

Under the Microscope

Getting the most out of imaging

With the medical literature suggesting that up to one third of the imaging investigations ordered for patients are inappropriate, there is plenty of room for improvement according to RPH Radiology Clinical Prof Richard Mendelson.

He has started a project to assess the way Royal Perth Hospitals uses medical imaging services.

Over many years a team at RPH have developed an online consensus-based and evidence-based clinical decision support and educational tool, called “Diagnostic Imaging Pathways” (DIP) to help referrers request appropriate imaging examinations.

This tool will form the basis of the project.

Prof Mendelson said inappropriate imaging had a number of potential adverse outcomes.

“Unnecessary or excessive examinations may expose patients to risk without benefit, including ionizing radiation exposure and the risk of false-positive results, as well as leading to a waste of resources,” he said.

“We want to look at the way we use those tests now, before the intervention of the Diagnostic Imaging Pathways tool.

“And we want to see if we can document any reduction of inappropriate investigations by using this tool.

Prof Mendelson said one of the ways we can do this is to have the referring doctors complete a pro-forma related to a particular clinical scenario showing what the indicators are for requesting the test and what previous investigations a patient has had.

“Hopefully this will not only shorten the whole investigating procedure but it might also save some money and it might increase patient throughput through the ED.”

The Diagnostic Imaging Pathways (DIP) tool includes 130 different medical scenarios but he said his project could only look at imaging tests ordered for five or six common clinical scenarios.

The DIP team is conducting the research after a successful application for one of the SHRAC Research Translation Projects for 2007/08.

The team includes its manager, Dr Phillip Bairstow and research fellow Dr Adrian Yesuratnam.

Prof Mendelson helped set up the imaging pathways website, a resource that is accessed on-line by medical students and practitioners all over the world.

DIP is accessible on the hospital intranet and on the internet at www.imagingpathways.health.wa.gov.au