HEALTHCARE MANAGEMENT ADVISORS

DEPARTMENT OF HEALTH AND AGEING

EVALUATION OF THE ENHANCED DIVISIONAL QUALITY USE OF MEDICINES PROGRAM PILOT

MACKAY DIVISION OF GENERAL PRACTICE CASE STUDY SUMMARY

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1 Introduction

The Department of Health and Ageing (the Department) has engaged Healthcare Management Advisors (HMA) to undertake:

> ***"an evaluation of the first year (2002-03 Financial Year) of a two-year pilot of the Enhanced Divisional Quality Use of Medicines (EDQUM) program."***

The prescription of medicine to treat health problems represents a major area of activity for medical practitioners. A key concern for health authorities internationally is ensuring that medicines are used appropriately. The National Medicines Policy (DHA, 1999) emphasises that the focus of activity should be first on peoples needs, aiming to ensure:

- timely access to medicines that Australians need, at a cost individuals and the community can afford;
- medicines meet appropriate standards of quality, safety and efficacy;
- quality use of medicines; and
- maintenance of a responsible and viable medicines industry.

The current National Strategy for Quality Use of Medicines (DoHA, 2002) builds on the direction established in earlier iterations of the Strategy and provides the framework against which the Quality Use of Medicines Strategic Action Plan is developed every two years. IN this context, Quality Use of Medicines is characterised in terms of three areas of clinical decision making, namely:

- selecting management options wisely (considering the place of medicines);
- choosing suitable medicines if a medicine is considered necessary; and
- using medicine safely and effectively to get the best result.

The development of the Enhanced Divisional Quality Use of Medicine Program (EDQUM) highlights the importance of maintaining a focus on the quality agenda embodied within the National Strategy for the Quality Use of Medicines (DHAC, 2002). The EDQUM Program, which commenced operation in January 2003, was established with the requirement that an evaluation be undertaken after the first twelve months. Healthcare Management Advisors (HMA) was contracted to undertake the evaluation in January 2004 with a requirement to complete the evaluation in April 2004.

1.1 OBJECTIVES

The objectives for the evaluation were identified in the Terms of Reference as being to:

- provide a description of the programs or initiatives implemented by Divisions under the EDQUM program;
- assess the extent to which activities centred on education and or data;

- assess the appropriateness, effectiveness and efficiency of the Program in achieving its objectives;
- assess the role out and support mechanisms for Divisions in implementing the program;
- identify successes of the program;
- identify barriers to, enablers and drivers for the EDQUM program;
- develop strategies to overcome identified barriers;
- provide recommendations that will contribute to ongoing Program development; and
- identify a methodology to be developed to assist in undertaking a future impact evaluation.

1.2 PROJECT METHODOLOGY

The agreed methodology for the project incorporated seven stages, namely:

(1) Detailed project planning**.**
(2) Situation analysis.
(3) Development of an evaluation framework.
(4) Quantitative and qualitative data collection and analysis.
(5) Stakeholder consultation.
(6) Preparation of a discussion paper.
(7) Preparation of the final report.

1.3 PURPOSE OF THIS DOCUMENT

This document provides a summary of the information gained via teleconference with personnel at the Mackay Division of General Practice in Mackay, Queensland.

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Mackay Division case study summary

On Tuesday, 30th of March a teleconference was held with personnel of the Mackay Division of General Practice (MDGP) to gain an understanding of:

- the implementation and operation of EDQUM within the Division;
- assess the role out and support mechanisms for the Division in implementing the program;
- identify successes achieved in Mackay through implementation of the program;
- gain an understanding of barriers to, enablers and drivers for the EDQUM program; and
- identify strategies to overcome identified barriers.

Participants in discussions included:

- Mr Christian Grieves;
- Ms Merrilyn Amiet;
- Ms Deborah Bishop;
- Dr David Parker.

2.1 THE MACKAY DIVISION OF GENERAL PRACTICE

The Mackay Division of General Practice is located on the Queensland Coast and inland from Mackay. The Division covers an area of approximately 25,000 square kilometres and a population of 120,000. There are approximately 106 GPs in 35 practices serving the region.

The Division employs 12 full time equivalent (FTE) staff (16 individuals) and is engaged in a range of programs, including More Allied Health Services, Home Medication Review and the NPS Quality Use of Medicine initiatives. EDQUM was developed in the Division utilising Output Based Funding (OBF) resources. The Division employs two full time staff to supply computer technical support to practices on a fee-for-service basis at commercial rates. These two technical staff have had a big role in the Division clinical information management work associated with EDQUM.

It was reported that there was a long standing interest amongst the Division's Board in the Independent Practice Associations developed in New Zealand and the quality of data collected from GP practice management systems. This underpinned the Division's interest in developing an EDQUM program.

