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1. Introduction

The Australian Institute for Primary Care (AIPC) at La Trobe University conducted an evaluation of the Early Intervention in Chronic Disease (EIiCD) initiative on behalf of the Victorian Department of Human Services (DHS). The evaluation commenced in December 2006 and data collection was completed in April 2008.

This data and technical report provides a summary of the qualitative and quantitative data collected by AIPC as part of the evaluation, and details the evaluation methodology and tools. This report is intended to support the final evaluation report, submitted separately to DHS, which contains the analysis and interpretation of the data, and recommendations.

Evaluation framework

The EIiCD evaluation framework was developed by AIPC in 2006, in consultation with DHS and the original nine agencies (and PCPs) funded under the EIiCD initiative. A program logic approach was used in the development of the framework, and is summarised in Figure 1.

Figure 1: Summarised program logic for EIiCD evaluation – inputs, process and outcomes

Upon completion, the evaluation was to provide DHS, agencies, PCPs and other stakeholders with:

- Information on system- and service-level activities and impacts of the EIiCD initiative (e.g. program implementation, GP–agency liaison/communication arrangements, change management issues).
- A comprehensive profile of clients engaged by EIiCD programs, including data on client chronic disease/s, overall health and wellbeing status, self-management efficacy, psychological distress, disease risk factors and health service utilisation.
Overview of evaluation tools

The following evaluation tools were developed as part of the EIiCD evaluation framework:

- **Agency management reports**: a report on systems-level aspects for agencies to describe implementation, service provision, leadership, change management, client enrolment and external liaison arrangements associated with the EIiCD program.
- **PCP management report**: a report from PCP on implementation and leadership of EIiCD programs.
- **Key worker report**: a report from key workers involved in the EIiCD program to provide their perspective on client psycho-social needs, mechanisms in place to deal with these needs, and GP liaison arrangements.
- **Client survey**: baseline and follow-up surveys developed for the evaluation to provide an insight into the health, wellbeing, self-management capacity, risk factors, service usage of clients enrolled in EIiCD programs.
- **Clinical indicators**: data regarding biochemical and other measurements of client disease progression.

The questions/tools used for each of the above are included in Appendices I to IV.

Evaluation methodology

The systems-level evaluation tools (agency, PCP and key worker reports) were deployed at six-monthly intervals (January – February 2007 [baseline], July 2007 [six-month follow-up] and February 2008 [12-month follow-up]). Client data was continuously collected until April 2008, with baseline surveys administered to clients on enrolment to EIiCD programs, repeated at six months. Clinical indicator collection followed a similar pattern, but was limited to data obtainable from client GPs. Client data obtained was de-identified and later matched to other data contained in the SWITCH database (provided by DHS). The EIiCD evaluation was approved by the La Trobe University Human Research Ethics Committee.

Evaluation reporting

The evaluation framework, and its reporting, considers the EIiCD initiative as a whole, rather than on an individual agency basis. The final report contains the main evaluation findings and their interpretation, the EIiCD client profile and the broad system- and service-level impacts related to the EIiCD initiative.

The final evaluation report draws on the data, summarised here, from agencies, key workers within agencies, and PCPs. Throughout the report, the term “EIiCD program” is used to describe individual agency programs funded under the EIiCD initiative. Note that while 18 agencies are currently funded under the EIiCD initiative, two agencies conducted a joint EIiCD program, and, for the purposes of the evaluation, were considered as one program.

This supplementary report provides a summary of the following key areas of data collected as part of the EIiCD evaluation: program implementation; system change; client enrolment; EIiCD service models; liaison with general practice; practical issues for program cost efficiency and effectiveness; and the EIiCD client survey responses.
2. Program implementation

This section of the technical report will consider data regarding EliCD client target groups, program implementation (at agency and PCP levels) and overall program leadership.

Client target group

As a key step in the initial implementation of EliCD programs, agencies defined a client target group for their program. Target group criteria were designed according to DHS guidelines for the EliCD initiative, and the needs of the agency’s local community. As part of the evaluation, each EliCD program provided a description of their client target group, and any subsequent modifications made to their target group criteria.

Specific disease, risk and social factors were incorporated into EliCD program target groups in the following ways:

- **Disease states**: The majority of EliCD programs targeted multiple disease states. Diabetes was the most commonly targeted disease (82% of EliCD programs), followed by COPD (64%), cardiovascular diseases (58%) and asthma (35%). Arthritis, musculoskeletal diseases and depression/anxiety were usually included as comorbidities; however, one EliCD program made musculoskeletal diseases the exclusive focus of their program.

- **Risk factors**: Several distinct risk factors have been incorporated into the target group criteria for many EliCD programs, beyond the general risk of medium- to long-term hospitalisation due to chronic disease (as specified in the DHS guidelines). The presence of modifiable risk factors such as smoking or physical inactivity, in conjunction with early-stage disease, was a feature of client target groups. Many programs also included the perceived lack of self-management skills as a criterion for entry (in association with other risk factors).

- **Social factors**: Several agencies included specific social factors as part of their target group criteria. This approach was commonly used to target services to isolated and/or under-utilising groups in the local community. Examples include: Indigenous and CALD groups; refugees; homeless people or people without secure accommodation. Social factors have also been defined on a geographical basis; for example, conducting program activities in conjunction with Neighbourhood Renewal Programs or identifying clients from particular postcodes for assessment.

Modifications to the client target group have been continuously described throughout the evaluation. Only four EliCD programs reported no modifications to their client target group criteria during the period of the evaluation. Reports of target group modifications at baseline were largely confined to 2005-funded programs, reflecting the earlier stage of development of the 2006-funded programs at the time. At six and 12 months, target group modifications have been reported by programs from both funding rounds, which may indicate that target group refinement is an ongoing process throughout the life of an EliCD program.

Modifications to client target group criteria have largely involved the disease states included in the program, including expanding the range of chronic diseases covered by the program, alterations regarding the ‘length’ of disease (i.e. time since initial diagnosis) or refinement of eligibility criteria with reference to other programs (e.g. HARP-CDM). In several instances, these modifications are the product of program piloting—a single disease has been used as the initial target by EliCD programs during the early phase of the program, and additional disease states are included by the program as it becomes more established. In some reports, expansion of the geographic areas covered by EliCD program intake has been described. There were fewer reports of modification to social and risk-related target group criteria.
Agency-level implementation

In order to describe progress in the deployment of individual EIiCD programs, agencies were asked to rate the implementation of their program against a structured scale designed to measure phases of implementation. The scale ranged from a rating of one (priority setting and early planning) to five (sustained routine activity). Full details of the scale are reproduced in Appendix V. Agency self-ratings were provided against the following seven key aspects of agency-level program implementation:

1. Completion of relevant planning processes
2. Recruitment of new staff for the EIiCD program (e.g. key workers)
3. Provision of information about the EIiCD program to existing agency staff
4. Development of appropriate business systems relating to the EIiCD program
5. Allocation of facilities for the EIiCD program
6. Establishment of referral and liaison pathways with GPs
7. Establishment of referral and liaison pathways with other agencies/initiatives.

The quantitative ratings of program implementation were used to establish general patterns of program implementation. In addition to the quantitative data, qualitative data were also collected for each implementation aspect to provide additional information on the barriers and enablers to EIiCD program implementation. The broad themes identified in this data are summarised below.

Implementation patterns

Over the 12-month evaluation period, two general patterns of agency-level program implementation were evident: progressive implementation (observed for aspects 1 to 5 above) and lagging implementation (aspects 6 and 7). The attainment of the sustained implementation level was largely confined to programs established during the 2005 funding round.

Progressive implementation pattern

For aspects 1 – 5 listed above, a general pattern of progressive implementation across all programs was observed; in each case, more than 85% of programs reported either advanced or sustained implementation levels at 12 months. Figure 2 illustrates the progressive implementation pattern, using implementation ratings for aspect 2 (recruitment of new staff) as the example.
At baseline (January 2007), a broad range of implementation phases was observed for aspect 2, with some programs reporting that staff recruitment had already been completed. At six months, a discernable shift in the distribution of responses had occurred, with more programs reporting that they had attained an intermediate or higher level of implementation (Phases 4 and 5); no programs reported being in Phase 1 at this time. At 12 months, all programs reported that they had achieved advanced or sustained program implementation (Phases 4 and 5) with respect to staff recruitment.

**Lagging implementation**

For aspects 6 (GPs) and 7 (other programs), a slightly different implementation pattern was observed. For both aspects, at least one-third of programs continued to report early implementation levels (ratings of 3 or less) at 12 months. Figure 3 illustrates the distribution of responses observed for this pattern, using aspect 6 as the example.
Figure 3: Lagging pattern of agency-level program implementation: aspect 6 – GP liaison and referral pathway development

In this example, the baseline and six-month responses are distributed across all phases of implementation. At the 12-month mark, six programs (35%) continued to rate themselves as being in the piloting and refinement phase of implementation.

**Attainment of sustained implementation**

As expected, the majority of programs that reported achieving the highest level of program implementation (sustained routine activity) were programs established during the 2005 EliCD funding round. For aspects 6 and 7, the only programs to report sustained implementation at 12 months against these aspects were programs funded in 2005. This indicates that while considerable progress in EliCD program implementation occurs over a 12-month period, the attainment of a sustained level of implementation occurs over a longer time-frame.

Owing to the smaller number of rural agencies with EliCD programs, and that three of the five rural programs were established in the 2006 funding round, distinctions between rural and metropolitan implementation ratings were more difficult to discern. However, one obvious rural–metropolitan pattern was evident: in addition to belonging exclusively to the 2005 EliCD funding round, those programs reporting sustained routine activity for aspects 6 and 7 were all metropolitan-based.

**Implementation activities**

For each of the key implementation aspects, additional comments were invited regarding the types of activities undertaken in relation to each aspect, and any barriers or facilitators that had been encountered. The following briefly summarises additional comments made by agencies for each aspect.

**Planning processes**

- Early stage activities described by EliCD programs as part of their overall planning processes included the establishment of steering committees/reference groups; these governance structures were established by agencies and included key stakeholders (e.g. GPs/DGPs, HARP-CDM programs/acute sector) as well as PCPs (who also played a facilitation role in these governance structures).
The development of operational guidelines and service models was also observed over the evaluation period; the preparation of draft protocols was described in the baseline reports, followed by implementation and subsequent refinement/review of these protocols in subsequent reports.

The 12-month evaluation reports also indicated that a number of programs moved towards reviewing their overall program implementation; for example, conducting Plan-Do-Study-Act (PDSA) cycles in relation to their overall EIiCD planning processes.

Staff recruitment (discussed in more detail below) was described as having a significant impact on planning processes, particularly in relation to the role of the EIiCD ‘program manager’ (or similar leadership role). Vacancies in this role were viewed as impacting significantly on overall EIiCD program planning.

**Staff recruitment**

- The two key elements of staff recruitment for EIiCD program implementation were the roles of program manager and key workers.
- Recruitment to program manager positions was especially problematic for many EIiCD programs; this had the flow-on effect of impairing other planning processes (above). One EIiCD program that had particular difficulties described this as a significant barrier to program implementation:
  
  *There has been a poor response to external advertising and we have been unable to employ a project manager. It seems that a number of [EIiCD programs] are recruiting for the same skills and maybe there are not enough people around with the required skills.*

- The recruitment of key workers was often internal, with mapping exercises and other methods used to identify existing agency staff suitable and interested in these roles. Key workers have been drawn from a variety of allied health backgrounds and are supported in their role by other health professionals within the agency (especially psychologists/counsellors via secondary consultations). The movement of existing staff into these roles then created vacancies and/or necessitated back-filling of positions; throughout the reporting cycles there have been numerous reports of problems in recruiting to vacant allied health positions.
- In addition, other EIiCD program roles have also been created (e.g. GP liaison workers or additional service coordination staff).
- The 12 month reports reflect higher levels of implementation in this area, with recruitment processes described as complete (or largely complete) and occasional reports of planned expansion of the EIiCD staff base (e.g. additional EFT for health coaching roles).

**Information for existing staff**

- Information about EIiCD programs was disseminated among agency staff in a variety of ways, including specific briefing sessions or staff workshops on the program (or chronic disease management or self-management approaches generally) and the distribution of written information about the program (e.g. newsletters or EIiCD service brochures).
- Briefing sessions and staff workshops were particularly prominent in the earlier reports; over time, these have been reinforced with the distribution of written information and the participation of EIiCD program managers in various agency-wide committees and/or involvement in regular allied health team meetings.
- Infrequently, the provision of self-management/health coaching training (e.g. Flinders training) to staff not officially designated as key workers has been described; in addition, some agencies are including self-management requirements into position descriptions across their organisation.
Development of business systems

- Implementation of appropriate business systems has been a relatively unproblematic process for EIiCD programs, with basic functions such as cost centres and budgeting being described as following normal agency procedures.
- Repeated concerns have been expressed by EIiCD programs regarding the capacity of the SWITCH system to support the EIiCD program, particularly in relation to the identification of funding source and the subsequent activity reporting in the Community and Women’s Health data set:

> Clients do not neatly fit into these funding boxes. They have varied needs and often require services from a range of funding sources. For us, all clients with diabetes who see one or more of our diabetes team members (includes clinicians funded specifically under [the EIiCD program] and those that aren’t) are classified as part of [the EIiCD program]. However, if we were to record all clients with diabetes under [the EIiCD program] funding source, this would drop numbers of clients under other funding sources such as HACC (clients with diabetes can fit under multiple funding sources).

Allocation of facilities

- The allocation of appropriate facilities for EIiCD program staff (in terms of office space or client treatment facilities) has been problematic in some cases. The implementation of EIiCD programs has often highlighted (or exacerbated) pre-existing space problems within the agency; limitations on office and client spaces has created some delays in program implementation.
- Several 12-month reports indicate that EIiCD program outreach facilities have necessitated car purchases to support program activities.

GP liaison and referral pathways

- Involvement of the DGP in planning/reference groups was a standard feature of EIiCD programs. Direct contact arrangements with DGPs were often described in relation to the GP liaison officer, with some programs reporting liaising with DGP staff with responsibility for promoting the uptake of MBS CDM items.
- The formalisation and operation of referral pathways was a significant area of program activity; many programs have experienced considerable delays in moving draft referral protocols into operational mechanisms between the agency and local GPs. Early stage implementation activities were generally focused on pilot-scale referral pathways (e.g. with one specific local practice) and the subsequent refinement of processes in light of this experience.
- Staff members with a dedicated GP liaison function have been described by many EIiCD programs. A variety of methods have been used to create this role, including jointly funding the position with the DGP. In one instance, difficulties with recruitment of a GP liaison worker has been viewed as impairing progress.
- The development of referral and liaison pathways has, in a small number of agencies, progressed to the point that case conferences have occurred between EIiCD program staff and local GPs.

Other liaison and referral pathways

- At the management level, the majority of EIiCD programs have established links with local HARP-CDM programs, with reciprocal representation of program staff on the steering committees of these programs.
- At an operational level, close links between the two programs were developing, with the development of common client entry points and co-location of EIiCD/HARP-CDM programs highlighted as enabling factors. In a few instances, the two programs were jointly promoted to GPs.
As noted above with regard to the patterns of implementation, some EliCD programs have experienced considerable difficulty in this aspect of implementation. In some cases there were consistent problems in the triage/referral of clients to (or between) EliCD and HARP-CDM programs, particularly when clients are referred from acute care settings. A particular problem in the metropolitan area was also described: one agency—not ‘associated’ with any particular hospital but proximally located to several metropolitan hospitals—experienced significant coordination challenges due to the multiple pathways applying to clients within their catchment.

EIiCD program managers also stated that the EIiCD/HARP-CDM program interface requires more DHS-level activity to drive necessary system change, beyond that achieved at the local level, for example, greater DHS activity relating to the promotion of the overall approach to chronic disease management.

**PCP-level implementation**

PCP staff were also asked to rate implementation progress for EliCD programs within their catchment. The following key aspects were outlined in the evaluation, and ratings were made by PCP staff using the same phases of development and implementation scale used for agencies:

1. The PCP has developed a consistent approach to supporting initial contact, initial needs identification, assessment and care planning for this program.
2. The PCP has developed practice, processes, protocols and systems (PPPS) for facilitating client access to this program.
3. The PCP has supported agency implementation of PPPS in relation to this program.
4. The PCP has developed and implemented systems that facilitate the identification of clients within the target group (e.g. via PPPS).
5. The PCP has developed information management systems to support care plan implementation, monitoring and review for clients participating in this program.
6. The PCP’s service coordination model supports the agency to implement care planning for clients participating in this program.
7. The PCP has facilitated/improved communication between GPs and the agency about clients participating in this program.
8. The PCP has developed approaches to address disadvantage and health equality (in IHP) in relation to this program.
9. The PCP has developed and implemented strategies around workforce development of the GP sector in relation to this program.

**Implementation patterns**

PCP responses to the implementation scales showed three different patterns of implementation, two of which were broadly similar to the patterns observed for agencies.

**Progressive implementation**

For aspects 1 to 4 (development and implementation of client identification and assessment processes), a progressive pattern of implementation was observed (Figure 4). This pattern is broadly similar to that observed for progressive implementation at agency level, with a discernable shift in the pattern of responses over the 12-month period from lower to higher phases of implementation. However, a
larger number of PCPs (approximately one-third in each case) still reported ratings at the lower end of the implementation scale at 12 months.

**Figure 4: Progressive pattern of PCP-level implementation progress: PCP implementation aspect 1 – development of consistent approaches to supporting initial contact/needs identification, assessment and care planning**

![Progressive pattern of PCP-level implementation progress](image)

‘Breakthrough’ implementation

The distribution of responses for aspects 5 to 7 (support for care planning and facilitation of agency-GP communication) indicated that some PCPs made considerable (‘breakthrough’) progress in implementation in the second half of 2007 (Figure 5). For these aspects, reports of advanced or sustained routine activity were observed in the 12-month reports; however, even at 12 months many PCPs were still reporting early phase implementation.
Figure 5: ‘Breakthrough’ pattern of PCP-level implementation progress: PCP implementation aspect 5 – development of information management systems to support care plan implementation, monitoring and review

![Figure 5: 'Breakthrough' pattern of PCP-level implementation progress: PCP implementation aspect 5 – development of information management systems to support care plan implementation, monitoring and review](image)

Lagging implementation

The pattern of implementation observed for aspects 8 and 9 (development of approaches to address health equality and workforce development in relation to the EiICD program) was similar that for aspects 5 to 7, but with an even smaller number of PCPs reporting advanced or sustained progress at 12 months (Figure 6). This may indicate a considerable lag in implementation of approaches relating to these aspects, as well as being reflective of the complexities associated with each of these aspects.

