

# Teaching trainees and residents to “Choose Wisely”

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A report published by the Canadian Institute for Health Information suggests that an estimated 30% of tests, treatments, and procedures in Canada are unnecessary, meaning that they offer no clinical value to patients and can cause harm.<sup>1</sup> This is consistent with estimates in many other countries.<sup>2</sup>

Overuse in health care is a burden to patients and to the health care system. It is associated with harms such as false positives, overdiagnosis, side effects from treatments that might not have been warranted, and medication interactions. Available resources are always limited and need to be allocated wisely. Indeed, the revised CanMEDS–Family Medicine framework includes “engage in the stewardship of health care resources” as one of the key competencies of the leader role.<sup>3</sup>

## Teaching appropriateness

Previously published data indicate that while family medicine residents tend to order appropriate preventive health screening, they also tend to order additional unnecessary tests.<sup>4</sup> Research has shown that the residency training environment plays a role in shaping the way physicians practise for years to come. For example, a US study demonstrated that training-site culture influenced whether or not inter-nists were prone to use a conservative approach, when appropriate, without affecting the rate of more aggressive approaches when deemed necessary.<sup>5</sup> Changing one’s established practice is difficult for any physician, making our teaching around “appropriateness” of the utmost importance.<sup>6</sup> Given these data, it seems essential to create a culture of appropriateness in medical education. The fact that the patient–doctor relationship is at the core of the family physician role makes us ideal champions of initiating conversations about overuse with our patients.

While the means to achieve these goals might vary, a review of educational interventions targeting medical learners suggests that a combination of knowledge transmission, reflective practice, and a supportive environment are key to creating a culture of appropriateness.<sup>7</sup>

**Table 1**<sup>6,8</sup> and **Box 1**<sup>9</sup> are teaching tools that can help teach learners the principles of appropriateness; they can be downloaded from <https://choosingwiselycanada.org/teachingcw1> and <https://choosingwiselycanada.org/teachingcw2>, respectively. Consider printing these resources and posting them in teaching rooms for easy reference. The creation of these 2 teaching tools was inspired by the Choosing Wisely Canada poster *Four Questions To Ask Your Health Care Provider*, available at <https://choosingwiselycanada.org/wp-content/uploads/2017/05/Four-questions-EN.pdf>,

which was distributed to the public and clinicians across Canada to help initiate conversations with clinicians about overuse with the following questions:

**Table 1. Examples of activities that teach principles of resource stewardship\***

CONTEXT	ACTIVITIES
Outside of clinical supervision	<p>Include lectures and case discussions on overuse, overdiagnosis, and iatrogenic complications with proposed solutions</p> <p>Encourage quality improvement projects on reduction of overuse of specific tests or treatments (Choosing Wisely Canada recommendations are a good starting point)</p> <p>Encourage healthy scepticism regarding published guidelines and underlying evidence</p> <ul style="list-style-type: none"> <li>• Compare 2 guidelines on a topic, highlighting differences in recommendations</li> <li>• Discuss discrepancies between guidelines, asking the following:               <ul style="list-style-type: none"> <li>-Are patients involved in the guideline development?</li> <li>-Are primary care physicians involved in the guideline development?</li> <li>-Who funds or publishes the guidelines?</li> <li>-What are the authors’ potential conflicts of interest?</li> <li>-What is the strength of the recommendations and the quality of evidence supporting them?</li> <li>-Do the guidelines apply to your patient population?</li> </ul> </li> </ul>
During clinical supervision	<p>Encourage regular medication review, tapering or deprescribing when appropriate; consider using guidelines from the Canadian Deprescribing Network<sup>8</sup></p> <p>Talk out loud about whether a proposed test, treatment, or procedure will truly affect patient outcome</p> <p>Ask learners if a conservative approach might be just as appropriate as an interventional approach</p> <p>Integrate feedback alerts in your EMR for redundant testing</p> <p>Integrate nudges for certain commonly overused high-risk medications or for certain tests of little value</p> <p>Encourage learners to watch for inappropriate care; encourage them to point out these situations. Give them approaches for how to discuss these concepts with other preceptors</p>

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CONTEXT	ACTIVITIES
During clinical supervision	<p>Modify SOAP note format to include a review of appropriateness (medications, testing)</p> <p>Model and encourage shared decision making, using tools where available</p> <p>Acknowledge areas of uncertainty and gaps in knowledge, and how to disclose this to patients</p> <p>Be a role model in terms of judicious use of tests and treatments. Research has shown that residents who order “excessively” sometimes perceive such expectations from supervisors<sup>6</sup></p>
In feedback and evaluations	<p>Include a section on appropriate use of tests and treatments on daily feedback sheets</p> <p>In formal written examinations or OSCEs, integrate questions on appropriateness, polypharmacy, deprescribing, management of side effects, or complications of treatments</p>

EMR—electronic medical record; OSCE—objective structured clinical examination; SOAP—subjective, objective, assessment, plan.  
 \*This Choosing Wisely Canada “Teaching Trainees and Residents To ‘Choose Wisely’” tool can be downloaded from <https://choosingwiselycanada.org/wp-content/uploads/2019/08/TeachingCW1.pdf>.

