once there, patients often receive unnecessary imaging and lab tests. Instead of unnecessary imaging or surgery for back or joint pain, patients could receive home-based or telehealth physical therapy, which can be as effective as in-person therapy in certain cases.²¹ The Covid-19 era also offers opportunities to advance other alternative care pathways, such as palliative care and onco-primary care survivorship clinics.^{22,23} Instead of cancer survivors seeing their oncologist in the hospital for a routine check-up, they could receive needed care by a PCP in a survivorship clinic. Not only can these delivery alternatives result in safer and more efficient and effective care, they are likely to align more closely with patient preferences.^{24,25}

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As providers and health care systems reintroduce care and implement new protocols, they should concurrently track and evaluate the impact on health outcomes, quality of care, patient experience, known or new disparities, and costs. The drastic changes in health care delivery due to Covid-19, combined with incremental resumption of elective procedures and services, provides a natural experiment to generate much needed evidence for eliminating or reducing many types of low-value care. Such evidence could pinpoint situations where care is unnecessary or inappropriate in certain populations, settings, or circumstances, which would provide valuable insights on opportunities for broader care redesign. (Table 2)

Support from Payers, Policymakers, Employers, and Patients

Action from stakeholders across the health care system can help providers and health systems to reduce low-value care.

Payers play a critical role in adjusting incentives for providers so that providing high-value care and eliminating wasteful services are the right financial decision. Payers could decrease or cease

payment for low-value services that create excess risk in the pandemic and align coverage policies to support “Do Not Restart” recommendations from professional organizations and practices. They could also support the development of alternative strategies via short-term payments to offset the costs of practice redesign and any necessary retraining, and ensure accessibility of actionable data and supportive tools for determining whether or not a procedure is necessary and tracking outcomes. If these efforts succeed, payers should promise to share savings with provider groups. Some payers such as Blue Cross Blue Shield of Massachusetts have already succeeded in reducing commonly overused services using these approaches.²⁶

Long-term, payers should accelerate development of value-based payment models. Providers practicing within these models have been more successful in responding to the pandemic and weathering the ongoing economic uncertainties,²⁷ as a result of more predictable financial structures and associated investments in infrastructure, staff, programs, and data systems to improve population health and care delivery.²⁸ These are many of the same capabilities required to eliminate low-value services.

“ *If seeing a physical therapist via telehealth over an orthopedist in an office offers a safer, higher-value pathway, then benefit design should reflect this higher value through lower co-payments.* ”

Payers should also engage consumers through this process, adopting value-based insurance design principles that deter use of low-value care and reduce barriers to necessary care. For example, if seeing a physical therapist via telehealth over an orthopedist in an office offers a safer, higher-value pathway, then benefit design should reflect this higher value through lower co-payments. Many payers have provided expanded telehealth services with low or no copays during the pandemic.²⁹ Payers should also prioritize lower copays for high-value pandemic services like Covid-19 testing and non-Covid-19 essential care such as preventive and mental health services, while increasing cost-sharing for low-value, high-risk services like spinal fusion, knee arthroscopy, and other outpatient lab and surgical services. Recent evidence indicates that utilization of low-value services can be reduced through modifying cost-sharing for patients.³⁰

Policymakers should create opportunities for providers, health systems, and payers to pilot innovative models that reduce low-value care and reflect the new Covid-19 reality, integrating telehealth and a wider range of health care professionals. CMS could direct additional Covid-19 relief funding to hospitals and providers who agree to pilot new models for health care reopening that actively seek to aid in the pandemic response, and who participate in alternative payment models to build a stronger health care system.³¹ More broadly, CMS should work with health care providers and payers to assess how and where relaxed telehealth regulations have worked particularly well to align care with patient need, using it as the basis for deciding how to continue to encourage effective telehealth. Finally, CMS should continue encouraging states to address social drivers of health and advance clinical and social care integration through 1115 waivers, such as North Carolina’s Healthy Opportunities Pilots,³² as well as other policies that support home and community-based services.

Even though high unemployment due to Covid-19 has underscored the weaknesses of employer-sponsored health care, the majority of Americans are still insured in this manner—and the higher reimbursements health systems get from these plans means **employers** must also play a key role in building this new normal. They can accelerate the adoption of tools already used successfully by many large, self-insured employers to limit wasteful care. “Centers of Excellence” (COE) programs, in which employees pay reduced (or no) out-of-pocket costs in return for using a high-quality institution, have reduced inappropriate joint and spine surgery for Walmart enrollees by 20-50% and reduced readmission rates by 70-95%.^{33,34} COEs could also provide remote second opinions on treatment. High-value provider networks linked to employer benefit design are also encouraging enrollees to see providers that perform well on quality metrics, while encouraging lower performers to improve. These approaches should be applied systematically to a range of therapeutic areas, starting with those that have opportunities for reducing known unnecessary care, such as orthopedics, oncology, cardiology, and obstetrics.