Figure 6: Lagging pattern of PCP-level implementation progress: PCP implementation aspect 8 – development of approaches to address disadvantage/health inequality in relation to program

![Figure 6: Lagging pattern of PCP-level implementation progress: PCP implementation aspect 8 – development of approaches to address disadvantage/health inequality in relation to program](image)
PCP activities

In conjunction with the self-rating of implementation progress, PCP staff provided additional information regarding the activities conducted around certain implementation aspects. A range of activities were described by PCPs, particularly in the 12-month evaluation reports; these activities are summarised below.

Communication with GPs

In relation to communication with GPs, PCPs have described their general role in facilitating communication between member organisations; such communication concerns specific EIiCD programs as well as chronic disease more generally. This facilitative role was supported in several key ways:

- Participation of PCP staff in EIiCD governance structures.
- Creation and joint funding of specific positions working with agencies and GPs, including GP liaison workers as well as “chronic disease workers” focused on broader integrated chronic disease management (ICDM)-related strategies.
- Consultation strategies with member organisations regarding ICDM.

In addition to these jointly funded positions, PCPs have also participated in the preparation of funding applications relating to improved communication between service providers, and specific project work (e.g. trials of client-held records, e-referral systems).

Experience over time has also highlighted the many problems associated with facilitating communication with GPs. Specific examples were given by PCPs—the lack of information available about EIiCD, continued staff turnaround (at the program or PCP), and a perceived lack of interest among GPs themselves:

*GP engagement has consistently been a difficult nut to crack. While some success has been achieved with a specific GP clinic, overall GPs are ignoring the correspondence sent from EIiCD including client care plans. We seem not to be on their radar and will need to develop different strategies.*

Disadvantage and inequality

PCP approaches to address disadvantage and inequality in relation to EIiCD programs generally involved linking with more specific health or social programs targeted towards priority/disadvantaged groups. Such program links included Neighbourhood Renewal, AHPACC or local Indigenous Health Cooperatives, specific CALD group organisations and other programs (in one case including a program addressing local transport disadvantage).

GP workforce development

PCP approaches to GP workforce development in relation to EIiCD programs were again in the context of larger PCP strategies in this area. A number of PCPs reported engaging with DGPs in the development and/or delivery of education and training packages for GPs and practice nurses.

A number of PCPs described specific engagement strategies with practice nurses, including facilitating networking and supporting practice nurse attendance at chronic disease self-management courses (e.g. health coaching courses).

As discussed above, this aspect of implementation has been slower to progress; even at 12 months, some PCPs were still reporting that they were in very early developmental and consultative phases. Other PCPs have indicated that it is not their role to develop or implement GP workforce strategies.
Program leadership

Throughout the evaluation, agencies and PCPs were asked to rate the contribution that various stakeholders have made to the overall leadership of EIiCD programs. The five identified local stakeholders were the agencies and PCPs themselves, the acute health sector, local DGP/s and consumer, carer and community representatives. The rating scale used categorised the leadership contribution as ‘very little’, ‘some’, ‘quite a bit’ or ‘a great deal’ (with an additional ‘don’t know/not applicable’ option).

Leadership ratings were relatively consistent throughout the evaluation. As shown below, agencies have consistently rated themselves as the leaders in EIiCD (i.e. showing ‘a great deal’ of leadership); fewer PCPs and DGPs have been rated at the same level by agencies (Figure 7). The parallel ratings by PCP staff confirmed this overall program leadership shown by agencies; PCPs regarded themselves as showing ‘a great deal’ of leadership in EIiCD less frequently (Figure 8).

**Figure 7: Agency ratings of EIiCD stakeholder leadership: percentage of ratings of ‘a great deal’ of leadership contribution from stakeholders**

**Figure 8: PCP ratings of EIiCD stakeholder leadership: percentage of ratings of ‘a great deal’ of leadership contribution from stakeholders**
3. System change

An important aspect of EIiCD programs is the focus on internal system change consistent with best practice in chronic disease management within the broader system change to better support people with chronic disease. This section reports agency perceptions of system change and improvement within these components of the CDM service model.

Changes and improvements

As in previous reports, the Wagner Chronic Care Model (CCM) was used as the conceptual base for analysing data from agency management reports. Changes and improvement were categorised into four domains of the Wagner CCM: health system organisation; delivery system design; decision support; and clinical information systems. The self-management support domain of the CCM is implied across all responses, as it the focus of EIiCD programs. Notably, the sixth domain of the Wagner CCM—community resources—did not feature in agency reports in relation to changes and improvements.

Respondent comments were categorised according to elements of the model (Table 1). The focus was restricted to changes and improvements; CCM elements that did not require modification would not be identified in responses to survey questions about changes or improvements.

| Table 1: Service changes or improvements according to CCM elements reported throughout the evaluation |
|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| agencies noting changes or improvements [n (%)] | January 2007 | July 2007 | February 2008 |
| Health system organisation | 8 (47) | 15 (88) | 13 (76) |
| Delivery system design | 6 (35) | 13 (76) | 16 (94) |
| Decision support | 7 (41) | 10 (59) | 12 (71) |
| Clinical information systems | 2 (12) | 6 (35) | 3 (18) |

At each evaluation follow-up, all agencies identified changes to their programs in the previous six months; all but one agency identified some of these changes as being improvements.

There were increased reports of changes and improvements to programs in February 2008. Table 1 shows that in February 2008, the most commonly reported area of service change or improvement was delivery system design (94%), followed by health system organisation (71%), decision support (71%) and clinical information systems (18%). Overall, reports suggested an ongoing process of change largely related to the design of the delivery system and the system organisation that supports it.

Table 2 shows the relationship between key components of the EIiCD service model (namely client recruitment and referral, GP liaison, and internal systems and processes) and the four domains of Wagner CCM, as observed in the February 2008 agency reports.
Table 2 shows that changes in client recruitment and referral reported by agencies occurred in the CCM domains of delivery system design, decision support and clinical information systems. From the agency perspective, change or improvement in GP liaison took place in the CCM domains of health system organisation and delivery system design, whereas change or improvement in internal systems and processes crossed all four CCM domains. Those domains where no change or improvement was noted by agencies suggest possible gaps in activity where future attention may be needed to progress development; for example, improvements in clinical information systems may help to enhance GP liaison.

The four domains of the CCM that featured in agency reports of change and improvements in the EliCD evaluation are described below. Examples from six- and 12-month agency reports are used to illustrate different aspects of each domain.

**Health system organisation**

In January 2007, agencies focused on the establishment of management/leadership groups, strategies advancing intra-agency ways of operating, and organisational structure. By July 2007, agencies reported health system organisation-level changes or improvements with greater frequency. These were classified as either intra- or inter-agency activities.

Intra-agency activities focused on:

- Staff relationships
- Communication
- Program structure.

Inter-agency activities occurred through:

- Alliances
- Meetings
- Relationship building.

These included working with GPs and the external promotion of the program.

After 12 months, nearly three-quarters of agencies reported intra- or inter-agency activities where there had been change or improvement.
The reported intra-agency activity in February 2008 denoted change in one key component of a CDM service model: internal systems and processes. This activity can be categorised into three main areas: organisational structure; organisational processes; and workforce profile. These three areas are discussed in more detail below.

**Organisational structure**

Ongoing change and/or improvement in organisational structure were reported by about half of the agencies. One agency described its change as providing “a more effective organisational structure that is conducive for decision-making and therefore sustaining change”. The change was further explained as follows:

> Many changes depend on high level decision-making if change is to be sustainable. This type of decision-making was difficult within our previous organisational structure due to an excessive number of reporting lines. The Primary Health component of the organisation is now undergoing a re-structure to address these problems. All staff are now in teams with an appointed team leader. Each Team Leader will report to a Program Manager who forms part of a management team. Major decisions in relation to changes in practice will now be discussed at the management team level with input from staff being sought in working groups. Each working group will have terms of reference and changes will be trialled and tested via PDSA cycles.

Other agency reports also implied flow-on effects to their broader organisation and its activities from the EIiCD initiative. For example, one agency reported, “Cross organisational care coordination is now high on the organisational agenda”, while another said “The EIiCD Initiative is now fully integrated into the broader Primary Care services at the Community Health Centre and no longer operates as a discrete service activity”.

**Organisational processes**

Four activities reported by agencies in February 2008 were considered to be organisational processes: ongoing planning and demand management; quality improvement; integration or standardisation of practices and tools across the organisation; and strategies to engage staff.

Some activities continued from previous reports; for example, planning and development of implementation, strategic, communication or work plans had changed or further improved. Unlike earlier reports, in February 2008 specific quality improvement activities—in terms of monitoring, evaluation and review of processes and outcomes—were raised by a small number of agencies.

Streamlined processes and form-sharing across program areas were reported by several agencies. Others reported the adoption of common approaches; for example, “care coordination has been incorporated into the workloads of all clinicians” and “the role [of project officer] has been incorporated into program areas”.

For a number of agencies, an important area of attention was the continuing effort to engage staff. Three main strategies were reported: education; communication; and addressing structural issues.

For example, agencies sought to improve team meetings by changing processes, such as modifying the reporting hierarchy or changing meeting content to include case reviews. Concern about staff workload remained, but staff resistance to changes appeared to be diminishing. However, new concerns, such as the long-term sustainability of the initiative and the impact of additional roles on clinical skills and career pathways were flagged. As examples:

> Staff engagement has been an issue, hence new engagement strategies that include more regular meetings with key staff funded under the EIiCD initiative and regular diabetes project meetings have been introduced. This has laid the foundation for change across more team members.
Supporting implementation of self-management principles by program staff through conducting Health Coaching Practice Forums to ensure maintenance of skills, knowledge and familiarity of tools. This is further supported amongst program staff via fortnightly PD, monthly formalised secondary consultation sessions, peer support and case studies. Our internal evaluation cited these supports as a key strength of our program contributing to the increased confidence of program staff throughout 2007.

Due to the new and complex role key workers are undertaking in this program, some staff have raised questions over staff longevity in the program. Whilst they are gaining skills in self-management support there have been concerns raised regarding perceived deskilling within their discipline role as their time is split between their discipline and key worker role.

**Workforce profile**

In the February 2008 agency reports, issues relating to the profile of the workforce overlapped two components of the chronic disease management service model: GP liaison and internal systems and processes. The two main issues relating to workforce profile reported by agencies were role restructure (or redefinition) and team capacity.

Key worker or care coordinator roles were restructured or redefined in some agencies to address issues relating to general practice, but in one case change in this area involved the incorporation of key worker functions into all clinical roles.

Team capacity continued to be an issue in agency reports. Agencies addressed this issue in two ways:

- By expanding the role and skill of more workers across the agency; for example, by training more staff in health coaching or involving staff in case conferences with GPs.
- By adjusting workloads either by recruiting additional support for staff, or, less commonly, using a “restricted number of service providers” to work with each client. The latter strategy was designed to reduce confusion among clients, and to allay their “sense of being overwhelmed”.

**Delivery system design**

In January 2007, two main activities at the level of delivery system design were the focus of agencies: establishing defined roles and staffing. By July 2007, attention had shifted to defining care pathways, establishing flexible systems to meet diverse needs and (in two agencies) revision of the implementation plan.

By February 2008, the primary changes and improvements in delivery system design reported by agencies related to two key components of the service model: client recruitment and referral pathways and internal systems and processes.

Several modifications to inclusion criteria and care pathways were reported. These were streamlining processes or developing alternate pathways to fast-track people with high needs such as “refined [...] program entry criteria and triage processes to enable those clients who need services urgently to have rapid access” and extending access to hard-to-engage communities through assertive outreach. Agencies developed both specialist and generic approaches. The latter included:

A new consent policy where diabetes clients who attend or are referred for a service consent to a team approach rather than an individual discipline. This will more effectively enable us to deliver team-based care and overcome the hoops of client consent.

Changes or improvements to internal processes and structures included the integration of services, team management, and skill development. Agencies reported that these changes contributed to improved service delivery by improving access and appropriate treatment approaches. For example:
The wait list for the Diabetes Educator has decreased in the past report period as the Program has picked up many of these clients.

The integration of services included incorporation of ELiCD programs, or components of it, into broader practice. ELiCD has clearly provided an impetus for broader system change among some agencies:

*The program team is now part of a broader Chronic and Complex Care program at [agency], providing a strong chronic disease focus for the organisation. As a result of this, clearer referral pathways have been established to ensure that all clients who would benefit from self-management support are directed to the program.*

*Regular GP contact is now a standard procedure (poor contact is a common report for the reason why GPs don’t refer to community health).*

*Self-management is viewed as an important part of best practice with a need to move away from solely giving information to people about their disease. Our aim is for this to occur for all people with diabetes, not only those clients recruited as part of the ‘program’ as defined earlier.*

Reported changes and improvements in agency reports related to team management issues and generally involved regular multidisciplinary team meetings. Some agencies have established smaller management groups. One agency has established a small-team allocation approach, ostensibly to avoid problems that may arise when there are too many care-givers.

The agency reports included notification of a number of new self-management related programs, including clinics addressing specific health conditions, a generic self-management education group and other specific topic programs such as psychology and medication review.

Several agencies reported improvements among staff in skill development and growing awareness of the skills needed to support self-management in the client population. For example, one agency reported changes as:

*Better team approach to client needs within the program. Staff have developed an improved awareness of specific skill sharing that aim to maximise the potential for client outcomes.*

**Decision support**

Decision support strategies highlighted by agencies in January 2007 focused on clinical practice and staff development. In July 2007, decision support activities were about staff training and the development of guidelines, tools and other resources. By February 2008, agency reports showed changes and improvements to decision support in the development or revision of tools and protocols. These affected the internal systems and processes and client recruitment and referral components of the service model:

*The integration of chronic disease self-management assessment and principles into assessment tools for both physiotherapy and diabetes education has increased awareness and discussion within these allied health streams. This has aided program implementation and ownership.*

*A trial and implementation of a common assessment framework to improve the coordination of care. [Evidence] of this will be an increase in internal referral traffic that will better ensure that all diabetes clients (as an initial focus) receive the care they need.*

**Clinical information systems**

The fourth domain of the chronic care model refers to clinical information systems or how agencies “organise patient and population data to facilitate efficient and effective care”.
In January 2007, two agencies commented on strategies to share client information; one through electronic files and the other via client consent across programs. By July 2007, six agencies reported changes or improvements in this area. In some cases this involved improved data systems, while at one location the use of 20 remote patient monitors had begun.

In February 2008, three agencies reported changes or improvements to their clinical information systems that affected two aspects of the service model—internal systems and processes and client recruitment and referral. Two changes involved the introduction of electronic file systems; one agency had purchased three laptops for use at home visits. A third agency used a clinical file audit to improve the care provided to people with diabetes:

To examine the percentage of diabetes clients (those seen by any member of the diabetes team) receiving the minimum standard of diabetes care, we undertook a client file audit that benchmarked our diabetes care against best practice diabetes guidelines and standards. As suspected, there were significant gaps, including little evidence of adequate self-management support. We are now testing ideas for improvement through the PDSA methodology, the aim of which is to ensure all clients with diabetes receive guideline-based care and self-management interventions that suit their needs.

Changes and improvements: summary

Agency reports in February 2008 indicated changes and improvements across four domains of the Wagner CCM. These aligned with three key service components of the EIiCD service model: client recruitment and referral, internal systems and processes and GP liaison.

Client recruitment and referral

Changes and improvements in client recruitment and referral were identified in the CCM domains of delivery system design, decision support and clinical information systems:

- The delivery system designs were affected by the continued modification of inclusion criteria and referral pathways. In regard to the latter, agencies reported both broad and targeted approaches, and appeared to be improving access for those in greatest need.
- These approaches were reinforced in changes to decision support tools and protocols—integrating self-management principles into assessment frameworks to streamline referral pathways.
- Finally, clinical information systems were used to facilitate and improve referral.

Internal systems and processes

All four CCM domains identified in agency reports showed evidence of change or improvement in agency reports:

- The health system organisation domain covered both intra-agency and inter-agency activities in the reports. There was indication of important change to organisational structure to facilitate decision-making and entrenching long-term change. Reports of changes and improvement to organisational processes also suggest sustainable change as common processes and protocols were introduced across service systems. Changes to workforce profiles through role restructure and enhanced team capacity were also reported.
- Changes to the delivery system design relied on changes to internal systems and processes, particularly in regard to team structure and management and the delivery of new programs. These programs were designed to address both broad and specific needs.
- Although relatively uncommon in agency reports, changes and improvements to clinical information systems were important to internal systems. For example, the purchase of laptops for home visits is likely to facilitate record keeping.
**GP liaison**

Changes or improvements in the GP liaison component of the service model were identified in two of the four CCM domains that featured in agency responses: health system organisation and delivery system design:

- Several changes to health system organisation were directed at GP liaison. Several agencies referred to adjustments in workforce profiles that affected interaction with GPs; for example, by restructuring roles.
- Inter-agency activities in relation to health system organisation were common. These included communication, relationship-building and collaboration, and often involved divisions of general practice.

**Change management**

Six themes relating to change management were identified in agency management reports from January 2007; these themes were reiterated in the July 2007 reports and were still evident in February 2008. These themes were:

- Program establishment
- Integration with existing programs
- Paradigm shift
- Practice change
- Resource planning
- Knowing the client group.

These themes are discussed in more detail below.

**Program establishment**

- Program establishment issues related to the practical barriers of setting up a new program. This change management issue was still evident in the February 2008 reports in a minority of agencies, where the issue related to continuing attempts to engage effectively with general practitioners.

