The computerisation of Australian general practice 1998–2001 – what did we get for AU$15 000 000?

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ABSTRACT

In 1998 the Commonwealth government provided AU$15 000 000 towards a three-year project to support the computerisation of Australian general practice. This initiative was carried forward by the peak national body for information technology in general practice, the General Practice Computing Group (GPCG). This paper describes the activities of the GPCG, how this money was spent, and includes the evaluation of this three-year project which has resulted in computers on the desktops of the majority of Australia’s GPs.

Keywords: computing, general practice, information technology

Introduction

This has been a very exciting time of change for Australian general practice and we have seen many initiatives thrive during this period. Perhaps the greatest change has been the computer that now sits on the doctor’s desk in most general practice surgeries in Australia.

In 1998 fewer than 10% of Australia’s general practitioners (GPs) were using a computer for clinical applications. The Practice Incentive Figures for February 2001 show 77% were using electronic prescribing and 86% claimed electronic data connectivity – a remarkable increase over a short period of time.¹

Most Australians now receive a computer-generated prescription from their GP – this is legible and, most importantly, it has been electronically checked for potential interactions with their other medications, or contraindications with their other health problems, and to ensure that the drug is safe if they are pregnant or breastfeeding, and to make sure that it is not a member of a class of drugs to which they are known to have allergies. This is quality use of medicines in action. The fact that the pharmacist has to re-type the details provided on the computer-generated prescription is an issue that our Better Medication Management System hopes to address soon.² This autumn and winter, Australia’s GPs have been reminded by their prescribing software to immunise their aged population against influenza each time people over 65, or over 55 for indigenous Australians, or those with chronic health problems, have presented to the GP’s surgery. This is population health in action and the first of many major initiatives sure to come to improve preventive care intervention rates through general practice. And each of our GPs is finding other ways to use their computer systems to improve the efficiency of their daily work, through word processing of referral letters, receipt of online pathology results, the use of CD-ROM and Internet-based guidelines and education resources, electronic travel medicine advice, plotting of vital signs over time – the list goes on and on.


So what are some of our specific achievements and what did the Commonwealth of Australia get for its
AUS$15m investment in the General Practice Computing Group (GPCG), and our activities, over the past three years? The GPCG activities have been based on the Strategic Framework for General Practice Information Management and Technology, endorsed by all major stakeholder organisations and published in May 1999. The strategic framework was based around six key areas and I will report on progress against each.

Policy, partnerships and co-ordination

The first area in the strategic plan is ‘Policy, partnerships and co-ordination’. Over the past 18 months the GPCG secretariat, management committee, and individual GP and affiliate members of the GPCG, have continued co-ordination of activities in general practice information management (IM) and information technology (IT). Our partnership remains intact after a difficult phase of GP politics. Indeed we have seen an expansion and increased support for GP representation in key health IM/IT initiatives. We are represented on NHIMAC (National Health Information Management Advisory Council) and NHISAC (National Health Information Standards Advisory Council). We report regularly to GPPAC (General Practice Partnership Advisory Committee) and have membership of the Standing Committee on Primary Health Care. We participate in the Standards Australia Committee IT 14 and several key working groups. We are represented on the BMMS (Better Medication Management System) development group and working groups. We also work closely with the Medicines Coding Council of Australia, the General Practice MOU (Memorandum of Understanding) implementation working groups, the ACIR (Australian Childhood Immunisation Register), ANZ CIO (Australia & New Zealand Chief Information Officer) Forum, the ICP Technical Working Group, the Cardiovascular Disease Clinical Minimum Dataset Working Group, the Virtual Amalgamations Project Committee and the Expert Working Group on Classifications in Health. We have also provided advice to the General Practice Financing Group on the revisions to the IM/IT components of the Practice Incentive Payments scheme.

Practical support for general practitioners via divisions of general practice

The second area in the strategic plan is ‘Practical support for general practitioners via divisions of general practice’. The secretariat has provided ongoing support for IM/IT support officers in 123 divisions of general practice nationwide and all eight state-based organisations of general practice. We have been involved in the evaluation project to evaluate the effectiveness of IM/IT support officers and have conducted an annual survey of IM/IT activity in divisions. We have conducted extensive lobbying to continue support funding and have produced security guidelines for use by division IM/IT officers. Our secretariat has had regular teleconferences and information sharing with the state-based organisations.

