

Commentary

Making it easier to ‘choose wisely’

Jeremy N. Friedman MB.ChB FRCP^{1,2}, Sanjay Mahant MD FRCP^{3,4}

¹Division of Paediatric Medicine, Hospital for Sick Children, Toronto, Ontario; ²Department of Paediatrics, University of Toronto, Toronto, Ontario; ³Division of Paediatric Medicine, Hospital for Sick Children, Toronto, Ontario; ⁴Department of Paediatrics, University of Toronto, Toronto, Ontario

Correspondence: Jeremy N. Friedman, The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario M5G 1X8. Telephone 416-813-5500, fax 416-813-5663, e-mail: jeremy.friedman@sickkids.ca

Abstract

The Choosing Wisely campaign has stimulated many clinicians to think about the appropriateness of various tests and treatments. Most of the recommendations published thus far are adult-focused. In this commentary, we discuss the development and early implementation of a Choosing Wisely ‘top 5’ list specifically aimed at children being cared for at our tertiary care children’s hospital. We hope that this will encourage others involved in the health care of infants and children to engage in further thought and discussion about the appropriateness of current tests and therapies. Despite often focusing on the deficiencies, we are privileged to have a highly developed and well-resourced health care system in Canada which allows us tremendous freedom to order tests and treatments. It is incumbent on us as health care providers to exercise that privilege with the utmost responsibility and strive to choose wisely and thoughtfully when selecting tests and therapies for our patients.

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Choosing Wisely (CW) is a campaign designed to stimulate providers and patients to think about and discuss the appropriateness and need for various tests, interventions and treatments. This movement started in the USA in 2012 (1), in Canada in 2013 (2) and has now spread to more than 15 countries. It is born out of the realization that at least 20% of all health care interventions add no value for patients and may in fact cause harm, in addition to wasting resources (3).

The speed and depth of engagement with Choosing Wisely Canada (CWC) suggests that the message sometimes ‘less is more’ resonates strongly with many providers. In the last 2 years, over 35 national societies in Canada have developed their top 5 or top 10 list of ‘Do not’s’ for a current total of 160 recommendations (2). The vast majority of these items pertain to adults with very few directed toward children. In the USA, the American Academy of Pediatrics (AAP) and the Society for Hospital Medicine (SHM) have both produced lists of recommendations (4) aimed at paediatricians. In Canada, the Canadian Paediatric Society has just recently finalized their list. A number of adult hospitals in Canada have embraced the CW campaign by endorsing the adult specialty guidelines felt to be most relevant to their patients, and by devising strategies to promote initiatives to improve compliance with these recommendations.

At our tertiary care children’s hospital, a specific example of unnecessary diagnostic testing and waste prompted us to consider how we might join the CWC campaign. We discovered that of the 2500 nasopharyngeal swabs performed in children with respiratory symptoms who were seen in the emergency department in the previous year, 2000 of them were performed in children who did not require admission to hospital. Furthermore, there was no process in place for the results of these tests to be reviewed by the ordering physician when

available the next day, nor to be reported to the patient or their primary care provider; therefore, they did not have any bearing on patient management. How important and helpful is it to know exactly which virus is causing these symptoms in a relatively well child? If it is not important then why would we order it and expose a child to an unpleasant test, often resulting in discomfort and crying? Is it appropriate to utilize already over-extended nursing and laboratory resources for a test that does not seem to inform or impact care? This is just one very simple but real example of unnecessary testing and waste that likely occurs every day in hospitals across the world.

Compelled by the principles of the CW campaign—reducing unnecessary and even harmful testing, interventions and therapies—we began considering how we could implement a CW campaign at our tertiary care children’s hospital. However, the 160 existing CW recommendations were adult-focused, and the recommendations inclusive of children were aimed at office-based practice. In this commentary, we describe how we used the principles of the CW campaign to create a tailored initiative that was targeted to the patients, clinicians, practices and culture at our paediatric hospital.

DEVELOPING A TOP 5 LIST OF CW RECOMMENDATIONS

A request for recommendations that would be appropriate for our hospital CW list was sent out in July 2015 to various stakeholders including diagnostic imaging, department of pathology and laboratory medicine, pharmacy, antibiotic stewardship committee and the divisions of Paediatric Emergency Medicine and Paediatric Medicine. In each case, the leadership was asked to informally

consult their teams for tests and therapies that were felt on occasion to be inappropriately ordered by paediatric faculty at our hospital.