**Integration with existing programs**

- Integration with existing programs, which was primarily concerned with resistance to change in earlier reports, was described in terms of continuing progress by the majority of agencies in the February 2008 reports. Five agencies had sustained routine activity and three of these declared that full integration had been achieved between programs.

Staff resistance was still present in the February 2008 reports, although this appeared to have abated considerably compared with earlier reports. The improvement in this area suggests that strategies established to address concerns relating to change management may be working.

In February 2008, similar approaches to staff engagement were reported. These included:

- Development of frameworks and plans to guide the change management process
- Establishment of implementation working groups
- Increased staff skills by training and allied specialist support
- Provision of regular supervision and group meetings to encourage peer support.
Two new engagement strategies directed at staff were identified in the February 2008 reports:

- Consultation by the use of focus groups or regular educational forums. For example, one agency described focus groups involving staff to identify needs.
- Review of team meetings to develop more effective and relevant structures and approaches. For example, one agency introduced case reviews at team meetings.

The following excerpt shows how focus groups were used to involve staff in ongoing discussion of the challenges they faced with implementation:

A focus group was conducted with staff in September 2007 who have received health coaching training to date (EIiCD and non EIiCD funded) to identify what support mechanisms they would like to assist them in implementing self-management support into their daily clinical role. Many ideas were generated from this focus group. To enable management to assist in this process, another staff focus group was conducted end of January 2008 with the purpose of staff identifying their top priority areas and the strategies. A number of barriers for staff in implementing self-management support into their daily clinical role have been discussed. For example: staff NOT funded by EIiCD program continue to highlight the need for “dedicated time” to assist them in providing adequate self-management support within their clinical role. With current targets and structured appointment times for many clinicians, staff feel there is inadequate time to provide self-management support in addition to their clinical role.

Despite success in some areas, some agencies still struggled with staff resistance and continued to see it as a significant barrier to change, for example:

There has been difficulty in getting staff (including those funded in EIiCD) to additional staff meetings – many staff feel that there is no time for meetings because of client loads. However, changing care is impossible if staff do not meet. This is an example of a directive that needed to come from higher up so that staff would attend relevant meetings.

**Paradigm shift**

The paradigm shift towards a self-management approach encountered a misalignment with staff skill and experience in earlier reports. By February 2008, most agency reports indicated increased confidence to operate in the new paradigm with widespread use of team approaches and considerable emphasis on skill development, particularly in health coaching.

However, two new concerns about the impact of the initiative were raised—maintenance of clinical skills and the impact of the changes on existing programs:

Due to the new and complex role key workers are undertaking in this program, some staff have raised questions over staff longevity in the program. Whilst they are gaining skills in self-management support there have been concerns raised regarding perceived de-skilling within their discipline role as their time is split between their discipline and key worker role. Career pathways will be discussed and explored in more detail with staff early 2008.

**Practice change**

- Practical challenges to practice change in the application of self-management principles were reported in previous agency reports. However, by February 2008, at least half of the agency reports contained examples of significant practice change. These examples included accounts of broader impacts on primary care services resulting from the initiative, where “cross-organisational care coordination is now high on the organisational agenda”.

The most common indicator of sustainable practice change was the adoption of new and revised assessment tools for common use. One agency identified that key workers needed more training to
help clients with mental health issues, while others reported encouraging more staff to be trained in health coaching.

**Resource planning**

Resource planning was identified as needing substantial time commitment in earlier reports. A shift from planning to development was apparent in the February 2008 reports. This included preparing new resources for internal and external use, revising or reviewing existing material, and training staff.

**Knowing the client group**

The need for agencies to know their client group better was recognised in earlier reports, as was the need for data. Three specific approaches to determining the needs of the client group were reported by agencies—monitoring demand, the use of telephone surveys, and undertaking clinical audits. In addition, one agency used assertive outreach to target vulnerable populations with high needs.

**Changes and improvements: summary**

Overall, agency reports suggest evidence of sustainable change in relation to EIiCD programs, particularly in regard to the structure and organisation of care across agencies. There also appears to be growing confidence and skill in managing such change. However, some problem areas remain despite improvements; in particular, staff engagement and ongoing time demands. New areas to be monitored were also flagged, including the impact of time taken for care coordination on clinical skills, and the scope of skills required by key workers.

**PCP assistance with change management**

Agencies were asked about the role of PCPs in assisting with change management issues; 12 agencies reported on this in the January 2007 and 16 in July 2007. In February 2008, 16 agencies reported PCP assistance with change management. One agency reported that “This is still in early development phases with external agencies”.

Similar to the earlier reports, the February 2008 reports featured three major themes regarding PCP assistance with change management: planning and support; liaison and communication; and staff development.

**Planning and support**

Most agencies reported some level of PCP assistance with planning and support. Unfortunately, most agency reports did not specify whether this related to a PCP staff member or a member agency, although two agencies nominated funded roles within the PCPs. For example:

*PCP executive officer continues to provide advice and support to the program and included the EIiCD team in the recent […] mapping exercise.*

PCP input into program planning, including representation on internal and cross-agency reference groups and involvement in staff recruitment, were common PCP activities identified in agency reports. These activities appeared to be a mix of established committees, including the PCP ICDM group, and new initiatives such as networks and project-specific groups. Several agencies reported that PCPs provided advice and shared information. Practical and material support included the development of a recall and reminder system and project workers:

*Development of a six-month Chronic Disease Access Officer position (0.6EFT) on a trial basis. It is envisaged the position will improve the triage and referral process of clients into the appropriate Chronic Disease Program (HARP, AHPACC or [EIiCD] Program).*
Other important material assistance provided by PCPs included marketing material to promote the program such as posters and postcards; and items directly used in service delivery, such as client-held records:

Some of the tangible outputs from these groups include a single information sheet regarding all EIiCD programs in the [region] for use with HARP, GPs etc., a client held record with a self-management focus, developed by [regional] EIiCD programs in conjunction with [regional] HARP.

Agencies also reported assistance from PCP-facilitated activities that contribute to longer-term planning, such as self-management mapping exercises, regional service networks and regional projects:

The PCP is coordinating a two-year project in the region [...] The objectives of the program are to: identify risk factors for diabetes at point of entry to service; manage those risk factors and prevention.

Facilitated meetings in regard to the development and trialling of client Hand Held Records. This project is currently being trialled and will be evaluated in April 2008.

Liaison and communication

About a third of all agencies identified a PCP role as a liaison and communication link between EIiCD programs with external agencies and GPs. Some agencies reported that PCPs helped to develop these links, particularly with other integrated chronic disease management programs, general practice and other PCP member agencies:

Outcomes have included recruitment of the GP Liaison Officer, development of KPIs for this role, development of processes around identification of referring (lead) GPs, feedback to GPs following referral and active promotion of the program to GP practices.

Additionally, the PCP now facilitates a regional ICDM steering group which is responsible for overseeing the various ICDM initiatives across the [region], sharing the successes and learnings from key programs and providing broad strategic input into ICDM directions for the region.

Staff development

Support for staff development by PCPs was reported by several agencies. PCPs conducted training courses and provided information and funding for training. They also provided support at a strategic level in workforce development.

An important function of PCP involvement appeared to be their capacity to help EIiCD staff better understand self-management:

Working with staff on self-management mapping has raised staff awareness and stimulated discussion of components of self-management.

PCP assistance with change management: summary

PCPs appeared to play a valuable role in assisting with change management for some agencies, but their impact was limited in others. Most agencies reported some level of PCP assistance with planning and support, but two agencies reported little change and one agency felt it was too early for PCP input.

The type of PCP assistance provided included the provision of resources, including staff, and projects to help with the integration of services. PCPs also helped with staff development. PCPs also assisted in agency liaison with GPs and other external agencies, described largely as being through the provision of resources and networks.
4. Client enrolment

The following summarises the quantitative and qualitative data collected by the evaluation regarding client enrolment and recruitment across EIiCD programs.

Client enrolment statistics

At the completion of the evaluation in February 2008, 1933 clients were reported to be currently enrolled in EIiCD programs throughout Victoria. This total enrolment figure is calculated from the data provided by 17 agencies; one agency had not yet enrolled clients at the time of reporting. As shown in Table 3, there was a significant expansion in EIiCD client enrolment in the latter half of 2007, with the majority of the increase occurring in programs funded in 2006.

Table 3: Number of ‘currently enrolled’ clients, by program type

<table>
<thead>
<tr>
<th>Program type</th>
<th>Baseline</th>
<th>6 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-funded programs ($n = 8$)</td>
<td>867</td>
<td>862</td>
<td>942</td>
</tr>
<tr>
<td>2006-funded programs ($n = 9$)</td>
<td>0</td>
<td>178</td>
<td>991</td>
</tr>
<tr>
<td>Rural programs ($n = 5$)</td>
<td>58</td>
<td>137</td>
<td>380</td>
</tr>
<tr>
<td>Metropolitan (capital and other metro) programs ($n = 12$)</td>
<td>809</td>
<td>903</td>
<td>1553</td>
</tr>
<tr>
<td>All programs ($n = 17$)</td>
<td>867</td>
<td>1040</td>
<td>1933</td>
</tr>
</tbody>
</table>

The determination of the number of clients involved in recall/review phases has been more difficult to determine due to problems with data collection, as well as differing program definitions (the phases was not considered applicable to clients by some programs). From the data obtained, the number of clients involved in recall/review phases has increased steadily over the evaluation period (Table 4).

Table 4: Number of ‘recall/review’ clients, by program type

<table>
<thead>
<tr>
<th>Program type</th>
<th>Baseline</th>
<th>6 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-funded programs ($n = 8$)</td>
<td>119</td>
<td>304</td>
<td>312</td>
</tr>
<tr>
<td>2006-funded programs ($n = 9$)</td>
<td>0</td>
<td>51</td>
<td>332</td>
</tr>
<tr>
<td>Rural programs ($n = 5$)</td>
<td>16</td>
<td>103</td>
<td>141</td>
</tr>
<tr>
<td>Metropolitan (capital and other metro) programs ($n = 12$)</td>
<td>103</td>
<td>252</td>
<td>503</td>
</tr>
<tr>
<td>All programs ($n = 17$)</td>
<td>119</td>
<td>355</td>
<td>644</td>
</tr>
</tbody>
</table>
Client recruitment barriers

As part of the evaluation, EIiCD programs were asked to provide data on any identified barriers to client recruitment. Themes identified from the data are summarised below under the broad headings of client-, agency/program- and referral-related barriers.

Client-related barriers

Two major themes were identified in regard to client-related barriers: the interest, understanding and motivation of individual clients, as well as general socioeconomic factors.

Interest, understanding and motivation

- A number of agencies have identified that some clients are uninterested in participating in EIiCD programs as they were satisfied with the services they already receive; for example, they may prefer to be managed by their GP alone. In addition to this, one agency identified the need for clients to interact with multiple clinicians as being another potential deterrent to participation in the EIiCD program.
- As would be expected for an early intervention client population, some clients were described as not considering themselves ‘sick enough’ to require the additional/more intensive services offered by EIiCD programs.
- A general lack of understanding of self-management approaches was described as making some clients unwilling to participate in EIiCD programs. This was described as a client perception that the health system should “take care of them”, with “visible” services.

Socioeconomic factors

- For clients from disadvantaged backgrounds, costs associated with the EIiCD program were described as being a barrier to client recruitment. This extended beyond any program-related fees, and includes the costs of transport to program activities.
- The specific characteristics of special needs groups that agencies are engaging with as part of EIiCD programs was also viewed as impacting on client recruitment (e.g. group-based activities with homeless or CALD clients).

Agency-/program-related factors

Some EIiCD programs described several internal barriers to client recruitment, including barriers relating to agency staff. These identified barriers included:

- The existing expertise of staff in specific chronic diseases and self-management approaches
- General staff workloads
- Ability to engage with particular client groups, such as CALD clients.

In addition, a general staff discomfort was perceived with EIiCD programs ‘prioritising’ some clients over others. This prioritisation was perceived as being the provision of services (either additional services or services being provided to EIiCD clients ahead of other clients with equal needs who are not part of the EIiCD program) and the greater amount of care coordination devoted to EIiCD clients.

A consistent theme has emerged, particularly in the 12-month evaluation reports, relating to EIiCD program marketing materials (e.g. information sent to GPs by agencies). The early evaluation reports viewed these delays in distributing these materials as being a barrier to recruitment; in later evaluation reports, the effectiveness of these marketing materials was questioned by several programs. Both problems were perceived as potentially limiting client recruitment.
GP and referral-related barriers

EliCD programs considered that low numbers of referrals from GPs and other providers would be major barriers to EliCD client recruitment. Barriers perceived by agencies included:

- Confusion between EliCD and HARP-CDM has created a significant barrier to client recruitment. Agencies indicated this confusion had created inappropriate referrals in some instances.
- A lack of awareness of self-management approaches by GPs, which was related by agencies to a preference among GPs for traditional medical/pharmaceutical approaches to chronic disease management. It is notable that at 12 months there were several reports of previous GP reluctance regarding self-management being alleviated.
- The general perception about agencies and/or the community health sector in general, particularly around waiting times for services.
- “Program fatigue” among GPs, with EliCD being deployed in a program-heavy environment in which programs often “come and go”.

The issue around the EliCD and HARP-CDM interface was not only problematic for GPs; in some cases, the relationship between the two local programs was such that the triage mechanisms in place resulted in most clients being diverted into HARP-CDM when potentially suitable for EliCD (or a mixture of the two programs).

Strategies for improving client recruitment

A number of strategies were developed by agencies to alleviate these perceived barriers to client recruitment. The majority of efforts around improving client recruitment were centred upon GP-/referral-related barriers. The development of a single point of entry between EliCD and HARP-CDM programs, incorporating an assessment and triage mechanisms, as well as streamlined transition mechanisms between the two, was viewed as an effective means to improve client recruitment. Other strategies to reduce specific GP-related barriers included:

- General awareness-raising among GPs of the EliCD program (or the initiative as a whole, especially its relationship to HARP-CDM), the agency itself and the services that it offers, or of the role of self-management approaches in the care of chronic diseases.
- Close working relationship with GPs, practice nurses, as well as the DGP. For GPs/practice nurses, this included responding to referrals in a timely manner, as well as providing feedback to GPs about clients. Feedback regarding observed clinical improvements in clients was viewed by agencies as a highly effective means of overcoming GP-related barriers; agency experience has been that GPs who have had positive referral experiences tend to refer more clients to the program.
- Providing GPs with a referral/service model tailored to their needs, as well as assisting with the use of MBS CDM items.

In addition to the above strategies in relation to GP-/referral-related barriers, some agencies have attempted to directly address the client-related issues by developing marketing materials to increase client understanding of self-management and its potential benefits.
5. EIiCD service models

Throughout the evaluation, considerable data were collected on the features of the service models developed by agencies as part of EIiCD programs. The following section summarises data collected on the different service elements and models described in the evaluation, the key service characteristics of the service models, as well as information on the range of service types offered as part of EIiCD programs.

Service elements

Agencies were required to describe how the following service elements were incorporated into their EIiCD programs:

- Care coordination
- Client self-management and coaching
- Psychosocial support
- Referral to external services.

The following summarises major themes identified from the data for each service element.

Care coordination

Responsibility and communication

Responsibility for care coordination in virtually all EIiCD programs lies with the key worker, with some descriptions of supplementary responsibility being placed with other allied health professionals involved with EIiCD clients. In some instances a ‘care coordinator’ role was described.

The importance of communication to the care coordination process was also described in many reports. Communication involved liaising with clients, GPs and other service providers, and also with other program staff (e.g. via case conferences). Communication with GPs regarding care coordination was particularly emphasised, especially in relation to the requirements of MBS CDM items. Involvement in multidisciplinary case conferences and other review mechanisms with GPs and other service providers was also described.

Functions according to stage of care

The major functions associated with care coordination changed according to the stage of client care involved. The functions described at each stage included:

- **Intake and assessment**: at this stage, care coordination involved a comprehensive assessment of the client; consideration of past health service utilisation to establish ‘gaps’ in client care. Assessment also included general capacity for engaging in self-management activities. Coordination of other more specialised assessments (e.g. by diabetes educators) was also included.
- **Planning**: care coordination activities at this stage included the development of new care plans or following existing care plans (e.g. established GP TCA plans). In some cases, a ‘meta-care planning’ role was required to harmonise multiple care plans applying to a single patient to avoid duplication and confusion. Planning also includes health coaching and ‘big picture’ goal setting and mapping out the various interventions necessary to meet goals. Specific service needs were then coordinated, along with specialised assessments from other health professionals where necessary.
• **Interventions**: coordination of specific services (and providers), self-management and other activities clients were engaged with as part of the program. Coordination at this stage was also described as responding to client needs and preferences—particularly in relation to self-management activities involved—in addition to the requirements of the overall care plan.

• **Follow-up**: at this stage, care coordination involved the organisation of continuing resources for clients following periods of more intensive intervention; for example, assisting with additional/ongoing service provision difficulties experienced by clients.

**Client self-management and coaching**

Perhaps the single most significant activity undertaken by agencies in relation to the client self-management element has been workforce development. Formal training of staff in the Flinders Model, and other professional peer-to-peer support mechanisms (e.g. regular key worker meetings) were described as enabling mechanisms for staff to support client self-management. Staff training has also included health coaching/motivational interviewing techniques.

Client self-management principles have underpinned the development of a number of new initiatives and program activities conducted by agencies. Specific examples of activities where self-management has been incorporated into programs by agencies include:

- Educational tours: for example, of supermarkets (as a nutrition education exercise), shoe shopping tours with diabetic clients.
- Workshops: on specific self-care activities such as foot care and stress management.
- Disease-specific programs: agencies have developed specific self-management programs for particular diseases, including diabetes, COPD and depression.
- Support groups: for example, peer-led discussion groups and weight-loss groups.

