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Commentary and Opinions

Choosing wisely in medical education: bridging the gap between clinical care and managerial mindsets

Choisir avec soin en éducation médicale : combler le fossé entre les soins cliniques et les mentalités managériales

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Healthcare systems today face a paradox familiar to some businesses: rising costs accompanied by diminishing returns. In clinical settings, this often involves the overuse of diagnostics and treatments that offer minimal benefit, carry potential harm, and divert scarce resources. The Choosing Wisely Canada (CWC) initiative, launched in 2012, was designed to address this challenge by promoting evidence-informed, value-based care. However, its structured integration into undergraduate medical education remains limited.

As a medical student with prior training in management, I see a missed opportunity. The same principles that underpin effective business education—resource allocation, operational efficiency, and systems thinking—are equally critical in clinical practice. Just as future managers are taught early to assess cost-benefit, risk, and long-term value, so too must future physicians learn to prioritize care that is both evidence-based and sustainable.

In business school, decision-making is framed around trade-offs. Whether evaluating a capital investment or a market expansion, students are trained to ask: Does this action deliver value? Is it the best use of limited resources? What are the opportunity costs? These questions parallel those that clinicians must ask when deciding whether to order a CT scan, initiate antibiotics, or make a specialist referral. Yet many medical students enter clinical environments without this mindset. The culture often rewards thoroughness over thoughtfulness, and "doing more" is mistaken for "caring more." Choosing Wisely education provides a framework to counter this narrative by reframing clinical reasoning around value, not volume.

Despite widespread endorsement by national bodies, Choosing Wisely content is frequently delivered as an elective or stand-alone session. Without longitudinal integration, students may not appreciate the central role of stewardship in high-quality care. Worse still, the hidden curriculum in many clinical environments reinforces the normalization of unnecessary investigations and treatments, often rooted in a culture of defensive medicine, medico-legal concerns, time pressures, and assumptions about patient expectations. Historically, such low-value practices have been perpetuated by technological enthusiasm, fee-for-service incentives, and institutional inertia, all of which contribute to their routine use despite limited patient benefit.[1]

Consider a typical emergency department shift. A patient presents with ankle pain after a minor twist while walking. A medical student, eager and cautious, recommends an X-ray "just to be safe." The resident agrees, despite the absence of malleolar tenderness or inability to bear weight criteria that, according to the Ottawa Ankle Rules [2], make a fracture highly unlikely. Such decisions reflect more than mere caution. For trainees, the impulse is shaped by fear of missing a diagnosis, limited clinical confidence, and the desire to meet perceived expectations of both supervisors and patients. For supervisors, medico-legal concerns, time

pressures, and ingrained habits may reinforce defaulting to additional testing. Together, these factors represent missed opportunities to apply Choosing Wisely principles and instead perpetuate a culture of overuse, where unnecessary investigations are framed as safer, despite evidence to the contrary.

There are many opportunities to integrate Choosing Wisely into undergraduate education meaningfully. A few of such ideas include:

1. Formative modules and assessments throughout pre-clerkship and clerkship that require application of stewardship principles.
2. OSCEs and simulation activities that include scenarios where "doing less" is the correct decision.
3. Structured reflections or discussion prompts during clinical rotations that ask students to identify and critique decision-making around investigations or treatment.
4. Student-led initiatives and advocacy projects, which not only enhance learning but contribute to a broader culture shift within institutions.

Crucially, clinical supervisors must be encouraged to role-model resource-conscious care, explaining their decisions in real time and fostering open discussions about uncertainty, risk tolerance, and system-level impacts. Saying "no" to an unnecessary test should be seen not as a lack of knowledge but as an act of responsible, evidence-based medicine.

In business education, no graduate completes their training without mastering core concepts like operations, finance, and strategic planning. Medicine should be no different, especially when the stakes are higher, the systems more fragmented, and the consequences more personal.

The future of healthcare depends on clinicians who act as stewards of resources, patient trust, and system integrity. Choosing Wisely education is not just about avoiding overuse; it is about cultivating a mindset of clinical restraint, accountability, and systems awareness. Importantly, what constitutes "low-value clinical practice" is not arbitrary but defined through rigorous processes that combine best available evidence, specialty consensus, and patient-centered outcomes. Much like management programs embed fiscal literacy and operational discipline, medical schools must embed stewardship as a core competency. Medicine must be taught not only as a science of healing, but as a discipline of wise, value-based decision-making.

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