The Division indicated that work had commenced on developing quality indicators and that EDQUM provided an opportunity to move the focus of this activity to the specific medicines associated with EDQUM, and more particularly cardiovascular drugs.

It was reported that EDQUM fits closely with other QUM initiatives, such as Home Medication Review and the NPS QUM program and it was reported that the Division had not sought to participate in additional medicine-related projects.

2.2 PROJECT IMPLEMENTATION

Review of documentation and discussions with key stakeholders from the Division focussed on areas identified in the case study framework developed for the evaluation and related to the planning and implementation of EDQUM. Each of these areas is summarised below.

2.2.1 Activities undertaken

A GP reference group was established to support development of the quality indicators operated by the Mackay Division of General Practice and also assumed the role of overseeing the EDQUM Program.

The Mackay Division built its EDQUM activities around existing strategies and projects. This included the employment of a pharmacist for the DMMR project who would also act in an advisory capacity to assist in the promotion of patient care and quality prescribing and building on existing QUM activities by expanding GP education sessions and workshops provided by the QUM facilitator, as well as offering reimbursement for GP time.

In addition to these activities, it was reported a key focus of EDQUM for the MDGP was to encourage and guide GPs to better utilise their clinical software as a quality improvement tool. It was anticipated that analysis of prescribing patterns through data received by the Division as part of these activities would assist GPs (and the Division) to identify target areas for improvement and the development of quality indicators. It was reported that follow up visits would occur over the three months following this case study.

The Division was interested in the use of quality indicators for approximately five years, three years prior to EDQUM involvement. The approach required GPs to record data/indicators and offered a reward for their participation. It was anticipated this data would allow GPs to analyse their prescribing patterns and the Division to identify, audit and monitor GP prescribing and adherence to clinical, best practice guideline. It was argued that by concentrating on a limited number of individual diagnoses the Division can work with GPs to improve prescribing behaviour more quickly than attempting to implement a broader range of quality indicators. In addition, it is expected this approach will allow GPs to develop the skills necessary for them to begin independently reviewing their data and practices.

Other activities included the expansion of the Divisions consumer education program which utilises the media to promote immunisation and improving linkages between GPs, the community and hospital pharmacists. It is believed that by educating consumers the demand for inappropriate prescriptions will decrease.

2.2.2 Personnel involved

The Mackay Division has utilised five Division staff equating to 4.5 FTE to operate the EDQUM project. The GP Advisory group overseeing the Program involved participation from 10 GPs. EDQUM personnel have been involved in two clinical audits. The Division has two full-time IT staff both experts in medical software who perform the data downloads and provide support when not occupied with other Division duties. Commercial rates are charged for the IT support service they provide, and the income supports the Division to sustain the service and engage in programs such EDQUM. It was indicated the available level of IT expertise was essential for the MDGP to pursue the development of broad quality

indicators. The Division also experienced low staff turnover during the data collection phase and this was considered very valuable to the success of their EDQUM activities.

2.2.3 Balance of approaches

For MDGP the implementation of the EDQUM Program became an extension of an existing program which now has been operating for five years. This program incorporates raised awareness of therapeutic guidelines and incorporates prescribing practices within a range of quality indicators. The focus of the MDGP has remained largely on the collection and analysis of data from GPs practice management systems and reporting quality indicators. This was supplemented by increased practice visits, education sessions and provision of educational resource.

2.2.4 Issues impacting on planned activities

In the course of discussions with Division representatives a number of issues were identified which impacted on implementation of EDQUM, namely:

- the time taken to develop guidelines, reports, queries and software was identified by informants as a key barrier to the implementation of planned activities;
- the quality of data entered by GPs was initially poor and an extensive process of providing feedback to improve data was required;
- adherence and consistency to data recording, particularly entry of key fields such as diagnosis;
- the need to focus GPs initially on one area of improvement rather attempting to analyse multiple facets of their prescribing from inception; and
- restrictions in accessing data within medical software programs.

2.2.5 Barriers to implementation

Discussions with stakeholders identified a number of potential barriers to the implementation and success of EDQUM, namely:

(1) Time taken and resources required to develop protocols for, and undertake download of data was greater than had been anticipated. Similar, establishing frameworks for the analysis of data was more involved than expected.

(2) The initial approach sought to cover too many diagnoses in the data recording process by GPs which contributed to poor data quality. This was overcome by reducing the range of diagnoses involved and accepting that the development would be an iterative process over a number of years.

(3) The language or jargon used for quality indicators and data management was not familiar to GPs, reducing interest and understanding of the initiative. As a result, a more effective approach to communicating the direction and potential benefits to GPs was developed. Informants noted that once principles and ethics were explained GPs interest increased.

