



Sentinel Sites Evaluation: A place-based evaluation of the Indigenous Chronic Disease Package 2010–2012

Summary Report

March 2013

Menzies School of Health Research



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Abbreviations

The following abbreviations are used in this document:

AHS	Aboriginal Health Service
CCSS	Care Coordination and Supplementary Services
DGP	Division of General Practice
DoHA	Department of Health and Ageing
GP	General Practitioner
GPMP	General Practice Management Plan
ICDP	Indigenous Chronic Disease Package
MBS	Medicare Benefits Schedule
MSOAP-ICD	Medical Specialist Outreach Assistance Program – Indigenous Chronic Disease
NRT	Nicotine Replacement Therapy
PBS	Pharmaceutical Benefit Scheme
PIP	Practice Incentives Program
SSE	Sentinel Sites Evaluation
TCA	Team Care Arrangement
USOAP	Urban Specialist Outreach Assistance Program

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Authors of this report: Ross Bailie, Jodie Griffin, Alison Laycock, Margaret Kelaher, Tracy McNeair, Nikki Percival and Gill Schierhout.

The report is based on vital contributions from all members of the Sentinel Sites Evaluation team, whose roles and contributions are listed below.

Menzies School of Health Research staff

- Ross Bailie – Project Leader
- Marcus Goddard – Program Director
- Marianne Hellers – Project Manager
- Jodie Griffin and Tracy McNeair – Evaluation Process Coordinators
- Nikki Percival, Gill Schierhout, Alison Laycock and Barry Scrimshaw – Consultants
- Barbara Beacham – Site Evaluation Manager
- Amal Chakraborty, Lynette O’Donoghue, Trish Hickey, Elaine Kite, Julia Hodgson and Kevin Swift – Site Evaluation Facilitators
- Jennifer Allchurch and Andrea Moser – Administration Support

The University of Melbourne staff

- Associate Professor Margaret Kelaher – Consultant (Administrative Data)
- Zewdu Woubalem Wereta – Research Officer (Administrative Data)

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Definitions

For the purposes of this report:

- 'Aboriginal Health Service (AHS)' refers to Aboriginal Community Controlled Health Organisations, State/Territory managed Aboriginal Health Services and other non-community controlled Aboriginal Health Services designed primarily to meet the needs of Aboriginal and Torres Strait Islander people. All except one of the AHSs were Aboriginal Community Controlled Health Organisations.
- 'Chronic illness care' is used in preference to 'chronic disease care' or 'chronic disease management' except where quoting or referring to official documentation. The term 'chronic illness' is more reflective of a person's experience of care and is used in favour of the more medical term 'chronic disease'. This is consistent with contemporary approaches or concepts, such as the chronic care model, patient/client centred care, and holistic care.
- 'Clinician' refers to a health professional such as a General Practitioner (GP), nurse or Aboriginal Health Worker.
- 'Division of General Practice (DGP)' is used throughout the report, recognising that by the time this Summary Report is released all Divisions of General Practice will have transitioned to Medicare Locals.
- 'General Practice' refers to privately run General Practices.
- 'General Practitioner (GP)' refers to medical doctors based in both private General Practice and Aboriginal Health Services.
- 'Health Service' refers to any primary health care services, including General Practices and Aboriginal and Torres Strait Islander Health Services.
- 'Indigenous' is used when referring to the Indigenous Chronic Disease Package measures as per the usage in Commonwealth Government documents. The term should be read to be synonymous with the phrase 'Aboriginal and Torres Strait Islander' as used elsewhere in the report.
- 'Measure' refers to programs addressing the priority areas as part of the Indigenous Chronic Disease Package.
- 'Regional Tackling Smoking and Healthy Lifestyle teams' refer collectively to the following ICDP funded workers: Regional Tobacco Coordinator, Tobacco Action Worker and Healthy Lifestyle Worker.
- 'Sentinel Site' refers to a geographically defined area that is the focus of 'place-based' Sentinel Sites Evaluation activities.

Where reference is made to data from 'the Sentinel Sites and the rest of Australia', data are aggregated for all the relevant Sentinel Sites and for the rest of Australia excluding the Sentinel Sites respectively.

1. Executive summary

Chronic disease contributes to two-thirds of the health gap between Aboriginal and Torres Strait Islander people and other Australians. The Indigenous Chronic Disease Package (ICDP) is a vitally important initiative that was designed to improve the capacity of primary health care services to more effectively prevent and manage chronic disease. To support ongoing implementation and refinement of the ICDP, the Commonwealth Government engaged Menzies School of Health Research to undertake a process of innovative place-based monitoring and formative evaluation of the ICDP.

Known as the ‘Sentinel Sites Evaluation’ (SSE), this evaluation was completed over the period 2010 - 2013. The evaluation addresses the complex challenges of re-orienting services and systems to provide high quality chronic illness care.* The SSE has identified some notable achievements, but there is wide variation between local areas in effective implementation of the ICDP. This Summary Report presents an overview of the findings and key policy considerations relevant to ongoing implementation of the ICDP, with attention to enhancing equity and population health impact. A more in-depth analysis is presented in the SSE Final Report.¹

The Indigenous Chronic Disease Package

The ICDP represents the Australian Government’s contribution of \$805.5 million to the National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes. Initial funding was over four years (2009–2013), and across three priority areas:

- tackling chronic disease risk factors
- earlier detection, improved management and follow-up of chronic diseases in primary health care
- expansion of the Aboriginal and Torres Strait Islander workforce and increased capacity of the health workforce to deliver effective care.²

The ICDP comprised 14 different ‘measures’ or programs addressing priority areas relevant to various components of the health system, and was administered across seven divisions in the Department of Health and Ageing (DoHA). The measures included a range of health promotion and social marketing initiatives, reforms to existing programs, and funding for new initiatives. These reforms and new initiatives were intended to improve follow-up and coordination of care and to increase the size and capacity of primary health care services to deliver effective care to Aboriginal and Torres Strait Islander people.

The Sentinel Sites Evaluation

The SSE was a groundbreaking approach to informing ongoing implementation and refinement of the ICDP in order to maximise the potential benefit to Aboriginal and Torres Strait Islander communities across the country.

Between the middle of 2010 and early 2013, the SSE provided six-monthly reports on progress with implementation of the ICDP in 24 Sentinel Sites. The SSE assessed and reported on progress with

* We use the term ‘chronic illness care’ to emphasise the importance of people’s experience of care. See further explanation in the definitions list.

implementation, and identified challenges and innovations in implementation of the ICDP at the local level. Quantitative and qualitative data were collected, analysed, interpreted and fed back in five six-monthly cycles, with each round of data collection, analysis and interpretation informing the next.

Over the course of the SSE, over 700 interviews were completed with key informants, 72 community focus groups were conducted with a total of 670 participants, and 41 Health Services provided clinical indicator data. Feedback on site-specific data, and overall progress of the evaluation, was provided to local stakeholders in each of the Sentinel Sites at regular intervals during the evaluation period. The focus of enquiry for data collection, and the approach to data analysis and interpretation, was refined in response to the findings and experience over successive cycles of the evaluation. The approach followed recognised principles for ensuring rigour in health systems and services research and evaluation.

1.1. Tackling chronic disease risk factors

The measures under this priority area were designed to address key risk factors associated with chronic diseases, particularly tobacco smoking, poor nutrition and lack of exercise. The measures supported community education initiatives, the establishment of a new tobacco and healthy lifestyle workforce, development of lifestyle modification programs and improved access to smoking cessation programs.

Regional Tackling Smoking and Healthy Lifestyle teams have been established across the majority of Sentinel Sites to work with communities to address chronic disease risk factors. Almost all teams have been based in Aboriginal Health Services (AHS). There was a high level of engagement in training activities and development and distribution of toolkits and resources to support the workforce. The program of work delivered by teams varied across sites and included individual and community based work. A range of local factors, including organisational capacity and partnerships to provide effective support to the teams, influenced the extent to which they were able to function effectively.

Opportunities for improvement include the need for primary health care clinical teams to understand the complementary roles of the new health promotion teams (noting that team members are not clinicians), and to expand population coverage through supporting more local community-based initiatives, targeting activities to reach population sub-groups most in need of support and identifying the use of effective ways to achieve change. Further work is needed to ensure centrally produced resources are suited to supporting the needs of a diverse range of communities.

There was an increasing awareness of grants to support **local community campaigns** to promote healthy behaviours and some evidence of project-level activities. Perceptions of **Healthy Community Days** were generally positive, with existing high levels of awareness among community members of the risk factors for chronic disease.

Strategies are needed to identify and reach particular target population groups, and to move beyond education about risk factors to promoting an understanding of personal and population-level risks to health and how to reduce them.

1.2. Improving chronic disease management and follow-up care

Measures under this priority area were to deliver a comprehensive chronic disease management program through increasing the uptake of adult health assessments, follow-up care, and access to medicines in a coordinated, accessible and systematic manner.

There was wide variation between sites in uptake of the various measures.

Registration for the **Pharmaceutical Benefit Schedule (PBS) Co-payment measure** to improve Aboriginal and Torres Strait Islander people's access to medicines exceeded expectations. This appeared to be encouraged by community demand and practitioners' perceptions of the value of the measure.

The key opportunities for improvement include increasing the understanding and engagement of stakeholders (such as specialists) in supporting eligible patients to gain access to the PBS Co-payment measure. The definition and application of eligibility for the PBS Co-payment measure should be reviewed and revised to further enhance the effectiveness of the measure in providing benefit to those patients and families most likely to be affected by financial barriers to medications.

Uptake of **adult health assessments** in the Sentinel Sites increased almost four-fold over the evaluation period, and two-fold in the rest of Australia. The number of claims for follow-up services by practice nurses and registered Aboriginal Health Workers was very low, with some increase over the SSE evaluation period. Uptake of follow-up services by allied health professionals showed a similar pattern.

Refinements in design and implementation of health assessments should aim to enhance access, ensure fit both with the variety of primary health care delivery systems and with health professional perspectives of high-quality primary care, and ensure appropriate follow-up care.

