Controlling healthcare costs by removing waste: what American doctors can do now


ABSTRACT
Healthcare costs are unsustainable. The authors propose a solution to control costs without rationing (deliberate withholding of effective care) or payment reductions to doctors and hospitals. Three physician-led strategies comprise this solution: reduce (1) overuse of health services, (2) preventable complications and (3) waste within healthcare processes. These challenges know no borders.

PROPOSITION
Physicians have a primary responsibility to care for the individual patients we serve. Principles of distributive justice also argue that our responsibility extends more broadly to ensure that sufficient resources are available to treat all Americans. In the face of unsustainable, escalating healthcare costs, these two responsibilities can be met only by removing clinically unwarranted waste, variation and other defects. This ‘reform from within the profession’ requires no legislative mandate. There are numerous structural flaws that must be addressed in partnership with others (eg, misaligned financial incentives, cumbersome administrative processes and professional liability reform), but we do not need to wait to make a change. Physicians who order the tests, prescribe the medications, develop the treatment plans and execute the procedures are in a unique position to deliver results now.

As our country recovers from the worst economic downturn since the Great Depression, the impact of healthcare costs on our competitiveness is thrown into sharper focus. Businesses are struggling to survive, while patients are losing their insurance and their access to healthcare in record numbers. In 2007, nearly two-thirds of personal bankruptcies were due to medically related bills.1 Americans spend more than twice as much per capita on healthcare than the average spent in other developed countries.

Some experts believe that there is 40–50% waste in the US healthcare system.2–4 If only 10% is amenable to straightforward interventions led by physicians, we could realise annual healthcare savings of $100 000 000 000, enough to fully fund the recently passed healthcare legislation over a 10-year period. $100 billion is within our reach.5 6 The strategy is a physician-led reduction in (1) overuse of health services, (2) preventable complications and (3) waste within healthcare processes.

OVERUSE
Overuse is the use of clinical services with negligible benefit, so that harm outweighs any slim benefit in virtually all cases. Identification of all overuse is controversial. We submit, however, that it is prudent to start by addressing the numerous targets where there is strong evidence to support unnecessary care (eg, antibiotics for colds, tympanostomy tubes for brief middle-ear effusions, induction of labour before 39 weeks with no medical indication [leading to preventable caesarean section surgery], stenting minimally obstructed coronary or carotid arteries, diagnostic knee arthroscopy in simple osteoarthritis which is no more effective than sham surgery at decreasing pain or increasing mobility in defined populations).7–10 Shared patient–family decision-making is a fundamental of patient-centred care. Genuine engagement is also important in decisions involving the intensity of care in the first and
last few months of life. There is a great opportunity to improve both family and patient satisfaction while lowering costs for healthcare. Patient engagement and understanding of the issues are helpful, increasing and necessary but not sufficient.10 11

Overuse is first and foremost a patient harm issue, but it also has substantial economic implications. Patient harm from overuse includes complications from unnecessary procedures, drugs and tests, and anxiety related to incidental findings that sometimes require years of follow-up and exposure to cancer-causing ionising radiation from unnecessary imaging. Unnecessary care may be directly responsible for as many as 30 000 patient deaths per year.12

The economic cost of overuse is formidable. It has been estimated to be in the range of one-fifth to one-third of our total healthcare expenditure.13–15 One need only look at a very small segment of our care to understand the opportunity. The wasted clinical spending from seven services alone accounts for $33–62 billion of waste annually.5 The seven are antibiotic use for viral upper-respiratory infections and otitis media, avoidable hospitalisations for nursing home patients, overuse of cervical cancer screening, inappropriate hysterectomies, unnecessary admissions in emergency triage of chest pain patients, overuse of non-invasive imaging and inappropriate spinal-fusion surgeries. We, as medical professionals, have primary responsibility to change these trends. We can start by better understanding the evidence, communicating it to our patients and then engaging our patients in a shared decision-making process.