**Psychosocial support**

Agencies have reported that EIICD clients experience a wide variety of psychosocial issues; while depression and anxiety were the most prominent, social problems such as family, relationship, financial, and housing/accommodation issues were also noted. Client psychosocial support mechanisms were incorporated into EIICD programs in a variety of ways, including:

- Psychosocial assessments being incorporated into intake processes; this ensured that clients with complex needs were identified early and that appropriate services/referrals were included in the care planning process.
- Provision of specific services to clients identified with complex psychosocial issues as part of their EIICD program, including counselling, psychology and social work services.
- Employment of health psychologists and/or counsellors as key workers (or working closely with EIICD teams) to provide specific services for clients.
- Secondary consultation mechanisms for EIICD key workers to consult with health psychologists or other professionals.

Psychosocial assistance for clients as part of EIICD program were not necessarily provided using internally available services; in some instances, external services were provided via MBS referrals, and this has been a strategy used by agencies where internal services were overwhelmed by demand.

**Referral to external services**

A number of different types of services external to agencies have been referred to (or incorporated within) EIICD programs. Primarily, “external services” include HARP-CDM programs as well as
private allied health providers; in addition to these, partnerships with local support/activity groups and facilities (e.g. gymnasiums) were developed.

Referrals to external services were also described in relation to general care coordination and planning processes, particularly in relation to clients requiring more intensive services (e.g. HARP-CDM) or where internal services were overwhelmed by demand (e.g. psychosocial services, above).

Service models

From the descriptions of the “typical time course” for clients involved in ElIiCD programs, the generic features of an ElIiCD service model were discerned. These generic features were:

- **Intake and assessment**: clients enter ElIiCD programs in a variety of ways; for example, they may be identified from the existing agency client base, or referred to the program from external providers (GPs, HARP-CDM etc.). Assessment processes on intake include service and care needs as well as psychosocial issues and readiness/capacity to engage with self-management programs. Where ElIiCD and HARP-CDM programs have a common entry point, triage mechanisms are in place to ensure appropriate referral between the programs.

- **Care planning, care coordination and ongoing support**: key workers have the principal function of ensuring care plans are in place (either coordinating with existing care plans from other providers and/or new care plans) and that necessary services are provided. Throughout all phases, key workers have an ongoing first point-of-contact role with clients and fulfil a continuous assessment/monitoring/review function to ensure that the appropriate level of service is being provided relative to client need.

- **Program activities**: this may include service provision according to specific best-practice pathways of care for particular chronic diseases (e.g. for diabetic patients this might include podiatry, dietetics and diabetes education) and other services necessary for the care of the particular client (e.g. specific counselling services). Self-management activities and other supportive measures are also provided to clients in conjunction with these services; the services themselves may be internal or external to the agency.

- **Recall, review and follow-up**: Client follow-up and monitoring processes are embedded throughout the ElIiCD program; additional supportive activities may be necessary for individual clients (e.g. additional self-management education or activities to reinforce client skills). Review mechanisms were incorporated into ElIiCD programs in a variety of ways, including case conferencing with other involved health care providers. Such activities were supported by ongoing external liaison with external providers.

These generic service model features are summarised diagrammatically in Figure 9, which also illustrates the broad scope of key worker functions throughout ElIiCD programs.
Figure 9: Generic features of EIiCD service models and scope of key worker activity

Key service characteristics

Agencies were also asked to self-rate their performance against selected key service characteristics over the course of the evaluation. The results of these self-ratings are shown in Table 5, which uses a rating of “very good” as the level of attainment measured.

For several key service characteristics, such as the coordination of initial needs identification/assessment to minimise duplication, a consistent increase in ratings of “very good” was observed during the evaluation. Other key service characteristics, such as the time taken to complete these intake and assessment processes, remained static.
Table 5: Agency self-rating of key service characteristics: percentage of “very good” ratings at baseline, 6 and 12 months

<table>
<thead>
<tr>
<th>Key service characteristic</th>
<th>Ratings of “very good” by agencies [n, (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination of initial needs identification/assessment to minimise duplication between/within agencies</td>
<td>Baseline</td>
</tr>
<tr>
<td></td>
<td>4 (23.5)</td>
</tr>
<tr>
<td>Sharing of client information between agency and other providers</td>
<td>4 (23.5)</td>
</tr>
<tr>
<td>Supply of information to clients about health needs, including information about condition/health promotion</td>
<td>8 (47.1)</td>
</tr>
<tr>
<td>Compliance with privacy legislation requirements (including informing clients about rights/confidentiality)</td>
<td>11 (64.7)</td>
</tr>
<tr>
<td>Streamlining of referrals and scheduling of appointments between agency and other providers</td>
<td>2 (11.8)</td>
</tr>
<tr>
<td>Time taken to complete intake and assessment processes</td>
<td>6 (35.3)</td>
</tr>
<tr>
<td>Consistency of information provided to clients</td>
<td>3 (17.6)</td>
</tr>
<tr>
<td>Capacity of agency to implement systems and structural changes</td>
<td>8 (47.1)</td>
</tr>
</tbody>
</table>

**Service types and service brokerage**

Throughout the evaluation, agencies were asked to provide data on the types of allied health and other services that were provided as part of EIiCD programs, as well as information regarding the funding sources for these services. The following provides an overview of the range of services provided by EIiCD programs and other non-EIiCD funding sources.

**Types of services provided**

A wide range of services were provided as part of EIiCD programs (Table 6). The most commonly reported services were nursing, diabetes education, physiotherapy, podiatry, counselling and dietetics.
Table 6: Types of individual services provided by agencies as part of EiICD programs: February 2008

<table>
<thead>
<tr>
<th>Type of service</th>
<th>EiICD programs n (%)</th>
<th>Type of service</th>
<th>EiICD programs n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>15 (88.2)</td>
<td>Diabetes education</td>
<td>15 (88.2)</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>15 (88.2)</td>
<td>Podiatry</td>
<td>15 (88.2)</td>
</tr>
<tr>
<td>Counselling</td>
<td>15 (88.2)</td>
<td>Dietetics</td>
<td>15 (88.2)</td>
</tr>
<tr>
<td>Occupational therapy</td>
<td>12 (70.6)</td>
<td>Psychology</td>
<td>11 (64.7)</td>
</tr>
<tr>
<td>Home-based services</td>
<td>11 (64.7)</td>
<td>Support groups</td>
<td>11 (64.7)</td>
</tr>
<tr>
<td>Social work</td>
<td>11 (64.7)</td>
<td>COPD education</td>
<td>10 (58.8)</td>
</tr>
<tr>
<td>Medication management</td>
<td>10 (58.8)</td>
<td>Dental</td>
<td>9 (52.9)</td>
</tr>
<tr>
<td>CV education</td>
<td>9 (52.9)</td>
<td>Indigenous health</td>
<td>8 (47.1)</td>
</tr>
<tr>
<td>General practice</td>
<td>5 (29.4)</td>
<td>Optometry</td>
<td>2 (11.8)</td>
</tr>
</tbody>
</table>

Service types other than those listed were reported by 12 (70.6%) of agencies. These other services included: speech pathology, smoking cessation and other drug and alcohol services, more complex care coordination and case management activities (e.g. financial and family support services), community development, day and CALD-specific activities, as well as public education sessions on health and self-management.

Service brokerage

Data on service brokerage was difficult to collect, and many agencies were only able to provide estimates of the percentage of services delivered to EiICD clients that used general CHS or HACC funding. A wide variety of the services described above were funded via CHS or HACC funding; estimates of the percentage of services provided using these funding sources varied from 5% to 50%.

There were fewer reports of privately provided services for EiICD clients; where this occurred, it appears to be in relation to Medicare allied health items provided under GP-initiated Team Care Arrangement (TCA) referrals. Where private service provision occurred, estimates of the percentage of EiICD program-related services delivered in this manner were between 5% and 15%.
6. Liaison with general practice

This section summarises data obtained from agencies regarding the relationship between EiICD programs and general practice, including GP liaison work and GP referrals of clients, from the perspective of agencies, key workers and DGPs.

GP liaison

GP liaison was envisaged by DHS as being a key component of the EiICD service model. It incorporates both clinical practice and planning and service development; as such, it involves the engagement of both individual GPs and DGPs. While no explicit definition of GP liaison is offered in the DHS guidelines, its purpose and relevant activities can be inferred from the stated goals and desired outcomes.

For the purposes of this report, GP liaison is about working with GPs and DGPs to improve communication, care planning, client outcomes and system capacity. In February 2008, agencies reported GP liaison activity that was concerned with engaging GPs. Communication pathways were a significant issue. A quarter of all agencies nominated referral pathways or protocols when asked about the arrangements in place in regard to local GP practices and DGPs.

The outcomes that are sought from GP liaison can be considered in terms of the domains of the Wagner CCM of health care organisation and delivery system design.

In relation to health care organisation, these outcomes included:

- GP representation and participation in planning and development
- DGP-based coordination of GP engagement
- Sustainable GP participation.

For delivery system design, these outcomes included:

- Support for systematic approaches to identifying eligible patients in general practice
- Referral, feedback and care planning processes for general practice
- Flexible arrangements.

Activity related to GP liaison was also reported in terms of the number of practice visits, the arrangements in place, the factors affecting these arrangements, and the perspectives of key workers.

Role of GPs

The role of GPs in ongoing clinical care is an essential part of chronic disease management. This section explores the role of GPs in EiICD programs from the perspective of agencies.

Agency reports varied considerably in the detail they gave about how they saw the GP role in their EiICD programs. Six agencies described anticipated roles for GPs, with one admitting that the role was “not yet fully determined at this stage”. This aspect of the agency response reflects the pattern of lagging program implementation in this area, as described previously.

Descriptions of the GP role provided by agencies were focused on the practice level, rather than the planning level. Descriptions of the GP role included a range of functions, none of which were common across all agencies (as expected from an open-ended question). Agencies considered some functions to be implicit; for example, referral, which was the most commonly mentioned role. Referral was mentioned by just over half of all agencies. This could reflect the limitations of the
question format, but also raises an important issue about the articulation of the GP role across different programs and the expectations that flow from it. For example, six agencies described the GP role as being to develop care plans, whereas three agencies saw the role as GPs being advised of care plans. These subtle differences may be just local differences in application that do not have wider significance but could also indicate a lack of clarity around the GP role, or no shared understanding of it in the service model.

There were some significant differences in emphasis among agencies about the GP role. In particular, three agencies specified the need to acknowledge GPs as the primary care-givers whereas other agencies did not mention this. Other functions for GPs described by agencies included:

- Feedback and review
- Participation in case conferences
- Provision of pathology and other test results
- Communication with key workers.

Agencies also described the GP role in terms of their obligations to GPs, which included:

- Acknowledgement of referral
- Provision of advice or recommendations for changes to treatment plans including EPC Medicare items
- Advising of changes to patient status.

Agency descriptions of the GP role were categorised as controlling, collaborating or passive.¹ One agency did not provide sufficient information for classification. For most agencies, the GP role was classified as collaborative; it involved some level of shared or joint decision-making around care delivery. The extent of collaboration was broad, with some agencies tending to a more controlling GP role and others to a more passive GP role. One agency presented a controlling GP role and another agency described a passive GP role.

This classification was helpful as it showed that most agencies see GPs as partners in the service care model. It is not known whether GPs share this view.

**GP-related key service characteristics**

Agency perspectives of the role of GPs were supplemented by their ratings for five GP-related key service characteristics. These were: the quality of communication between GPs and the agency; quality of working relationships with GPs; the undertaking of joint care planning and care coordination; GP referrals to the agency; and agency feedback to GPs.

Overall, agency ratings of the GP-related key service characteristics suggest scope for improvement.

Less than half the agencies rated the quality of communication with GPs as very good (47%) and two agencies rated it as poor (12%). Fewer agencies rated the quality of working relationships with GPs as very good (41%) but only one described it as poor (6%). The key service characteristic of joint care planning and coordination was rated lowest. One agency reported it as not applicable, and of the

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¹ A GP role was categorised as: *controlling* when the agency framed activities as primarily providing support to the GP and gave no indication of shared or independent decision-making in terms of GP liaison; *collaborative* when the agency framed the role in terms of shared or joint decision-making around care delivery; *passive* when GPs were depicted as recipients of information.
remaining agencies, 25 per cent rated joint care planning as poor or very poor. Only three agencies described this aspect of the service as very good (19%).

GP referrals was rated as very good by less than a third of those agencies to which it was applicable (31%), although half rated this key service characteristic as good (50%). Three agencies rated it as poor (19%) and one agency reported it as not applicable.

The only key service characteristic that the majority of agencies rated as very good was for agency feedback to GPs (58.7%); this was a self-rating of agency performance. Three agencies reported that they were poor at this, one of which had previously rated itself as good in earlier reports. The rating change appears to be the result of investigation into their performance in this area. The agency reported:

_A recent file audit investigated communication to the GP from CHS and found that communication was given back to the GP in only 35% of cases._

This example highlights a potential limitation in the subjectivity of self-rating, but also supports the usefulness of practice audits. In this case, the audit appears to have been prompted by a focus group reported in the July 2007 report, which involved community health staff, GPs, practice nurses and Division staff. In July 2007, the agency reported that the focus group:

[…] revealed significant gaps in communication between GPs and community health staff. The focus group uncovered that GPs were interested in receiving communication about: acknowledgement of referral, the intended plan for patient care and what the clinician felt the GPs role should be, any changes to patient status of care plan, and if the patient was no longer accessing services.

Further evidence to demonstrate the importance of communication between GPs and agencies is demonstrated when GP-related key service characteristics are considered in conjunction with agency assessments of program implementation.

Figure 10 shows that agencies with sustained implementation (Phase 5) rated all key service characteristics as good or very good. In particular, the quality of communication between GPs and the agency was rated very highly by all Phase 5 agencies. Two agencies, both categorised as collaborative, rated all GP-related key service characteristics as very good.

**Figure 10: Agency ratings of GP-related key service characteristics by programs rated as Phase 5 (sustained implementation)**
Program implementation that was not yet sustained (Phases 3 and 4) was associated with greater variation in agency ratings for relevant GP key service characteristics (see Figure 11 and Figure 12). Comparison of the agencies based on their ratings of program implementation show that agencies were more likely to rate program implementation higher if they also rated communication with GPs higher.

Phase 4 agencies were also more likely to rate key service characteristics more variably compared with agencies that assessed themselves at either Phase 5 or Phase 3 in development and implementation.

**Figure 11: Agency ratings of GP-related key service characteristics by agencies rated as Phase 4 (advanced implementation)**

![Figure 11](image1)

**Figure 12: Agency ratings of GP-related key service characteristics agencies rated as Phase 3 (early implementation)**

![Figure 12](image2)
PCP contribution to GP-related key service characteristics

PCPs have a supporting role in service system integration and are important in helping with GP engagement in the CDM service model. The CDM guidelines anticipated the initial focus of PCPs in the EiiCD initiative to be work with local agencies, but that over time PCP resources were expected to be directed across the entire PCP catchment.

Agencies were asked to rate PCPs’ contribution to different aspects of agency service performance, including GP-related key service characteristics (KSC): quality of communication; quality of working relationships; the way in which joint care planning and coordination is undertaken; how GPs refer clients to agencies; and how agencies provide feedback to GPs.

Most agencies rated the contribution or assistance from PCPs to these GP-related KSC as low. The most common assessment of PCP contributions to GP-related key service characteristics was “some” (42% of all responses) followed by “none or very little” (19%; Figure 13).

Only two agencies, both classified as Phase 5 or sustained implementation, indicated that their PCP had contributed “a great deal” or “quite a bit” to each GP-related KSC. These ratings were associated with agency self-assessments of “good” or “very good” for performance in the relevant area.

Overall, perceptions of strong contributions from PCPs (that is, assessed as “quite a bit” or “a great deal”) for GP-related key service characteristics were uncommon in agency reports but did not affect agency ratings of their own performance in these area (Figure 13).

**Figure 13: Agency ratings of GP-related key service characteristics agencies rated as Phase 3 (early implementation)**

DGP role

The GP liaison component of the EiiCD service model identifies three outcomes relevant to DGPs that the EiiCD initiative hopes to achieve:

- GP representation and participation in planning and development
- DGP coordination of GP engagement
- Support for systematic approaches to identifying eligible patients in general practice.
In addition, process measures in development of the service model involving DGPs can be identified in the DHS guidelines. These include:

- Involvement in service planning processes
- Development of strategies to inform general practice about the initiative
- Development of strategies to increase general practice capacity to participate in chronic disease management service models.

Information about the activities undertaken by DGPs and their support for the program was included in statements provided by them in the agency reports. In these statements, DGPs were asked to describe their perspective of their role in the program. Sixteen of the 17 agency reports in February 2008 included such a statement.

Several DGP statements included unsolicited support for the EIiCD programs. DGP activities were identified that relate to DGP coordination of GP engagement and GP representation and participation. These provide some evidence of progress towards these desired outcomes. There was some support inferred for systematic approaches to identify eligible patients in general practice.

Common activities for DGPs included: promoting the EIiCD programs to GPs; liaising between GPs and agencies; linking EIiCD activities to other CDM initiatives, such as Australian Better Health Initiative Primary Care Integration; providing information and advice to agencies; supporting systems change; improving capacity across general practices. One DGP described their role as “a champion” for the program.

A small number of DGPs also raised concerns about EIiCD programs, including:

- Inconsistency in the information made available to GPs from a lack of promotional material and changes to eligibility criteria
- Additional burden of more processes and tools added to already complex systems
- Reluctance among GPs to refer to allied health workers
- Lack of confidence in agency systems and processes.

For example:

_A lack of promotional material and settled eligibility criteria have made it difficult to put a consistent message about the Program to GPs. Most GPs in this Division are only just becoming comfortable with referrals for Allied Health Services on Care Plans and the introduction of another option using another referral tool or requiring another process has proved to be off-putting. GPs tend to prefer familiar/traditional referral contacts and evidence-based medical systems and treatments. In many instances patients are now asking GPs for Care Plans and Health Checks. When they start asking GPs for help to manage themselves, referrals to the Program may increase._

**GP liaison activity**

To assess the activity involved in engaging with general practice, GP liaison visits were measured for three groups: practices, practitioners, and practice staff. To date, 1132 visits were reported by EIiCD programs. These were equally distributed between the three groups: 369 practice visits (32.6% all visits); 379 practitioner visits (33.5%); and 384 practice staff visits (33.9%). Programs funded in 2005 account for the majority of visits (778 [68.9%]) compared with 354 visits by the 2006-funded programs (31.3%). Rural programs account for 175 GP liaison visits (15.5%) compared with metropolitan programs which had 957 visits (84.5%).

