We need to mandate drug cost transparency on electronic medical records

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Canada has the dubious distinction of boasting the second highest per capita drug costs in the world, after the United States, with prescription drugs as the second most costly component of health care.[1] Yet physicians have no real-time access to drug costs, so patients routinely receive prescriptions with little, if any, discussion about the affordability of the drugs they are prescribed. Patients learn how much their prescriptions cost at the pharmacy, and many may then feel helpless if they find that they cannot afford their medications. These problems would be solved, and many other benefits realized, if drug costs were included in electronic medical records.

Physicians often have poor insight into the cost of drugs. A survey of 189 physicians found that 80% were unaware of drug costs and only 33% believed they had easy access to data about drug costs. However, most (88%) reported that drug cost was an important consideration when prescribing.[2] Lack of awareness about drug costs among physicians leads to prescription of more costly drugs when cheaper, equally beneficial, alternatives exist.[3,4] Studies have shown that increasing out-of-pocket costs for patients results in decreased prescription adherence, especially among older adults.[5]

Provincial drug programs and Canadian health care professional associations have underscored the need for cost-effective prescribing in Canada. A communication from the Executive Officer for Ontario Public Drug Programs stated that one of the goals of the programs included "operating transparently ... to health care practitioners, consumers, manufacturers, wholesalers and pharmacies." Another goal was "aiming to consistently achieve value-for-money and ensure the best use of resources at every level of the system."[6] In 2012, the Canadian Medical Association and the Canadian Pharmacists Association published a joint statement on e-prescribing that foresaw the potential benefits of e-prescribing and stressed that "clinicians must have access to … drug costs"[7] to fully realize the benefits of e-prescribing.

The need to have access to the cost of a prescription for individual drugs is illustrated by a 2014 comparison of the prices of commonly prescribed pharmaceuticals that was published by the Alberta College of Family Physicians. Appendix 1 (available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.171070/-/DC1) uses examples from a variety of therapeutic areas to show how large the cost differences can be for a 90-day prescription for drugs that are equivalent therapeutic options.

KEY POINTS

- Canadian physicians have no direct access to drug costs at the time of prescribing, and they lack awareness of the costs of drugs.
- Greater out-of-pocket costs for patients are associated with reduced adherence to medication, which contributes to downstream health care costs.
- Limited but compelling evidence shows substantial potential savings associated with interventions that increase drug cost transparency to physicians.
- Provincial and territorial guidelines mandating that providers of electronic medical records integrate drug benefit formulary information into the records would assist prescribers to identify cost-effective medications for patients.

The effects of transparency in drug costs have not been researched exhaustively, but limited evidence is compelling. A survey of 761 primary care physicians in Toronto found that the percentage who prescribed an expensive antibiotic option for a hypothetical patient with an infectious exacerbation of chronic obstructive pulmonary disease dropped from 38% to 18% when insurance coverage and prices were disclosed.[8] A longitudinal nonrandomized study examined prescription claims from a large health plan in Hawaii for 5883 members with diabetes over two years and found that providers who had received a Web-based prescribing guide (www.PrescribingGuide.com) had an average lower increase of $208 in total drug costs per patient per year than providers who did not receive the guide.[9] Another study of e-prescribing with formulary support for 1.5 million patients estimated total savings in drug costs of $845 000 per 100 000 patients.[10] These studies likely underestimate actual potential savings. None of these studies examined point-of-care provision of drug costs to the prescribing physician; potential savings associated with real-time access to drug costs are likely to be higher.

Integrating and updating prices listed in provincial formularies should be straightforward from a technical perspective, although we are not aware of any Canadian jurisdiction, or any

other country, that has implemented full drug cost transparency in an electronic medical record. Reimbursements to pharmacies by the Ontario Drug Benefit Formulary are available in the online formulary and could, arguably, be uploaded and integrated into drug formularies in electronic medical records.

To ensure that physicians are able to prescribe the most cost-effective drugs for patients, we propose that integration of transparency of drug costs be mandated by provincial and territorial ministries of health in all drug formularies in electronic medical records, and provincial formulary reimbursements to pharmacies should appear in the electronic medical record at the point of care when prescriptions are written by physicians.

Improved physician knowledge about drug costs would have many benefits. It could spur dialogue between physicians and patients about the affordability of a given drug. Improved adherence could reduce complications from stopping drug therapy, visits to the emergency department, hospital admissions and suffering by individuals and their families. Furthermore, cost differentials between similar drugs would become more widely appreciated, which could result in reduced public and private spending on drugs.

Implementing transparency in drug costs is not without challenges. One potential disadvantage is that prescribers will also need to explain to patients that listed prices are cost approximations and that the final cost will also include a dispensing fee. The prices that appear in the electronic medical record will be estimates only, because confidentiality agreements between companies and drug plans may mean that actual prices paid for drugs are not known, and prices might vary among provinces and territories, and among public and private insurance plans. However, the potential benefits to patients, providers and the health care system from an increase in cost-effective use of medication outweigh the practical problems associated with providing information about drug costs to physicians and patients within the electronic medical record.

Providing cost-effective care is simply not possible in the absence of accurate knowledge of drug costs. Mandating transparency for drug costs would define a new standard of care for physicians and other prescribers.

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