- Do I really need this test, treatment, or procedure?
- What are the downsides?
- Are there simpler, safer options?
- What happens if I do nothing?

## Conclusion

As teachers, we can foster a better understanding of the usefulness and limitations of tests, treatments, and procedures. Abstract concepts like risk and overdiagnosis require deep understanding and deliberate learning in order to become part of daily clinical care. Beyond resource stewardship, CanMEDS—Family Medicine requires competencies in multiple domains that relate directly to the tenets of Choosing Wisely Canada. Simple strategies can help health care learners to appreciate that sometimes less is more. 🌿

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### Competing interests

**Dr Wittmer** is a member of the Scientific Planning Committee and a course facilitator for Practising Wisely in Quebec. **Dr Thériault** is Primary Care Co-lead of Choosing Wisely Canada. **Dr Wintemute** is a member of the Scientific Planning Committee and a course facilitator for Practising Wisely in Ontario, and Primary Care Co-lead of Choosing Wisely Canada.

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## Box 1. Granular questions to ask learners around appropriateness\*

Does this patient need this test?

- Was it done previously?
- If so, what is the indication for repeating it?
- Is the result of a repeat test likely to be substantively different from the last result?
- If it was done elsewhere, can I get the result instead of repeating it?
- Did we consider a less invasive option?

Is this test or treatment likely to change the patient’s management? Will it help the patient achieve his or her care goals?

- What are the goals of care for this patient at this time?
- What matters to your patient?

Can the patient’s current presentation be the result of side effects from existing medication? Is withdrawing that medication more appropriate than further testing or treatment?

Does the patient embrace the proposed plan? Did we truly integrate his or her viewpoint?

What are the potential harms? Do the advantages outweigh the disadvantages?

Does the patient understand potential risks versus benefits? Do the benefits outweigh the risks for him or her?

What are the effects of potentially labeling this person “sick”?

Are you suggesting this primarily because the patient wants it, for academic reasons, or because your supervisor wants it?

Is the patient in potential danger (in the short term) if you do not perform this test or start this treatment? Is watchful waiting an appropriate alternative?

How certain is the evidence for this test or treatment? Does the evidence apply to this patient?

Could this intervention cause a serious burden to the patient? Practically speaking, how will it affect his or her life?

\*This Choosing Wisely Canada “Teaching Trainees and Residents To ‘Choose Wisely’” tool can be downloaded from <https://choosingwiselycanada.org/teachingcw2>.

Adapted from Choosing Wisely Canada’s list *Six Things Medical Students and Trainees Should Question*, <https://choosingwiselycanada.org/wp-content/uploads/2017/04/Medical-students-and-trainees.pdf>, and Laine.<sup>9</sup>

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La traduction en français de cet article se trouve à [www.cfp.ca](http://www.cfp.ca) dans la table des matières du numéro d'octobre 2019 à la page e453.

### Teaching tips

- ▶ Overuse in health care is a burden to both patients and the health care system; for this reason, teaching family medicine residents about the “appropriateness” of care is of the utmost importance.
- ▶ As teachers, we can help residents develop a better understanding of the usefulness and limitations of tests, treatments, and procedures. Abstract concepts like risk and overdiagnosis require deep understanding and deliberate learning in order to become part of daily clinical care.
- ▶ This article presents tools that provide activities to help teach principles of resource stewardship and that offer a list of questions to ask learners about appropriateness; the tools can be downloaded from <https://choosingwiselycanada.org/teachingcw1> and <https://choosingwiselycanada.org/teachingcw2>, respectively. Consider printing these tools and posting them in teaching rooms for easy reference.

**Teaching Moment** is a quarterly series in *Canadian Family Physician*, coordinated by the Section of Teachers of the College of Family Physicians of Canada. The focus is on practical topics for all teachers in family medicine, with an emphasis on evidence and best practice. Please send any ideas, requests, or submissions to **Dr Viola Antao**, Teaching Moment Coordinator, at [viola.anta@utoronto.ca](mailto:viola.anta@utoronto.ca).