



ISSUES AT THE HEART OF ADVANCING THE DE-ADOPTION OF LOW-VALUE CARE

Proceedings from an expert roundtable

Identifying and paying for value has become a recurrent theme of health care reforms. Its corollary, reducing the prevalence of, and resources directed to, ineffective or marginally effective care, has received far less attention. In July 2016, the University of Pennsylvania's Leonard Davis Institute of Health Economics (LDI) convened a diverse set of national leaders and stakeholders representing industry, think-tanks, provider and patient groups, and academic experts to tackle how health systems, payers, and providers can spur the 'de-adoption' of medical practices and technologies no longer considered valuable.

While the roundtable of experts unanimously supports the need for de-adoption and current efforts to curb the use of low-value practices or technologies, they identified four specific polarities at the heart of the debate about how best to build the momentum around de-adoption, and move it forward. They are:

- 1) value (targeting ineffective, even harmful, care or expanding efforts to address care of limited value)
- 2) resource allocation (spending less or redirecting spending)
- 3) quality improvement (a subset of QI or a distinct process)
- 4) level of intervention (policy, payment, provider, or organization)

In addition to these polarities, several key questions emerged that form practical next steps for advancing de-adoption activities. With an eye toward advancing de-adoption, this brief summarizes the polarities and questions that

suggest priorities for a future research agenda and policy-relevant action steps.

The [U.S. spends nearly 18% of its GDP \(\\$3.0 trillion, or \\$9,523 per person\) on health care](#), more than any other country. [According to the Institute of Medicine](#), a third of that spending could be considered wasteful, in that it does not contribute to improving health. Nearly one-third of the waste is due to the provision of 'unnecessary services,' which gives us a sense of the scope of the problem, but little guidance about which services are unnecessary, why they are provided, and what to do about it. The expert roundtable illuminated the following dimensions that can help us develop new better frames for moving the debate forward.

VALUE: TARGETING INEFFECTIVE OR marginally EFFECTIVE CARE?

Whether to target ineffective or marginally effective care is a key decision in de-adoption efforts. The value of a service or product is almost always a function of clinical situation in which it is used, and capturing that clinical nuance can be challenging. However, there is a limited set of services in which that [clinical nuance](#) can be readily and reliably ascertained to identify useless, or even harmful, care for de-adoption. The advantage of targeting this category is the broad support that can be leveraged around advocating for de-adoption of services that are useless or harmful. One [study](#) estimated Medicare spending on 26

As background for the roundtable, and to help find a common terminology for discussions, [LDI reviewed the literature](#) on previous attempts to reduce the use of services that do not improve health. While the process by which ineffective practices or technologies are abandoned is neither simple nor automatic, even the language used to describe it is not clear. And language matters, with different terms often reflecting an unstated focus on one intervention mechanism (for example, guidelines or payment policy) or one level of decision-making (for example, at the bedside or formulary). *Disinvestment* remains the most commonly used term, but may presuppose that the best way to reduce ineffective care is to stop paying for it. For the purposes of the roundtable, we chose *de-adoption* as this [has been suggested](#) as a term to standardize the literature on low-value clinical care, and is more neutral about how we might advance this objective.

ADDRESSING THE USE OF MARGINALLY EFFECTIVE CARE OFFERS POTENTIALLY GREATER REWARDS FOR DE-ADOPTION EFFORTS, AND CARRIES MUCH HIGHER RISKS.

ineffective services that were easily identifiable, and readily verifiable, from claims data. The study estimated that these services comprise between 0.6% and 2.7% of Medicare spending. That is a useful baseline about the potential savings that can be captured by targeting clearly useless services for de-adoption.

Broadening the targets to situations in which marginal costs exceeds marginal benefit may threaten the support for de-adoption initiatives, because it involves both clinical nuance and value judgments. On the other hand, targeting marginally effective care has a much greater potential to bend the health care spending curve, because it encompasses a much larger set of services and spending. Addressing the use of marginally effective care offers potentially greater rewards for de-adoption efforts, and carries much higher risks. It requires value judgments and trade-offs that may be politically infeasible, even if it is economically efficient. But even a small reduction in such care, if it could be ascertained, has greater potential to impact health care spending than even a large reduction in ineffective care.