(4) The need for adequate data processing and down loading tools was initially a barrier with data transfer conducted manually in the first instance, then utilising an in-house program and finally able to extract data directly from GP practice management systems.

2.3 PROGRAM STRUCTURE AND RELATIONSHIPS

2.3.1 Program structure

Discussions with representatives of the Division indicated that a key attraction of the EDQUM Program was its relatively open structure, which allowed the Division to increase the focus on development of its quality indicators program, focus on improved prescribing and potentially increase the resources available to support primary care activities.

The support for collaboration between Divisions established within the Program's structure was identified as providing added value to the Division.

2.3.2 Relationships between organisations

During the teleconference it became apparent that there were several key organisations involved in the EDQUM program were:

- the Department of Health and Ageing;
- the Australian Divisions of General Practice;
- the National Prescribing Service; and
- the other twelve Divisions of General Practice.

It was reported that the primary relationships for the Division had been:

(1) The Australian Divisions of General Practice which co-ordinated formal communication between the Divisions via workshops. In the past Divisions have not been brought together to share information across state boundaries, which it was noted was largely due to cost of time and travel.

(2) The National Prescribing Service (NPS) was seen as playing a critical role in the EDQUM Program although it was reported the relationship took some time to develop. Key to the relationship was that both parties gained an understanding of the other's areas of skill and expertise. The development of education resources, such as the recently developed information on Proton Pump Inhibitors (PPIs) was noted as an example of the support provided by NPS, and was considered both timely and helpful.

(3) It was indicated that the Division had no expectations that the Commonwealth would play a key role in the EDQUM process and suggested this was the case. It was felt that an increased understanding of the Division's activities through the provision of their business plan.

(4) It was suggested that as Mackay Division was focussed more heavily on data quality, contact with other Divisions at the regular workshops was focussed on information sharing than establishing a basis for collaboration.

2.4 INVOLVEMENT OF CONSUMERS

Informants indicated that consumers were not engaged and were unlikely to be included in future EDQUM activities, although the MDGP does have a Consumer Reference Group who have been made aware of issues surrounding the use of quality indicators in GP practice. The extent of consumer involvement in EDQUM activities at MDGP has been through the development of posters for placement in participating practice waiting rooms to make consumers aware how data collected at the practice was being used. Consumers were given an opportunity refuse the use of information related to them by the Division.

2.5 INVOLVEMENT OF GPS

MDGP reported that 98% of GPS were currently utilising information extracted from their practice management systems to analyse and compare their prescribing practices. Uptake varied with some GPs using recall/reminder systems, prompts, reason for prescribing, diagnosis and so on. 19 GPs used their systems in this manner for EDQUM activities in 2002 and this increased 35 GPs in 2003.

2.5.1 Issues impacting on GP participation

The Division noted GPs were interested in EDQUM activities, although they were not specifically identified as EDQUM. Those involved were generally not the same GPs that traditionally attended Division lead forums. It was suggested that approximately 35 GPs in the MDGP were interested in quality medicine initiatives, though there was no clear means to distinguish between those who were interested and those who had shown limited interest.

MDGP found it difficult initially to communicate the EDQUM and quality message to GPs. Explaining the purpose and intention behind the EDQUM activities was a critical process. MDGP determined that if EDQUM activities were incorporated into their broader education workshop sessions they would reach more GPs, accordingly the EDQUM label was not used.

One of the key marketing techniques used by MDGP to gain more GP participation was word of mouth. As participating GPs discussed their involvement and benefits of the EDQUM activities MDGP has initiated with other GPs it is expected that more GPs will participate. Each year MDGP increases number of participating GPs involved in their overall quality improvement program.

2.5.2 Attitudes to EDQUM

MDGP found it difficult initially to promote EDQUM and quality message to GPs. Explaining the purpose and intention behind the EDQUM activities was a critical process. MDGP determined that if EDQUM activities were incorporated into their broadening education workshop sessions they were able to reach more GPs and the EDQUM label was not used. It was suggested a key consideration for GPs was efficiently improving the quality of care they provided to patients, rather than reducing expenditure by government.

2.6 DATA ASSESSMENT AND MANAGEMENT

As the MDGP EDQUM activities were heavily focussed on obtaining data from, and developing quality indicators for GPs. Accordingly, discussion during the teleconference

mostly revolved around participants experiences with data collection, quality and management of the Program.

2.6.1 Data required

Mackay Division focussed on quality indicators that involved collection of diagnoses, demographic and geographic indicators. The Division was in the process of analysing received data and reporting back to GPs for feedback. Initially data collection was undertaken manually by GPs and forwarded to the Division. Realising that GPs would loose interest with this data collection method the Division developed in-house software to facilitate the download of data electronically. This process, although an improvement, was still creating an extra workload for GPs and eventually a technique for downloading directly form practice/patient management systems was established. The new mechanism allows GPs to perform as they normally would without being required to do any additional data recording following a patient visit.