There were generally high levels of registration of Health Services and of patients for the **Practice Incentive Program (PIP) Indigenous Health Incentive** to improve Aboriginal and Torres Strait Islander people's access to quality health care. There was earlier registration of patients through AHSs, with more recent increases mainly through General Practices. There was little clear evidence that funding derived from the incentive payments was being used by practices to enhance systems providing high-quality chronic illness care. Access and uptake of cultural awareness training by General Practice staff increased over the evaluation period, with evidence of General Practices becoming more oriented to Aboriginal and Torres Strait Islander patient needs.

The key opportunities for improvement include linking the PIP Indigenous Health Incentive registration process more directly both to care delivery processes and to health benefits for patients and populations, and supporting system capability to deliver high-quality chronic illness care, particularly to those services most in need of such support. A further opportunity is to enhance efforts to build the cultural competence of General Practice staff.

The extent of collaborative development of local **Care Coordination and Supplementary Services** Program arrangements to improve the coordination of, and access to, care varied between sites. Employment of a nurse as a 'Care Coordinator' was the usual model, with recruitment and establishment of Care Coordinators in their role initially slow. While the program was generally positively regarded, there were substantial difficulties in establishing appropriate processes for referring and transitioning patients through the program. There was also some concern about equity

of access for patients, population coverage, and complementarity with other initiatives to enhance coordination of care, role definition and sustainability of the model.

Chronic Disease Self-Management training to support patients to participate in their own health care was available in relatively few Sentinel Sites over the course of the evaluation. Of those who participated in the training in the Sentinel Sites, few were in positions that allowed them to utilise self-management skills with patients or to influence the uptake of the chronic disease self-management tools and techniques by colleagues. This may not be an accurate reflection of the national situation, however.

A key opportunity for improvement is to adapt and develop models that enable effective self-management approaches to be applied in everyday service environments.

Access to specialists through the **Urban Specialist Outreach Assistance Program (USOAP)** varied between Sentinel Sites, influenced by funding allocation processes and the availability both of services through other programs and of specialists willing to bulk-bill. AHSs hosted the program in all of the participating sites. Where referrals were being made and patients were attending, the USOAP services appeared to be working well for primary health care services, specialists and those patients attending the service.

Key opportunities for improving ongoing implementation in this area include strengthening processes for appropriate referral; supporting patient attendance at appointments; orientation of specialists to the organisational culture of AHSs and effective ways of working in these organisations; and enhancing access to specialised equipment and follow-up care.

Most eligible sites were accessing **Medical Specialist Outreach Assistance – Indigenous Chronic Disease (MSOAP-ICD)** program funding by late 2012. Effectiveness of planning processes in ensuring local needs were addressed was variable, partly owing to the limited supply of relevant specialists. MSOAP-ICD was seen to have resulted in improved patient access to specialists in some sites.

In addition to those identified above for USOAP, opportunities to improve the ongoing implementation of MSOAP-ICD include: clearer delineation of expectations, roles and responsibilities of the health professional and the host organisation prior to commencement of service delivery; development of effective approaches to enhancing capacity of the host organisations to coordinate visits; and adequate resourcing to support patients to attend for specialist care in regional or urban centres.

1.3. Workforce expansion and support

Measures under this priority area aimed to expand the primary care workforce and improve access to health services for Aboriginal and Torres Strait Islander people.

Workforce support, education and training: Staggered recruitment, diversity in skill level, different needs in different work environments and the dispersion of Outreach Workers presented significant challenges in providing them with orientation, especially remote-based Outreach Workers. Generally, there was a low uptake of funding for individualised training across the sites. This could be due to a lack of organisational capability to define and source relevant training, as well as uncertainty over contracts. Uptake of the ICDP funded General Practitioner (GP) Registrar positions in Sentinel Sites was also low, because there were more posts available than AHSs with the capacity to accommodate and provide appropriate supervision, and not enough GP Registrars to fill them. There was little evidence from the Sentinel Sites that the ICDP funded scholarships for the

professional development of nurses in AHSs and scholarships for nurses undertaking a clinical placement in an AHS had created opportunities not previously available to support training for nurses. The uptake of the scholarships and placements was low. This was at least partly due to a lack of capacity by AHSs to host and house nurses undertaking clinical placements.

There is a need to focus training, scholarships and placements on strengthening the core competencies for chronic illness care, to overcome the barriers of lack of infrastructure and supervisory capacity, and to increase the appeal of these training opportunities.

Expanding the outreach capacity of Aboriginal Health Services: There were high levels of recruitment to Outreach Worker positions in AHSs, with some evidence of greater challenges experienced in recruitment and retention in remote sites. People recruited to Outreach Worker positions filled a range of roles depending on their skills and the needs of the AHS.

Opportunities for improving ongoing implementation include developing effective approaches to providing supervision, support, training and mentorship for a workforce with widely differing needs in diverse settings; and focusing additional 'practice manager' support on enhancing systems to deliver high-quality chronic illness care.

Engaging Divisions of General Practice to improve access to primary care: A key component of the Australian Government's National Health Reforms was the establishment of a new nation-wide network of Medicare Locals. The process of transition from Division of General Practices (DGP) to Medicare Locals is an important development that has occurred during the course of the SSE. DGPs /Medicare Locals were successful in recruiting and, to a large extent, retaining the Indigenous Health Project Officer and Outreach Worker workforce. Outreach Workers appeared to be increasing patients' access to primary health care services through assisting them to navigate the health system, arranging transport and providing cultural brokerage between community members and health professionals.

Opportunities for improvement for ongoing implementation include strengthening leadership, management and resources to support Aboriginal health teams, and to integrate these teams into the core business of Medicare Locals. Ongoing effort will be required to foster collaboration between the General Practice and AHS sectors.

1.4. Effective implementation of the ICDP as a whole

Based on information gathered through the SSE we have defined 'successful' implementation of the ICDP as resulting in 'A workforce with skills and capacity, and systems and services with capacity to improve access to, and delivery of, high-quality services and programs for prevention and management of chronic disease for Aboriginal and Torres Strait Islander people'. This is consistent with the aims of the overall ICDP as described in the National Evaluation Framework.³ The greater emphasis on systems and on capacity to achieve impact at the population level reflects internationally recognised best practice in chronic illness care.

The World Health Organization describes the health system as comprising six main building blocks – service delivery, health workforce, health information, medical technologies, health financing, and leadership and governance.⁴ The health systems strengthening model proposed by the World Health Organisation emphasises that 'every intervention from the simplest to the most complex, has an effect on the overall system, and the overall system has an effect on every intervention' (p.21). The model suggests that policies and programs should be designed and evaluated with an understanding of their system-wide effects. Systems-thinking or systems approaches to program implementation

recognise complexity and local variation, are informed by feedback and use adaptive and learning processes to harness available resources in a way that is suited to local context.

Systems approaches to development and engagement of the health workforce through the ICDP, and to development of chronic disease service delivery systems, were key mechanisms through which the ICDP was able to achieve its effects.

Several factors were identified in the SSE that appeared to enable or constrain a systems approach to workforce development and engagement. It was important that leadership and management were able to articulate and communicate the overall vision of the ICDP and the practical steps required to achieving this vision. It was also important that information about the ICDP was available at all levels of the system, and that it was tailored to fit the specific organisational and professional context of the people who needed to implement the measures. Where flexibility in the program and measure guidelines was recognised and the ICDP measures, including workforce positions, were modified to suit local context, this enabled a non-siloed approach to workforce development. Such an approach made it possible to integrate ICDP funded positions into existing structures and service delivery approaches.

Taking systems approaches to developing and optimising chronic disease service delivery systems meant that Health Services and other organisations at the local level found ways to ensure that the ICDP measures were optimally complementary to one another, and to pre-existing chronic disease services. Well-organised Health Services, which generally were able to identify, access and use resources effectively, were also more likely to make effective use of the resources available through the ICDP. Taking a non-siloed approach to developing chronic disease services through the ICDP also required stable management and leadership commitment. Where Health Services already had dedicated resources allocated for integrated chronic illness care, ICDP resources were able to strengthen and extend these arrangements. Appropriately skilled staff and clinical information systems with the capacity to support population health monitoring and evaluation made it more possible for the ICDP to be implemented using systems approaches. Some services were applying this capacity through continuous quality improvement processes that monitored and drove efforts to improve chronic illness care at the population level.

One of the ways in which the ICDP ‘worked’ to achieve its goals was through primary health care organisations becoming oriented both to Aboriginal and Torres Strait Islander community needs and values and to chronic illness care. This was demonstrated where Health Services adapted activities to accommodate cultural values and concerns. It was more apparent in Health Services that had been set up specifically to meet community needs (including having representative governance arrangements) and/or where health professionals and managers had experience working in the Aboriginal and Torres Strait Islander services sector. Orientation to Aboriginal and Torres Strait Islander community needs and related changes was less likely in sites and organisations with limited actual or perceived demand for services for Aboriginal and Torres Strait Islander people and, related to this factor, limited motivation to change service approaches for a particular small population group.

There was engagement with ICDP measures and their utilisation within existing systems where primary health care organisations had information and organisational systems that functioned well and supported experienced managers and leaders to adapt the ICDP measures and resources to suit local contexts. Positive staff attitudes and skills were important factors, and more evident in sites where the workforce was not working under the constraints of difficulties with recruitment and high staff turnover, and infrastructure or management stability issues.

Alignment of values with best practice in Aboriginal and Torres Strait Islander primary health care occurred where organisations and individuals had relevant understanding, knowledge, skills, motivation and support, and where there was a culture of continuous quality improvement. This alignment was most evident among organisations and the workforce in the AHS sector. In sites with comparatively higher populations of Aboriginal and Torres Strait Islander patients this alignment was also evident in some General Practices, particularly those supported by DGPs /Medicare Locals with a strategic focus on integrating Aboriginal and Torres Strait Islander health within the wider system of primary health care.

1.5. Conclusion

The implementation of the ICDP to date has shown some notable achievements. These include:

- improved access to primary health care services and to affordable medication for many Aboriginal and Torres Strait Islander people;
- improved orientation of the General Practice sector to the needs of Aboriginal and Torres Strait Islander people;
- significant steps towards the early establishment of a new workforce that is focused on health promotion and in development of local health promotion initiatives; and
- increased attention to enhancing access to specialist, allied health and team-based approaches to chronic illness care.