Finally, **patients** seeking care as health systems reopen will have a critical impact on the development of the new normal. Telehealth can make patient-provider interactions significantly easier and safer—a Better Medicare Alliance poll found that 91% of seniors in Medicare Advantage using telehealth services had a “very or somewhat favorable experience.”³⁵ However, patients need help and support in distinguishing needed services worth the risk from those that are unnecessary, and providers must account for how health disparities and access issues can impact a patient’s experience. Shared decision-making strategies can help facilitate these discussions around the risks and benefits of in-person care and have been found to result in patients choosing less-invasive treatments.^{36,37} Patient engagement will be critical to building and maintaining trust in new care approaches and for monitoring health outcomes.

While Covid-19 has exposed critical gaps in the U.S. health care system, it has also created significant new opportunities, offering reason to hope for a better future. Many of the capabilities required to respond effectively to Covid-19 — proactive care management within the community, collaborative care coordination, nimble clinical practice and policy approaches, value-based payment and care delivery models, timely data collection and sharing, and a sense of shared responsibility to protect and improve population health — are similar to those needed to tackle low-value care and more broadly create a better system for delivering care.

The range of actions we outline herein are certainly not exhaustive, but represent critical steps that a range of stakeholders can take in the coming months. Now more than ever, we need to allocate our limited health care resources towards services that produce better outcomes, at lower costs, and that align with patient values and preferences. This “new normal” can help build a more flexible, innovative system for achieving these goals.

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References

1. Cox C, Kamal R, McDermott D. How Have Healthcare Utilization and Spending Changed So Far During the Coronavirus Pandemic? Peterson-KFF. May 29, 2020. Accessed June 1, 2020. <https://www.healthsystemtracker.org/chart-collection/how-have-healthcare-utilization-and-spending-changed-so-far-during-the-coronavirus-pandemic/#item-start>.
2. Mehrotra A, Chernew M, Linetsky D, Hatch H, Culter D. The Impact of the Covid-19 Pandemic on Outpatient Visits: Practices Are Adapting to the New Normal. The Commonwealth Fund. June 25, 2020. Accessed July 28, 2020. <https://www.commonwealthfund.org/publications/2020/jun/impact-covid-19-pandemic-outpatient-visits-practices-adapting-new-normal>.
3. Berwick DM, Hackbarth AD. Eliminating waste in US health care. JAMA. 2012;307(6):1513-6
4. Shrank WH, Rogstad TL, Parekh N. Waste in the US health care system: Estimated costs and potential for savings. JAMA. 2019;322(6):1501-9
5. Mafi JN, Parchman M. Low-value care: an intractable global problem with no quick fix. BMJ Qual Saf. 2018;27(6):333-6
6. Re-Opening Facilities to Provide Non-Emergent Non-Covid-19 Healthcare: Phase I. Centers for Medicare & Medicaid Services. April 19, 2020. Accessed May 20, 2020. <https://www.cms.gov/files/document/covid-flexibility-reopen-essential-non-covid-services.pdf>.
7. Framework for Healthcare Systems Providing Non-Covid-19 Clinical Care During the Covid-19 Pandemic. May 12, 2020. Accessed May 20, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/framework-non-Covid-care.html>.
8. Navigating the Covid-19 Pandemic. American Academy of Orthopaedic Surgeons. 2020. Accessed June 8, 2020. <https://www.aaos.org/globalassets/about/covid-19/aaos-clinical-considerations-during-covid-19.pdf>.

9. Marron JM, Joffe S, Jaggi R, Spence RA, Hlubocky FJ. Ethics and Resource Scarcity: ASCO Recommendations for the Oncology Community During the COVID-19 Pandemic. *J Clin Oncol*. 2020;38(6):2201-5
10. Roadmap from AHA, Others for Safely Resuming Elective Surgery as Covid-19 Curve Flattens. American Hospital Association. April 17, 2020. Accessed June 8, 2020. <https://www.aha.org/standardsguidelines/2020-04-17-roadmap-aha-others-safely-resuming-elective-surgery-covid-19-curve>.
11. Lou E, Beg S, Bergsland E. Modifying Practices in GI Oncology in the Face of COVID-19: Recommendations From Expert Oncologists on Minimizing Patient Risk. *JCO Oncol Pract*. 2020;16(6):383-8
12. Cho HJ, Feldman LS, Keller S, Hoffman A, Pahwa AK, Krouss M. Choosing Wisely in the Covid-19 era: Preventing harm to healthcare workers. *J Hosp Med*. 2020;15(6):360-2
13. Choosing Wisely. Clinician Lists. Accessed May 27, 2020. <https://www.choosingwisely.org>.
14. U.S. Preventive Services Task Force Grade D Recommendations. Accessed May 28, 2020. https://www.uspreventiveservicestaskforce.org/uspstf/topic_search_results?topic=status=P&grades%5B%5D=D&searchterm=.
15. The Top Five Low-Value Services. VBID Health. Accessed May 20, 2020. <http://www.vbidhealth.com/low-value-care-top-five-services.php>.
16. Milliman MedInsight. Milliman. Accessed May 20, 2020. <https://www.medinsight.milliman.com/en/>.
17. Low Value Care Visualizer. Research Consortium for Health Care Value Assessment. Accessed May 21, 2020. <https://www.hcvalueassessment.org/resource-tool.php>.
18. Swartz A. Replication Code/Data for Medicare Low-Value Care Measurement. Harvard Dataverse. Accessed May 22, 2020..
19. Washington State Choosing Wisely Task Force. Choosing Wisely Claims-Based Technical Specifications. Accessed May 22, 2020. https://wahealthalliance.org/wp-content/uploads/2013/11/Choosing_Wisely_Specifications_2014.pdf.
20. Navathe AS, Volpp KG, Bond AM. Assessing the effectiveness of peer comparisons as a way to improve health care quality. *Health Aff (Millwood)*. 2020;39(6):852-61
21. Prvu Bettger J, Green CL, Holmes DN. Effects of Virtual Exercise Rehabilitation In-Home Therapy Compared with Traditional Care After Total Knee Arthroplasty: VERITAS, a Randomized Controlled Trial. *J Bone Joint Surg Am*. 2020;102(6):101-9
22. Spivey A. Escaping the Cancer Care Black Hole. Duke Cancer Institute. October, 1 2017. Accessed May 28, 2020. <http://dukecancerinstitute.org/donors/your-gifts-at-work/escaping-cancer-care-black-hole>.