Consider this: MRI for simple back pain performed in the first 6 weeks after onset of back pain is neither scientifically supported nor recommended. Approximately 80% of patients over 40 years of age, whether symptomatic or not, have a spinal ‘abnormality’ on MRI, many of which could lead to unnecessary surgery. Use of MRI in the first 6 weeks is costly and has been shown to result in a 2.5-fold increase in surgery with no difference in the outcomes of disability, pain and general health status.16 In addition, return to full function is significantly delayed. Use of existing evidence, clinical guidelines and shared decision-making could curtail this wasteful use of expensive technology and the resultant unnecessary surgery. Indeed, radiology benefit management groups have emerged because professions involved with imaging have not stepped up to their obligation to perform only patient-centred, evidenced-based examinations.17

Vertebroplasty procedures are performed twice as frequently as they were just 6 years ago. The episode of care costs $5000. The complication rate is 1–2%. Are we helping these patients? Two independent randomised trials performed in two different continents and published in the N Engl J Med found that vertebroplasty was no better than sham surgery in relieving disability or pain from vertebral fractures, even 6 months after the procedure.18 19 In response to these publications, the Society for Interventional Radiology formally declared support for vertebroplasty.20 Why are we continuing to perform and to pay for risky, invasive procedures that our best science shows is no better than placebo?

Pharmaceutical use is also in large part driven by physician behaviour. The industry recognises this and accordingly directs over $7 billion in direct marketing to physicians annually, approximately $10 000 per doctor, in addition to billions spent on direct-to-consumer advertising with a goal of indirectly influencing physician prescribing.21 Yet it is widely recognised by clinicians that truly breakthrough medications ‘sell themselves’ with little need for marketing. The opportunity for savings from better evidence-based prescribing and use of generics has been estimated at tens of billions of dollars. Just the overuse of antibiotics may be over $1 billion. Up to 55% of antibiotic prescriptions are unnecessary and should be curtailed.22

The use of clinical guidelines offers a rational and evidence-based approach to more appropriate utilisation. They set the stage for a substantive reduction in imaging while offering a strong legal defence for appropriate care.23 Use of the Canadian Head CT clinical prediction rule for minor head trauma has been shown to reduce CT use by over one-third, yet identifies 100% of cases where appropriate neurosurgical intervention is beneficial.24 Costs and exposure to ionising radiation are reduced in both cases, and outcomes are better. Guidelines from respected professional organisations that are generated from evidence-based medicine and comparative effectiveness research are a path to greater standardisation and better outcomes for patients.

Defensive medicine plays a role in overuse. Establishing unambiguous standards of care for problematic practice areas will help enable, protect and support physicians as they direct all the care that is indicated, but nothing more.

There are many causes of overuse: fee for service reimbursement systems (that create a financial conflict of interest for non-salaried physicians), patient demand fuelled by commercial advertising, miscommunication, malpractice concerns and unwarranted enthusiasm for new technologies or drugs that ignore the importance of balanced clinical judgement. Physicians are in the best position to address these issues.

Preventable Complications

Preventable complications are the second opportunity for which physicians have considerable direct responsibility. Preventable complications occur when an appropriate
healthcare service is chosen, but then delivered poorly and may account for up to $29–46 billion annually.5 25 26

Healthcare-associated infections are largely preventable adverse events. They account for an estimated 1.7 million infections and 99 000 associated deaths annually, making them the most common complication of hospital care. The added financial burden attributable to infections is estimated to be $28–33 billion each year.97 Established preventive measures, if rigorously implemented, can substantially reduce infections.

Injuries associated with medication errors constitute another major class of preventable complications. The Institute of Medicine estimated that 1.5 million Americans experience such injuries each year.28 The estimated cost of preventable adverse drug events each year is at least $5 billion.29

Very large cost reductions are achievable through improving quality of care and reducing harm to patients. These potential gains are not speculative. They have been demonstrated in organisations throughout America.30 31 However, their implementation requires courage, brutal honesty concerning unacceptable performance and physician leadership.