The findings of the SSE should be interpreted in relation to its intended purpose; namely to inform ongoing improvements, refinements in design and implementation of the ICDP. As intended, the innovative evaluation approach of the SSE has enabled early identification of barriers and enablers to implementation to inform refinement and ongoing implementation at the local, regional and policy level.

The important finding of wide local variation in the effectiveness of ICDP implementation delineates some major opportunities for further development. The greatest potential gains are likely to be in enhancing the practice of the existing workforce and the capability of less capable services. Whilst a mapping of services in relation to the characteristics of their service population was beyond the scope of the SSE, it seems reasonable to assume that populations that rely on these less capable services may be most in need of improved access to high quality chronic illness care. A substantial proportion of less capable services, and their populations, are likely to be located in areas of socio-economic disadvantage, with disproportionate risk for chronic disease, and lower health literacy

Efforts to strengthen the primary health care system should be based on best local and international evidence. A critical requirement for ongoing implementation of programs to enhance chronic illness care is to build a stronger systems-orientation and population health perspective in the organisation and operation of Health Services and programs – including both Health Service and government programs. Development of capability in the effective use of information systems at various levels of the primary health care system is also vital to guiding and supporting ongoing development.

The re-orientation of Health Services and systems development that is needed to achieve demonstrable impact at the community and population level will take sustained attention. There is a need to continue monitoring, evaluating and refining our health system for the explicit purpose of

improving the prevention and management of chronic illness to achieve large-scale population impact.

The findings of the SSE should be considered with the understanding that health authorities around the world are struggling to re-orient their health systems to address the epidemic of chronic disease. The challenges of providing high quality chronic illness care are complex, and successful re-orientation of the health system will require stakeholders at multiple levels of the system to grapple with new concepts and develop and implement sophisticated strategies to achieve system change.

2. Background and approach

This Summary Report provides an overview of the findings of the Sentinel Sites Evaluation (SSE) of the Indigenous Chronic Disease Package (ICDP), and complements a more complete and detailed Final Report.⁵ These two reports build on a series of Interim Reports^{6,7,8,9} and cover progress with implementation of the ICDP up to September – October 2012.

2.1. The Indigenous Chronic Disease Package

The ICDP is funded over four years from July 2009 to June 2013 and represents the Australian Government's contribution of \$805.5 million to the National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes.

The ICDP comprised 14 different 'measures' or programs addressing three priority areas:

- tackling chronic disease risk factors
- earlier detection, improved management and follow-up of chronic diseases in primary health care
- expansion of the Aboriginal and Torres Strait Islander workforce and increased capacity of the health workforce to deliver effective care.¹⁰ Each of the three priority areas includes a number of specific measures (Figure 1).

The measures include a range of health promotion and social marketing activities, reforms to existing programs, and new initiatives and funding to increase the size and capacity of primary care services to deliver effective care to Aboriginal and Torres Strait Islander people. The measures are delivered through Aboriginal and non-Aboriginal Health Services, including Aboriginal Community Controlled Health Organisations, State and Territory government Aboriginal and Torres Strait Islander-specific Health Services [collectively referred to in this report as Aboriginal Health Services (AHSs)], General Practices and other government and non-government organisations that provide and support primary health care services used by Aboriginal and Torres Strait Islander people.

The ICDP is managed across seven divisions of Department of Health and Ageing (DoHA) with the Office for Aboriginal and Torres Strait Islander Health having responsibility for overall coordination and governance.

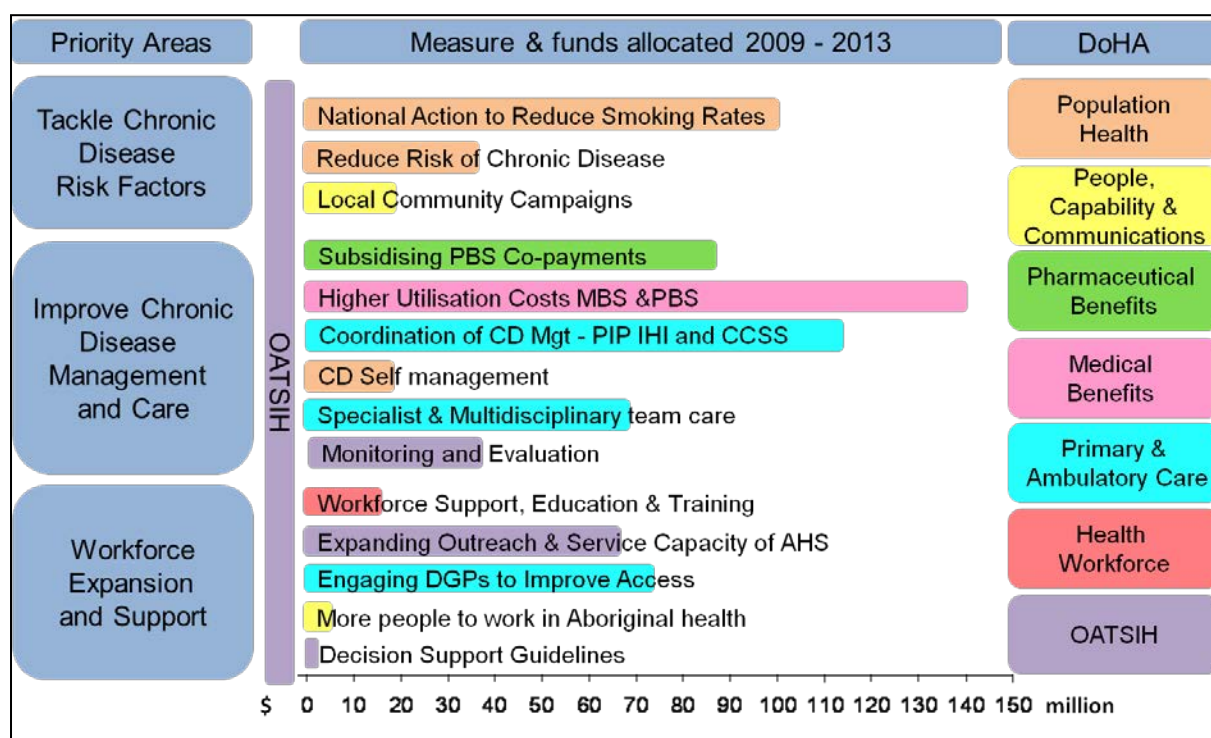


Figure 1: The Indigenous Chronic Disease Package: Priority areas, measures, funding and responsible divisions, 2009–2013

A key component of the Australian Government’s National Health Reforms was the establishment of a new nation-wide network of Medicare Locals from 1 July 2011. The process of transition from Divisions of General Practice (DGP) to Medicare Locals occurred during the evaluation period. For the purposes of this report we have referred to DGPs, recognising that all DGPs have transitioned to become Medicare Locals over the course of the evaluation.

2.2. The Sentinel Sites Evaluation

In 2010 DoHA contracted Menzies School of Health Research to undertake a place-based monitoring and formative evaluation of the ICDP through the SSE. The SSE was intended to inform ongoing refinements in design and implementation of the ICDP and aimed to identify how the ICDP was providing benefits to local communities and service organisations, and to identify barriers and facilitators to effective implementation at the local level.

2.2.1. Site establishment

The location of Sentinel Sites was decided by DoHA in consultation with the Aboriginal and Torres Strait Islander Health Partnership Forums in each State/Territory. Establishment of the Sentinel Sites was dependent on the agreement of the key stakeholder organisations (the AHS and the DGP) in each location to participate in the SSE. All except one of the AHSs were Aboriginal Community Controlled Health Organisations. Ethical approval for the SSE was obtained through a specially established ethics advisory group, and subsequently through the DoHA Ethics Committee.

Twenty-four Sentinel Sites spanning urban, regional and remote locations and all Australian States/Territories were established between mid 2010 and mid 2011 (Figure 2). The sites were not

intended to be representative of the range of service settings across Australia, but rather to provide insight into progress with implementation in locations with relatively early and relatively intensive investment. As shown in Figure 2, and explained in more detail below, there were three different types of sites, distinguished by the intensity of data collection.

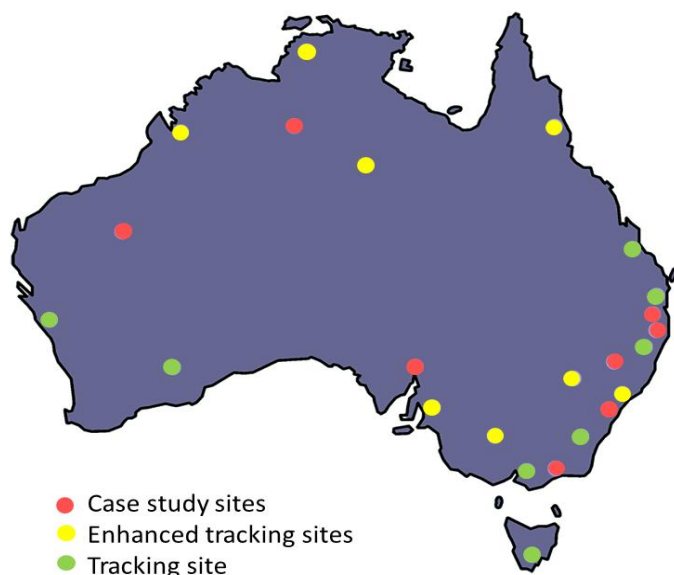


Figure 2: Location of Sentinel Sites

2.2.2. Data sources and analysis

During the SSE, there were five six-monthly cycles of data collection, analysis, interpretation and reporting. Eight sites were designated as case study sites, with relatively intensive data collection processes, including semi-structured interviews with a range of key informants and community focus groups with community members. A further eight sites were designated as enhanced tracking sites, where open-ended interviews were conducted with a smaller range of selected key informants. Clinical indicator data were requested from General Practices and AHSs in the 16 case study and enhanced tracking sites. Administrative and program data available through DoHA were collated and analysed for all 24 sites.

