Less is not always more: embracing (appropriate) medical intensity

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As healthcare costs continue to rise globally, policy makers and researchers have focused on inefficiencies in healthcare delivery. In the USA, the combination of high costs and disappointing outcomes associated with a fragmented delivery system has generated the idea that substantial reductions in spending are possible without sacrificing patient care. Indeed, we know that high spending often fails to produce optimal outcomes and therefore, reductions in spending should be achievable with no detrimental effects on quality.

The evidence that less can sometimes be more is all around us. Front-line providers know all too well the human and financial costs of aggressive treatment of terminally ill patients who might otherwise prefer a palliative approach. Redundant testing due to inadequate care coordination and lack of information sharing is another example. Preventable adverse events exemplify how poor-quality care can drive up costs and harm patients at the same time. From these instances, a new mantra has emerged among many health policy leaders: less is better. Intensity is bad.

What is clinical intensity? It is often described as the tendency to do more: perform more procedures, admit more patients, consult more specialists and prescribe more medications. Why does level of intensity appear to vary widely across institutions? Some have suggested that variation in clinical intensity is due to differences in the underlying patient population, although others have argued that patient factors matter very little. Detailed work by researchers at Dartmouth has suggested that both medical intensity and its variation among providers are fundamentally inefficient and are driven by differences in medical culture. The authors examined rates of admission from emergency departments (EDs) for patients presenting with heart failure (HF). They found that the low-intensity EDs, those with low baseline rates of admissions for patients with HF, had higher rates of repeat ED visits and hospitalisations. Even more worrisome, low admission rate EDs were less likely to see a cardiology specialist or to have cardiac testing after discharge. Taken together, these findings suggest that there are real clinical costs to being less aggressive. Many patients might have done better had they gone to an ED with a higher level of clinical intensity.

A second insight from the Bhatia study is that intensity does seem to be related to clinical culture. While the authors found that low admission rate hospitals tended to be smaller, non-teaching, rural hospitals (with presumably healthier patients), these characteristics did not fully explain the differences in hospitalisations after presentation. Indeed, the authors found that when patients presented to a different hospital after being discharged from the original ED, their trend toward greater mortality relative to institutions with higher admission rates for this condition. Patients discharged from EDs with low rates of admission were less likely to see a cardiology specialist or to have cardiac testing after discharge. Taken together, these findings suggest that there are real clinical costs to being less aggressive. Many patients might have done better had they gone to an ED with a higher level of clinical intensity.

In this context, an elegant new study by Bhatia et al. offers several important insights. The first is that providing less medical care (i.e. having lower intensity) has its own costs. The authors examined rates of admission from emergency departments (EDs) for patients presenting with heart failure (HF). They found that the low-intensity EDs, those with low baseline rates of admissions for patients with HF, had higher rates of repeat ED visits and hospitalisations. Even more worrisome, low admission rate EDs had a trend toward greater mortality relative to institutions with higher admission rates for this condition. Patients discharged from EDs with low rates of admission were less likely to see a cardiology specialist or to have cardiac testing after discharge. Taken together, these findings suggest that there are real clinical costs to being less aggressive. Many patients might have done better had they gone to an ED with a higher level of clinical intensity.

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Clinicians who have worked at multiple institutions will not be surprised. Indeed, we are all familiar with the phenomenon of ‘medical culture.’ What is common practice at one hospital (e.g. discharging...
a patient with low-risk chest pain after a single set of cardiac enzymes) may be viewed as substandard or even reckless at another. It seems that this phenomenon of medical culture at least partly explains some of the variation in medical intensity among providers and institutions.

The study by Bhatia et al adds to a growing body of literature that challenges the ‘less is more’ philosophy in health policy. Their study is consistent with the other literature showing that aggressive, high-intensity care is associated with better outcomes for some conditions.

The policy implication of this phenomenon is clear: even in health care, sometimes, ‘you get what you pay for’. But how does one reconcile the findings of the Bhatia study and others like it with the Dartmouth work suggesting that higher spending does not produce better outcomes? Is medical intensity bad or is it good? Clearly, the answer depends on the specific clinical scenario. Patients and their conditions are too heterogeneous for a single approach. The optimal level of intensity of care needs to be tailored to the patient’s needs and wishes and supported by high-quality evidence whenever possible. Optimal care for patients with serious illness frequently requires complex care in expensive settings.

This level of intensity, applied to seriously ill patients, can lead to better outcomes. Applying the same level of intensity to a different patient population is likely to lead to waste and potentially worse clinical outcomes.

The recognition of waste and inefficiency has motivated policymakers in a number of countries to begin a shift away from a fee-for-service model, which often encourages volume over value. As this shift continues, we need to remember the corollary: that less is also important—and not just for the bottom line. Indeed, patients’ lives depend on it.

Contributors AKJ and LGB both made substantial contributions to the conception or design of the work, drafted the work and revised it critically for key intellectual content, approved the final version to be published and agreed to be accountable for all aspects of the work.

Competing interests None.

Provenance and peer review Not commissioned; internally peer reviewed.

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