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Engagement in eliminating overuse: The argument for safety and beyond

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Introduction

Medical overuse is defined as the provision of healthcare services whose potential for harm exceeds benefit.¹ Originally conceptualized as a fundamental quality problem,¹ medical overuse is pervasive² and increasingly identified as a threat to patient safety.³

While eliminating overuse is a priority, there are barriers to engaging clinicians.⁴ Overestimation of benefits and underestimation of harms of medical interventions^{5,6} lead to unjustified enthusiasm for health services from both patients and clinicians.⁷ Further, physicians identify a number of important barriers to doing less.⁸ Large-scale efforts such as Choosing Wisely™ and the Right Care Alliance⁹ have attempted to overcome these barriers by raising awareness and putting forth recommendations addressing overuse. However, these broad initiatives are unlikely to have great impact alone,^{10,11} and targeted interventions are likely necessary.¹² Many healthcare organizations are adopting local processes to reduce overuse and enhance safety.¹³ We propose four tips to facilitate clinician engagement in such “de-implementation” efforts to abandon low-value practice.¹⁴

1. Reframe from cost-focused to value-focused messaging

Overuse has often been framed as primarily a problem of cost.^{15,16} To engage clinicians in reducing overuse, it is imperative to focus messaging on improving safety and quality and away from curbing unnecessary costs. Unlike epidemiologists trained to view health from a population perspective, clinicians are trained to focus on one patient at a time, with a core professional value of advocacy for the individual patient. In a national survey, most physicians agreed they “should be solely devoted to individual patients’ best interests, even if that is expensive” (78%), and disagreed that they “should sometimes deny beneficial but costly services to certain patients because resources should go to other patients that need them more” (85%).¹⁷ At the same time, despite this aversion to limiting resources for

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Conflicts of Interest

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individual patients, most physicians agreed that “doctors need to take a more prominent role in limiting use of unnecessary tests” (89%).¹⁷ Empirical evidence suggests a similar pattern. While there is increasing interest in the use of price transparency to curb testing and treatment,¹⁸ outcomes have been mixed,^{19–21} with a recently published large trial showing no benefit.²² We believe that highlighting improvements in health outcomes and the reduction of harm rather than cost and resource stewardship will optimize physician investment in de-implementation.

2. Involve patients in discussions of overuse

Effective patient-clinician conversation is key to achieving patient-centered care and crucial for patient acceptance of initiatives to reduce overuse.²³ Tools are available to facilitate these conversations. The Choosing Wisely campaign has patient-oriented educational materials regarding overuse and specific services that are distributed through their many consumer partners.²⁴ In addition, growing evidence reveals that decision aids — used to facilitate conversations about complex clinical decisions — can help reduce overuse. In particular, this tactic proved successful regarding unnecessary provision of antibiotics for upper respiratory infections and overaggressive prostate cancer screening.^{25,26} Although they are effective, decision aids are challenging to implement, often requiring robust multidisciplinary strategies.²⁷ Physicians commonly cite fear of malpractice (85%) and patient pressure or request (59%) as the main drivers of their own unnecessary care.²⁸ The fear that denying a patient request might lead to a lawsuit can drive any physician to perform unnecessary services. Concurrently, patients may mistrust efforts to reduce unnecessary care, conflating them with rationing.²⁹ Improving communication with patients about overuse as a threat to safety is the antidote to both clinician fear and patient mistrust.

3. Address clinicians’ safety concerns when reducing overuse

A new initiative that seeks to limit service delivery may engender clinician concerns about patient safety. When evaluating initiatives to reduce unnecessary care, it is important to use balancing measures to document that there is no concomitant reduction in needed, appropriate care that may result in unintended harms. Balancing measures can be standard measures that are already tracked by the institution, such as length of stay, readmission rates, and intensive care unit transfers, or they may be more specific to the target and process.³⁰ For example, efforts to reduce unnecessary urinary catheters would track reinsertion rates as a balancing measure. Sharing these measures in real time is important for building trust among front-line staff.

At times, balancing measures may not appease skeptics, who may continue to suspect isolated instances of harm that are not captured with standard measures. Developing a forum for reporting and discussing adverse events may prove helpful. For example, a Society of Hospital Medicine Choosing Wisely recommendation focuses on reducing unnecessary daily labs “in the face of clinical and laboratory stability.”³¹ In an implementation effort to reduce unnecessary daily labs, the use of adverse event reporting and surveys from front-line members can facilitate effective and safe engagement.^{32,33} Reserving time to address concerns in regular staff meetings can also be helpful. A culture of safety is crucial for these

reporting systems and discussions, and careful attention must be paid in avoiding blame and allowing candid conversations.