The five main sources of data and the focus of analysis of each are outlined below:

- Administrative data.** These data were provided by DoHA [Medicare Benefit Schedule (MBS), Practice Incentive Program (PIP) Indigenous Health Incentive and Pharmaceutical Benefits Schedule (PBS) Co-payment] and were analysed to track the impact of the ICDP on program uptake and chronic disease prevention or treatment item use over time. The focus of the analysis for administrative data was on the uptake for Aboriginal and Torres Strait Islander people aged ≥ 15 years in the Sentinel Sites compared to the rest of Australia.
- Program data.** The program administrative data were provided by DoHA, and were derived largely from reports provided to DoHA by organisations contracted to provide services relevant to the ICDP. These data were analysed to track the state of implementation of various ICDP measures over the course of the evaluation.
- Key informant interviews.** Interviews were conducted to gain insight into stakeholder awareness and understanding of their perception of issues relevant to the implementation of

the ICDP. Interviews in case study sites were semi-structured using a mix of open-ended questions and responses to closed-ended statements. Interviews in enhanced tracking sites were less structured and focussed on issues that were emerging as priorities in the implementation of the ICDP at the local level. Stakeholders in some tracking sites provided information to explain patterns in data presented during feedback sessions.

Over 700 interviews were undertaken during the course of the SSE. This included 581 interviews in case study sites, 103 in enhanced tracking sites and 17 in tracking sites. In case study sites, a total of 298 different people participated in interviews, with 152 participating in interviews in two or more successive cycles over the evaluation.

- **Community focus groups.** Community focus groups were conducted to explore community perceptions of change in accessibility and quality of services related to the prevention and management of chronic disease, and the extent to which any change may have been due to the ICDP.

Seventy-two community focus groups were held in case study sites. A total of 670 attendees (535 different people) participated in the community focus groups, with 94 participants attending groups in successive evaluation cycles. The number of participants per group ranged between 4 and 30, with an average of 9 participants.

- **Clinical indicators.** The collection and analysis of clinical indicator data were specified in the national evaluation framework for the purpose of providing an indication of impact of the ICDP on clinical performance of primary health care services and on clinical outcomes among Aboriginal and Torres Strait Islander people attending these Health Services.

Requests for clinical indicator data were made to 53 different Health Services. In response to these requests, a total of 116 clinical indicator datasets were provided from 41 different services and across the five evaluation cycles. This included 68 datasets from General Practices and 48 from AHSs.

Analysis of the data gathered during the evaluation period was designed specifically to address the SSE objectives, including describing ICDP implementation, identifying and tracking change and identifying the constraints and enablers impacting on effective implementation of the ICDP at local level. In order to provide more in-depth understanding of the barriers and enablers to implementation for the purpose of informing ongoing and wider implementation, we used a realist evaluation¹¹ approach and drew on systems thinking¹² concepts.

The realist evaluation approach explores ‘what works, for whom’, in what circumstances. It aimed to provide insight into the interaction between contextual influences and mechanisms by which the ICDP measures were generating various outcomes across the diverse range of locations in which the ICDP was being implemented. The systems thinking approach aimed to provide insight into how the different ICDP measures were designed to influence various aspects of the complex health system, the emerging patterns of interaction between the measures within the system, and how these interactions were achieving the intended outcomes of the ICDP. Attributing any observed change to specific interventions or influences within a complex intervention and in the context of a complex system is difficult, with inherent and unavoidable uncertainties.

Findings of the SSE need to be interpreted with an understanding that the sites were not intended to be representative of the range of service settings across Australia.

3. Findings – priority areas

This section includes a summary of our findings in relation to the three ICDP priority areas:

- tackling chronic disease risk factors
- improving chronic disease management and care
- workforce expansion and support.

For each of the priority areas, we discuss achievements in terms of early results for years 2–4 as specified in the program logic for the ICDP in the National Evaluation Framework¹³ (presented below as headings in bold text), and implications for strengthening and program refinement.

The conclusion of the chapter includes a summary of the findings in relation to the early outputs specified in the program logic that applies across the three priority areas.

3.1. Tackling chronic disease risk factors

The measures under this priority area were designed to address key risk factors associated with the development of chronic diseases, including tobacco smoking, poor nutrition and lack of exercise. The measures supported the development of community education initiatives, the establishment of a new tobacco and healthy lifestyle workforce, development of lifestyle modification programs and improved access to quit smoking programs.¹⁴

The measures under this priority area represent a major new investment in an area that has to date been under-developed and under-resourced. There is a need for substantial and sustained developmental work to support this important early investment to deliver population health impact.

3.1.1. Key findings in relation to the program logic

Resources for designing and delivering health promotion campaigns for Aboriginal and Torres Strait Islander people with or at risk of chronic disease are accessible, effective and evidence-based

A range of new national resources for tackling chronic disease risk factors were developed and distributed. While some of these resources were seen to be potentially useful, awareness and use of the resources varied in the Sentinel Sites. This was partly due to the timing of distribution and of local understanding of their relevance or value. Use and uptake of the Community Health Action Pack and the Live Longer! website was found to be low, even in those sites with targeted grant funding for local community campaigns. By the end of the evaluation period, Healthy Community Days had been held in the majority of Sentinel Sites, and had been well received.

There was a general need for greater development of systems for monitoring and evaluating health promotion resources evident in the Sentinel Sites. Whilst the new national resources include some tools relevant to monitoring and evaluation, for reasons identified above, there had been limited uptake of these resources during the SSE period. As there were few monitoring and evaluation

systems and little information available, it was difficult to form an assessment of how well the resources that had been developed were meeting community needs.[†]

[†] The National Evaluation may be in a better position to report on this matter

There was high demand for operational funds that could be used to develop local community health promotion campaigns: although some of the local Health Services placed more priority on using existing resources effectively than developing new resources.

Aboriginal and Torres Strait Islander people who have had contact with the ICDP have a better knowledge and understanding of the impact of preventable chronic disease risk factors on their wellbeing

Communities were generally aware of chronic disease risk factors and the importance of healthy lifestyles. A gap in awareness was identified in relation to the importance of accessing primary health care to prevent chronic disease, and for regular management of chronic disease. In the final evaluation cycle clinicians indicated an increased interest from people seeking support to quit smoking. However, it was also apparent that efforts to quit were influenced by individual motivation and broader societal influences on behaviour (such as social norms, cost, accessibility, acceptability and appropriateness of services of various groups). There is now extensive evidence that increasing knowledge and understanding of chronic disease by community members on its own has limited potential to change behaviour, and that there is a requirement for policies and action by health and non-health sectors to reduce risk behaviours and improve population health through addressing these societal influences.¹⁵

Aboriginal and Torres Strait Islander people who have had contact with the ICDP are more aware of and utilise (according to their need) the expanded range of health services and supports available to them to adopt healthy lifestyle choices and reduce smoking

The ICDP new workforce engaged in reduction of risk factors for chronic disease provide a potentially important addition to the existing health workforce. As expected, the new workforce is taking some time to be established.

The program of work delivered by these new teams varied across sites and included individual support, health education and community campaigns, and implementation of smoke free workplace policies. Over the period of the evaluation, community awareness of the Regional Tackling Smoking and Healthy Lifestyle teams increased in some of the sites, whereas in others, it remained low. This may have been due to the large geographic areas covered by some of the teams and the consequent need for teams to focus their efforts in particular areas, and the extent to which the role of the teams was clearly defined and supported within communities. In the Sentinel Sites almost all of these teams were based in AHSs. General Practitioners (GPs) generally were not aware of these teams, suggesting that it would be unlikely that GPs were encouraging engagement of the teams within local primary health care service systems.

Clinicians and community members were aware of the availability of Nicotine Replacement Therapy (NRT). The PBS Co-payment measure data show a general upward trend in NRT prescriptions during the evaluation period.

There is evidence that a range of important local level activities has been supported and delivered by the new workforce. These include brief interventions, support for access to Quitline, provision of information on NRT, social marketing and health education and skill development. There was a general perception that locally relevant counselling services needed to be enhanced, particularly where phone support was not meeting local needs.

Aboriginal and Torres Strait Islander people who have had contact with the ICDP make positive decisions about their health and lifestyle

Behaviour change is complex and takes time to be achieved, and it was not feasible to make an assessment in relation to this early result on the basis of data from the SSE. There is a general lack of established systems to provide reports on indicators of reach and outcomes of direct relevance to the various measures of the ICDP, and within timeframes that are useful for guiding implementation.

3.1.2. Contextual factors influencing success

The following factors were identified as important influences on the implementation of the various measures under the priority area of reducing risk factors for chronic disease.

The measures included in this priority area included a significant new investment in workforce positions. These positions were deployed in regional teams. This meant that the support available to these teams at local and regional service level was a key factor influencing their success. In host organisations that were able to integrate the workforce, and provide good supervision and mentoring, the workforce was more likely to be able to operate as a team, and have a strategic focus of work. It was important for some organisations to have flexibility in recruitment, as the positions needed to fit within existing team structures and complement existing activities. Policy and regional level leadership were highly valued as providing sources of direction and support.

Since teams were hosted by organisations with varying capacity to accommodate them, the nature of the host organisation had an important influence on the extent to which the teams could work effectively. Organisational capacity to manage and support the workforce, with a shared clear vision of the goals and work of the team was important to achieving success. Where host organisations were oriented to acute care needs, rather than chronic illness and population health, they were less likely to recognise the value of preventive activities, and to provide an enabling environment for this work. Organisational capacity to identify grant opportunities, and to write the funding applications and support implementation, were also key requirements for access to the community grants funding available through the ICDP. In some sites, instability in the organisation, or transitioning arrangements, were reported to have inhibited the organisation from applying for the funding.

The motivation, commitment and capabilities of people recruited into the new ICDP positions in this priority area were also key to their effectiveness at local level. Where team training and networking opportunities were provided, these were valued. Many sites found it useful to have workers co-located. In general, face-to-face training opportunities were more valued than the online resources that were available. The credibility of these workers with clinical teams was a key factor that helped to support greater involvement of clinicians with health promotion work (as discussed below).

