

Strategic Review of Future Funding Arrangements for Diagnostic Imaging and Pathology Services

Supplementary Submission on Options for Demand Management in Pathology

Drivers of Demand

- The population is growing and ageing, and the burden of chronic disease is mounting. This is an international phenomenon in first world countries and in keeping with this pathology testing is increasing everywhere, not just in Australia.
- Pathology is a specialist medical service so it is to be expected that demand for pathology testing will rise in the same way as demand for other specialist medical services¹.
- With the exception of a few items, pathologists are not permitted to determine which tests are done. They must perform every test requested by a referring practitioner, even those that are redundant/duplicative, useless in the clinical context, or inferior to an alternative test that may be less expensive and more informative.
- Medical students and junior doctors have less training in pathology / diagnostic testing than in the past, which can lead them to request more tests than a patient requires. In an increasingly litigious world, referring doctors may also be inclined to request more tests on the assumption that this will confer protection from medico-legal claims.
- Patient expectations are increasing as patients are better educated about health conditions and the tests available. Patients are more likely to seek testing, and there is usually no good reason for a referring practitioner to decline.
- With bulk-billing for over 85% of pathology testing, there is no financial incentive for either patients or referring practitioners to curb requesting of tests.
- Clinicians and patients expect to receive the best information a pathology service can provide. For example:
 - a tumour diagnosis once involved a few slides to rule cancer in or out; now 50 slides might be examined to define the disease in as much detail as possible and guide the appropriate treatment for that individual.
 - Cholesterol testing used to involve one simple analyte; a range of markers is now used which gives a much better indication of cardiovascular disease risk and better guidance as to optimal management.
- As a consequence of such factors, pathologists cannot control demand for testing. This is made clear by the high growth under the current MoU despite the impact this has on the profession in the midst of a workforce shortage and the reduced returns (through coning) on the volumes of tests requested.
- Decisions must be taken carefully – growth in many areas of pathology is appropriate and it is clearly in no one's interest to cut expenditure on testing that brings significant benefit to patients and saves costs in other areas of health care. Where demand for pathology testing can be managed, the attention should be on changing the behaviours and expectations of those who drive the demand - the requesting doctors and their patients.

¹ "Pathology Services in Australia" IBISWorld Report 2007

Strategies that could assist in managing demand

Principle 1: Referring practitioners should be encouraged to request tests appropriately.

- Survey focus groups of referring practitioners to identify the main stimuli that prompt them to request tests, and the strategies that would be likely to make them change their referral behaviour. GPs (such as through the RACGP) should be actively involved in determining whatever strategies are to be used so that there is buy-in from their colleagues as initiatives are rolled out.
- Educate medical students and junior doctors in pathology diagnostics to ensure they learn to request tests that are necessary / appropriate as it is easier if doctors start out with the right requesting approach rather than trying to change entrenched behaviours.
- Create educational modules and publications for GPs to read, with on-line access, similar those used by the National Prescribing Service (NPS). Decision support tools can reduce redundant ordering more specifically by guiding referring doctors as to the tests required for a given condition. This does however require a significant level of motivation for doctors to remain up to date with any changes in test recommendations.
- Computerised Physician Order Entry (CPOE) systems based on best practice guidelines can overcome the obstacle of the referring doctor having to seek out updated guidelines. CPOE systems are programmed to ensure that only appropriate tests are requested. A literature review of 19 studies from 1990 to 2004 demonstrated statistically significant decreases in the volume of test ordering.²
- Academic detailing – this involves specially trained individuals visiting referring practitioners to educate them and try to change their practice. This has been shown to be effective in changing some prescribing habits in GPs.
- Introduction of tele-pathology services in regional areas to facilitate timely investigation, monitoring and management. This is particularly useful for supporting GPs in solo practices, who have been shown in some studies to be more likely to request tests³.

Principle 2: Consumers should be educated about the role of appropriate test requesting

- Similar to the education program undertaken by the NPS regarding use of antibiotics for the common cold, educate consumers to discourage them from seeking tests that are unnecessary for their health condition. For example, many patients might think twice about asking their GP to request a test if they realised that
 - in many cases, the test does not actually prove that they are in good health
 - there is an 80% chance of at least one abnormal result if a standard group of tests is requested (e.g. a borderline low Haemoglobin level), yet
 - this abnormal result is not necessarily an indicator of underlying disease, so further investigation will be needed to determine whether or not there is underlying disease, and
 - this investigation can be costly, invasive and have a risk of complications or side effects (e.g. a colonoscopy which can lead to a perforated bowel)

² Georgiou A, Williamson M, Westbrook JI, Ray S. The impact of computerized physician order entry systems on pathology services: a systematic review. *Int J Med Inf* 2007;76:514-29.

³ Verstappen WH, ter RG, Dubois WI, Winkens R, Grol RP, van der WT 2004. Variation in test ordering behaviour of GPs: professional or context-related factors? *Fam Pract* 21(4):387-395.