The figures below show the number of visits to each of these groups for each of the reporting periods (prior to January 2007, from January 2007 to July 2007, and from July 2007 to February 2008).
number of visits was reported for: all programs; programs funded in 2005 and in 2006; and for metropolitan- and rural-based programs. Data included multiple visits to some practices, but did not include telephone contacts.

Overall, in the period from July 2007 to February 2008 fewer practice visits were reported compared with the previous reporting period; there was a slight increase in the number of practitioners visited; and visits to practice staff increased.

The overall decrease in practice visits can be largely attributed to a marked fall in practice visits by the 2005-funded programs and metropolitan-based programs (Figure 14). Practice visits by 2006-funded programs and rural programs increased between July 2007 and February 2008.

A similar dual pattern underlies the slight overall increase in the number of visits to practitioners between July 2007 and February 2008 (Figure 15); visits by 2005-funded programs and metropolitan programs decreased while visits by 2006-funded programs and rural programs increased. There were slightly more practitioner visits by 2006-funded programs (83) than by 2005-funded programs (75).

There was a marked increase in the number of visits to practice staff from July 2007 to February 2008 (Figure 16). Visits by 2005-funded programs stabilised or decreased slightly (from 97 visits between January 2007 and July 2007 to 88 visits between July 2007 and February 2008) and increased for 2006-funded programs, rural programs and metropolitan programs.

Over time, GP liaison visits appeared to shift from visits with practitioners to visits with practice staff and it is likely that face-to-face visits were replaced with telephone contact once relationships establish.

There are no data to show whether these practice visits resulted in more referrals from GPs to agencies, or whether it improved communication more generally. However, anecdotal accounts in key worker reports suggest that the practice visits did help to develop relationships between agency staff and GP practice staff, although it is not possible to determine the impact of these improved relationships in terms of either short- or long-term gains.

**Figure 14: General practices visited, by agency classification, pre-January 2007, January-July 2007 and July 2007-February 2008**

![Graph showing practices visited by agency classification](image)

*Practices visited*

- All programs
- 2005 funded programs
- 2006 funded programs
- Rural programs
- Metropolitan programs
GP liaison arrangements

Almost all agencies reported using DGP structures to engage GPs in their programs between July 2007 and February 2008. DGP structures included: regular meetings, both formal and informal; mechanisms to promote programs, such as DGP newsletters, targeted letters and flyers; educational forums for GPs and practice staff; and DGP-based liaison staff positions.
Four other types of arrangements were also reported by agencies: communication strategies including educational sessions or forums; referral pathways that included elements such as key contacts in general practices, direct contact with a client’s GP, or the use of surveys or audits.

**Arrangements in place**

All agencies identified arrangements to achieve GP liaison; more than half of the agencies nominated relationships with DGP and the support provided by them, as being important to GP liaison. Several agencies found it useful to negotiate arrangements with other parties at the outset; in two instances this was formalised as a service agreement (with a DGP) or as a Memorandum of Understanding (with DGP and PCP). Others considered a GP liaison role to be critical, either within the agency or within a DGP.

**Difficulties encountered**

Approximately half of agencies identified difficulties with GP liaison arrangements. Most commonly these involved the GPs themselves having insufficient time and being resistant to practice change. The following examples highlight these issues:

> Practice change within practices is also a challenge. Marketing is only one strategy and although important does not necessarily lead to an increased number of referrals. The working group has attempted to address this through discussions about the practice of diabetes guidelines... This has been challenging work as there is a consensus by some that practitioners are already delivering guideline-based care to the best of their ability. For those that aren’t, they cannot be changed because there are already numerous incentives to try to do this that if they don’t work, nothing will.

> The GPs are very busy and are running private businesses. A number of practices have indicated that they do not want to see the GP liaison officer and are not interested in the EliCD program.

Other problems included problems with staff recruitment, retaining suitable staff, time demands and delays, and the availability of resources, particularly in languages other than English.

**GP referrals**

Referrals from GPs to EliCD programs were generally considered by agencies to be low. However, agencies were asked about the use of referral protocols by general practice, as the development of referral, feedback and care planning processes for general practice was one of the outcomes sought from GP liaison.

**Use of referral protocols**

Programs established in 2005 were more likely to report success with referral protocols, although this was not observed in all cases. Generally, it appears that agencies have needed to be flexible in their response to GP referral behaviours. There appear to be two main reasons for this:

- Agencies need to accommodate deviations from protocols; for example, all referrals from GPs in one area have been to the agency and not the EliCD program, contrary to the protocol.
- Agencies need to accommodate a mix of referral processes, such as different electronic formats, letters, faxes and care plans.

One agency described the complexity of the situation they face:

> Survey of 27 GP practices. Sample of 6 practice results – 2 GPs confused about referral process, many GPs not aware of program, 1 GP had an (inappropriate) referral not accepted and was discouraged, 2 GPs reported too many referral options to remember – [program] not front of
mind, 2 GPs were unsure if they received feedback, and 2 GPs had attempted to encourage clients to self refer but were unsuccessful – this may possibly be because they did not have time, or did not understand the program well enough to explain it positively to their clients.

The most commonly cited approach was either to use the SCTT or Victorian Statewide Referral Form (VSRF), although compatibility issues were still apparent in programs where implementation was lagging. One agency reported that local GPs tend to refer using care plans rather than use the VSRF that continued to be promoted by the local DGP.

Factors influencing referral protocol use

Agencies identified several factors influencing the use of referral protocols. Positive influences included:

- Good communication
- Good coordination, both internally and externally
- GP knowledge of the program
- Consistent agency processes, such as acknowledgment of referral, timely referrals to GPs, and simplified yet comprehensive assessments
- GP liaison positions
- Good clinical outcomes for clients
- (In one case) a GP champion for the agency.

Factors adversely affecting the use of referral protocols were more common in the agency reports. The most frequently raised issue was the plethora of programs and their requirements, of which GPs need to be aware. This, along with the significant demands on GPs’ time, made it difficult to generate enough interest to learn about ElIiCD programs or self-management approaches generally and contributed to the ongoing challenge of changing practice among GPs. In addition, some GPs had poor experiences with previous programs and with the current one; for example, referrals were deemed inappropriate or feedback from agencies was slow or inappropriate. One agency reported:

> [M]any GPs are not familiar with [agency] so are reluctant to refer their patients to a centre that they are unfamiliar with. For GPs whose surgeries are on the border of the [catchment] there is hesitation to refer due to eligibility concerns, therefore they prefer not to use the service. The GPs do not know the practitioners personally and are less likely to refer to practitioners that they do not know. Many GPs already have established protocols that they use and are reluctant to change to the preferred VSRF which is unfamiliar to many GPs. Even when the VSRF form is on their computer they do not think to use it. The majority of GPs in the region do not know about the ElIiCD program as practice visits to date have been limited.

One agency had also been advised via the DGP that GPs did not approve of their clients being referred by other pathways:

> Clients who have been referred for direct service are being identified as eligible for the service at service access screening. Divisional project officers have informed us the GPs whose clients had this happen disapprove.

Key worker perspective on GP referrals

After 12 months, key workers had mixed perceptions of the support they had received from GPs, even among agencies with established programs. While most key workers expressed optimism for future improvements, their experiences ranged from “excellent support and interest from GPs and practice nurses” to “did not always find the GPs in the practice helpful. Would often not return calls, send [pathology] results or medication and/or medical history”, and even “others simply refuse to acknowledge our efforts or participate in this program at all”. Most described situations in which, as
one key worker wrote “there is definitely room for improvement”. As might be expected, support depended on individual practices.

Several key workers reported a gradual increase in GP referrals over recent months, but one believed that support had decreased over time and “Other programmes appear to have become a greater priority to the GPs”. GPs have also raised concerns about programs that target similar patients being run at the same time. Key workers generally found support from practice staff to be positive, and DGP's were seen as being important to building relationships.

Communication with individual GPs was the most common challenge identified by key workers. There were two aspects to this: getting information from GPs about clients, and finding out how information from the program was used.

Some key workers have developed strategies to address communication problems. One reported attending GP visits with clients, and another coordinated telephone calls to the GP to coincide with client appointments. Others focused on internal GPs or have by-passed GPs altogether and developed relationships with practice staff. One key worker described the situation this way:

Some GPs are great and some are woeful! The worst problem is getting them to arrange for blood tests and sending the results on to me and also with sending a care plan if already in existence. I have found a self-addressed envelope useful. It’s often easier to call and speak to the receptionist than the GP. They are just so busy and I am afraid the paperwork we send is too much so they won’t read it at all. I am very loath to call them by phone as they are usually with a client and then I am with a client when they call me back. It’s very frustrating. An email system would be preferable so both parties can respond when they are ready.

Key workers recognised GPs as being “time poor” but were disappointed that care plans did not always appear to be taken seriously. One key worker had problems in:

Gaining feedback from the GPs in regard to the value of the Care Plans and Client summaries they receive from the program has been difficult. We are not sure if they actually read them!

In some regions key workers recognised that the shortage of health professionals presented a significant barrier to the success of the program:

In terms of meeting the needs of the clients, lack of GPs and allied health services mean that clients often struggle to implement goals they set through the program. For example, GPs can have a 3/52 wait, some allied health services having waiting periods >3/12.

Key workers also made suggestions for program improvements:

- Better use of email to share client information and inform GPs about programs. This would involve GP training on accessing information about programs on the Internet and up-to-date program staff email address lists
- Establishing EIICD programs working in GP surgeries
- Building relationships through practice nurses
- Developing collaborative care planning with GPs and other health providers
- Using common tools such as the VSRF, and similar wording, formats and processes.

In addition, key workers suggested two potential problems. Success of the program could create waiting lists (or increase their length) and there is potential for over-referral.

Key workers appeared to have wide understandings of the term “GP liaison”; while some considered it fundamental to their role, other key workers viewed it as being the responsibility of others, usually the GP liaison workers.
7. Practical issues for program cost efficiency and effectiveness

As part of the evaluation, agencies were asked to consider local factors likely to influence the cost efficiency and effectiveness of the EIiCD program overall. From the responses received, a number of practical issues were identified relating to local system-, service- and client-related factors that were likely to influence the cost efficiency and effectiveness of programs. Sixteen of the 17 agencies provided comments over the evaluation period; one agency felt that it had insufficient evidence to respond.

On balance, more factors were identified that were likely to increase overall costs (e.g. complexity of client need, discussed below), but the potential for cost savings (e.g. resulting from practice change and better outcomes) was also recognised.

System factors

The key message is that change takes time, yet it is necessary if we are to improve and deliver cost efficient and effective services.

Three main system factors were identified by agencies as being important to the effectiveness of the program: the change to a proactive service model; workforce shortages; and the ongoing drought. In summary:

- The change to a proactive service model was recognised as a fundamental shift in the delivery of services, with a potentially positive impact on cost effectiveness. The change from a reactive system of care delivery to a proactive model was seen as having far-reaching consequences. One agency described this as a “transformation” necessary to address the problem of costs rising without improved patient outcomes.
- The second system factor identified by agencies was workforce shortages, which were related to both allied health workers and general practitioners, particularly in rural and outer metropolitan areas, and limited service development.
- The third system factor was the ongoing drought, which was a concern raised by agencies in rural communities. It was seen to affect cost efficiency by increasing the cost of access to services.

Service factors

Three main service factors were identified by agencies as having the potential to affect program efficacy and effectiveness. These were: practice changes; workforce shortages; and the impact of increased demand.

Changes in work practices were seen as offering the potential to both increase and decrease cost efficiency. Agencies considered cost savings may be gained by:

- Implementing a systems approach to ensure the routine provision of evidence-based practice
- Shifts to cost efficient practices such as the use of telephone follow-up.

Practice changes related to increases in service costs included:

- The extension of services such as the provision of out-of-hours services
- The need for additional support services such as transport and interpreters
• Additional administrative tasks such as maintaining additional databases and monitoring clients over time.

Workforce shortages were also seen to have cost implications at the service level. Two main issues were raised: access to the allied health workers and the increased need for interpreters. Two agencies made suggestions about how the shortage of allied health workers might be addressed; these had different cost implications. One agency suggested that payments may need to be increased to attract people with the required skills; another agency felt that liaising with private allied health practitioners may offer better utilisation of MBS items.

Increased demand for services was seen as having a number of important cost implications, including increasing pressures on existing infrastructure, increases in the incidence of missed appointments and gaps in the community services available for referral.

The adequacy of existing infrastructure and resources was a particular concern among agencies. They pointed to the need for additional space for staff and other services, such as parking. One agency suggested that relocation may be necessary.

**Client factors**

The most commonly identified factors likely to influence cost efficiency and effectiveness of EIiCD programs were client-related. Most agencies nominated the complexity of clients’ health and psychosocial needs as being the most important issue affecting costs.

The complexity of need, including the presence of comorbidities and complex psychosocial needs, was greater than anticipated by a number of agencies. It required greater service intensity, longer appointment times and longer periods of follow-up monitoring. There were also significant costs to address the wide need for social support that was identified to address issues such as social isolation and insecure housing.

Eleven of the 16 services that identified issues affecting cost efficiency nominated the proportion of CALD and/or ATSI clients in their catchment as being significant factors. These groups can require specialist services or support.

Specific resources required for people with low levels of literacy were identified by several agencies as an issue likely to influence the cost efficiency of programs.
8. EIiCD client data

The following section summarises responses obtained from the EIiCD client survey (at baseline and six-month follow-up). These data tables are supplemented in the second section with a summary of key worker perception of EIiCD client psychosocial complexity.

EIiCD client survey data tables

Self-rating of general health and wellbeing

*Whole-of-life self-outlook*

*Question A 1:* “How do you feel about your life as a whole, taking into account what has happened in the last year, and what you expect to happen in the future?”

*Table 7: Whole-of-life self-outlook – baseline and six-month follow-up client survey results*

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
</tr>
<tr>
<td>Delighted</td>
<td>12 (1.8)</td>
</tr>
<tr>
<td>Pleased</td>
<td>106 (15.9)</td>
</tr>
<tr>
<td>Mostly satisfied</td>
<td>178 (26.7)</td>
</tr>
<tr>
<td>Mixed</td>
<td>227 (34.0)</td>
</tr>
<tr>
<td>Mostly dissatisfied</td>
<td>40 (6.0)</td>
</tr>
<tr>
<td>Unhappy</td>
<td>75 (11.2)</td>
</tr>
<tr>
<td>Terrible</td>
<td>25 (3.7)</td>
</tr>
<tr>
<td>No answer</td>
<td>4 (0.6)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>667 (100.0)</td>
</tr>
</tbody>
</table>
**Self-rated health**

*Question A 2: “In general, would you say that your health is…”*

**Table 8: Self-rated health – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>5 (0.7)</td>
<td>5 (1.6)</td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td>72 (10.8)</td>
<td>47 (15.1)</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>217 (32.4)</td>
<td>135 (43.3)</td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>249 (37.2)</td>
<td>84 (26.9)</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>124 (18.5)</td>
<td>32 (10.3)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>2 (0.3)</td>
<td>9 (2.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>669 (100.0)</strong></td>
<td><strong>312 (100.0)</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Health compared to one year ago**

*Question A 5: “Compared to one year ago, how would you rate your health in general now?”*

**Table 9: Self-rated health compared to one year ago – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>Much better now</td>
<td>40 (6.0)</td>
<td>44 (14.1)</td>
<td></td>
</tr>
<tr>
<td>Somewhat better now</td>
<td>95 (14.2)</td>
<td>78 (25.1)</td>
<td></td>
</tr>
<tr>
<td>About the same</td>
<td>261 (39.1)</td>
<td>120 (38.6)</td>
<td></td>
</tr>
<tr>
<td>Somewhat worse now</td>
<td>213 (31.9)</td>
<td>48 (15.4)</td>
<td></td>
</tr>
<tr>
<td>Much worse now</td>
<td>53 (7.9)</td>
<td>13 (4.2)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>5 (0.7)</td>
<td>8 (2.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>667 (100.0)</strong></td>
<td><strong>311 (100.0)</strong></td>
<td></td>
</tr>
</tbody>
</table>
Lorig health distress scales

**Discouraged by health**

*Questions A 3a:* “How much time during the past month were you discouraged by your health problems?”

**Table 10: Health distress scale: discouraged by health problems – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>All of the time</td>
<td>39 (5.9)</td>
<td>9 (2.9)</td>
<td></td>
</tr>
<tr>
<td>Most of the time</td>
<td>132 (19.8)</td>
<td>31 (9.9)</td>
<td></td>
</tr>
<tr>
<td>A good bit of the time</td>
<td>113 (17.0)</td>
<td>34 (10.9)</td>
<td></td>
</tr>
<tr>
<td>Some of the time</td>
<td>192 (28.9)</td>
<td>103 (33.0)</td>
<td></td>
</tr>
<tr>
<td>A little bit of the time</td>
<td>124 (18.6)</td>
<td>81 (26.0)</td>
<td></td>
</tr>
<tr>
<td>None of the time</td>
<td>59 (8.9)</td>
<td>48 (15.4)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>6 (0.9)</td>
<td>6 (1.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>665 (100.0)</td>
<td>312 (100.0)</td>
<td></td>
</tr>
</tbody>
</table>
**Fearful about future health**

*Questions A 3b*: “How much time during the past month were you fearful about your future health?”

**Table 11: Health distress scale: fearful about future health – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
</tr>
<tr>
<td>All of the time</td>
<td>56 (8.5)</td>
</tr>
<tr>
<td>Most of the time</td>
<td>76 (11.6)</td>
</tr>
<tr>
<td>A good bit of the time</td>
<td>91 (13.8)</td>
</tr>
<tr>
<td>Some of the time</td>
<td>182 (27.7)</td>
</tr>
<tr>
<td>A little bit of the time</td>
<td>123 (18.7)</td>
</tr>
<tr>
<td>None of the time</td>
<td>116 (17.6)</td>
</tr>
<tr>
<td>No answer</td>
<td>14 (2.1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>658 (100.0)</strong></td>
</tr>
</tbody>
</table>

**Worried by health**

*Questions A 3c*: “How much time during the past month was your health a worry in your life?”