The roles and capabilities of the existing primary health care workforce in relation to health promotion appear to be important to ensuring continuity of care and to ongoing monitoring and support of the Health Service populations in reducing risk factors for chronic disease. In general, the evaluation found that the existing workforce (i.e. not the new teams) was not well engaged in health promotion, and there was a lack of recording in the clinical records of risk factor status (e.g., smoking status) and of interventions to address risk factors. Collaboration between clinical teams and the ICDP Regional Tackling Smoking and Healthy Lifestyle teams was useful, for example, in facilitating access to health assessments at Healthy Community Days.

3.1.3. Implications for refinement and strengthening

The measures under this priority area are important initiatives in a part of the service delivery system where there has been relatively little previous investment. There is therefore substantial developmental work and capacity building required supported by rigorous evaluation and refinement of programs. Particular considerations for strengthening the effectiveness of measures in this priority area include:

- Many of the influences on health-related behaviours are not within the scope of the ICDP as it is currently formulated. There is extensive evidence on the requirement for policies and action by the health and non-health sectors to reduce risk behaviours and improve population health through broader societal measures (such as education, housing, employment and community empowerment).¹⁶ A recent Australian Government Senate Committee has recommended that the Government adopt the World Health Organization Report on the Social Determinants of Health and commit to addressing the social determinants of health relevant to the Australian context.¹⁷ The evidence on the influence of societal factors on health-related behavior has important implications for the level of behavioral change that can be realistically expected through the ICDP as it is currently formulated, and for shifting the focus from efforts to increase people's knowledge and understanding of the impact of preventable chronic disease risk factors on their wellbeing to more evidence based strategies to reduce risks to health.
- Population coverage of the measures under this 'health promotion and prevention' priority area is unclear, as are the means of targeting activities to reach population sub-groups most in need of support, and of the use of effective ways to achieve change. There is a clear need for strategic planning, monitoring and evaluation of health promotion strategies at the local Health Service and regional level. This should be aided by an enhancement of regional level and Health Service clinical information systems to provide meaningful data on health risk status and trends, and improved staff capability to use data for population health purposes. Activity in this area should go beyond smoking status to enhancing understanding and use of population data on risks to chronic disease and of evidence-based cardiovascular risk assessment tools. There is also a need for clinical information systems to provide data relevant to populations at a regional level. There is a need for a clearer understanding and application of program logic and evidence for development and implementation of health promotion activities, i.e., what is intended by the activities, and how change is expected to be achieved from a population health perspective, specifically including reach to high-need groups.
- The Regional Tackling Smoking & Healthy Lifestyle teams working in this priority area need to be more strongly linked with primary health care teams in some sites. In particular, regional teams need to be better engaged with the General Practice sector at local level, and there needs to be clearer understanding of how the roles of the teams can be complementary to the work of primary health care clinical teams – which may comprise for example, registered nurses, GPs, Aboriginal Health Workers, and other allied health professionals. The Regional Tackling Smoking and Healthy Lifestyle teams should work collaboratively with primary health care teams to ensure that the work of both teams most effectively meets local needs, and that key gaps in services are addressed.
- Because the teams are working in a diverse range of settings there is a need for further work to ensure that a suitable range of centrally produced resources are available to suit different contexts. The extent to which the initiatives are integrating evidence-based principles and are achieving the intended outcomes should be systematically assessed, with ongoing refinement of initiatives in the light of this evidence.

3.2. Improving chronic disease management and follow-up care

Measures under this priority area were aimed to support chronic disease management through increasing uptake of adult health assessments and follow-up care in a coordinated, accessible and systematic manner. Incentives were provided to encourage Health Services to improve the coordination of health care, and promote best practice management of patients with chronic disease. Support was to be provided to enable Aboriginal and Torres Strait Islander people to actively participate in their own health care. This priority area also included measures to improve access to medicines, multidisciplinary follow-up care and specialist services.¹⁸

3.2.1. Key findings in relation to the program logic

Expected early results for years 2–4 for earlier detection and improved chronic disease management and follow-up care as specified in the program logic contained in the National Evaluation Framework are presented below as headings in bold text, followed by a discussion of relevant findings from the SSE.

ICDP funded health system supports, incentives and subsidies are operating to facilitate the provision of quality primary health care for Aboriginal and Torres Strait Islander people with chronic disease

There is evidence from the SSE that ICDP funded positions and other aspects of the ICDP are improving access to primary health care, specifically including facilitating access to medications and to more culturally appropriate care in General Practice and specialist and allied health professionals. There is some evidence that efforts to increase uptake of adult health assessment may be encouraging access to primary health care. The evidence on improvements in other aspects of quality of care is more limited. While health assessments may in some instances be contributing to improved quality of care through a structured and comprehensive assessment that results in earlier diagnosis of chronic conditions or identification and raising awareness of risk factors, it is not clear that increased uptake of adult health assessments is generally associated with improved quality of care. This is partly because a) the way that adult health assessments are being conducted in some locations appears more oriented to income generation for Health Services through Medicare than to provision of high-quality care – this is evident to some extent in both the General Practice and Aboriginal Health Service (AHS) sectors; and b) the design and implementation of adult health assessments may not be consistent with established models of comprehensive primary health care and existing practice approaches.

There is limited evidence that the PIP Indigenous Health Incentive registration process, or the PIP Indigenous Health Incentive-related payments, are resulting in improved quality of care. To the extent that there have been improvements in recording of Aboriginal or Torres Strait Islander identity, this appears to have been driven largely by the perceived benefits of the PBS Co-payment measure, with little evidence of impact of the PIP Indigenous Health Incentive registration process. While there is some evidence of new income through PIP Indigenous Health Incentive contributing to improved infrastructure, staffing and systems, this is limited to a relatively small proportion of services with relatively high capacity, and that were already performing at relatively high levels. It is clear that there are many services that have inadequate capacity, and inadequately developed systems to enable them to access the funding that is channelled through the PIP Indigenous Health Incentive. These services are providing care to large numbers of Aboriginal and Torres Strait Islander people. There is little or no evidence that PIP Indigenous Health Incentive-related payments are providing any significant benefit to these services or to the populations that rely on these services.

Financial and other barriers to accessing health care and medicines are reduced

The PBS Co-payment measure has clearly been very significant in reducing financial barriers to medicines, and this has had more general flow on effects in encouraging patients to attend for care. There continue to be financial barriers to access to care through limited availability and ability for patients to identify services that will bulk-bill. This is the case for General Practice in many locations, but also specifically and importantly for allied health professionals and specialist care. There is evidence in some locations of reduced financial barriers to some specialist services, but this is variable and appears to be dependent on attitudes and practices of individual specialists and their willingness and adaptability in providing care in a way that meets the needs of local Aboriginal and Torres Strait Islander people. This variability and the lack of easily available and clear information on billing practices has been a deterrent to patients accessing specialist and allied health professional services.

Health Services funded under the ICDP demonstrate cultural awareness and commitment

There is evidence that the ICDP has contributed significantly to increasing cultural awareness among staff of General Practices and DGPs/Medicare Locals that have a commitment to providing good quality care for Aboriginal and Torres Strait Islander people. However, it is clear that not all services that are benefiting from ICDP-related funding are demonstrating cultural awareness and commitment, and this is particularly the case where engagement with the ICDP is driven primarily by financial or business interests ahead of professional motivation consistent with the general 'Closing the Gap' agenda.

Care coordination within ICDP funded services is improved for Aboriginal and Torres Strait Islander people with or at risk of chronic disease

There is some evidence of limited improvement in care coordination, with relatively few care coordination positions being funded in relation to population need. It appears that care coordination services are not necessarily reaching those most in need, and that care coordination efforts are not necessarily being expended on those most likely to benefit. The development and establishment of models that consistently reach patients who are most likely to benefit from assistance with care coordination and which achieve effective integration into the General Practice sector is an area that needs further work.

Aboriginal and Torres Strait Islander people with chronic disease or associated risk factors have more services and supports available to help them manage their condition

There is emerging evidence that Aboriginal and Torres Strait Islander people with chronic disease or associated risk factors are benefiting through increased availability of services to help them manage their conditions. Specific examples include: more available community-based health promotion activities and support; increased availability of NRT to support smoking cessation; removal of cost barriers to medicines; increased access to General Practice and to specialist and allied health professional services; less transport barriers to access services; increased resources to support General Practice to provide culturally appropriate care; and increased access to direct support provided by the ICDP workforce.

Priority issues include the need to develop and support broad implementation of behavioural change interventions that are of demonstrated acceptability and effectiveness in the diverse Aboriginal and Torres Strait Islander contexts. Further attention should also be paid to integration of patient services, particularly across sectors and strengthening of clinical information and service systems to support this integration. There also needs to be further development of local/service systems for identification of individual patients who have most potential to benefit from chronic disease services and support and system responses to facilitate increased allocation of resources to those communities and patients with relatively higher service delivery needs and to services with limited current capacity to meet demands. This highlights the need for greater attention to developing information and service systems to monitor needs and quality of services for the purpose of guiding ongoing improvement.

The number of Aboriginal and Torres Strait Islander people with or at risk of chronic disease who access primary health care services is increased

While there was quantitative evidence of increasing numbers of people in some sites registering for the PIP Indigenous Health Incentive, having adult health assessments that are billed through Medicare, and who are having PBS Co-payment measure prescriptions filled, the extent to which these data reflect an increase in access to primary health care is uncertain. Data indicate increasing involvement by General Practices in registration for the PIP Indigenous Health Incentive, and triggering of Tier 1 payments by General Practices. There was qualitative evidence from a variety of sources that indicates an increase in access related to a range of ICDP-related activities. This included: removal of cost barriers to medicines; removal of transport barriers to attend services; improved cultural safety in General Practices; support and assistance provided by ICDP funded Outreach Workers, Indigenous Health Project Officers, and Regional Tackling Smoking and Healthy Lifestyle teams; encouragement and incentives for Aboriginal and Torres Strait Islander people to have adult health assessments; arrangements for improved access to specialist and allied health professionals; and more community programs/resources to support healthy lifestyle choices and health seeking behaviours.