GPCG clearinghouse

The third area in the strategic plan is the ‘GPCG clearinghouse’, which can be found at www.gpcg.org. An extensive resource base has been developed and maintained. There are now databases of relevant GP IM/IT projects and resources, as well as links to topics of interest, the development of a bibliography on GP IM/IT and a thesaurus for GP IM/IT. We have provided web-based publishing for the sector and ongoing support of mailing lists and information exchange.

Standards development and implementation

The fourth area in the strategic plan is ‘Standards development and implementation’. We have had extensive representation in standards development as outlined previously, providing particular support for the Discharge and Referral Messaging Standard, and funding for the Royal Australian College of General Practitioners (RACGP) standards integration project. We have developed security guidelines for use in general practice. The Coding Jury recommendation has been delivered to DHAC, as has the GP data model, and the software accreditation project has been funded and has progressed.

Development of electronic architecture and platforms

The fifth area in the strategic plan is the ‘Development of electronic architecture and platforms’. Major
evaluation projects have been conducted on the up-take of IM/IT in general practice, the business case for further investment, and the effectiveness of current structures. A range of projects has been funded in each of the areas of the GP IM/IT strategic framework, all of which were completed by 30 September 2001. GP informatics funding has been secured for a further three years with AU$3 million funding for the GPCG secretariat and an additional AU$2 million per year allocated to GP IM/IT projects.

Management of information

The sixth and final area in the strategic plan is ‘Management of information’. We developed targeted activities based on the Coding Jury recommendations and on the data model outcomes. We have particularly been involved in the furthering of IM projects in falls prevention, management of diabetes, and the ongoing development of therapeutic guidelines for use in general practice. We look forward to the continuing progress of electronic IM in general practice, now that the first stage of the IT platform is firmly in place.

Evaluation of the GPCG

The work of the GPCG has been the subject of three evaluations over the past 12 months. The findings of each of these evaluations have been very positive and have shown that the GPCG has achieved what it intended.

The first evaluation project measured current use of IT in general practice and was led by a team from the University of Queensland. The key findings of the report are that computers are being used in the great majority of general practices. Only 11% of respondents suggested that computers were not used and two-thirds of that small group stated that computers are likely to be used in the future, the majority suggesting the acquisition of a computer in the next two years. Computers are typically used for both clinical and administrative purposes. Although the majority of practices use computers, they are most common in larger practices. Virtually all (96%) of the practices of three or more doctors report computer usage, as do 80% of two-doctor practices and 75% of solo practices. State differences in computer use are not large.

The second evaluation examined divisions of general practice IT funding through the GPCG and was led by a team from Monash University. They found that the IT officer programme has been effective in providing assistance to GPs to help them adopt and use computers in their practices; GPs were offered a large range of services; a good number of GPs were using these services; there was a high degree of satisfaction among GPs using the services; IT officers were very active in the field and their assistance was valued; and there was an expressed need for continuation of IT support and education services in the future.

The final evaluation was an infrastructure analysis of the GPCG to review how effective the GPCG has been in completing the key activities of the original GPCG strategic framework. The report found that the GPCG has addressed all six key activity areas; that the GPCG has had a positive impact on GPs, specifically through the state-based organisations and divisions of general practice; that the GPCG has impacted on the broader health agenda through the development of standards in GP IM/IT, as well as other activities, which are the building blocks to enhancing e-health and the broader health objectives; that the GPCG clearinghouse has made a useful contribution to general practice computing; that the GPCG has facilitated future IM use throughout general practice; and that the GPCG is seen as being independent from both inter-GP group politics and the various related organisations and that the GPCG has not been dominated or unduly influenced by any one of the members or related organisations.

Governance of the GPCG

The GPCG has a committee of management which includes a representative from each of the Australian Medical Association (AMA), the Australian Divisions of General Practice, the RACGP, the Rural Doctors Association of Australia, the Consumers Health Forum, the Medical Software Industry Association, the General Practice Partnership Advisory Committee, the Health Insurance Commission and two representatives from the Commonwealth Department of Health and Aged Care (DHAC). There are also four GPs elected from the wider membership of the GPCG. The management committee elects its own chair annually.