**Table 12: Health distress scale: worried by health – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
</tr>
<tr>
<td>All of the time</td>
<td>55 (8.3)</td>
</tr>
<tr>
<td>Most of the time</td>
<td>93 (14.1)</td>
</tr>
<tr>
<td>A good bit of the time</td>
<td>88 (13.3)</td>
</tr>
<tr>
<td>Some of the time</td>
<td>169 (25.6)</td>
</tr>
<tr>
<td>A little bit of the time</td>
<td>135 (20.4)</td>
</tr>
<tr>
<td>None of the time</td>
<td>113 (17.1)</td>
</tr>
<tr>
<td>No answer</td>
<td>8 (1.2)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>661 (100.0)</strong></td>
</tr>
</tbody>
</table>
Frustrated by health

Questions A 3d: “How much time during the past month were you frustrated by your health problems?”

Table 13: Health distress scale: frustrated by health problems – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td></td>
<td>Six months</td>
</tr>
<tr>
<td>All of the time</td>
<td>86 (13.1)</td>
<td>17 (5.4)</td>
<td></td>
</tr>
<tr>
<td>Most of the time</td>
<td>120 (18.3)</td>
<td>33 (10.6)</td>
<td></td>
</tr>
<tr>
<td>A good bit of the time</td>
<td>83 (12.7)</td>
<td>45 (14.4)</td>
<td></td>
</tr>
<tr>
<td>Some of the time</td>
<td>146 (22.3)</td>
<td>61 (19.6)</td>
<td></td>
</tr>
<tr>
<td>A little bit of the time</td>
<td>110 (16.8)</td>
<td>81 (26.0)</td>
<td></td>
</tr>
<tr>
<td>None of the time</td>
<td>95 (14.5)</td>
<td>62 (19.9)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>16 (2.4)</td>
<td>13 (4.2)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>656 (100.0)</strong></td>
<td></td>
<td><strong>312 (100.0)</strong></td>
</tr>
</tbody>
</table>
Lorig limitations on social activities scale

**Limitations on normal social activities**

*Question A 4a:* “During the past month how much has your health interfered with your normal social activities?”

**Table 14: Social limitations scale: health interfering with normal social activities – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
</tr>
<tr>
<td>Almost totally</td>
<td>78 (11.7)</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>163 (24.5)</td>
</tr>
<tr>
<td>Moderately</td>
<td>125 (18.8)</td>
</tr>
<tr>
<td>Slightly</td>
<td>139 (20.9)</td>
</tr>
<tr>
<td>Not at all</td>
<td>155 (23.3)</td>
</tr>
<tr>
<td>No answer</td>
<td>6 (0.9)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>666 (100.0)</strong></td>
</tr>
</tbody>
</table>

**Limitations on hobbies and recreational activities**

*Question A 4b:* “During the past month how much has your health interfered with your hobbies or recreational activities?”

**Table 15: Social limitations scale: health interfering hobbies or recreational activities – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
</tr>
<tr>
<td>Almost totally</td>
<td>91 (13.9)</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>142 (21.6)</td>
</tr>
<tr>
<td>Moderately</td>
<td>100 (15.2)</td>
</tr>
<tr>
<td>Slightly</td>
<td>123 (18.8)</td>
</tr>
<tr>
<td>Not at all</td>
<td>185 (28.2)</td>
</tr>
<tr>
<td>No answer</td>
<td>15 (2.3)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>656 (100.0)</strong></td>
</tr>
</tbody>
</table>
**Limitations on household chores**

*Question A 4c:* “During the past month how much has your health interfered with your household chores?”

**Table 16: Social limitations scale: health interfering with household chores – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>Almost totally</td>
<td>66 (9.9)</td>
<td>17 (5.4)</td>
<td></td>
</tr>
<tr>
<td>Quite a bit</td>
<td>165 (24.8)</td>
<td>55 (17.6)</td>
<td></td>
</tr>
<tr>
<td>Moderately</td>
<td>116 (17.4)</td>
<td>50 (16.0)</td>
<td></td>
</tr>
<tr>
<td>Slightly</td>
<td>131 (19.7)</td>
<td>79 (25.3)</td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>183 (27.5)</td>
<td>102 (32.7)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>5 (0.8)</td>
<td>9 (2.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>666 (100.0)</td>
<td>312 (100.0)</td>
<td></td>
</tr>
</tbody>
</table>

**Limitations on errands and shopping**

*Question A 4d:* “During the past month how much has your health interfered with your errands and shopping?”

**Table 17: Social limitations scale: health interfering with errands and shopping – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>Almost totally</td>
<td>55 (8.3)</td>
<td>17 (5.4)</td>
<td></td>
</tr>
<tr>
<td>Quite a bit</td>
<td>132 (19.9)</td>
<td>44 (14.1)</td>
<td></td>
</tr>
<tr>
<td>Moderately</td>
<td>97 (14.7)</td>
<td>43 (13.8)</td>
<td></td>
</tr>
<tr>
<td>Slightly</td>
<td>125 (18.9)</td>
<td>67 (21.5)</td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>243 (36.7)</td>
<td>132 (42.3)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>10 (1.5)</td>
<td>9 (2.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>662 (100.0)</td>
<td>312 (100.0)</td>
<td></td>
</tr>
</tbody>
</table>
Self-efficacy in managing chronic disease

**Note:** Rating scale: 1 (not at all confident) to 10 (totally confident) for items (a) to (f)

**Question A 6:** “How confident are you that you can…

(a) Keep the fatigue caused by your disease from interfering with the things you want to do?  
(b) Keep the physical discomfort or pain of your disease from interfering with the things you want to do?  
(c) Keep the emotional distress caused by your disease from interfering with the things you want to do?  
(d) Keep any other symptoms or health problems you have from interfering with the things you want to do?  
(e) Do the different tasks needed to manage your health condition so as to reduce your need to see a doctor?  
(f) Do things other than just taking medication to reduce your need to see a doctor?”

Table 18: Overall mean ratings for the six elements of the self-efficacy scale – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Self-efficacy scale element</th>
<th>Client self-confidence rating</th>
<th>Baseline</th>
<th>Six months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean (SD)</td>
<td>n</td>
</tr>
<tr>
<td>Fatigue</td>
<td>654</td>
<td>6.1 (2.6)</td>
<td>301</td>
</tr>
<tr>
<td>Physical discomfort</td>
<td>634</td>
<td>6.2 (2.8)</td>
<td>294</td>
</tr>
<tr>
<td>Emotional distress</td>
<td>654</td>
<td>6.3 (2.8)</td>
<td>302</td>
</tr>
<tr>
<td>Other symptoms and health problems</td>
<td>636</td>
<td>6.2 (2.8)</td>
<td>295</td>
</tr>
<tr>
<td>Health management tasks</td>
<td>637</td>
<td>6.6 (2.6)</td>
<td>299</td>
</tr>
<tr>
<td>Non-medication treatment</td>
<td>629</td>
<td>6.7 (2.6)</td>
<td>297</td>
</tr>
</tbody>
</table>
General risk factors

**Bodyweight**

**Self-perception of bodyweight**

*Question B 1:* “In terms of your body weight, do you consider yourself…”

**Table 19: Self-rated bodyweight categories – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)] Baseline</th>
<th>Six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable weight</td>
<td>138 (20.8)</td>
<td>104 (32.3)</td>
</tr>
<tr>
<td>Underweight</td>
<td>34 (5.1)</td>
<td>11 (3.4)</td>
</tr>
<tr>
<td>Overweight</td>
<td>486 (73.1)</td>
<td>201 (62.4)</td>
</tr>
<tr>
<td>No answer</td>
<td>7 (1.1)</td>
<td>6 (1.9)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>665 (100.0)</strong></td>
<td><strong>322 (100.0)</strong></td>
</tr>
</tbody>
</table>

**Body mass index (BMI)**

*Questions B 2 and 3:* “How much do you weigh?” and “How tall are you without shoes?”

**Table 20: BMI categories based on client self-reported height and weight – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>2004-05 National Health Survey BMI category</th>
<th>Clients [n (%)] Baseline</th>
<th>Six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight (less than 18.5 kg/m²)</td>
<td>8 (1.4)</td>
<td>6 (2.1)</td>
</tr>
<tr>
<td>Normal (18.5 kg/m² to less than 25.0 kg/m²)</td>
<td>96 (16.4)</td>
<td>70 (24.1)</td>
</tr>
<tr>
<td>Overweight (25.0 kg/m² to less than 30 kg/m²)</td>
<td>153 (26.1)</td>
<td>93 (32.1)</td>
</tr>
<tr>
<td>Obese (30 kg/m² or greater)</td>
<td>329 (56.1)</td>
<td>121 (41.7)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>586 (100.0)</strong></td>
<td><strong>290 (100.0)</strong></td>
</tr>
</tbody>
</table>
**Exercise**

**Walking**

*Question B 4: “In the last two weeks, have you walked for sport, recreation or fitness?” If yes: “How many times did you walk for sport, recreation or fitness in the last two weeks?” and “What was the total number of hours you walked for sport, recreation or fitness in the last two weeks?”*

**Table 21: Self-reported walking habits in the previous fortnight – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
</tr>
<tr>
<td>Have walked for sport, recreation or fitness in the</td>
<td>382 (57.4)</td>
</tr>
<tr>
<td>previous fortnight</td>
<td></td>
</tr>
<tr>
<td>Have not walked for sport, recreation or fitness in the</td>
<td>278 (41.7)</td>
</tr>
<tr>
<td>previous fortnight</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>6 (0.9)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>666 (100.0)</strong></td>
</tr>
</tbody>
</table>

**Number of occasions walking in previous fortnight**

<table>
<thead>
<tr>
<th>Number of occasions</th>
<th>Baseline [n (%)]</th>
<th>Six months [n (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or two</td>
<td>54 (14.6)</td>
<td>20 (9.8)</td>
</tr>
<tr>
<td>Three to six</td>
<td>133 (35.9)</td>
<td>85 (41.7)</td>
</tr>
<tr>
<td>Seven to fourteen</td>
<td>169 (45.7)</td>
<td>91 (44.6)</td>
</tr>
<tr>
<td>Fifteen or more</td>
<td>14 (3.8)</td>
<td>8 (3.9)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>370 (100.0)</strong></td>
<td><strong>204 (100.0)</strong></td>
</tr>
</tbody>
</table>
Moderate exercise

Question B 5: “Apart from walking, in the last two weeks did you do any exercise which caused a moderate increase in your heart rate or breathing (i.e. moderate exercise)?” If yes: “How many times did you do any moderate exercise in the last two weeks?” and “What was the total number of hours you spent doing moderate exercise in the last two weeks?”

Table 22: Self-reported moderate exercise habits in the previous fortnight – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
</tr>
<tr>
<td>Have engaged in moderate exercise in the previous fortnight</td>
<td>259 (39.6)</td>
<td>162 (50.6)</td>
</tr>
<tr>
<td>Have not engaged in moderate exercise in the previous fortnight</td>
<td>383 (58.6)</td>
<td>148 (46.3)</td>
</tr>
<tr>
<td>No answer</td>
<td>12 (1.8)</td>
<td>10 (3.1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>654 (100.0)</strong></td>
<td><strong>320 (100.0)</strong></td>
</tr>
</tbody>
</table>

Number of occasions of moderate exercise in the previous fortnight

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>One or two</td>
<td>76 (31.0)</td>
</tr>
<tr>
<td>Three to six</td>
<td>84 (34.3)</td>
</tr>
<tr>
<td>Seven to fourteen</td>
<td>79 (32.2)</td>
</tr>
<tr>
<td>Fifteen or more</td>
<td>6 (2.5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>245 (100.0)</strong></td>
</tr>
</tbody>
</table>
**Vigorous exercise**

*Question B 6: “In the last two weeks, did you do any exercise which caused a large increase in your heart rate or breathing (i.e. vigorous exercise)?” If yes: “How many times did you do any vigorous exercise in the last two weeks?” and “What was the total number of hours you spent doing vigorous exercise in the last two weeks?”*

### Table 23: Self-reported vigorous exercise habits in the previous fortnight – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th>Baseline</th>
<th>Six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have engaged in vigorous exercise in the previous fortnight</td>
<td>83 (12.8)</td>
<td>51 (15.9)</td>
<td></td>
</tr>
<tr>
<td>Have not engaged in vigorous exercise in the previous fortnight</td>
<td>555 (85.4)</td>
<td>252 (78.8)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>12 (1.8)</td>
<td>17 (5.3)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>650 (100.0)</strong></td>
<td><strong>320 (100.0)</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of occasions of vigorous exercise in the previous fortnight</th>
<th>Baseline</th>
<th>Six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or two</td>
<td>31 (41.3)</td>
<td>20 (44.4)</td>
</tr>
<tr>
<td>Three to six</td>
<td>29 (38.7)</td>
<td>16 (35.6)</td>
</tr>
<tr>
<td>Seven to fourteen</td>
<td>15 (20.0)</td>
<td>9 (20.0)</td>
</tr>
<tr>
<td>Fifteen or more</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75 (100.0)</strong></td>
<td><strong>45 (100.0)</strong></td>
</tr>
</tbody>
</table>
Smoking

Question B 7: “Do you currently smoke?” If yes: “Do you smoke regularly (e.g. at least once a day)?”

Question B 8: “Have you ever smoked regularly (e.g. at least once a day)?”

Table 24: Current and previous smoking status – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Smoking status</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>Current smokers</td>
<td>101 (15.2)</td>
<td>29 (9.1)</td>
<td></td>
</tr>
<tr>
<td>Previous regular smoker (at least once per day)</td>
<td>351 (53.6)</td>
<td>142 (44.4)</td>
<td></td>
</tr>
</tbody>
</table>

For the supplementary question to B 7, at baseline 88 of 100 current smokers (88.0%) reported that they were regular smokers (i.e. once per day). At six months, 82.1% of current smokers reported that they were regular smokers.

Nutrition

Milk consumption

Question B 9: “What is the main type of milk that you use?”

Table 25: Main type of milk consumed – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>Whole or full cream milk</td>
<td>152 (23.9)</td>
<td>61 (19.1)</td>
<td></td>
</tr>
<tr>
<td>Low or reduced fat milk</td>
<td>262 (41.2)</td>
<td>134 (41.9)</td>
<td></td>
</tr>
<tr>
<td>Skim milk</td>
<td>148 (23.3)</td>
<td>71 (22.2)</td>
<td></td>
</tr>
<tr>
<td>Other type*</td>
<td>38 (6.0)</td>
<td>17 (5.2)</td>
<td></td>
</tr>
<tr>
<td>Do not drink milk or don’t know</td>
<td>29 (4.5)</td>
<td>15 (4.7)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>7 (1.1)</td>
<td>22 (6.9)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>636 (100.0)</td>
<td>320 (100.0)</td>
<td></td>
</tr>
</tbody>
</table>

* Other type includes soy, evaporated/sweetened condensed, or type not listed.
**Vegetable consumption**

*Question B 10: How many serves of *vegetables* (fresh, frozen or tinned) do you *usually* eat each day?*

Table 26: Self-reported number of daily serves of vegetables – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td></td>
<td>Six months</td>
</tr>
<tr>
<td>One serve or less</td>
<td>125 (18.9)</td>
<td>47</td>
<td>(14.7)</td>
</tr>
<tr>
<td>Two serves</td>
<td>142 (21.4)</td>
<td>67</td>
<td>(20.9)</td>
</tr>
<tr>
<td>Three serves</td>
<td>177 (26.7)</td>
<td>89</td>
<td>(27.8)</td>
</tr>
<tr>
<td>Four serves</td>
<td>112 (16.9)</td>
<td>56</td>
<td>(17.5)</td>
</tr>
<tr>
<td>Five serves</td>
<td>76 (11.5)</td>
<td>38</td>
<td>(11.9)</td>
</tr>
<tr>
<td>Six serves or more</td>
<td>23 (3.5)</td>
<td>14</td>
<td>(4.4)</td>
</tr>
<tr>
<td>Do not eat vegetables</td>
<td>4 (0.6)</td>
<td>1</td>
<td>(0.3)</td>
</tr>
<tr>
<td>No answer</td>
<td>4 (0.6)</td>
<td>8</td>
<td>(2.5)</td>
</tr>
<tr>
<td>Total</td>
<td><strong>663 (100.0)</strong></td>
<td><strong>320</strong></td>
<td>(100.0)**</td>
</tr>
</tbody>
</table>
**Fruit consumption**

*Question B 11:* “How many serves of fruit (fresh, frozen or tinned) do you usually eat each day?”

**Table 27: Self-reported number of daily serves of fruit – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>One serve or less</td>
<td>209 (31.5)</td>
<td>85 (26.6)</td>
<td></td>
</tr>
<tr>
<td>Two serves</td>
<td>249 (37.5)</td>
<td>117 (36.6)</td>
<td></td>
</tr>
<tr>
<td>Three serves</td>
<td>119 (17.9)</td>
<td>72 (22.5)</td>
<td></td>
</tr>
<tr>
<td>Four serves</td>
<td>33 (5.0)</td>
<td>21 (6.6)</td>
<td></td>
</tr>
<tr>
<td>Five serves</td>
<td>17 (2.6)</td>
<td>12 (3.8)</td>
<td></td>
</tr>
<tr>
<td>Six serves or more</td>
<td>4 (0.6)</td>
<td>2 (0.6)</td>
<td></td>
</tr>
<tr>
<td>Do not eat fruit</td>
<td>28 (4.2)</td>
<td>5 (1.6)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>5 (0.8)</td>
<td>6 (1.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>664 (100.0)</strong></td>
<td><strong>320 (100.0)</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Salt consumption**

*Question B 12:* “How often do you add salt to your food after it is cooked?”

