

CAME Voice/Voix

Choosing Wisely: Utilizing Simulation to Teach Resource Stewardship

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The Choosing Wisely campaign was developed in 2012 by the American Board of Internal Medicine with the aim of transitioning from a culture of overuse to one of evidence-based, patient-centered, cost-effective management. This is not only fiscally responsible, but also minimizes patient exposure to errors, side effects and anxiety related to unnecessary interventions. Canada officially implemented Choosing Wisely in 2014.

Early exposure to resource stewardship is essential in establishing an environment of quality patient care. To foster awareness of resource stewardship for medical trainees, Choosing Wisely Canada developed the Students and Trainees Advocating for Resource Stewardship (STARS) program in 2015. Since then, numerous approaches have been used to integrate resource stewardship into the medical curriculum. One currently underutilized resource is simulation.

We therefore launched a pilot project incorporating Choosing Wisely Canada (CWC) recommendations into simulated clinical scenarios for Internal Medicine PGY-1 and PGY-2 residents at the University of Calgary. Our objective was to assess first and second year Internal Medicine residents' knowledge of common CWC recommendations in a simulated environment to guide the design of educational interventions. Using an interprofessional approach that included nurses, respiratory therapists, and medical trainees, we utilized standardized simulation case scenarios and telephone consultations that tested decision-making around CWC recommendations. These scenarios incorporated the use of blood products, antibiotics, and carotid doppler. The indications and costs of interventions obtained from Calgary Laboratory Services were discussed during the facilitated reflection by simulation educators.

We found that among the first-year resident cohort, 2 out of 6 times blood products were given when not indicated and 4 out of 6 times antibiotics were given despite sufficient drainage of a simple cutaneous abscess. Two out of 6 times carotid doppler was ordered when not indicated for syncope. Among the second-year residents, 1 out of 6 times intravenous immunoglobulin was administered when not indicated to treat thrombocytopenia and 3 out of 6 times antibiotics were administered in mild asthma. Thus, though the PGY-2 residents displayed greater understanding of avoidance of unnecessary interventions, both cohorts had room for improvement to choose more wisely.

We conclude that simulation is a cost-effective educational modality that can be employed in the delivery of a resource stewardship curriculum to encourage the early adoption of fiscally-responsible practices. Though our local experience was limited to Internal Medicine trainees, future directions include extension to trainees in different disciplines, medical students, nurses, social workers, and dieticians. Moreover, the use of pre-and posttest assessments could be incorporated to assess retention and provide insight into continued adaptation of simulation in the teaching of resource stewardship.