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Australian GPs ready to take on developments in IT technology

Internationally, health systems are placing increasing emphasis on an e-health environment. Health care is supported by electronic medical records and movement of clinical information like prescriptions, laboratory results and discharge summaries between GP practices and other parts of the health system.

And, according to a recent international survey, Australian GPs are well prepared to take these new initiatives in their stride.

The 2006 Commonwealth Fund survey, co-sponsored by APHCRI to double the numbers in the Australian cohort, showed doctors in this country are leading the pack in using electronic systems to order laboratory tests. Their use of electronic prescribing systems; prompts to provide patients with test results; and ability for the electronic systems to provide patients with access to their medical records, all ranked second against the seven comparator countries.

But Australian GPs ranked consistently below comparator countries like New Zealand and the United Kingdom in important domains related to management of the practice population.

The rapid developments of electronic systems for general practitioners within Australia during the last 10 years, together with the exposure of young people to IMIT systems more generally, suggests age may be a factor in IT use. It is also useful to consider what GPs are using computers for in their practice. Is it:

- within a practice for individual patient care;
- for management of the practice population; and/or
- for communications across the health system.

Australian data from the survey were further examined by APHCRI looking at the effect of age in each of these three areas. The results are summarised in the following three tables.

Table 1 Individual patient care

Electronic support for individual patient care within the practice	Under 35 (n = 88)	35 - 49 (n = 430)	50 - 64 (n = 375)	65 or older (n = 109)	Total (n = 1003)	Australia's 7 country rank (Highest % (Lowest %))	Age differences significant
Do you currently use electronic patient medical records in your practice?							
Yes	90%	86%	76%	58%	79%	4	Yes
No, but plan to implement in the next year	3%	7%	7%	7%	6%	(Net 98%)	
No, and no plans to implement in the next year	7%	7%	17%	35%	14%	(Can 23%)	
Does your electronic medical record system allow you to ... Provide patients with easy access to their medical records?							
Yes	39%	43%	51%	51%	46%	2 (UK 50%)	
No	61%	57%	49%	49%	54%	(Can 6%)	
Do you currently use electronic ordering of tests in your practice?							
Yes, used routinely	81%	72%	60%	40%	65%	1 (Aus 65%)	Yes
Yes, used occasionally	2%	5%	6%	10%	6%	(Net 5%)	
No	17%	23%	34%	50%	29%		
Do you currently use electronic prescribing of medication in your practice?							
Yes, used routinely	92%	89%	76%	60%	81%	2 (Net 85%)	
Yes, used occasionally	2%	2%	3%	5%	3%	(Can 11%)	
No	5%	8%	21%	35%	16%		
Does the doctor receive an alert or prompt about a potential problem with drug dose or drug interaction?							
Yes, using a computerized system	88%	86%	78%	53%	80%	4 (Net 93%)	Yes
Yes, using a manual system	2%	5%	11%	29%	10%		
No	10%	9%	11%	18%	11%	(Can 10%)	
Does the doctor receive an alert or prompt to provide patients with test results?							
Yes, using a computerized system	63%	56%	48%	37%	52%	2 (UK 53%)	Yes
Yes, using a manual system	9%	12%	18%	38%	17%		
No	28%	31%	34%	25%	31%	(Can 6%)	

For questions related to individual patient care, there is a significant age gradient, with younger doctors reporting greater use of within-practice electronic supports, nearing the top international rank for all.

But a majority of doctors over the age of 50 years of age also report using these systems, perhaps due to perceived benefit or user-friendliness. The response to the question on easy access for patients to their medical records is interesting. Perhaps older doctors recall the difficulties of summarising years of information held in hand written records and contrast this favourably with being able to print out a patient summary from the electronic record? The highest ranked country, the UK (50 per cent) was not significantly different from the Australian GPs (overall 46 per cent) for this item.

Table 2 Sharing information across the health system

Electronic support for individual patient care across the health system	Under 35 (n = 88)	35 - 49 (n = 430)	50 - 64 (n = 375)	65 or older (n = 109)	Total (n = 1003)	Australia's 7 country rank (Highest % (Lowest %))	Age differences significant
Does your electronic medical record system allow you to ... Share your patients' medical records electronically with clinicians outside your practice?	Yes 3%	11%	17%	12%	13%	7 (Net 45%) (Can 6%)	
	No 97%	89%	83%	88%	87%		
Does your electronic medical record system allow you to ... Access your patients' medical records when you are outside the office (e.g., at home or on call)?	Yes 23%	24%	27%	10%	24%	6 (NZ 36%) (Can 11%)	
	No 77%	76%	73%	90%	76%		
Do you currently use electronic access to your patients' test results in your practice?	Yes, used routinely 88%	83%	74%	46%	76%	4 (NZ 90%) (Can 27%)	Yes
	Yes, used occasionally 4%	7%	7%	13%	7%		
	No 8%	10%	20%	41%	17%		
Do you currently use electronic access to patient hospital records (e.g., discharge summary) in your practice?	Yes, used routinely 9%	11%	14%	14%	12%	5 (NZ 44%) (Ger 7%)	
	Yes, used occasionally 3%	7%	8%	6%	7%		
	No 88%	82%	78%	80%	81%		