RESOURCE ALLOCATION: SPENDING LESS OR REDIRECTING SPENDING?

A commonly cited reason for de-adoption is to 'make room' for medical innovation that improves health. Given that innovation is often expensive (though perhaps of high-value), de-adopting services of lesser value would free up space in budgets to pay for advances in care.

But does de-adoption actually redirect resources in efficient ways, and what is the mechanism for doing so? The answer to the question is important because it provides the motivation for de-adoption, and gives it some urgency. In a system of fixed budgets for the health care system (for example, the UK's National Health Service), it is easy to argue that resources are redirected; it is harder to perceive these mechanisms in the pluralistic, multi-payer U.S health care system. It is not the case that innovation always replaces the technology that precedes it. For example, the advent of MRIs did not spur de-adoption of CT scans, but instead added to spending directed to imaging.

That additional spending may reduce the resources available to other important sectors of the economy, but it does not necessarily crowd out medical innovation.

In the absence of fixed budgets, one way to promote efficient redirection of resources is through risk-based payment models, such as Accountable Care Organizations (ACOs), bundled payments, and shared savings programs. In effect, these models create incentives for providers to identify and discard lower-value services in favor of higher-value ones, because providers are at risk for the excess spending.

QUALITY IMPROVEMENT: WHERE DOES DE-ADOPTION FIT?

How does de-adoption differ from quality improvement? A common [definition](#) of QI is the "...systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups." To the extent that de-adoption eliminates harmful care, it clearly overlaps with the goals of QI. To the extent that it reduces services that are of marginal benefit, it may fall outside the scope of QI, especially at a health system level, unless that system can redirect resources. Hospital global budgeting may bring QI and de-adoption into better alignment.

Even when the goals of de-adoption and QI overlap, the methods may differ. This is an area of fruitful inquiry, given what we know about incentivizing behavior change. A different approach may be needed to encourage a provider to adopt a practice or process as part of QI than to stop delivering a specific practice or service.

AT WHAT LEVEL TO INTERVENE: POLICY, PAYMENT, PROVIDER, OR ORGANIZATION?

A critical question to answer is the appropriate level at which to target de-adoption efforts, which may differ depending on the nature of the service being de-adopted. For example,

RESEARCHERS NEED TO BUILD OUT THE SET OF EXAMPLES THAT ARE GENERALLY CONSIDERED HARMFUL OR INEFFECTIVE, AND YET REMAIN IN USE.

the [Choosing Wisely](#) campaign targets physicians and their patients for conversations about care identified as low-value by specialty societies. The campaign grounds its efforts within a shared decision-making framework and targets clinical situations in which services are ineffective or harmful. It remains an open question whether the cumulative impact of these bedside conversations can have a significant impact on the de-adoption of such care.

At the payer level, simply not providing coverage for low-value services has a direct effect on de-adoption. For example, payers can remove a service from their coverage criteria. However, using payment policy is inherently a blunt instrument that may prompt resistance from consumers and providers.

Acting at a health system or institutional level may be best for de-adopting some services, particularly ones that are hospital-based or device-oriented. However, a problem may arise at this level if the system has invested many of its resources in a technology and needs to recoup its investment.

LOOKING AHEAD: A RESEARCH AND POLICY AGENDA TO INCENTIVIZE THE DE-ADOPTION OF LOW-VALUE CARE

The roundtable participants identified current knowledge gaps and areas of inquiry that they considered to be the most promising in terms of informing de-adoption initiatives. These six areas, with explicit acknowledgement of the framing along the dimensions we discussed, make up a vibrant research agenda and practical next steps for advancing de-adoption activities.

What is the full potential of Choosing Wisely?

Although the provider-led [Choosing Wisely](#) initiative has an important role to play in promoting the de-adoption of low-value care, its full potential savings has not been calculated. The study mentioned earlier focused on 26 ineffective services and the potential savings for Medicare. But the campaign has more than 300 recommendations. If all Choosing Wisely

recommendations were implemented, what are the potential savings, and how far would this go toward addressing low-value care? What institutional, social, and individual changes are needed to realize this potential?