4. Tell stories

Harnessing the power of storytelling has become pivotal to the patient safety movement.³⁴ After a near-death experience of his twins from an accidental heparin overdose, actor-turned-activist Dennis Quaid produced and narrated a documentary reporting on stories of families affected by medical errors³⁵ and championed the use of narratives about personal care experiences, as a tool in engaging staff for improving patient safety. Similar storytelling strategies can be used to engage clinicians and patients in initiatives to reduce overuse, as described by Institute of Healthcare Improvement in a video guide to storytelling.³⁶ Highlighting cases — particularly those that lead to patient harm — enables an element of pathos to bolster enthusiasm for reducing overuse. Similar models utilize overuse narratives in education. Right Care Rounds utilize cases of overuse to explore possible drivers of overuse in a conference setting.³⁷ Similarly educators and administrators at Icahn School of Medicine at Mount Sinai developed the “OCCAMs Conference” that employs root cause analysis to frame cases of overuse as medical errors and mobilizes the trainee audience to brainstorm solutions and participate in improvement projects to prevent similar overuse events.³⁸ JAMA Internal Medicine has further engaged trainees through the Teachable Moments series in which students and trainees publish cases of overuse that led to harm,³⁹ with over 55 such cases published by the end of 2017.

Conclusion

A culture of overuse is prevalent in health care settings, driven by physician malpractice fear, discomfort with medical uncertainty, and perceived patient demand.²⁸ Although awareness of overuse is increasing among clinicians, successful de-implementation of overuse in local institutions remains a challenge. Physician engagement in efforts to reduce overuse can be optimized through key strategies: (1) Focusing on patient safety rather than cost, (2) Improving clinician-patient communication (3) Maintaining transparency regarding potential negative effects, and (4) Appealing to empathy through storytelling. Effective engagement of physicians can help shift the culture away from overuse and toward greater patient safety.

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References

1. Chassin MR, Galvin RW. The urgent need to improve health care quality. Institute of Medicine National Roundtable on Health Care Quality. *Jama*. 1998; 280(11):1000–1005. [PubMed: 9749483]
2. Brownlee S, Chalkidou K, Doust J, et al. Evidence for overuse of medical services around the world. *Lancet*. 2017

3. Lipitz-Snyderman A, Korenstein D. Reducing Overuse-Is Patient Safety the Answer? *Jama*. 2017; 317(8):810–811. [PubMed: 28245304]
4. Saini V, Garcia-Armesto S, Klemperer D, et al. Drivers of poor medical care. *Lancet*. 2017
5. Hoffmann TC, Del Mar C. Patients' expectations of the benefits and harms of treatments, screening, and tests: A systematic review. *JAMA internal medicine*. 2015; 175(2):274–286. [PubMed: 25531451]
6. Hoffmann TC, Del Mar C. Clinicians' expectations of the benefits and harms of treatments, screening, and tests: A systematic review. *JAMA internal medicine*. 2017; 177(3):407–419. [PubMed: 28097303]
7. Casarett D. The Science of Choosing Wisely — Overcoming the Therapeutic Illusion. *New England Journal of Medicine*. 2016; 374(13):1203–1205. [PubMed: 27028909]
8. Zikmund-Fisher BJ, Kullgren JT, Fagerlin A, Klamerus ML, Bernstein SJ, Kerr EA. Perceived Barriers to Implementing Individual Choosing Wisely((R)) Recommendations in Two National Surveys of Primary Care Providers. *Journal of general internal medicine*. 2017; 32(2):210–217. [PubMed: 27599491]
9. Lane R. Vikas Saini: leading activist in the Right Care Alliance. *The Lancet*. 390(10090):117.
10. Rosenberg A, Agiro A, Gottlieb M, et al. Early trends among seven recommendations from the Choosing Wisely campaign. *JAMA internal medicine*. 2015; 175(12):1913–1920. [PubMed: 26457643]
11. Colla CH, Mainor AJ. Choosing Wisely Campaign: Valuable For Providers Who Knew About It, But Awareness Remained Constant, 2014–17. *Health affairs (Project Hope)*. 2017; 36(11):2005–2011. [PubMed: 29137515]
12. Lomas J, Anderson GM, Domnick-Pierre K, Vayda E, Enkin MW, Hannah WJ. Do practice guidelines guide practice? The effect of a consensus statement on the practice of physicians. *N Engl J Med*. 1989; 321(19):1306–1311. [PubMed: 2677732]
13. Zapata JA, Lai AR, Moriates C. Is Excessive Resource Utilization an Adverse Event? *Jama*. 2017; 317(8):849–850. [PubMed: 28245327]
14. van Bodegom-Vos L, Davidoff F, Marang-van de Mheen PJ. Implementation and de-implementation: two sides of the same coin? *BMJ Qual Saf*. 2017; 26(6):495–501.
15. Mukerji G, Weirnerman A, Schwartz S, Atkinson A, Stroud L, Wong BM. Communicating wisely: teaching residents to communicate effectively with patients and caregivers about unnecessary tests. *BMC medical education*. 2017; 17(1):248. [PubMed: 29228940]
16. Wolfson D, Santa J, Slass L. Engaging physicians and consumers in conversations about treatment overuse and waste: a short history of the choosing wisely campaign. *Academic medicine : journal of the Association of American Medical Colleges*. 2014; 89(7):990–995. [PubMed: 24979166]
17. Tilburt JC, Wynia MK, Sheeler RD, et al. Views of US physicians about controlling health care costs. *Jama*. 2013; 310(4):380–388. [PubMed: 23917288]
18. Sinaiko AD, Rosenthal MB. Increased price transparency in health care—challenges and potential effects. *N Engl J Med*. 2011; 364(10):891–894. [PubMed: 21388306]
19. Silvestri MT, Bongiovanni TR, Glover JG, Gross CP. Impact of price display on provider ordering: A systematic review. *J Hosp Med*. 2016; 11(1):65–76. [PubMed: 26498736]
20. Chien AT, Lehmann LS, Hatfield LA, et al. A Randomized Trial of Displaying Paid Price Information on Imaging Study and Procedure Ordering Rates. *Journal of general internal medicine*. 2017; 32(4):434–448. [PubMed: 27913910]
21. Durand DJ, Feldman LS, Lewin JS, Brotman DJ. Provider cost transparency alone has no impact on inpatient imaging utilization. *Journal of the American College of Radiology : JACR*. 2013; 10(2):108–113. [PubMed: 23273974]
22. Sedrak MS, Myers JS, Small DS, et al. Effect of a Price Transparency Intervention in the Electronic Health Record on Clinician Ordering of Inpatient Laboratory Tests: The PRICE Randomized Clinical Trial. *JAMA internal medicine*. 2017; 177(7):939–945. [PubMed: 28430829]
23. Born KB, Coulter A, Han A, et al. Engaging patients and the public in Choosing Wisely. *BMJ Qual Saf*. 2017; 26(8):687–691.