Aboriginal and Torres Strait Islander people in contact with ICDP measures value the enhanced services

There is emerging evidence that Aboriginal and Torres Strait Islander people who have contact with ICDP-related services appreciate the enhanced level of care. Specific examples include positive feedback from community focus groups regarding improved access to medicines through the PBS Co-payment measure, improved access to Health Services through Outreach Worker support (including transport), more specialist services available through AHSs, reduced wait times and cost of specialist and allied health professional services through the Urban Specialist Outreach Assistance Program (USOAP), Medical Specialist Outreach Assistance Program – Indigenous Chronic Disease (MSOAP-ICD) and Care Coordination and Supplementary Services (CCSS) measures, and access to health promotion activities (e.g., exercise classes, fresh food hampers, diabetes education).

The number of Aboriginal and Torres Strait Islander people with or at risk of chronic disease who access specialist and multi-disciplinary follow-up care is increased

There are limitations in the extent to which available administrative or program data can be used to assess changes in access to specialist or multi-disciplinary follow-up care. Specifically, the administrative data on follow-up by nurses or Aboriginal Health Workers, or by allied health professionals, shows limited or no evidence of increased access to follow-up care in Sentinel Sites.

However, it is clear that the lack of evidence on this question from these data does not necessarily mean there has been no improvement in follow-up care. Qualitative evidence from different sources in a number of sites indicates an increase in access to some types of specialist and allied health professionals as a result of ICDP-related activity.

There is substantial work to be done in both enhancing systems to provide access to appropriate care in a way that fits with local needs and service delivery systems, and in development of systems to effectively monitor access and quality of such care for the purpose of guiding ongoing improvement.

3.2.2. Variation in state of implementation of different measures

Program and administrative data show wide variation in uptake of various measures in different Sentinel Sites, with varying trends in uptake over time within and between sites. As illustrated by the PBS Co-payment measure and adult health assessment data shown below (Figure 3 and Figure 4), aggregated data show a general increase in uptake with some differences between urban, regional and remote locations and between the Sentinel Sites and the rest of Australia across these locations. However, it is the wide variation between local site data and trends within local sites over time that is more indicative of the extent to which the ICDP is enhancing local service systems and providing benefits to people in the community. Understanding the variation between sites and trends over time is vital to understanding how ongoing and wider implementation of the ICDP can be refined in a way that will maximise population health benefit. Our analysis identified a number of influences that contribute to this variation. The key findings from this analysis are outlined in the following subsection.

Higher utilisation costs of MBS and the PBS Co-payment measure

There was a general steady improvement in the uptake of ICDP-related MBS items, albeit with wide variation between sites in uptake at baseline and in trends over time. There was also variation in uptake of different ICDP-related MBS items, with some items influencing the uptake of others – as outlined below.

The PBS Co-payment measure provided a cost reduction in medications for eligible Aboriginal and Torres Strait Islander people. In order to access this cost reduction, patients needed to be registered for the measure by Health Services that were registered with the PIP Indigenous Health Incentive. In practice, the SSE found that generally Health Services would promote registration for patients for the PBS Co-payment measure along with registration for the PIP Indigenous Health Incentive. Some services encouraged patients to have an adult health assessment in association with these registration processes.

The PBS Co-payment measure was highly valued by community members, and registration for the measure was higher than anticipated. Clinicians were strongly supportive of the measure because of its value in encouraging medication adherence and reducing barriers to attending for care. Nevertheless, there was wide variation in uptake of the PBS Co-payment measure between specific Sentinel Sites and across urban, regional and remote locations, with exceptionally high uptake in a small number of locations (Figure 3). Uptake in remote sites is expected to be lower due to availability of medication through Section 100 supply arrangements. The data suggest that the PBS Co-payment measure is reaching many of those with relatively high need, but not necessarily in terms of those most likely to be affected by financial barriers to medications.

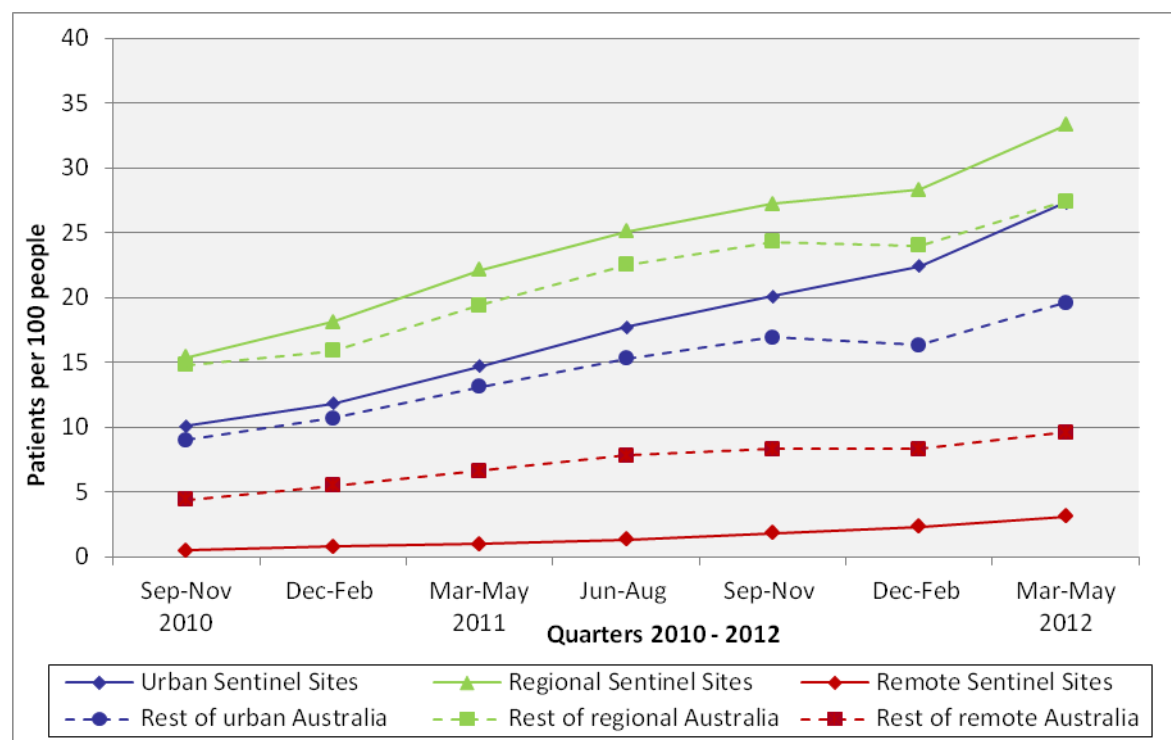


Figure 3: Number of Aboriginal and Torres Strait Islander people accessing the PBS Co-payment measure per 100 Aboriginal and Torres Strait Islander people aged ≥ 15 years for Sentinel Sites and the rest of Australia, by rurality, quarter, September 2010 – May 2012

Uptake of adult health assessments increased almost four-fold over the evaluation period in the Sentinel Sites, and around two-fold in the rest of Australia over the same period. All of the Sentinel Sites in urban and regional areas showed a general trend of increased uptake of adult health assessments over time, but the rate of increase was markedly different in different sites (Figure 4). Remote sites showed lower uptake of adult health assessments overall, with some remote sites showing little or no increase. The greatest increase and highest levels of uptake were in sites where there were relatively more GPs conducting adult health assessments and, to a lesser extent, higher numbers of assessments being completed by each GP.

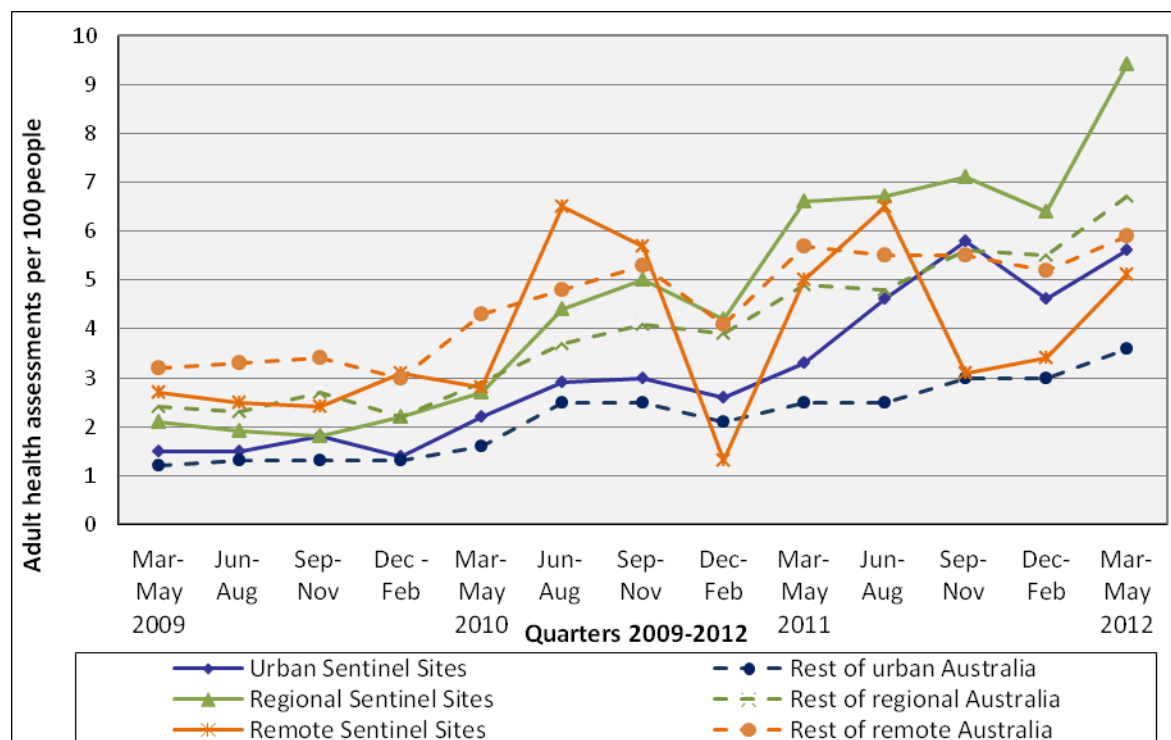


Figure 4: Adult health assessments (MBS items 704, 706, 710 to 1 May 2010 thereafter 715) claimed per 100 Aboriginal and Torres Strait Islander people aged ≥ 15 years in Sentinel Sites and the rest of Australia, by quarter and rurity, March 2009 – May 2012

There was an increase in the number of MBS follow-up items through the ICDP, which provided for increased follow-up care after an adult health assessment. There was relatively low uptake, with some increase towards the end of the period covered by the SSE. The low uptake appeared to be due to limited awareness of these specific item numbers, and limited capacity to take advantage of these items. Uptake of follow-up services by allied health professionals showed a similar level and pattern to that for follow-up services by practice nurses and registered Aboriginal Health Workers.

