

Introduction

Information Management (IM) and Information Technology (IT) are not new concepts in General Practice. Information management and technology has been the subject of a wide range of reports by GP organisations in Australia since personal computers became a viable business option. More recently, the need for a structured approach to the application of IMIT has been identified.

About the Stocktake

In funding the Divisions of General Practice, the Department of Health and Ageing requested that all Divisions undertake a 'Stocktake' of General Practice IM needs to establish a picture of the current IMIT environment.

The scope of the stocktake included the extent to which GPs have in place the IT infrastructure capable of supporting current information systems, along with establishing GP's current IM needs. In undertaking this work, the major goal was to stimulate discussion around IMIT and raise awareness of the benefits that can be achieved through the uptake of improved IM practices across general practice.

The ADGP IM Coordinator developed a non-mandatory Reporting Framework as a guide for gathering information and data. The guide was distributed to all Divisions nationally in November 2001. The Divisions employed a range of engagement strategies to gather the information including arranging specific Practice visits, utilising existing training and information sessions, holding group sessions for GPs, along with accessing recent information gathered through annual Divisional Practice surveys and similar. Divisions then provided this information to the IM Coordinator to collate. The Divisions were also offered the opportunity to provide additional comment on the collated data to further enhance the validity of the information. A total of 116 of the 123 Divisions nationally responded to the 'Stocktake'. 2715 of the registered 4544 General Practices nationally also participated in the stocktake.

The research was intended to ascertain the extent to which computerisation was impacting, not only on patient and clinical care, but also on the management of the practice as a whole. The following provides a summary of the key trends in IMIT across General Practices identified through the stocktake exercise. Full details of the final report can be viewed on the ADGP website (www.adgp.com.au).

Divisional Trends

Information provided by the Division is reported in Appendix 1, along with a Statewide and National tabulation.

So What Did The Stocktake Reveal?

The following trends regarding the level of electronic activity for the better management of information are presented against the five key IM in GP areas, as follows:

- **Electronic data availability and exchange**
 - ➔ e.g. online pathology/ radiology ordering and reporting; use of electronic forms (admissions, referrals, etc)
 - Computerisation has occurred in 87.3% of Practices
 - e-mail capability was indicated in 67.5% of Practices
 - online Pathology ordering and/or reporting was being utilised in 63.0% of Practices
 - online Radiology ordering and/or reporting was being utilised in 38.8% of Practices
 - electronic Referrals were used in 49.3% of Practices
- **Patient information databases**
 - ➔ e.g. practice registers including relevant patient and disease; recall and reminder systems
 - Patient registers were being utilised in 67.1% of Practices
 - Recall and reminder systems are used in 66.6% of Practices
- **Electronic diagnosis and treatment support**
 - ➔ e.g. drug-drug interaction alerts; patient medication and clinical histories
 - Drug interaction prompts were in effect in 75.6% of Practices
 - Clinical notes were being entered electronically in 52.8% of Practices
 - Scripts were being generated electronically in 78.3% of Practices
- **Practice administration and management**
 - ➔ e.g. electronic staff rosters/pays, billing and claiming; stock ordering on-line; for GST Business Activity Statements
 - Patient appointments are being electronically scheduled in 52.4% of Practices
 - Practice software is being used for billing in 73.8% of Practices
 - The use of accounting software is evident in 66.9% of Practices
- **Contribution to research activity**
 - ➔ e.g. adverse drug reporting; electronic contributions to approved clinical research activities.

- Adverse drug reporting was undertaken online from 43.3% of Practices
- There was insufficient information to postulate the degree of clinical audits or other research activities that were being undertaken electronically and/or in association with the clinical software.

Discussion

It is fair to say from the information received that clinically:

1. A high degree of computerisation exists in General Practice
2. e-mail access is available in two-thirds of the General Practices
3. There is fifty percent higher uptake of online Pathology ordering and/or reporting than for Radiology
4. Nearly half the Practices are using some form of electronic referrals (this is variably defined and will require further investigation to confirm exact activity/ies undertaken)
5. Two-thirds of the Practices are using patient registers, recall and reminder systems
6. Drug interaction prompts are used in three quarters of General Practices
7. Nearly eighty percent of Practices are generating scripts electronically
8. Clinical notes are entered in over half of the Practices
9. Adverse drug reporting was undertaken online in just over half of the Practices

It is fair to say from the information received that from a Practice Management perspective:

1. Over half of the patient appointments are being electronically scheduled in General Practice
2. Electronic patient billing is being undertaken in nearly three quarters of the Practices
3. Over two thirds of Practices are using accounting software

Information Management activities that are **assisting** clinical, patient and practice outcomes have been identified (rank ordered by frequency of response) in:

- use of electronic prescribing and clinical records, which, from the information provided, is seen as a highly rated reason for using IM in GP.
- electronic billing and, with the use of e-mail and internet rated highly as a reason for using electronic systems, along with the advent of HIC's Online – Medicare, this usage will grow.
- sharing business models, e.g. *Lead Practices* that can clearly assist General Practice in understanding the value of IM in GP and identifying with a similar Practice who has been down this path before.

- providing *Lead Practice* visits, discussions and potential mentoring between developed IM General Practices and developing IM Practices, has been identified in some Divisions as a very useful change tool.

Barriers to clinical usage of electronic information systems have been identified (rank ordered by frequency of response) in the:

- substantial cost of technology and the continuing resourcing requirements associated with the use of electronic systems in General Practice.
- lack of computer skills and the time to learn requirements for the uptake and use of electronic systems in General Practice.
- fear of technology and lack of technical support to adopt greater usage of electronic systems in General Practice.

Conclusion

Overall, the results from the stocktake showed that a high degree of computerisation in General Practice currently exists. The development and use of electronic scripts, which enjoys high levels of patronage (78.3%) across General Practice, appears to be a key catalyst in sparking the uptake of IMIT. Clearly, there was an established need for this.

Subsequently, attention should be focussed on the areas identified by GPs and Divisions for future action as this will drive the IMIT agenda in general practice over the coming years.

The use of computers in both clinical work and practice management would be expected to continue to rise with the advancement of IMIT not just in general practice, but across all spheres of the health industry. The Government's *Health Online* agenda will also facilitate IMIT development across the health sector. A more competitive market place may also alleviate some of the cost constraints GPs currently experience and further enhance IM developments in General Practice.

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