Annual history and physical examination has been dead for decades

I read Dr Ladouceur's editorial in the January issue with interest.[1] When I was a medical student in the 1970s at McGill University in Montreal, Que, I was overwhelmed by the conflicting recommendations from various services to include specific questions and investigations in the complete examination—so overwhelmed that I took a 3-month sabbatical in my third year to explore this subject.

This resulted in a paper published in the *Canadian Medical Association Journal*[2] that challenged the conventional model of the "complete history and physical" examination and recommended 2 things: selective examinations based on the reason for the patient presenting, and getting to know the patient as a person in all her or his rich complexity.

A few years later, the Canadian Task Force on the Periodic Health Examination was formed, and in 1979 it published its report, which concluded that "the task force's main recommendation is, therefore, that the routine annual check-up be abandoned in favour of a selective approach that is determined by a person's age and sex."[3]

The reason the annual checkup has persisted for nearly 4 decades since these findings were first shared reflects the often convention-ridden and protocol-oriented core of much medical practice, embedded in a fee-for-service system that rewards many short visits and most procedural interventions more than it encourages careful and comprehensive critical thinking.

Then add in a certain amount of irrational paranoia about negative medical-legal outcomes if some clinical stone is left unturned. There is a conspicuous absence of downward pressure against the constant expansion of investigative procedures—especially our increasing reliance on computed tomography scans. There seems to be little appetite for truncating our relentless scanning for nonexistent diseases or "pre-diseases," most of which are simply proxy markers—lipid profile, hemoglobin A_{1c} level, or even blood pressure.

When I researched my paper 45 years ago, I found one research project that compared an exhaustive complete history and physical examination, replete with intricate questions and multiple investigations, with another approach that relied simply on 7 open-ended questions—questions like "Is there anything you'd care to tell me about your health?" and "Is there anything you might have forgotten?"—with no examination at all. The 2 approaches attained very similar comprehensive and useful results; neither was perfect, but both were effective. The advantage of the second approach, however, was that it was much less expensive, while producing similar patient benefits.

We need less paint-by-numbers medicine and more genuine and meaningful human interactions between doctors and patients.

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Competing interests
None declared

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Antimicrobial stewardship by family physicians

We commend Smith et al[1] on their efforts to measure knowledge about antimicrobial use and antimicrobial resistance (AMR) in Canada with a national survey. It is certainly a research gap worthy of attention. However, we have some concerns regarding the interpretation of the survey results.

The authors conclude that, based on survey results, "Canadian physicians are demonstrating behaviour patterns of AMR stewardship (eg, patient counseling, refusal to give inappropriate antibiotics)."[1] Although we agree that, in recent years, there has been increasing awareness about AMR and antimicrobial stewardship, we question whether these responses truly reflect the behaviour of Canadian physicians. There is evidence that clinician perception does not necessarily align with actual practice when it comes to antibiotic prescribing, suggesting that self-reported responses from a survey do not accurately reflect appropriateness of prescribing.[2]

A study from Ontario with a cohort of more than 180 000 older patients with acute upper respiratory tract infections found that almost half were prescribed unnecessary antibiotics.[3] This is consistent with data from the United States showing similar rates of inappropriate antibiotic use in the community.[4] We believe the results of this national survey by Smith et al highlight the discordance between observed overprescribing of antibiotics in the community and physicians' perceptions of appropriate use.

The authors also indicate that most physicians correctly identified that not taking a full course of antibiotics increases the risk of AMR. While we concur that adherence to medication regimens is important, a large proportion of antibiotic prescriptions are prescribed for longer than necessary. A multitude of studies have noted that shorter courses (7 days or fewer) are as effective as long courses for common infections managed in the community (eg, urinary tract infections,[5] pneumonia,[6] chronic obstructive pulmonary disease exacerbation[7]). Despite this, approximately 35% of all Ontario prescriptions are longer than 8 days' duration. Not completing the course of antibiotics has in fact not been linked to increasing levels of AMR. Furthermore, there is evidence that longer courses of antibiotics lead to more AMR.[8,9] As a result, this "finish the course" counseling point has been addressed in a number of recent commentaries calling on clinicians to reconsider this dogma.[10-12]

We encourage future efforts to identify characteristics of physician antibiotic prescribing, understand the barriers to appropriate antibiotic use, and incorporate behavioural science theory to optimize antibiotic stewardship interventions. It is vital that family physicians take an active role in antimicrobial stewardship to prescribe antibiotics only when needed, to select the most appropriate agent, and to select the shortest duration necessary to effectively treat the infection. Adopting these principles will ensure that we have effective, and lifesaving, antibiotics for future generations.

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Competing interests
None declared

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Learner-centred research mentoring in academic family medicine

Further to the article by Stubbs et al in the December 2016 issue,[1] there continues to be room for improving the mentorship we provide on research and scholarship, particularly to early career and clinician-teacher faculty. A common challenge is helping the new researcher identify an area of focus and develop a researchable question. A new approach to this challenge is the P3 (Pursuing Personal Passion) mentoring method for learner-centred research mentoring.[2]

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Competing interests
Dr Phillips refers readers to a recent article he wrote on the topic of learner-centred research mentoring.

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