

APPENDIX 1: PHYSICIAN BEHAVIOUR CHANGE SUPPORT

A range of mechanisms was employed to support physician adherence to guidelines for best DI practice and acceptance of decision support technology.

1. Feedback on Personal and Group DI Ordering Appropriateness

Every two weeks, each physician received a private email containing a color coded graphic depiction of their performance, a numerical summary and an accounting of their performance compared to their anonymized peers in the clinic. Even physicians with no use of decision support received these summaries. Organized by DI type (e.g. X-ray, CT, MRI) performance summaries were presented on the total number of DI tests ordered; number with CAR Guidelines; number appropriate DI orders; number inappropriate orders; number changed to become appropriate after advice.

2. Group Sessions to Review Performance

Aggregate anonymous group results were reviewed in a group setting over lunch once a month. There was also a general discussion on how the project was operating to share suggestions for improvement.

3. Continuing Medical Education

A continuing education seminar on a topic of the physicians' choosing was also given at each monthly review meeting by the Project Clinical Lead (MHR). The topics chosen by the participating physicians were common issues in general practice with commonly misused DI: DI use in low back pain; the DI aspects of diagnosis and management of osteoarthritis of the knee; DI uses in diagnosis of head and neck issues; and head and neck vascular imaging.

4. Individual Sessions

As part of initial recruitment all physician participants were offered individual private sessions to review their personal results and allow for individual continuing education and consultation, which we expected would improve guideline compliance in the ensuing period. This opportunity was never requested. These individual sessions would also have been used to educate any individual with a persistent and pervasive pattern of DI test misuse. Monthly data analysis found no such patterns, so individual sessions remained optional for all participants.