24. Choosing Wisely, An Initiative of the ABIM Foundation. Choosing Wisely Consumer Partners Website. <http://www.choosingwisely.org/aboutus/partners/choosing-wisely-consumer-partners/> Accessed November 30, 2017
25. Coxeter P, Del Mar CB, McGregor L, Beller EM, Hoffmann TC. Interventions to facilitate shared decision making to address antibiotic use for acute respiratory infections in primary care. *Cochrane Database Syst Rev*. 2015; (11):Cd010907. [PubMed: 26560888]
26. Joseph-Williams N, Lloyd A, Edwards A, et al. Implementing shared decision making in the NHS: lessons from the MAGIC programme. *Bmj*. 2017; 357:j1744. [PubMed: 28420639]
27. Coulter A, Härter M, Moumjid-Ferdjaoui N, Perestelo-Perez L, Van Der Weijden T. European experience with shared decision making. 2015
28. Lyu H, Xu T, Brotman D, et al. Overtreatment in the United States. *PLOS ONE*. 2017; 12(9):e0181970. [PubMed: 28877170]
29. Campbell, D. Doctors to withhold treatments in campaign against 'too much medicine'. *The Guardian*. 2015. <https://www.theguardian.com/society/2015/may/12/doctors-to-withhold221treatments-in-campaign-against-too-much-medicine>.
30. Institute of Healthcare Improvement. How to Improve - Science of Improvement: Establishing Measures. <http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementEstablishingMeasures.aspx> Accessed 19 February 2018
31. Bulger J, Nickel W, Messler J, et al. Choosing wisely in adult hospital medicine: Five opportunities for improved healthcare value. *Journal of Hospital Medicine*. 2013; 8(9):486–492. [PubMed: 23956231]
32. Sadowski BW, Lane AB, Wood SM, Robinson SL, Kim CH. High-Value, Cost-Conscious Care: Iterative Systems-Based Interventions to Reduce Unnecessary Laboratory Testing. *The American Journal of Medicine*.
33. Wertheim BM, Aguirre AJ, Bhattacharyya RP, et al. An Educational and Administrative Intervention to Promote Rational Laboratory Test Ordering on an Academic General Medicine Service. *Am J Med*. 2017; 130(1):47–53. [PubMed: 27619354]
34. Cox LM, Logio LS. Patient safety stories: a project utilizing narratives in resident training. *Academic medicine : journal of the Association of American Medical Colleges*. 2011; 86(11):1473–1478. [PubMed: 21952066]
35. Landro, L. Patient Safety: The Movie. *The Wall Street Journal Health Blog*. 2010. <https://blogs.wsj.com/health/2010/04/22/patient-safety-the-movie/>.
36. Hayward M. Why Are Patient Stories Valuable in Health Care? *Institute for Healthcare Improvement Open School*. 2015
37. Murphy EN, Tad-y D, Combs B. Exploring Drivers of Medical Overuse Through Transformation of Grand Rounds Into "Right Care Rounds". *Journal of Graduate Medical Education*. 2015; 7(2):283–284. [PubMed: 26221457]
38. Cho HJ, Lutz C, Truong TTN, Jogendra M, Blanchard K, Dunn AS, O'Kula S, Greebel S, Korenstein DR. Occam's Conference: Overuse As a Medical Error [abstract]. *Journal of Hospital Medicine*. 2016; 11(suppl 1)
39. Caverly TJ, Combs BP, Moriates C, Shah N, Grady D. Too much medicine happens too often: the teachable moment and a call for manuscripts from clinical trainees. *JAMA internal medicine*. 2014; 174(1):8–9. [PubMed: 24080955]