**PROCESS INEFFICIENCY**

Process inefficiency is the third category of waste for which physicians and other providers are often responsible and in which they often feel trapped. Recoverable wasted effort in frontline care activities (eg, time spent on defects, errors, locating and waiting) may be as high as one-third of effort.32–37 The magnitude of hospital-specific waste alone has been estimated to be 13.6% of total hospital costs.36 Modern approaches using systems engineering for improving reliability can greatly reduce hospital costs.39–41

It is imperative that physicians engage in streamlining clinical processes that are redundant, needlessly complex and, therefore, prone to error and that ultimately contribute to patient dissatisfaction. In so doing, physicians are helping to reduce the burden of work that they and their teams needlessly encounter on a daily basis freeing up time for more productive and satisfying work.

The waste of preventable complications and process inefficiency are in part system issues that absolutely will need a partnership of physicians, nurses, administration and governing boards to eradicate. We submit, however, that physicians are the professionals that must lead the eradication by creating a culture compatible with bona fide highly functioning interdisciplinary teams and embracing standard work as the most patient-centred, safest and efficient. No one else can lay these cornerstones.

**SUMMARY**

We acknowledge that a systems approach is necessary for long-term success. However, we assert that it is possible for care givers to make a substantive difference in spite of the current systems and incentives by acting responsibly, both individually and collectively. Physicians have two responsibilities. The first is to always provide compassionate and effective care to our patients. The second is to recognise our role in ensuring that quality care is available to all. Both responsibilities compel us to eliminate waste in our healthcare system. Meeting these two responsibilities requires us to improve the quality, safety, effectiveness, appropriateness and efficiency of the care we provide. We understand that there are powerful systemic financial forces that entice physicians to do otherwise. We must also understand that professionalism starts and ends with the best interests of the patients.

Overuse, preventable complications and process inefficiency are problems that physicians can and should address. They belong to us.

We believe that it is possible to reduce healthcare costs by hundreds of billions of dollars—enough to make US healthcare funding sustainable. The basics of good healthcare can be delivered with no more money, no more people and no more buildings. The savings can be realised by comprehensive, intelligent, patient-centred work. It is a goal we can reach without intervention from public or private payers, although ultimately we need a reimbursement structure that does not penalise us for practising medicine that provides exactly what patients need.

The need to address the problem is compelling. The best results will be achieved through physicians meeting their responsibilities rather than depending on others to ‘manage’ the care we provide. We are better equipped to do so directly within a framework of patient centred care. As physicians, we can and should act now.

**ACTION**

The first step is for each physician to assess their own practice to minimise overuse and preventable complications and to optimise the efficiency of processes. For complete success, all those at the frontline must be engaged. The process of assessing, testing, measuring and improving must become a continuous quality-improvement activity that is part of everyone’s professional work. We must engage with all stakeholders in this work to optimise the continuum of care for our patients in ambulatory clinics, hospitals, extended care facilities or at home. All stakeholders have a common interest—all the care that is indicated and nothing more, delivered safely and efficiently.
Finally, we must leverage professionalism at the medical specialty society level. The leadership of each society should ask the same question at the national level: what are the opportunities to deliver higher-value care? The specialty organisations are in a powerful position to do the right thing by establishing simple, clear standards, guidelines and registries, and by developing transparent public reporting to support benchmarking, learning and accountability. Charging each of the specialty-based professional groups with the task of identifying three cost-saving opportunities that will either improve or hold neutral quality of care is a reasonable place to start.42 The National Priorities Partnership convened by the National Quality Forum is working to identify priorities for measure development in this area and will make important contributions to elevating the visibility of overuse as a quality problem in the national health policy discourse.43 The physician community should be part of the solution to the crisis rather than an obstacle.

American physicians must become better stewards of our nation’s limited healthcare resources. We must take responsibility for the clinically unwarranted variation, waste and defects that result from our choices when we care for patients. Choosing to act now is our professional obligation.

**Competing interests** None.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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*BMJ Qual Saf* published online February 21, 2011
doi: 10.1136/bmjqs.2010.049213

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