The resulting inventory of recommendations was then cross-referenced with existing CW lists from the USA and Canada (1,2), resulting in the addition of a few items potentially relevant to hospital-based paediatrics. In September 2015, the comprehensive list was presented to the departmental Clinical Excellence Committee (CEC), which is comprised of clinical leaders from across the hospital. Any items that did not have an established evidence base were removed. In November 2015, the remaining 12 recommendations were incorporated into an anonymous survey and sent out to all departmental full-time paediatric physician faculty members as well as the core paediatric resident trainees. Each item was scored on a 5-point Likert scale with 1 being 'least important' and 5 being 'most important'. Instruction was provided asking faculty and residents to score the items based on which they felt would have the greatest impact on improving patient care and minimizing harm. The survey was conducted using Survey Monkey utilizing the departmental e-mail list-serve, over a 10-day period with one reminder sent out after 5 days.

In December 2015, the top ranked items were then scored in a blinded fashion by two experienced paediatric hospitalist leaders (JNE, SM) with weighting for factors including expected value, ease of measurement, ease of implementation, alignment with current hospital quality initiatives and presence of a physician champion.

A total of 17 distinct recommendations were received from the various stakeholders, including many duplicate items. A further five recommendations pertaining to hospital paediatrics were added from the various published CW lists. Eight of the 17 local recommendations were also found on an already existing CW list. Expert consensus by the CEC with consideration of evidence resulted in reduction of the list from 22 to 12 items, which were then used in the survey. The response rate to the anonymous survey was 120/171 (70%) among faculty and 49/80 (61%) among paediatric residents. The final five items decided on are listed in Table 1.

DEVELOPING AN IMPLEMENTATION PLAN FOR THE CW RECOMMENDATIONS

A physician champion for each of the five selected items was approached to take a leadership role in strategy, implementation and measurement. These physicians were either content experts in the area or were already engaged in quality improvement activities related to the topic. Regular meetings of the CW 'champions' have been scheduled with representation from our hospital Public Affairs, Information Services, Decision Support, as well as Nursing and Quality Management. Measurement of baseline and ongoing performance for each of the five items is currently in progress.

Strategies used to implement each of the recommendations are different and tailored to the specific context of the practice issue. In the example of nasopharyngeal swabs quoted initially, as a hospital we have changed from using the older respiratory virus antigen test (identified six respiratory viruses with a turnover time of 1 day) and no rapid 'point of care' test, to a choice between a new rapid influenza A/B PCR test (turnover time less than 1 h) for children in whom oseltamivir treatment is being considered, or a respiratory virus multiplex PCR test (identifies 16 different viruses) with a 1-day turnover time. The latter test is mainly for children requiring ICU care, or where a positive result will clearly effect management decisions. This new testing strategy was developed with input from stakeholders including microbiology, infection control, emergency room and hospitalist faculty. A new ordering pathway on our computer system has been developed to facilitate and monitor compliance with appropriate test utilization. The goal for this CW item will be that only children whose management will be affected by the result will get tested, and these children will receive a more

Table 1. Hospital for Sick Children, Department of Paediatrics: Choosing Wisely List

1. Do not routinely order NP testing for typical respiratory illnesses unless results are likely to impact management.
2. Do not routinely perform a VCUG in infants after a first febrile urinary tract infection.
3. Do not use continuous pulse oximetry routinely in children hospitalized with acute respiratory illness unless they are on supplemental oxygen.
4. Do not automatically give IVIG as first-line treatment for children with newly diagnosed typical ITP.
5. Do not use routine radiography in children who present with acute ankle injuries and meet criteria for a low-risk examination.

ITP Immune thrombocytopenia; *NP* Nasopharyngeal; *VCUG* Voiding cystourethrogram.

timely (in the case of the rapid influenza test) and a more sensitive test (in the case of the multiplex PCR).

FOSTERING A CULTURE OF CW

The faculty have been sensitized to the CW campaign through the initial survey and the final list of five items has been presented through various hospital information electronic sharing options, the use of eye-catching posters and other CWC materials, as well as in a more directed approach at the faculty business meetings of the high 'users' including Emergency Medicine, General Paediatrics and core Paediatric Residents. We have set up an internal departmental web-link devoted to CW at our hospital and will post our baseline measurement data with regular updates allowing for feedback and audit. Each individual physician champion is building a collaborative team, including nursing and trainees to help with various quality and educational strategies to raise awareness and devise creative and innovative aids to help make it easier to choose wisely. The campaign has been endorsed and promoted by hospital leaders, and CW will be the focus of an upcoming Grand Rounds at the hospital.

CONCLUSION

We hope to build on the success of this single hospital departmental quality initiative by showing less inappropriate resource utilization while maintaining high-quality care without increasing important factors such as hospital readmissions, nosocomial respiratory infections or missed ankle fractures. We hope that our colleagues in surgery, ICU, nursing and some of the larger subspecialties will take up the challenge to develop their own 'top 5' list as we all continue to strive for ways to increase the quality, value and safety of the patient care we deliver. Those caring for hospitalized children across Canada will hopefully find this initiative of interest and may consider creating their own list, or adapting ours to fit the profile of the children they care for.

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