Electronic systems allowing information sharing outside the practice are poorly developed in all countries surveyed. But more than three quarters of Australian GPs routinely receive pathology results electronically, and young Australian doctors rate close to 90 per cent – this high figure indicating not only it can be done, but implying it is clinically useful. If it works for pathology, why not for other kinds of information? The challenge of getting confidential information from one secure system to another, and from multiple providers to multiple general practitioners is the same. Should the next target be discharge summaries? At face value, having electronic referrals and discharge summaries electronically delivered could mean increased efficiencies (less duplication) and safety (enhanced timely access to critical information).

Table 3 Managing the practice population

Managing the practice population	Under 35 (n = 88)	35 - 49 (n = 430)	50 - 64 (n = 375)	65 or older (n = 109)	Total (n = 1003)	Australia's 7 country rank (Highest % (Lowest %))	Age differences significant
How easy would it be for you (or staff in your practice) to generate a list of patients by diagnosis or health risk?	Easy 69%	71%	69%	59%	68%	4 (UK 92%) (Can 26%)	
	Somewhat difficult 20%	17%	16%	21%	17%		
	Very difficult 7%	4%	8%	10%	7%		
	Cannot generate 4%	8%	7%	10%	8%		
How easy would it be for you (or staff in your practice) to generate a list of patients who are due or overdue for tests or preventive care?	Easy 67%	64%	62%	53%	62%	4 (NZ 82%) (Can 13%)	
	Somewhat difficult 25%	26%	24%	30%	25%		
	Very difficult 7%	6%	7%	7%	6%		
	Cannot generate 1%	4%	7%	10%	6%		
How easy would it be for you (or staff in your practice) to generate a list of all medications taken by individual patients?	Easy 77%	78%	72%	62%	74%	2 (UK 88%) (Can 25%)	
	Somewhat difficult 17%	13%	17%	19%	16%		
	Very difficult 3%	3%	5%	7%	4%		
	Cannot generate 2%	6%	6%	11%	6%		
Are patients routinely sent reminder notices when it is time for regular preventive or follow-up care in your office practice?	Yes, using a computerized system 78%	72%	60%	41%	65%	3 (NZ 93%) (Can 8%)	Yes
	Yes, using a manual system 10%	15%	19%	33%	18%		
	No 12%	12%	20%	26%	17%		

Appropriate proactive care is a key component of optimal chronic disease management, and e-health records are seen as a vital tool to support this. Generating lists of patients defined by particular characteristics is critical. New Zealand and the UK set the benchmarks for this use of electronic systems, and Australian general practice needs to raise its game. It will mean continuing improvements to the electronic systems to be more user-friendly and appropriate funding to support the delivery of this care.

While it is clear that use of IT is a very useful tool to support better patient care arrangements, there is a dearth of evidence regarding the cost effectiveness, quality and safety outcomes associated with e-health implementation. This survey does not address whether the trend is "good" or not. Prospective evaluation and research activities of these kinds of outcomes should accompany the roll-out of different initiatives.

The 2006 International Survey of Primary Care Doctors was commissioned by the Commonwealth Fund. This was the ninth in a series of annual surveys conducted in Australia, Canada, New Zealand, the United Kingdom and the United States, and the second survey of physicians (the first was conducted in 2000). This year, Germany and the Netherlands were also included.

For full details of the 2006 International Health Perspectives (IHP) Survey conducted by Harris Interactive Inc. on behalf of The Commonwealth Fund, please see C. Schoen, R. Osborn, P. Trang Huynh, M. Doty, J. Peugh, K. Zapert, On The Front Lines of Care: Primary Care Doctors' Office Systems, Experiences, and Views in Seven Countries, *Health Affairs* Web Exclusive (Nov. 2, 2006): w555-w571
<http://content.healthaffairs.org/cgi/content/abstract/hlthaff.25.w555?ikey=3YyH7vDwrJSoe&keytype=ref&siteid=healthaff>



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