- Educate the community to counter spurious claims e.g. Direct-To-Consumer marketing by off shore genetic testing companies. When patients receive results of dubious quality and relevance from such companies it can lead them to seek further testing through mainstream pathology services that may have little clinical value.
- Educate the community to engender realistic expectations about what can be provided within available government resources and the role of pathologists in the diagnosis, treatment and monitoring of their health conditions.

Principle 3: Expenditure on pathology services can reduce health care costs in other areas.

- A nationally coordinated surveillance program for multi-drug resistant organisms would prevent outbreaks of infections that cause significant morbidity and mortality.
- Monitoring diabetics enables better blood sugar control, reducing the incidence of damage to the kidneys, eyes and cardiovascular system. Lack of monitoring leads to more amputations, blindness, heart attacks and more patients on dialysis etc.
- There must be planning for genetic testing. For example, pharmacogenetics creates savings by ensuring that patients who will not benefit from, or may be harmed by, a particular drug will not be treated with that drug. There must be coordination between the listing of a drug on the Pharmaceutical Benefits Scheme and providing access to the test required for a patient to be eligible for that drug.
- Investing in research (like the POCT trial) to define patient outcomes associated with pathology testing would provide valuable information to guide future decision making regarding the delivery of pathology testing and strategies to manage demand.

Principle 4: The emphasis should be on prevention.

- Research indicates that 10.9% of current expenditure on pathology testing is for preventive care⁴, which represents a significant component of the pathology budget and consequently it should be more structured.
- For example
 - Vitamin D testing to determine osteoporosis risk – use of this test is growing internationally, resulting in enormous benefits for patients by reducing the risk of fractures and the complications that commonly follow, but requesting is erratic.
 - Blood glucose should be measured in high risk individuals to diagnose diabetes early and prevent diabetic complications.
 - Cholesterol and lipids should be monitored to help define heart disease risk.
 - Pap test screening is important to enable treatment of pre-cancerous lesions and so prevent cervical cancer.
- There are fifteen consultation items for health assessments in the enhanced primary care section of the MBS (appendix A). Whilst these are important for prevention or early detection of disease, it is highly likely that these consultations will result in requests for pathology tests yet there are no companion items in the Pathology Services Table (PST). An item could be created in the PST with a standard list of tests that can be ordered once per patient per year to screen for common conditions, as a companion to the health assessment MBS items or separately.

⁴ Unpublished data from the BEACH study, personal communication Family Medicine Research Centre, University of Sydney.

Principle 5: Judicious use of external control mechanisms could be considered.

- Unique patient identifier numbers for pathology can help monitor demand and prevent unnecessary repetition of tests e.g. a flag can be used when a request is received to indicate that patient has already had the same test recently.
- Create a standard list of tests that will be included whenever a referring practitioner requests a typical test group (for example "LFTs" or "EUC") – any other analytes would need to be requested separately by name.
- Introduce an authority system like the one for the Pharmaceutical Benefits System. This could require a GP to phone and seek authority
 - for very expensive tests or
 - if more than a defined number of tests is being requested or
 - if tests outside a standard list are being requested (see point above).
- Require GPs to read at least one module/publication on best practice in pathology testing per year as part of their continuing medical education.
- Permit pathologists to disregard requests for inappropriate tests and to substitute alternative tests that are no more costly but considered better
- Where a referring practitioner obtains a sample for which they receive a fee (e.g. a fine needle aspirate for cytology examination) and the sample is found to be inadequate for diagnostic purposes, no fee should be paid to the same practitioner for obtaining a subsequent sample. Furthermore, practitioners for whom this is a recurring problem should be required to undergo education to improve their approach to sample collection.
- Introduce co-payments where more than a specified number of pathology tests is requested to deter GPs from requesting more tests than they actually need done, such as adding tests that 'might as well be done' because the patient is having blood taken.

Strategies that are unlikely to assist, or could impair, demand management

- It is important to recognise that despite various platforms and numerous reforms over time, no health system has identified a perfect approach for delivery of pathology services,⁵. Easy, radical solutions are flawed (and potentially dangerous) solutions.
- Splitting the Pathology Services Table to remove some disciplines that are considered to be 'non-automated': In the context of worldwide growth in demand for pathology testing there is no apparent way this could help to manage demand, so the motivations of those suggesting it are unclear. There is some automation evident in all disciplines of pathology so attempting such a split would be artificial and potentially divisive at a time when most are focusing on a holistic approach to health care. Pathologists are vital for interpreting all pathology tests regardless of the level of automation; what varies is the time spent on each individual test.
- Avoid false economies: Regular out of pocket expenses for pathology testing for low income groups is likely to reduce compliance with testing, which will compromise the monitoring of chronic diseases and increasing the likelihood of downstream health care costs that outweigh the amount saved and create additional morbidity and mortality.

⁵ "International approaches to funding health care; Occasional papers Health Financing Series Volume 2" by Bill Ross, Jen Nixon, Jamie Snasdell-Taylor and Keir Delaney; Commonwealth Department of Health and Aged Care 1999