Coordination of chronic disease management – PIP Indigenous Health Incentive and Care Coordination and Supplementary Services program

This measure included the PIP Indigenous Health Incentive and the CCSS program.

There were high levels of awareness of, and registration of Health Services for, the PIP Indigenous Health Incentive in urban and regional sites, with lower but increasing awareness in remote sites. The number of people registered for the incentive increased over the evaluation period, with earlier registration through AHSs, and more recent increases mainly through General Practices (Figure 5). The intent of the PIP Indigenous Health Incentive is for Health Services to register and provide targeted care to Aboriginal and Torres Strait Islander patients. However, initial registration for the PIP Indigenous Health Incentive was largely driven by interest in accessing the benefits of the PBS Co-payment measure, and to some extent by financial gain.

Delivery of adult health assessments and registration payments for the PIP Indigenous Health Incentive were reported to represent a significant income stream for some services. Health Services needed to use this income stream to improve their services to the benefit of Aboriginal and Torres Strait Islander patients. Some providers noted (correctly) that the registration process itself was of little direct benefit to patients, with the implication that these providers were not aware how the

income stream was being used, or that it was not necessarily being used for service improvement. As noted elsewhere, some Health Services were able to highlight concrete examples of how the income stream was being used to improve services. Further, service providers questioned the benefit of annual re-registration of patients for PIP Indigenous Health Incentive – noting the administrative burden this placed on them, with the implication that this could be a distraction from the main business of providing care.

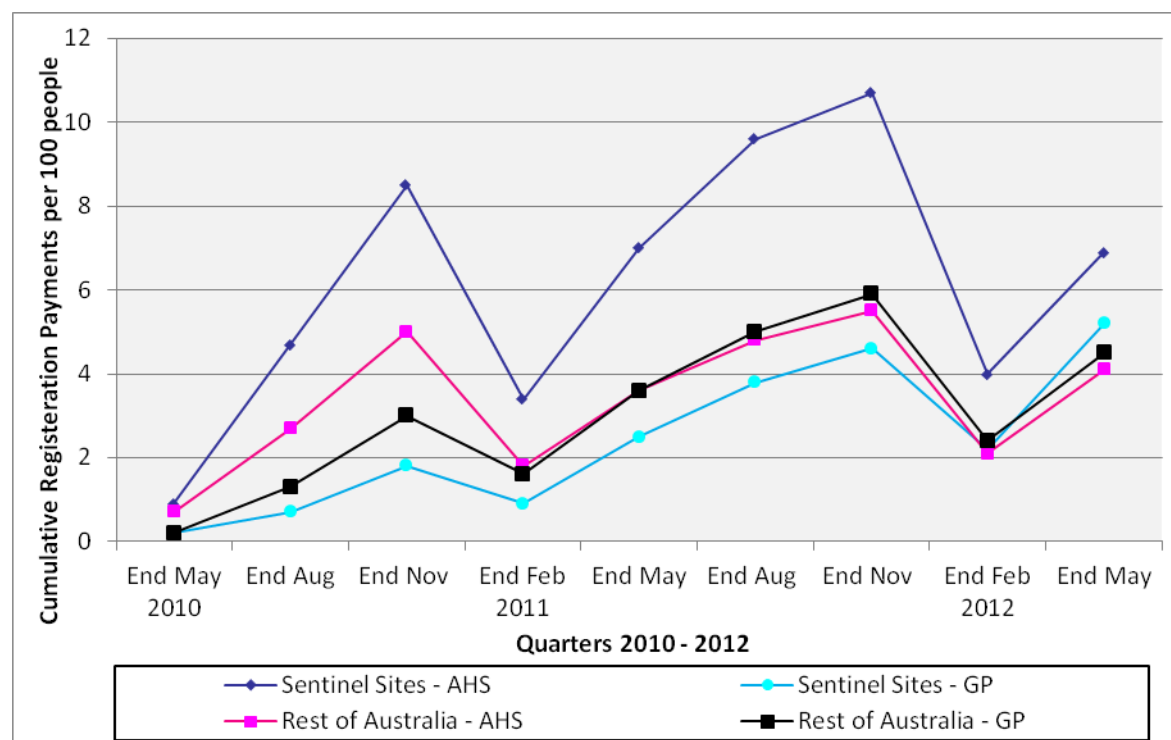


Figure 5: Cumulative number of people registering for the PIP Indigenous Health Incentive per 100 Aboriginal and Torres Strait Islander people aged ≥ 15 years for Sentinel Sites and the rest of Australia, by health sector, and quarter March 2010 – May 2012

Data on the payments made to Health Services for delivery of care to patients who were registered for the PIP Indigenous Health Incentive showed little evidence that the PIP Indigenous Health Incentive was resulting in any improvement in chronic illness care. Almost one-third of registered patients either did not attend any specific Health Service on enough occasions to generate a Tier 2 payment (more than five times in a calendar year) over the course of 2010 and 2011 (Figure 6), or Health Services were not billing for providing care in a way that triggers payments. This raises questions about the specification and application of the eligibility criteria for the incentive and the ability of the current payment system to appropriately reward services for delivery of high quality care.

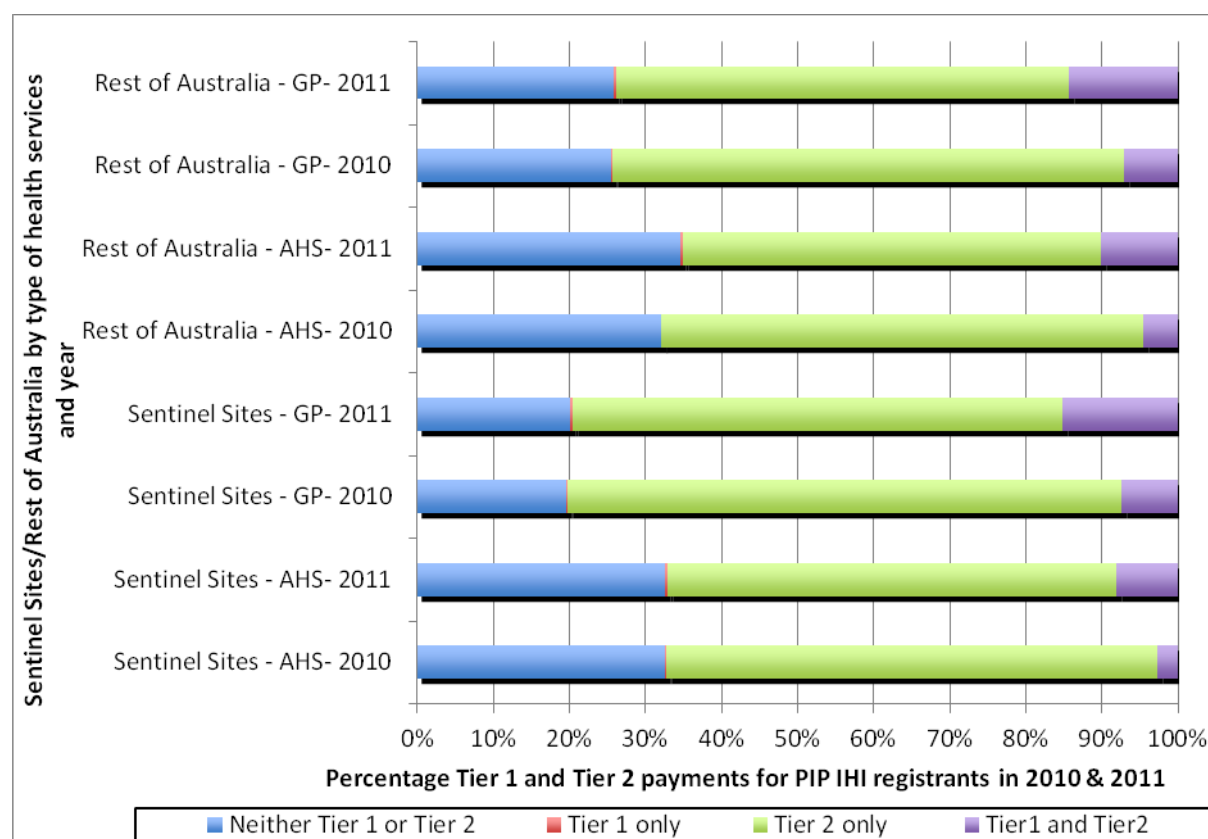


Figure 6: Percentage of Tier 1 and Tier 2 payments for people registered for the PIP Indigenous Health Incentive for Sentinel Sites and the rest of Australia, by sector and year 2010–2011

Very few payments were made to services for delivery of items that are designed to reward a planned and team-based approach to chronic illness care [GP Management Plans (GPMP), Team Care Arrangements (TCA) and reviews], as reflected in Tier 1 payments (Figure 6). However there was an increase in Tier 1 payments between 2010 and 2011, and payments tended to be higher for General Practice than for AHSs.

Re-registrations for the PIP Indigenous Health Incentive in the year following initial registration have been limited (between 30% and 40% overall). This raises further questions about the extent to which the design of this measure can achieve sustained change across both sectors and multiple services in a way that will deliver benefits at a population level.

As cultural awareness training by General Practice staff was a requirement of the PIP Indigenous Health Incentive measure, access and uptake of such training increased over the evaluation period. There was evidence of General Practices becoming more oriented to Aboriginal and Torres Strait Islander patient needs as a result of the cultural awareness training.

There was little evidence that funding derived from the incentive payments was being used by Health Services to develop or strengthen systematic approaches to providing high-quality chronic illness care in either General Practices or AHSs. Interviewees were generally unwilling or unable to say specifically how funding derived from the incentive payments was used. In the few instances where interviewees indicated how the funding was used they referred to building of new facilities, salary top-ups or employment of new staff. To the extent that systematic approaches to improving chronic illness care were identified through the SSE, these developments were not related to

funding derived from incentive payments, but rather to the vision or systems orientation of clinical or management leaders.