Why are practices still in use despite evidence of ineffectiveness or potential for harm?

Researchers need to build out the set of examples that are generally considered harmful or ineffective, and yet remain in use, e.g. [certain cancer screenings](#). A good starting point might be a subset of the services targeted by Choosing Wisely, which has had only a [marginal effect](#) on de-adoption. Taken together, these examples provide the raw data to answer the questions – Why is this still in practice? What are the barriers to de-adoption? What interventions might be most effective?

Conversely, researchers should also build the set of examples of practices that have been de-adopted, e.g. [non-medical labor induction prior to 39 weeks](#). What can be learned about incentives and appropriate strategies? When there has been a definitive cliff to the de-adoption of a certain procedure in practice, what was the impetus? What is the common thread across the examples? What sort of change - i.e. payment, guidelines – was effective in stopping a practice?

How do theories of individual and institutional behavior change apply to de-adoption?

Researchers should look to theories of behavior change to understand how to design effective interventions, especially considering that de-adoption entails stopping an existing practice. How do behavioral economic principles of loss aversion and discounting of long-term gains affect providers' decisions to de-adopt? How can framing be used to affect the way consumers and providers react to de-adoption activities? What is the role of social norms and feedback? On an institutional level, can diffusion of innovation theory help guide de-adoption (the final but rarely discussed phase of diffusion)? Theories are important, and different models of behavior change might be appropriate, depending on the specific practice and level being targeted.

ABOUT LDI


Since 1967, the Leonard Davis Institute of Health Economics (LDI) has been the leading university institute dedicated to data-driven, policy-focused research that improves our nation's health and health care. Originally founded to bridge the gap between scholars in business (Wharton) and medicine at the University of Pennsylvania, LDI now connects all of Penn's schools and the Children's Hospital of Philadelphia through its more than 250 Senior Fellows.

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How can new risk-sharing payment models and insurance design incentivize de-adoption?

New risk-sharing payment models provide an opportunity to understand and influence incentives for the de-adoption of low-value care. Researchers should analyze the utilization of low-value services in ACOs, as well as their non-ACO counterparts. The virtual or real infrastructure of an ACO may provide a necessary framework for integrating a multi-level intervention to de-adopt certain services, especially if that ACO can redirect its finite resources to more effective care.

Risk-sharing relationships and entities are also promising vehicles for changing provider incentives. As one roundtable participant said: "If we can pay farmers not to plant corn, we could pay cardiologists to not put in stents."

[Value-based insurance design](#) is gaining prominence as a way to align patient cost-sharing with the effectiveness of treatments. Simply put, it encourages patients to use services when the clinical benefits exceed the cost (by reducing or eliminating cost-sharing) and discourages the use of services of marginal benefit (by increasing a patient's out-of-pocket costs). This improves upon the strategy of simply not paying for a service by letting people choose between different plans that have different thresholds about low-value care. This must be coupled with greater transparency about the 'value' of different services.

How to determine where and when to intervene?

Researchers should develop a de-adoption framework that separates out the different levels at which to intervene – i.e. policy, organizational, payment, provider– and integrates them into a cohesive strategy. Depending on the practice, it may be that one level is targeted, or that multiple levels are targeted, either at the same time or sequentially. How might interventions interact with each other? Is a 'Stages of Change' model useful in assessing readiness for change, and laying the groundwork at different levels over time? This 'five ways to achieve de-adoption of low-value care' would marshal existing information but in a new way.

What does value mean to patients?

A missing, though essential piece in the de-adoption discussion is a better understanding of 'value' from a consumer or patient point of view. It is key to gaining consensus about what to de-adopt, and critical to the success of de-adoption initiatives. As the [National Health Council](#) notes, patient perspectives on value can differ significantly from that of physicians and payers, often integrating considerations beyond clinical outcomes and cost, such as how a treatment can help patients achieve personal goals. Researchers should build upon existing qualitative evidence about patient perspectives on value and apply it directly to de-adoption activities. It might help explain why services of little to no value continue to be offered. This evidence could help gain consensus on services to target, and engage consumer and patients in de-adoption activities.

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