Issues of confidentiality and privacy were highlighted as a concern. Privacy was a consideration not only for patients but for GPs and other treating specialists who may have had input into the care of the patient.

2.6.2 Support for and capture of EDQUM data

Informants reported that the data collection, quality and management relied upon the support and interest of the participating GP. It was vital that the project(s) developed by the Division focus on areas that were of interest to the GP and where the output was considered useful.

All data was downloaded, processed, analysed and reported on by the Division. The amount of data downloaded by the Division was too large and complex for simple data management systems such as Microsoft Access. The GP Advisory group assisted the Division in creating queries to interrogate data and establishing data criteria. Informants considered the involvement of the GP Advisory group critical for these processes. MDGP intends to maintain GP involvement and look more closely at treatment and quality indicators.

It was reported that three different practice management systems were used by GPs in the Mackay Division: Medical Spectrum, Genie and Medical Director. Informants reported that Medical Director was the most widely used system.

The existence of two skilled IT personnel within the Division, with a sophisticated understanding of the practice management systems involved was an essential component of the support provided through the Division.

2.6.3 Impact of the Data Consultancy

Stakeholders indicated that the Data Consultancy for EDQUM was not of critical importance to the Mackay Division. Initially informants felt that the consultancy was useful and that data output was interesting, however not particularly relevant to the needs of the MDGP. It was felt that there may be a purpose for the a process like the Data Consultancy in the future, provided that there was more input from GPs.

2.7 COSTS AND RESOURCES

Mackay Division utilised existing staff and Divisional funds to meet the cost of EDQUM activities and to supplement educational activities. It was suggested that for another Division progress to the point reached by Mackay Division the cost would be between $200,000 and $400,000. Once a basic infrastructure was established and GPs had been engaged, it was anticipated the ongoing cost would be $70,000 to $80,000 per annum. Mackay Division is able to supplement some of its costs by charging for the IT support services Requested by individual practices

2.8 LEARNINGS AND SUCCESSES

This section summarises advice provided in the course of the site visit regarding the range of lessons learned in implementing the EDQUM program, success achieved as a result of the implementation and advice regarding means by which the program could be improved for role out to a broader population of Divisions.

2.8.1 Lessons learned

In the course of the teleconference, informants highlighted a range of lessons they had learned as a result of implementing EDQUM.

Informants felt that focussing on small group exercises for education and promotion of EDQUM activities was most effective. Participants highlighted the importance of collecting local data to provide meaningful feedback to GPs and comparison of individual, divisional and national data to provide a context for analysing prescribing behaviours. Part of this learning process has involved the realisation of the time taken and level of staff expertise required to extract and analyse relevant data.

Improving the ease with which data could be recorded and collated was identified as crucial to increasing GP participation. It was noted that at first GPs did not understand the significance to their practice of utilising quality indicators. The Mackay Division identified effective means to convey the benefits of being involved in EDQUM initiatives, recording data accurately and the using quality indicators to improve the quality of care provided.

It was noted that in order to effectively engage GPs in the collection and subsequent use of data it was necessary to:

- align activity with GPs interests;
- overcome reservations amongst GPs regarding their capacity to effectively utilise their data and develop performance indicators to assess their own practice; and
- focus on small snapshots of data initially to gain GP support, confidence and interest.

It was also noted that the most effective means of communication information to GPs was in small groups and the relevance of collecting local data to GPs and the Divisions needed to be clearly articulated.

2.8.2 Strengths and weakness of EDQUM

There was considerable interest in discussing the relative strengths and weakness of the program and there was a high level of consistency in the views expressed across the whole range of informants.

The flexibility within the Program was identified as both a strength and weakness. On one hand the relatively limited degree of definition to the program allowed the Division to tailor its approach to local needs and to draw on their experience of working with GPs. The freedom to develop the program locally was identified as a key factor in motivating Division personnel.

The combination of data and education activities implied within the EDQUM Program was identified as building on earlier quality programs operated through Divisions, providing a focus for developments within the Division.

Finally, the establishment of regular meetings between participating Divisions provided an opportunity to learn from other Divisions and draw on their experience, particularly in relation to the education component of the Program.

2.8.3 Opportunities for improving the Program

Informants believed there were benefits available from the broader application of EDQUM and provided several insights into factors or directions which would enhance this, including:

- provision of funds at the outset to seed activity;
- support for other Divisions to achieve a comparable level of IT sophistication as the Mackay Division;
- providing departmental officers with opportunities to gain a better understanding of GPs and general practice through closer involvement with Divisions in the implementation of programs such as EDQUM; and
- broadening EDQUM to allow greater participation by GPs in defining the drugs or drug groups targeted may increase engagement.