To choose or not to choose: evaluating the effect of a Choosing Wisely knowledge translation initiative in rural and urban EM physicians

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Background:
Choosing Wisely is an innovative approach to address physician and patient attitudes towards low value medical tests1; however, a knowledge translation (KT) gap exists.

We aimed to quantify the baseline familiarity of emergency medicine (EM) physicians with the Choosing Wisely Canada (CWC) EM recommendations2. We then assessed whether a structured KT initiative affected knowledge and awareness.

Methods:
Physicians working in an urban (Saint John Regional Hospital, tertiary teaching hospital, Saint John, NB) and rural (Upper Valley River Hospital, community teaching hospital, Waterville, NB) emergency department were asked to participate in a survey assessing awareness and knowledge of the first five CWC EM recommendations before an educational intervention.

The intervention consisted of a 1-hour seminar reviewing the recommendations, access to a video cast and departmental posters. Knowledge was assessed by asking respondents to identify 90% or more of the recommendations correctly.

Physicians were surveyed again at 6-month follow up period. The Fisher exact test was used for statistical analyses. A sample size of 36 was required to detect a 30% change with an alpha of 0.05 and a power of 80%.

Results:
At the urban site (SJRH), 16 of 25 (64%) physicians responded to the pre- and 14 of 26 (53.8%) responded to the post-intervention survey. There was no significant increase in awareness of the EM recommendations, with 81.3% (95% CI 56.2-94.2) physicians responding “yes” in the pre-intervention period versus 92.9% (86.4-99.9) in the post-intervention period. There was a weak trend towards improved knowledge with 62.5% (38.5-81.6) of physicians responding correctly initially and 85.7% (58.8-97.2) after the intervention.

At the rural site (UVRH), 8 of 11 (72.7%) physicians responded to the pre- and post-intervention survey. There was a trend towards improved awareness, with 25% (6.3-59.9) physicians responding “yes” in the pre-intervention period versus 75% (40.1-93.7) in the post-intervention period. There was also a weak trend towards improved knowledge with 50% (21.5-78.5) physicians responding correctly in the pre-intervention group and 87.5% (50.8-99.9) in the post-intervention group.

Conclusion: We have described the current awareness and knowledge of the CWC EM recommendations in two New Brunswick EDs. Limited by our small sample size, we report a trend towards increased awareness and knowledge at 6 months following our KT initiative in a rural setting where there was a low baseline awareness. At the urban site where baseline knowledge was high, changes seen were less significant. Further work will look at the effectiveness of our initiative on physician practice.

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