

## In the Literature

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## GENERAL PRACTITIONERS' USE OF COMPUTERS FOR PRESCRIBING AND ELECTRONIC HEALTH RECORDS

In the United States, physicians—particularly those in small practices—have been slow to adopt electronic medical records and computerized prescribing, despite evidence demonstrating such tools can help improve the safety and quality of care. In comparison, nearly all Australian general practitioners (GPs) have begun using health information technology during the past decade, according to results from a new survey.

In "General Practitioners' Use of Computers for Prescribing and Electronic Health Records: Results from a National Survey" (Medical Journal of Australia, July 17, 2006), a research team led by D. Keith McInnes, M.S., of the Department of Health Care Policy at Harvard Medical School, reports on results from the survey. Australia's remarkable progress in technology adoption, they find, has been achieved in part through the use of financial incentives and other government programs. McInnes conducted the survey during 2005-06, which he spent in Australia on a Packer Policy Fellowship, part of The Commonwealth Fund-sponsored Australian-American Health Policy Fellowships.

## Most Australian GPs Use Clinical Software Tools

The researchers mailed the survey to 3,000 GPs, of which 1,186 responded (40%). Among these, the vast majority (90%) reported using a clinical software package. Virtually all (98%) used the clinical package for regular electronic prescribing. Most also regularly used the software to update medication lists (94%), check for drug—

drug interactions (88%), and monitor drug allergies (87%). Smaller percentages checked drug-disease interactions (70%) and recorded their reasons for prescribing certain drugs (65%).

Most GPs who reported having a clinical software package used it to maintain electronic health records for their patients. In particular, they regularly used it to order laboratory tests (85%), update patient allergy information (84%), and generate patient health summaries (84%). Less commonly used functions included creating and updating disease management plans, recording progress notes, accessing educational material for patients, and conducting clinical audits.

## **Government Incentives Speed Adoption**

In the late 1990s, the Australian government offered GPs financial incentives to install computers and clinical software packages for prescribing drugs and transmitting clinical data. This initiative was at least partially responsible for a significant rise in the use of computers by general practitioners, from 15 percent in 1997 to 70 percent in 2000.

In the current study, more than half of the practices (56%) said they had received a Practices Incentives Program payment—offered by the Australian government to primary care doctors to promote use of electronic medical records—and nearly one-third (32%) had received a Broadband for Health incentive payment to support installation and use of high speed Internet.

## Fewer Doctors Generate Patient Lists, Use Electronic Decision-Support

The researchers did uncover some notable gaps in GPs' current use of certain electronic functions, like generating patient lists—an important tool for managing chronic conditions. Compared with their use of other functionalities, GPs used their computers to generate such lists relatively less often: 58 percent or fewer GPs who used clinical software packages reported using this functionality.

Moreover, while GPs frequently used automatic alerts for medication safety (e.g., to identify drug interactions), most did not regularly use electronic decision-support functions during consultations, which can be used to review prescribing information, assess patients' risk factors, or review chronic disease guidelines. Such tools have the potential to reduce errors and improve quality of care. Still, less than 20 percent of GPs who used a clinical package regularly used these features.

#### **Conclusions**

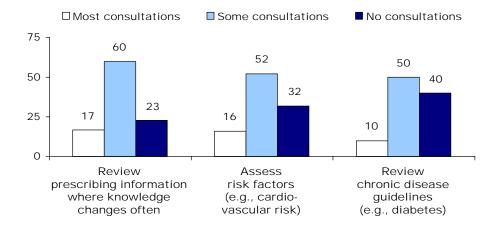
While there is still room for progress to exploit the full potential of health information technologies, Australian general practitioners have achieved universal use of electronic medical records in less than 10 years. According to the researchers, the routine use of electronic prescribing alone is likely to have improved efficiency and quality of care, while reducing medication errors. "Improving adoption of other electronic functions is likely to lead to additional health gains, especially in managing chronic conditions," they conclude.

## Facts and Figures

- Most general practitioners (78%) in Australia reported having a high-speed Internet connection.
- Female general practitioners used prescribing functions to check drug interactions more often than men (92% vs. 85%). By contrast, their male counterparts were more likely than women to generate patient lists.
- In 2005, 98 percent of general practitioners in Australia used electronic prescribing and 84 percent generated health summaries electronically, compared with 71 percent and 42 percent, respectively, in 2001.

General Practitioners' Use of Computers During Consultations

Percent of general practitioners who access computerized information to . . .



Source: Adapted from D. K. McInnes, D. C. Saltman, and M. R. Kidd, "General Practitioners' Use of Computers for Prescribing and Electronic Health Records: Results from a National Survey," *Medical Journal of Australia*, July 17, 2006 185(2):88–91.