**Table 28: Self-reported salt consumption – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>Never/rarely add salt</td>
<td>338 (50.7)</td>
<td>164 (51.3)</td>
<td></td>
</tr>
<tr>
<td>Sometimes add salt</td>
<td>189 (28.3)</td>
<td>107 (33.4)</td>
<td></td>
</tr>
<tr>
<td>Usually add salt</td>
<td>138 (20.7)</td>
<td>43 (13.4)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>2 (0.3)</td>
<td>6 (1.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>667 (100.0)</strong></td>
<td><strong>320 (100.0)</strong></td>
<td></td>
</tr>
</tbody>
</table>
**Alcohol**

*Question B 13:* “How long ago did you last have an alcoholic drink?”

**Table 29: Self-reported alcohol consumption – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>One week or less</td>
<td>216 (32.6)</td>
<td>121 (37.8)</td>
<td></td>
</tr>
<tr>
<td>More than one week to less than twelve months</td>
<td>189 (28.5)</td>
<td>79 (24.8)</td>
<td></td>
</tr>
<tr>
<td>Twelve months or more</td>
<td>70 (10.6)</td>
<td>27 (8.4)</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>130 (19.6)</td>
<td>63 (19.7)</td>
<td></td>
</tr>
<tr>
<td>Don’t remember</td>
<td>54 (8.2)</td>
<td>19 (5.9)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>3 (0.5)</td>
<td>11 (3.4)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>662 (100.0)</strong></td>
<td><strong>320 (100.0)</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Current psychological distress**

*Question B 14:* Kessler-10 (K10) scale.

**Table 30: Levels of psychological distress (K10 scale) – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Level of psychological distress (K10 score)</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td></td>
</tr>
<tr>
<td>Low (10-15)</td>
<td>202 (33.8)</td>
<td>132 (48.9)</td>
<td></td>
</tr>
<tr>
<td>Moderate (16-21)</td>
<td>165 (27.6)</td>
<td>84 (31.1)</td>
<td></td>
</tr>
<tr>
<td>High (22-29)</td>
<td>121 (20.2)</td>
<td>34 (12.6)</td>
<td></td>
</tr>
<tr>
<td>Very high (30-50)</td>
<td>110 (18.4)</td>
<td>20 (7.4)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>598 (100.0)</strong></td>
<td><strong>270 (100.0)</strong></td>
<td></td>
</tr>
</tbody>
</table>
Chronic disease type

**Question C 1:** “What chronic condition are you being assisted with by [AGENCY NAME] through the [PROGRAM NAME] program? (tick as many as apply)”

Table 31: Self-reported chronic diseases types clients are being assisted with by EIiCD programs – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Chronic disease</th>
<th>Clients [n (%)]</th>
<th>Baseline</th>
<th>Six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease</td>
<td>121 (18.1)</td>
<td>58 (19.1)</td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>394 (58.8)</td>
<td>196 (64.1)</td>
<td></td>
</tr>
<tr>
<td>COPD</td>
<td>50 (7.5)</td>
<td>21 (7.0)</td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td>84 (12.6)</td>
<td>34 (11.4)</td>
<td></td>
</tr>
<tr>
<td>Other*</td>
<td>211 (31.5)</td>
<td>90 (29.1)</td>
<td></td>
</tr>
</tbody>
</table>

*Chronic diseases reported by clients under “other” included osteoarthritis and rheumatoid arthritis, mental illness (depression, anxiety, schizophrenia, bipolar disorder), chronic pain or injury, gout, fibromyalgia, multiple sclerosis, cerebral palsy, spinal cord damage, Parkinson’s disease, systemic lupus erythematosus, coeliac disease, kidney disease, Barrett’s disease and thyroid disease.
Health service utilisation

Types of services accessed

*Question C 2: “Please indicate what types of health services you have used for any reason in the past 12 months (tick as many as apply).”*

Table 32: Self-reported types of health services utilised in the previous 12 months – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Health service type</th>
<th>Clients [n (%)]</th>
<th>Health service type</th>
<th>Clients [n (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Six months</td>
<td>Baseline</td>
</tr>
<tr>
<td>Doctor (GP)</td>
<td>646 (96.4)</td>
<td>306 (95.3)</td>
<td>Social work/welfare officer</td>
</tr>
<tr>
<td>Medical specialist</td>
<td>296 (44.2)</td>
<td>151 (49.0)</td>
<td>Psychologist</td>
</tr>
<tr>
<td>Hospital (any type)</td>
<td>238 (35.5)</td>
<td>101 (33.2)</td>
<td>Counsellor</td>
</tr>
<tr>
<td>Nursing</td>
<td>112 (16.7)</td>
<td>50 (16.6)</td>
<td>Medication management</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>193 (28.8)</td>
<td>96 (31.5)</td>
<td>Dietician or nutritionist</td>
</tr>
<tr>
<td>Podiatry</td>
<td>248 (37.0)</td>
<td>173 (56.0)</td>
<td>Support group(s)</td>
</tr>
<tr>
<td>Diabetes education</td>
<td>218 (32.5)</td>
<td>174 (56.9)</td>
<td>Home-based services</td>
</tr>
<tr>
<td>Optometrist or optician</td>
<td>256 (38.2)</td>
<td>145 (46.8)</td>
<td>Chiropractor</td>
</tr>
<tr>
<td>Heart education</td>
<td>†</td>
<td>27 (9.0)</td>
<td>Gymnasium</td>
</tr>
<tr>
<td>Occupational therapy</td>
<td>45 (6.7)</td>
<td>†</td>
<td>Hydrotherapy</td>
</tr>
<tr>
<td>Dentist</td>
<td>218 (32.5)</td>
<td>124 (40.4)</td>
<td>Other*</td>
</tr>
</tbody>
</table>

* Services reported under “other” included massage therapy, reflexology, art therapy, balance classes, exercise physiology, speech therapy, sleep apnoea therapy, arthritis education and an RDNS homeless person’s program.

† Services reported by less than 5% of the client group (data not shown for confidentiality reasons). Services reported with less than 5% at both baseline and six-month follow-up include: COPD education, Aboriginal health workers, Quit smoking programs, personal training, osteopathy, naturopathy, acupuncture, herbalism, hypnotherapy.
General practitioner utilisation

GP consultation in the previous fortnight

Question C 3: “In the last 2 weeks, have you consulted a general practitioner (GP) for your own health?”

Table 33: Self-reported consultation with GP in previous fortnight – baseline and six-month follow up-client survey results

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td></td>
<td>Six months</td>
</tr>
<tr>
<td>Have consulted a GP in previous fortnight</td>
<td>387 (59.0)</td>
<td>149 (46.1)</td>
<td></td>
</tr>
<tr>
<td>Not consulted a GP in the previous fortnight</td>
<td>255 (38.9)</td>
<td>165 (51.1)</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>14 (2.1)</td>
<td>9 (2.8)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>656 (100.0)</td>
<td>323 (100.0)</td>
<td></td>
</tr>
</tbody>
</table>

Number of occasions GP consulted in previous fortnight

Question C 3a: “How many times in the last two weeks have you consulted a GP?”

Table 34: Self-reported number of occasions consulting a GP in previous fortnight – baseline and six-month follow-up client survey results

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td></td>
<td>Six months</td>
</tr>
<tr>
<td>Consulted GP once in the previous fortnight</td>
<td>259 (74.0)</td>
<td>109 (75.7)</td>
<td></td>
</tr>
<tr>
<td>Consulted GP more than once in the previous fortnight</td>
<td>91 (26.0)</td>
<td>35 (24.3)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>350 (100.0)</td>
<td>144 (100.0)</td>
<td></td>
</tr>
</tbody>
</table>
**Time since last consultation with a doctor**

*Question C 4:* “When was the last time you consulted a doctor about your own health?”

**Table 35: Self-reported time since last doctor consultation – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than three months ago</td>
<td>594 (91.5)</td>
<td>285</td>
<td>88.2</td>
</tr>
<tr>
<td>Three months ago or more</td>
<td>41 (6.3)</td>
<td>28</td>
<td>8.7</td>
</tr>
<tr>
<td>Don’t know or no answer</td>
<td>14 (2.2)</td>
<td>10</td>
<td>3.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>649 (100.0)</strong></td>
<td><strong>323</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Specialist consultation**

*Question C 5:* “Have you visited a medical specialist (e.g. a cardiologist) for your chronic condition(s)?”

**Table 36: Self-reported specialist medical practitioner utilisation – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Clients [n (%)]</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Have consulted a specialist about chronic disease</td>
<td>357 (54.3)</td>
<td>180</td>
<td>55.7</td>
</tr>
<tr>
<td>Have not consulted a specialist about chronic disease</td>
<td>285 (43.3)</td>
<td>128</td>
<td>39.6</td>
</tr>
<tr>
<td>No answer</td>
<td>16 (2.4)</td>
<td>15</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>658 (100.0)</strong></td>
<td><strong>323</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
**Hospital utilisation**

*Question C 6:* “During the last 12 months, have you been admitted to hospital (not including outpatient/day clinics or casualty/emergency ward visits)?”  
*If yes:* (a) “How many times have you been admitted to hospital in the last 12 months?”  (b) “Were any of these admissions to hospital related to your chronic condition(s)?”

**Table 37: Self-reported hospital admission in previous 12 months – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Baseline</th>
<th>Six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have been admitted to hospital in previous 12 months</td>
<td>199 (30.0)</td>
<td>88 (27.2)</td>
</tr>
<tr>
<td>Not admitted to hospital in previous 12 months</td>
<td>456 (68.7)</td>
<td>230 (71.2)</td>
</tr>
<tr>
<td>No answer</td>
<td>9 (1.4)</td>
<td>5 (1.5)</td>
</tr>
<tr>
<td>Total</td>
<td>664 (100.0)</td>
<td>323 (100.0)</td>
</tr>
</tbody>
</table>

**Table 38: Self-reported number of occasions admitted to hospital in previous 12 months – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Baseline</th>
<th>Six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admitted to hospital once in previous 12 months</td>
<td>120 (64.2)</td>
<td>57 (66.3)</td>
</tr>
<tr>
<td>Admitted to hospital more than once in previous 12 months</td>
<td>67 (35.8)</td>
<td>29 (33.7)</td>
</tr>
<tr>
<td>Total</td>
<td>187 (100.0)</td>
<td>86 (100.0)</td>
</tr>
</tbody>
</table>

**Table 39: Self-reported hospital admission and relationship to chronic disease – baseline and six-month follow-up client survey results**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Baseline</th>
<th>Six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission(s) related to chronic disease</td>
<td>108 (58.7)</td>
<td>56 (63.6)</td>
</tr>
<tr>
<td>Admission(s) not related to chronic disease</td>
<td>74 (40.2)</td>
<td>27 (30.7)</td>
</tr>
<tr>
<td>No answer</td>
<td>2 (1.1)</td>
<td>5 (5.7)</td>
</tr>
<tr>
<td>Total</td>
<td>184 (100.0)</td>
<td>88 (100.0)</td>
</tr>
</tbody>
</table>
Key worker perception of EIiCD client psychosocial complexity

Throughout the evaluation, a consistent picture of the major psychosocial issues facing EIiCD clients was described in reports from key workers. Generally, key workers described a complex web of client issues that were difficult to untangle and which provided significant challenges in supporting clients to self-manage their chronic condition/s. The following extract exemplifies a common view among key workers:

*It is difficult to determine if the issues outlined have contributed to the client’s chronic disease or are a result of their condition. It appears that the clients seen have a range of social issues that are determinants to chronic disease, such as poor or inadequate social supports, or poor mental health and make self-management more difficult.*

Less frequently, key workers expressed an optimistic view in which clients were seen as being provided an opportunity that may not otherwise been available to them:

*Diagnosis can impact positively as clients review their lifestyle and change for the better addressing any concerns.*

Specific issues that key workers observed as either contributing to people’s experience of chronic disease, or resulting from it, were broadly categorised into three main areas:

- **Clinical issues or symptoms**: including conditions that may respond to clinical treatment and may require medical intervention.
- **Personal issues**: including issues that have direct ramifications or require targeted interventions for the individual.
- **Social or environmental factors**: issues that involve others and may require broader community-level response.

### Clinical issues or symptoms

As expected, the most widespread clinical issues or symptoms identified by key workers were depression (mentioned in 70% of 12-month reports, for example) and anxiety (40%); the two were frequently reported together. Other mental health issues were less frequently described.

Key workers construed the impact of clinical symptoms as being major barriers to effective self-management:

*Depression and anxiety are huge psychosocial issues that are affecting the quality of life of clients. In all cases this is impacting on their ability to self-care.*

*Anxiety and depression most common underlying psychological issue that has significant impact on complexity of presentation for those wanting to cease smoking and often related symptoms causal factors in smoking as self-medication for stress/anxiety/depression*

However, the presence of depression and anxiety was also viewed as a potential motivating factor for some clients:

*Anxiety and depression are common. Clients are worried about their state of health and are keen to do things to help themselves.*

### Personal issues

A number of personal or individual issues were identified by key workers as contributing psychosocial factors affecting people’s capacity to self-manage chronic disease. These issues included:
Poor self-esteem or embarrassment (24%)
Poor knowledge of health condition and its importance (16%)
Frustration and/or anger (14%)
Low literacy, either because of non-English background or poor education generally (14%)
Stress or fear (14%)
Lack of motivation or hopelessness (12%)
Feeling overwhelmed by changes and organisation needed (10%)
Loss of identity or grief because of change to role and self-image (10%)
Previous traumatic life experiences (4%)
Poor lifestyle choices (4%).

Most key workers reported that clients were disturbed or worried by their condition; however, one key worker has observed more ambivalent responses:

Most of the clients I have seen are largely unperturbed by their diabetes as they feel okay and know virtually nothing about it and make no lifestyle change.

The few who are worried are usually worried because they have seen people who have had complications, some anxiety caused by misinformation/beliefs, particularly dietary.

Social or environmental factors

Apart from general references to social factors impinging on client health, key workers identified specific issues that detracted from overall client wellbeing, including:

- Social isolation (44%)
- Financial problems (34%)
- Family and other relationships (24%)
- Housing issues such as accessibility or insecurity (10%)
- Employment or unemployment stresses (6%);
- Carer demands (4%)
- Poor transport services (2%).

These issues may be considered beyond the scope or capacity of individuals to resolve, yet play a significant role in a person’s ability to sustain their management of a chronic disease. The following extracts typifies key worker views on these issues:

Social isolation provides a means for escalation of health problems and prevention of access to broader community resources and ability to change lifestyle habits. Cost and inaccessibility of community physical activity programs provides an issue for regular long-term engagement with services and there is also the issue of access to quality fruit/vegetables for everyday nutrition within the local area. Not able to begin to care for themselves and single parent families with children with special needs which demands the carer’s ongoing focus. Many clients are working long hours in unskilled work – feeling stuck financially.

Financial pressures – to purchase preferred low GI foods for BGL control; purchase medications and equipment for monitoring of BGL. Cost of transport – taxi to appointments, petrol for car or even tickets for public transport.
Appendix I: Agency management report

The agency management reporting tool consisted of six sections, encompassing:

- Program implementation
- Target group, client recruitment and enrolment
- Service provision
- Changes and improvements
- Liaison with external organisations
- Program efficiency and effectiveness.

Program implementation

The implementation section required agencies to rate implementation progress against the following statements, using the generic phases of development and implementation scale (Appendix V):

1. Have the appropriate planning processes been completed?
2. Have the key worker(s)/other new staff involved in the initiative been employed?
3. Have existing staff been informed of the initiative as a whole and/or their role in the initiative?
4. Have the appropriate business systems been developed within the agency (e.g. budgeting, cost centre established etc)?
5. Have the appropriate facilities been allocated to the initiative?
6. Have the appropriate liaison and referral pathways been established with local GPs?
7. Have the appropriate liaison and referral pathways been established with other agencies/initiatives (e.g. HARP)?

In addition, agencies were invited to provide additional qualitative information regarding their self-rating for any of the above statements.

Target group, client recruitment and enrolment

Questions on target groups and enrolments were divided into the following three sections:

Inclusion criteria

1. Have there been any modifications to the target group inclusion criteria in the past 6 months?
   a. [If yes]: Please describe the modifications.

2. What are the perceived barriers (if any) to client recruitment?

Enrolment statistics

Agencies were asked to provide quantitative data on enrolments to answer the following three questions:

1. Number of clients currently enrolled in the initiative
2. Number of clients completing the intense phase of the program in the last 6 months and now on recall or review (if applicable)

3. Number of clients discontinuing from (‘dropping out’) of the program in the last 6 months (if applicable)

Non-participating or discontinuing clients

Agencies were asked to provide as much quantitative and qualitative information as possible on clients discontinuing from EIiCD programs.

1. Total number of discontinuing clients surveyed in the past 6 months.

2. Number of discontinuing clients who:
   a. have attended the agency before for any reason
   b. haven’t attended the agency before for any reason
   c. can’t remember attending the agency before for any reason

3. Source of referral information:
   a. total number of health professional referrals
      i. types
      ii. location of professional (e.g. within agency = 12 clients, GP surgery = 5 clients)
   b. total number of family/friends/other sources
      i. types

4. Summary of reasons for non-participation in the program

5. Summary of additional comments made by clients

6. In general, at what phase(s) of the program are clients discontinuing?

7. What potential modifications to the program are required/planned to address discontinuing clients (if any)?

Service provision

The service provision section consisted of three separate sections relating to the type, elements, and duration of services provided to EIiCD clients.

Types of services provided

1. Type of services provided [Specify]: GP/Medical, physiotherapy, podiatry, occupational therapy, nursing, diabetes education, CV education, COPD education, optometry, Indigenous health, social work, psychology, counselling, medication management, dietetics, dentistry, support group(s), home-based services, other (specify).

2. Are any of the above services for EIiCD clients provided through HACC funding?
a. [If yes]: Please list the service types that are involved:

b. [If yes]: Approximately what percentage of services for EiICD clients are being provided through HACC funding?

3. Are any of the above services for EiICD clients provided through other CHS funding (i.e. non-EiICD funding)?
   a. [If yes]: Please list the service types that are involved:
   b. [If yes]: Approximately what percentage of services for EiICD clients are being provided through other CHS funding?