23. Stanford Primary Care Doctor Establishes Clinic for Cancer Survivors. Stanford Medicine. Accessed May 28, 2020. <https://med.stanford.edu/aftercancer/our-programs/health-after-cancer.html>.
24. Orlando JF, Beard M, Kumar S. Systematic review of patient and caregivers' satisfaction with telehealth videoconferencing as a mode of service delivery in managing patients' health. PLoS One.
25. Dixon S, Nancarrow SA, Enderby PM, Moran AM, Parker SG. Assessing patient preferences for the delivery of different community-based models of care using a discrete choice experiment. *Health Expect*. 2015;18(6):1204-14
26. Song Z, Rose S, Safran DG, Landon BE, Day MP, Chernew ME. Changes in health care spending and quality 4 years into global payment. *N Engl J Med*. 2014;371(6):1704-14
27. Roiland R, Japinga M, Singletary E, et al. Value-Based Care in the Covid-19 Era: Enabling Health Care Response and Resilience. Duke Margolis Center for Health Policy. June 2020. Accessed June 9, 2020. https://healthpolicy.duke.edu/sites/default/files/2020-06/best_practices_brief_final.pdf
28. Bleser WK, Singletary E, Crook HL, Gonzalez-Smith J, Saunders RS, McClellan MB. Maintaining Progress Toward Accountable Care and Payment Reform During a Pandemic, Part 1: Utilization and Financial Impact. *Health Aff (Millwood)*.
29. Health Insurance Providers Respond to Coronavirus. (Covid-19). American's Health Insurance Plans (AHIP). June 11, 2020. Access June 12, 2020. <https://www.ahip.org/health-insurance-providers-respond-to-coronavirus-covid-19/>.
30. Gruber J, Maclean JC, Wright B, Wilkinson E, Volpp KG. The effect of increased cost sharing on low value service use. *Health Economics*. 2020; 1– 22. <https://onlinelibrary.wiley.com/doi/abs/10.1002/hec.4127>.
31. Supporting Health Care Providers During and After the Pandemic. A Covid-19 Health Care Resilience Program. Duke Margolis Center for Health Policy. June 2020. Accessed June 12, 2020. <https://healthpolicy.duke.edu/publications/supporting-health-care-providers-during-and-after-pandemic-covid-19-health-care-o>
32. Announcement: Healthy Opportunities Pilots Suspension. NCDHSS. May 28, 2020. Accessed June 2, 2020. <https://www.ncdhhs.gov/about/department-initiatives/healthy-opportunities/healthy-opportunities-pilots>.
33. Butcher L. Staying Mad: Walmart Gets Even-by Contracting Directly. *Manag Care*. 2019;28(6):19-24
34. Walmart Offers its Workers Free Surgery (With a Catch). Now it Wants Others to Do the Same. Advisory Board. March 19, 2019. Accessed May 17, 2020. <https://www.advisory.com/daily-briefing/2019/03/19/walmart-coe>.
35. Survey Results. Seniors' Experiences with Medicare Advantage Amidst Covid-19. Morning Consult-Better Medicine Alliance. May 2020. Accessed June 12, 2020. <https://www.bettermedicarealliance.org/sites/default/files/BMA%20Memo%20CT%20D2%5B3%5D.pdf>.

36. Parker PA, Peterson SK, Bedrosian I. Prospective Study of Surgical Decision-making Processes for Contralateral Prophylactic Mastectomy in Women With Breast Cancer. *Ann Surg.* 2016;263(6):178-83
37. Bertakis KD, Azari R. Patient-centered care is associated with decreased health care utilization. *J Am Board Fam Med.* 2011;24(6):229-39