Membership of the GPCG is open to all GPs and affiliates with expertise, interest or involvement in the computerisation of general practice. Affiliate members include representatives of the medical software industry, consumer organisations, government and

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*The Coding Jury was established to review all possible coding systems for use in Australian general practice and to provide advice to the government on which system/s to support.*
IT support staff from divisions of general practice or from other organisations and professional groups with an interest or expertise in GP computing. Membership is free. Only GP members of the GPCG can be nominated for the positions of elected GP members on the GPCG management committee and only GP members are eligible to vote.

The day-to-day work of the GPCG is carried out by the GPCG secretariat, which has a national coordinator and five support staff. The secretariat is based in Canberra.

Troubling times

Sadly the momentum we had attained was severely curtailed in April 2001 when it became clear that the DHAC was not going to continue to fund the auspicing of the GPCG by the AMA beyond 30 June 2001. The continued momentum of the GPCG has been the most obvious casualty of a very public battle between the Commonwealth Minister of Health and Aged Care and the President of the AMA.

The May 2001 Federal Budget saw the announcement of continued funding for the GPCG secretariat for the next three years. The RACGP was invited and accepted the responsibility of auspicing the GPCG for the next three years. A formal contract has been signed, and a budget has been approved for AU$3m of Commonwealth funding over the next three years. There has also been approval for an additional AU$9m of funding for a series of IM/IT projects in general practice.

The RACGP is not taking over the GPCG, or absorbing it, or changing it. The GPCG management committee will continue to determine its own structure and processes and workplan. The RACGP will be providing the supportive context for our work over the next three years as the AMA has done for the past three years.

The way ahead

The success of the GPCG has been largely due to the willingness of the practice staff and GPs of Australia to embrace the challenge of this new information age. With Commonwealth financial support, they have successfully transformed our distributed cottage industry into a computerised clinical workplace. It is through the vision and determination of this country’s GPs that Australia now has the backbone in place ready to build on improvements in IM and communication and to realise the healthcare benefits for the Australian community that will follow.

The success of the GPCG has relied on the team of 131 IT support officers in our 123 divisions of general practice and eight state-based organisations who, in the face of continuing funding uncertainty, have set out to provide support and education and training to our GPs and their staff. Their success has been outlined in the evaluation report of divisions of general practice IT funding through the GPCG, which found that the impact of GPCG IT funding to divisions has been an overall success and that a clear role for divisions has emerged as the appropriate vehicle for IT/IM support to GPs. They have also concluded that, without further IT officer funding, these services will not be maintained by divisional core funding and will drastically diminish. This is a critical issue and one that we hope the Commonwealth will embrace. Without adequate continued education, training and support, IM and IT initiatives in general practice will falter and start to fail. Education, training and support are key elements of any successful health informatics endeavour. There is an elephants’ graveyard of failed health IT projects that have neglected this core area. We are particularly concerned about the impact of a new national Privacy Act at the end of this year on the collection of personalised health data and the security implications of more widespread electronic transmission of personal health data between health professionals – heed my warning. The evaluation report recommends that funding for the IT officer programme should continue for at least another three years, and that IT officers and other relevant divisional personnel need appropriate training and education in IM issues.

The work of the GPCG has been accomplished by an approach that has seen the major general practice organisations in Australia working in partnership with the staff of the General Practice Branch of the DHAC and other key stakeholders. We operate by consensus and without factional politics. We strive always to keep an eye on our mission to improve the health and quality of life of the members of the Australian community through the systematic introduction of management of information in general practice, and between general practice and other sectors of the health industry.

Our partnership continues and we look forward to continuing to address key strategic priorities for general practice IM and IT and in building the key elements of infrastructure required to take general practice forward in this new millennium. There is still much to achieve.

ACKNOWLEDGEMENTS

This paper is based on an address to the 2001 annual meeting of the General Practice Computing Group in
Australia and is to be published in paper format as part of the annual report of the group. It is also available on the GPCG website at www.gpcg.org. This paper was also delivered at the PHCSG Annual Conference at Downing College, Cambridge, in September 2001.

REFERENCES

1 Practice Incentive Figures. www.gpcg.org/publications/gpcg.html

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