4. Are any of the above services for EiICD clients provided through private practitioners (e.g. EPC/CDM MBS items, or EiICD funding access to/paying for service)?
   a. [If yes]: Please list the service types that are involved:
   b. [If yes]: Approximately what percentage of services for EiICD clients are being provided through private practitioners?

**Elements of service provided**

1. Please describe how the following elements of chronic disease management are incorporated into your program (as applicable):
   a. Care coordination
   b. Client self-management
   c. Client coaching
   d. Psychosocial support
   e. Referral to external services

**Duration of service provided**

1. Over what period of time would you typically expect clients to be a part of the intense phase of your program?

2. Please describe a typical ‘time-course’ for clients in your program in terms of (a) intensive intervention (contact with the service, participation in groups etc) and (b) less intensive intervention (follow up by phone/appointment etc) (c) recall or review only (as applicable)

**Changes and improvements**

The following four questions were included in the changes and improvements section:

1. What changes or improvements have been made to the program in the past 6 months (excluding changes to target group inclusion criteria previously detailed)?

2. What change management issues have been encountered in the course of implementing the program in the past 6 months?
3. What system changes and/or services improvements has the agency experienced as a result of the program in the past 6 months (if applicable)?

4. In what ways has the PCP assisted your agency with change management in the past 6 months?

**Liaison with external organisations**

**Liaison with general practice**

Agencies were asked to respond to the following five questions regarding their liaison activities/arrangements with GPs.

1. Have liaison visits to local general practices been made in the past 6 months?
   a. [If yes]: How many practices have been visited in the past 6 months?
   b. [If yes]: How many practitioners have been visited in the past 6 months?
   c. [If yes]: How many practice staff (managers, nurses etc) have been visited in the past 6 months?

2. What liaison and other arrangements are in place with local GP practices/divisions?

3. How were these arrangements achieved and/or what difficulties have been encountered?

4. Briefly describe how the role of GPs in the program has been articulated.

5. Input from GPs/Division: please provide a short statement from the contact person for the GP Division involved in this program, describing their perspective on the articulation of their role in the program.

**Statistical information**

Agencies were asked to provide quantitative data on GP referrals to answer the following three questions:

1. How many GPs have provided referrals into the program in the past 6 months (if applicable)?

2. What is the average number of clients referred to program per GP (if applicable) in the past 6 months?

3. Total number of GPs in area OR total number of GPs from whom referrals could be anticipated

**GP referrals – general considerations**

The following two questions were included regarding general aspects of GP referrals:

1. To what extent are general practices (GPs, practice nurses etc) using the established referral protocols (if applicable)? What (if any) issues have arisen regarding referral protocols in the past 6 months?

2. In your opinion, what factors (positive/negative) will affect/have affected the active participation (in terms of referral of clients to the program) of GPs in the past 6 months?
Liaison with PCP and other stakeholders

The following two questions were included regarding liaison with PCPs and other stakeholders:

1. How has the PCP assisted with the communication and exchange of information between the agency and GPs about clients enrolled in the initiative in the past 6 months?

2. How has the role/liaison with other stakeholders been clearly articulated (e.g. PPPS, referral protocols with local HARP-CDM etc)?

Agencies were also asked in this section to rate the contribution to EiICD program leadership of the named stakeholders according to the scale provided.

- **Stakeholders:** Primary Care Partnership; Community Health Service; acute health sector; GP Division; consumers, carers and community representatives.
- **Rating scale:** very little; some; quite a bit; a great deal; don’t know/not applicable.

Key service characteristics

Agencies were asked to rate their internal performance on key service characteristics according to the scale provided, as well as providing a rating of the PCP contribution to each.

- **Key service characteristics:** [Agency performance] How well does this happen in your agency? [PCP contribution] Contribution/assistance of PCP to this aspect?
- Quality of communication between GPs and your agency
- Quality of working relationships between GPs and your agency
- The way in which joint care planning and care coordination is undertaken between GPs and your agency
- The way that GPs refer clients to your agency
- The way you provide feedback to GPs
- The way that you coordinate initial needs identification and assessment in order to minimise duplication between and/or within agencies
- The sharing of client information between your agency and other providers
- The manner in which you inform clients about their health needs, including giving them details about their condition and other health promotion information
- Compliance with privacy legislation requirements (including informing clients about their rights and confidentiality)
- Streamlining of referrals and scheduling of appointments between your agency and other providers
- Time taken to complete intake and assessment processes in your agency
- Consistency of information provided to clients
- The capacity of your agency to implement systems and structural changes
- **Rating scale (agency performance):** not at all or very poor; poor; good; very good; not applicable.
- **Rating scale (PCP contribution):** none or very little; some; quite a bit; a great deal; not applicable.
Program efficiency and effectiveness

The following two questions were included in this section to provide the evaluation with additional contextual information regarding local factors that may influence overall program efficiency and effectiveness.

1. Please list the disease states encompassed by your program and the relevant clinical indicators for which data can be obtained from your agency. This information will later be used in conjunction with the SWITCH data set to determine the numbers of successfully managed clients in the program.

2. Please comment on the local factors that are likely to influence the cost efficiency and effectiveness of the program (e.g. large numbers of complex clients, higher than expected CALD clients accessing services etc). [‘Cost efficiency’ – crude cost per successfully managed client; ‘cost effectiveness’ – crude cost per risk factor reduced].
Appendix II: PCP management report

The PCP management reporting tool consisted of two sections on leadership and implementation, both of which incorporated rating scales.

Leadership

PCPs were asked to rate the contribution to EiICD program leadership of the named stakeholders according to the scale provided.

- **Stakeholders:** Primary Care Partnership; Community Health Service; acute health sector; GP Division; consumers, carers and community representatives.
- **Rating scale:** very little; some; quite a bit; a great deal; don’t know/not applicable.

Implementation

The implementation section required PCPs to rate implementation progress against the following statements, using the generic phases of development and implementation scale (Appendix V):

- The PCP has developed a consistent approach to supporting initial contact, initial needs identification, assessment and care planning for this program
- The PCP has developed practice, processes, protocols and systems (PPPS) for facilitating client access to this program
- The PCP has supported agency implementation of PPPS in relation to this program
- The PCP has developed and implemented systems that facilitates the identification of clients within the target group (e.g. via PPPS)
- The PCP has developed information management systems to support care plan implementation, monitoring and review for clients participating in this program
- The PCP’s service coordination model supports the agency to implement care planning for clients participating in this program
- The PCP has facilitated/improved communication between GPs and the agency about clients participating in this program
- The PCP has developed approaches to address disadvantage and health equality (in IHP) in relation to this program
- The PCP has developed and implemented strategies around workforce development of the GP sector in relation to this program.
Appendix III: Key worker report

The following five questions were included in the key worker reporting tool, distributed to EliCD programs at baseline, six and twelve months.

- In your experience in dealing with clients enrolled in the program, what are the major psychosocial issues that generally (a) contribute to and/or (b) result from the client’s chronic disease?
- What mechanisms/services/approaches are in place to deal with psychosocial issues in your program/agency?
- In general terms, what level of support have you received from local GPs and practice staff? What (if any) difficulties have been encountered?
- Are the current liaison arrangements (with GPs, PCPs, other providers) satisfactory from your perspective? Do they meet the needs of the clients? How can these arrangements be potentially improved?
- What (if any) information can you provide regarding how this program has affected hospital admission of clients? For example, do you know of clients who have been admitted to hospital during their participation in the program, and was this admission related to their chronic disease?
Appendix IV: Client survey

Template for client surveys (each customised with agency/program names). Questions from the National Health Survey 2004-05 used with permission of the Australian Bureau of Statistics (ABS).

**SECTION A: About your health...**

1. How do you feel about your life as a whole, taking into account what has happened in the last year, and what you expect to happen in the future?
   - Delighted
   - Pleased
   - Mostly satisfied
   - Mixed
   - Mostly dissatisfied
   - Unhappy
   - Terrible

2. In general, would you say that your health is...
   - Excellent
   - Very good
   - Good
   - Fair
   - Poor

3. How much time during the past month...

<table>
<thead>
<tr>
<th>(a) were you discouraged by your health problems?</th>
<th>All of the time</th>
<th>Most of the time</th>
<th>A good bit of the time</th>
<th>Some of the time</th>
<th>A little bit of the time</th>
<th>None of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) were you fearful about your future health?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) was your health a worry in your life?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) were you frustrated by your health problems?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. During the past month how much...

<table>
<thead>
<tr>
<th>(a) has your health interfered with your normal social activities?</th>
<th>Almost totally</th>
<th>Quite a bit</th>
<th>Moderately</th>
<th>Slightly</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) has your health interfered with your hobbies or recreational activities?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) has your health interfered with your household chores?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) has your health interfered with your errands and shopping?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Compared to one year ago, how would you rate your health in general now?

- [ ] Much better now
- [ ] Somewhat better now
- [ ] About the same now
- [ ] Somewhat worse now
- [ ] Much worse now

6. For each of the following questions, please circle the number that corresponds with your confidence that you can do the tasks regularly at the present time.

**How confident are you that you can...**

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Totally confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Keep the fatigue caused by your disease from interfering with the things you want to do?</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Keep the physical discomfort or pain of your disease from interfering with the things you want to do?</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Keep the emotional distress caused by your disease from interfering with the things you want to do?</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Keep any other symptoms or health problems you have from interfering with the things you want to do?</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Do the different tasks needed to manage your health condition so as to reduce your need to see a doctor?</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) Do things other than just taking medication to reduce your need to see a doctor?</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION B: About your disease and other risk factors...

1. In terms of your body weight, do you consider yourself...
   - Acceptable weight
   - Underweight
   - Overweight

2. How much do you weigh? (Please give your answer in any of the boxes below)
   - [ ] kilograms
   - OR [ ] pounds
   - OR [ ] / stones/pounds

3. How tall are you without shoes? (Please give your answer in any of the boxes below)
   - [ ] centimetres
   - OR [ ] / feet/inches

4. In the last two weeks, have you walked for sport, recreation or fitness?
   - No – please go to question 5
   - Yes
     - (a) How many times did you walk for sport, recreation or fitness in the last two weeks?
     - (b) What was the total number of hours you walked for sport, recreation or fitness in the last two weeks?

5. Apart from walking, in the last two weeks did you do any exercise which caused a moderate increase in your heart rate or breathing (i.e. moderate exercise)?
   - No – please go to question 6
   - Yes
     - (a) How many times did you do any moderate exercise in the last two weeks?
     - (b) What was the total number of hours you spent doing moderate exercise in the last two weeks?

6. In the last two weeks, did you do any exercise which caused a large increase in your heart rate or breathing (i.e. vigorous exercise)?
   - No – please go to question 7
   - Yes
     - (a) How many times did you do any vigorous exercise in the last two weeks?
     - (b) What was the total number of hours you spent doing vigorous exercise in the last two weeks?
7. Do you currently smoke?
   ☐ No – please go to question 8
   ☐ Yes → Do you smoke regularly (e.g. at least once a day)? ☐ Yes ☐ No

8. Have you ever smoked regularly (e.g. at least once a day)?
   ☐ Yes ☐ No

9. What is the main type of milk that you usually use?
   ☐ Whole/full cream ☐ Soy milk ☐ Do not drink milk
   ☐ Low/reduced fat ☐ Evaporated or sweetened condensed ☐ Don’t know
   ☐ Skim ☐ None of these

10. How many serves of vegetables (fresh, frozen or tinned) do you usually eat each day?
    ☐ 1 serve or less ☐ 2 serves ☐ 3 serves
       ☐ 4 serves ☐ 5 serves ☐ 6 serves or more
       ☐ Don’t eat vegetables

11. How many serves of fruit (fresh, frozen or tinned) do you usually eat each day?
    ☐ 1 serve or less ☐ 2 serves ☐ 3 serves
       ☐ 4 serves ☐ 5 serves ☐ 6 serves or more
       ☐ Don’t eat fruit

12. How often do you add salt to your food after it is cooked?
    ☐ Never/rarely ☐ Sometimes ☐ Usually

13. How long ago did you last have an alcoholic drink?
    ☐ 1 week or less ☐ More than 1 week to less than 2 weeks
    ☐ 2 weeks to less than 1 month ☐ 1 month to less than 3 months
    ☐ 3 months to less than 12 months ☐ 12 months or more
    ☐ Never ☐ Don’t remember
14. The following questions are about your mood and feelings. *In the past four weeks...*

<table>
<thead>
<tr>
<th>Question</th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>A little of the time</th>
<th>None of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) about how often did you feel tired out for no good reason?</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) about how often did you feel nervous?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) about how often did you feel so nervous that nothing could calm you down?</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>(d) about how often did you feel without hope?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) about how often did you feel restless or jumpy/fidgety?</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(f) about how often did you feel so restless you could not sit still?</td>
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<td></td>
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<tr>
<td>(g) about how often did you feel depressed?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h) about how often did you feel that everything was an effort?</td>
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<td></td>
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</tr>
<tr>
<td>(i) about how often did you feel so sad that nothing could cheer you up?</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(j) about how often did you feel worthless?</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Section C: About your use of health services...

1. What chronic condition are you being assisted with by [CHS NAME] through the [PROGRAM NAME] program? (tick as many as apply)
   - Heart disease (any)
   - Diabetes
   - COPD
   - Asthma
   - Other (please specify):

2. Please indicate what types of health services you have used for any reason in the past 12 months (tick as many as apply):
   - Doctor (GP)
   - Medical specialist
   - Hospital (any type)
   - Nursing
   - Physiotherapy
   - Podiatry
   - Diabetes education
   - Heart education
   - COPD education
   - Occupational therapy
   - Optometrist/optician
   - Dentist
   - Social worker/welfare officer
   - Psychologist
   - Counsellor
   - Medication management
   - Aboriginal health worker
   - Dietician/nutritionist
   - Quit smoking program
   - Support group(s)
   - Home-based services
   - Chiropractor
   - Gymnasium
   - Personal trainer
   - Osteopath
   - Hydrotherapy
   - Naturopath
   - Acupuncturist
   - Herbalist
   - Hypnotherapy
   - Other(s) (please specify):

3. In the last 2 weeks, have you consulted a general practitioner (GP) for your own health?
   - No – please go to question 4
   - Yes ➔ How many times in the last 2 weeks have you consulted a GP?

4. When was the last time you consulted a doctor about your own health?
   - Less than 3 months ago
   - 3 months to less than 6 months ago
   - 6 months to less than 12 months ago
   - 12 months ago or more
   - Have never consulted a doctor
   - Don’t know
5. Have you visited a medical specialist (e.g., a cardiologist) for your chronic condition(s)?
   - Yes
   - No

6. During the last 12 months, have you been admitted to hospital (not including outpatient/day clinics or casualty/emergency ward visits)?
   - No
   - Yes

     (a) How many times have you been admitted to hospital in the last 12 months?

     (b) Were any of these admissions to hospital related to your chronic condition(s)?
        - Yes
        - No

Section D: Other comments...

1. Do you have any other comments about the program?

   Thank you for your participation in this survey.
Alternative Section D for follow-up client surveys:

**Section D: About the [CHS/PROGRAM NAME] program**

1. Please indicate how satisfied you are with the following:

<table>
<thead>
<tr>
<th>(a) the waiting time to get into the program</th>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>No opinion</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) the information provided to you by the professional(s) you saw</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>(c) the opportunity to talk about your health with the professional(s) you saw</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>(d) the extent to which the program has helped you manage your condition(s)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>(e) the extent to which the services offered by the program worked together</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>(f) the assistance and treatment you received</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>(g) the program overall</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

2. Do you have any other comments about the program?

*Thank you for your participation in this survey.*
Appendix V: Phases of development and implementation scale

Phases of development and innovation scale used in agency and PCP management reporting tools.

<table>
<thead>
<tr>
<th>Phases of development and implementation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Priority setting and early planning</td>
<td>Early planning stages occurring; revising/reviewing and developing plans and approaches. Examples:</td>
</tr>
<tr>
<td></td>
<td>• Discussions have taken place and priorities established, but a clearly specified implementation plan is not yet in place;</td>
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<tr>
<td></td>
<td>• Working to bring together the relevant agencies and stakeholders;</td>
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<tr>
<td></td>
<td>• Establishing and/or strengthening relationships required to move to next phase.</td>
</tr>
<tr>
<td>2 Agreed implementation plan</td>
<td>An agreed implementation plan has been formally developed. Examples:</td>
</tr>
<tr>
<td></td>
<td>• Decisions have been formally made and written documentation outlining the plan is in place;</td>
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<tr>
<td></td>
<td>• Priorities elaborated and identified tasks for implementation are planned;</td>
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<tr>
<td></td>
<td>• Understanding of next steps, including the allocation of resources (e.g. staffing, finances, time etc);</td>
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<tr>
<td></td>
<td>• Broader discussions to engage key stakeholders and personnel required for action.</td>
</tr>
<tr>
<td>3 Early implementation – piloting and refinement</td>
<td>Agency-level engagement with the plan and implementation has begun. Examples:</td>
</tr>
<tr>
<td></td>
<td>• Systems developed to support the plan;</td>
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<tr>
<td></td>
<td>• Staff engaged (including recruitment) and participating in training, piloting, evaluation etc;</td>
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<tr>
<td></td>
<td>• Processes with external stakeholders (e.g. referral pathways) now formalised.</td>
</tr>
<tr>
<td>4 Advanced implementation and systems redevelopment</td>
<td>Agreement that the program has been implemented as fully as possible and there is commitment to ensuring sustainability of changes, systems, procedures etc. Examples:</td>
</tr>
<tr>
<td></td>
<td>• Agencies in process of evaluating and (if necessary) changing procedures, protocols, policies and systems;</td>
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<tr>
<td></td>
<td>• Plan encompasses all relevant agencies/stakeholders.</td>
</tr>
<tr>
<td>5 Sustained routine activity</td>
<td>Program fully implemented and accepted by all involved; now part of routine activity. Examples:</td>
</tr>
<tr>
<td></td>
<td>• Sustainable activity demonstrated by incorporation into routine activities;</td>
</tr>
<tr>
<td></td>
<td>• Program is no longer considered as part of a change management activity.</td>
</tr>
</tbody>
</table>