Although there are a number of MBS items and incentives that are designed to enhance the quality of chronic illness care, the evaluation has highlighted the limited capability of many primary health care services to access and to make use of these items and incentives in a way that provides real benefits at a population level. There is a need for refinement of the design of the PIP Indigenous Health Incentive, in addition to strengthening of primary health care service systems on a large scale, in order for this type of measure to deliver substantial population health benefits.

The CCSS program was intended to assist patients with complex care needs, and provided for coordination of clinical care and a flexible funding pool to enable access to specialist, allied health and transport services.

While the guidelines emphasised that the CCSS funding could be used in different ways to meet local needs, employment of a nurse as a 'Care Coordinator' based in the DGP or Medicare Local (less commonly in an AHS in the Sentinel Sites) was the usual model. A specified requirement of CCSS funding was that local program arrangements needed to be developed collaboratively. The extent of collaboration varied between sites. Recruitment and establishment of Care Coordinators in their role was slow initially.

While the program was generally positively regarded, challenges included difficulties in establishing appropriate processes for referral and transitioning patients through the program. There was also some concern expressed about equity of access for patients, population coverage, and complementarity with other initiatives to enhance coordination of care, role definition and sustainability of the model. Uptake of supplementary services funding was constrained by the limited reach of the Care Coordinator position, owing to relatively few of these positions, and the program requirement that the funding was for patients enrolled in the CCSS program. There was also a perception in some sites that availability of funding to cover gap payments for specialists who were not prepared to bulk-bill was undermining the USOAP and MSOAP-ICD programs, and had potential to hinder efforts to encourage bulk-billing by specialists.

Chronic disease self-management

The ICDP allocated resources to the development and delivery of a training module in self-management, known as the Flinders Chronic Disease Self-Management training. The Flinders Chronic Disease Self-Management training was delivered in only a few of the Sentinel Sites. In the limited number of Sentinel Sites where the training was delivered, there was a general lack of participation by clinicians. In these sites there was relatively low participation in the training by staff who were in a position to utilise the skills gained through the training, and there were low rates of subsequent accreditation of participants who attended the training. Those who attended training were also not necessarily in positions to influence uptake of the self-management tools and techniques by colleagues. Alternative self-management training models were being used in some sites, and in other sites there was limited interest in self-management approaches or scepticism about the applicability of self-management techniques in the clinical consultation. In some sites the Care Coordinators, predominantly those based in DGPs /Medicare Locals, took up the Flinders Chronic Disease Self Management training with enthusiasm and incorporated self-management principles into aspects of their work.

Specialist and multi-disciplinary team care

The ICDP made available funding to reimburse specialists and allied health professionals for time spent at AHSs through the USOAP and MSOAP-ICD respectively.

The evaluation found that access to specialists through the USOAP varied between eligible Sentinel Sites, influenced by funding allocation processes, availability of services through other programs such as CCSS and availability of specialists who were willing to bulk-bill. AHSs hosted the program in all of the participating sites. Recruitment and engagement of specialists was largely complete at the time of the final evaluation visits with some retention difficulties becoming apparent. This was commonly related to low numbers of referrals and patient attendance for appointments. Where referrals were being made, and patients were attending, the USOAP services appeared to be working well for primary health care services, specialists and for those patients who attended the services. Increased accessibility and confidence in relation to accessing specialist care was noted in respect of some patients who attended AHS-hosted USOAP services. There was a trend towards use of general physicians over super-specialists owing to the greater scope of services they could deliver.

Most eligible sites were accessing program funding for the MSOAP-ICD by the final evaluation cycle, although implementation was at a fairly early stage. AHSs hosted the MSOAP-ICD in the majority of participating sites, with relatively few examples within DGPs. Effectiveness of planning processes in ensuring local needs were addressed was variable, partly owing to limited supply of relevant specialists. Some recruitment strategies put in place by State-based fundholders were perceived by AHS interviewees to be overly driven by the availability and interest of visiting health professionals, and were not necessarily responsive to local needs and priorities for service delivery. The MSOAP-ICD measure was seen to have resulted in improved patient access to specialists in some sites. However, efficiency was questioned, with low numbers of referrals and low patient attendance for many services. Patient attendance at specialist appointments was influenced by capacity of the host organisation to coordinate visits and support patient attendance (including recall and reminder systems, clinic management, and transport arrangements).

3.2.3. Contextual factors influencing success

The measures included in this priority area were diverse. They included provision for financial incentives available to Health Services for registering Aboriginal and Torres Strait Islander patients, and providing target levels of care; a removal of cost barriers to medication through the PBS Co-payment measure; and a range of workforce-related measures, including provision for a care coordination role in some areas, development of chronic disease self-management training and funding to encourage specialists and allied health professionals to provide outreach services. This section briefly summarises the main contextual influences on the effective implementation of measures in this area.

Across all of these measures, success was more likely where staff in the participating organisations had a clear vision of the intent of the measure, where services had the capability to adapt the measure to fit with their local needs, and where there was some flexibility in the application of funding criteria and in the program design. This was particularly evident in relation to specialist and multi-disciplinary care. For example, in some sites organisations extended and expanded the existing contracts of specialists and allied health professionals through the MSOAP-ICD and USOAP funding, whereas in other sites the interpretation and application of the guidelines constrained the use of funding to meet local needs. These contextual influences on successful implementation were also evident in relation to a number of the other measures. For example, adult health assessments were regarded by some organisations as not contributing to quality care, whereas others worked to

implement adult health assessments in a way that fitted with evolving service delivery systems, and in a way that was intended to provide appropriate benefit to patients.

Effective champions of the ICDP with a ‘big picture’ or a whole-of-site perspective, who worked across different Health Services and sectors to promote uptake of the ICDP as a whole, was an important enabler for the success of the PIP Indigenous Health Incentive, and other measures in this priority area. The work of these champions, along with other enablers, allowed the measures to be adapted to suit local needs, making success more likely.

The PBS Co-payment measure was regarded as a key element of success of the ICDP, owing to its clear direct benefit to patients. In general, for all of the measures, where there was a vision for how the measures could be used to provide a real benefit to patients, they were more likely to be taken up and implemented effectively. Networking and sharing of information between Health Services, between members of the ICDP workforce and across sites made it more likely for the measures to be taken up and used to overcome barriers to care.

Past experience in similar programs or initiatives was also an important enabler across a number of these measures. Conversely, where this was lacking it was more challenging for the measures to be implemented effectively.

3.2.4. Implications for refinement and strengthening

Particular considerations for strengthening the effectiveness of measures in this priority area include:

- The PBS Co-payment measure has been an important area of success in the ICDP as it provides tangible benefit to patients. The key opportunities for strengthening implementation of this measure include improving understanding and engagement of specialists, pharmacists, hospital staff, and service providers in remote locations in supporting eligible patients to gain consistent access to these benefits. The definition and application of eligibility for the PBS Co-payment measure may also require revision in a way that ensures the measure provides benefit to those patients and families most in need.
- There needs to be a greater focus on ensuring that the potential health benefits of adult health assessments are realised. Refinements in design should aim to enhance community and population access to health assessments, ensure fit with the variety of primary health care service delivery systems and with health professional perspectives of high-quality primary health care, and significantly to ensure appropriate follow-up care. Delivery of adult health assessments does not necessarily translate to high-quality chronic illness care in terms of dimensions of quality such as access, acceptability, continuity, coordination. In order to enhance quality of care, the approach to delivery and follow-up of adult health assessments needs to be specifically designed to enhance quality of care in the local service setting.
- The design of the PIP Indigenous Health Incentive measure needs some revision if investment is to result in improved care delivery and value for money. Consideration should be given to linking the registration process more directly to care delivery processes and to health benefits to patients and populations. There is also clearly a need to find ways to support the development of system capability to deliver high-quality chronic illness care, specifically including those services most in need of support for system development. While strengthening the cultural competence of all Health Services will remain important, efforts should be focused on those General Practices that can demonstrate an interest and potential to provide high-quality care to Aboriginal and Torres Strait Islander patients and populations.

- There is a need for better integration of Care Coordinators into clinical teams, and improving linkages and complementarity between the CCSS program and other aspects of the ICDP. The intended target group for the CCSS program should be more clearly defined and communicated, taking into account issues of coverage and equity. Reporting frameworks need to be refined to reflect the range of important care coordination activities, linkages and expected outcomes, with development of systems for ongoing evaluation and improvement.
- Strengthening processes for referral to specialist outreach programs (especially from General Practice) is needed, particularly for the effective implementation of USOAP. For both MSOAP-ICD and USOAP, better orientation of specialists to the organisational culture of AHSs and effective ways of working in these organisations should help to improve retention and effectiveness of these services, as should improving access to specialised equipment and follow-up care and procedures. There is a clear need for better systems for ongoing evaluation and improvement of access to specialist and allied health professionals and to ongoing care.
- Development of effective approaches to enhance capacity of host organisations to coordinate visits and development and implementation of strategies to enable patients to attend for specialist care in regional or urban centres are also required.

3.3. Workforce expansion and support

Measures under this priority area aimed to expand the primary care workforce in both AHSs and General Practice, and to encourage uptake of a range of health services by Aboriginal and Torres Strait Islander people.¹⁹

3.3.1. Key findings in relation to the program logic

Health care providers demonstrate increased knowledge and improved practice in relation to the prevention, early identification and management of chronic disease for Aboriginal and Torres Strait Islander people

There were several examples of improved practice in chronic disease prevention, detection and management in Sentinel Sites that may be attributed to the ICDP. These included increased recognition by some providers of the need to take a population health approach; efforts to improve systems for identification of Aboriginal and Torres Strait Islander patients; improved practice in relation to timely review of GPMPs and TCAs through dedicated resources provided through ICDP incentives payments; and improved cultural safety in many General Practices.

The ICDP workforce is retained and developed within funded services

Retention of ICDP workforce has generally been good, with some difficulties with retaining staff experienced in relatively few sites and organisations. Recruitment to new positions was generally not impacting heavily on existing positions in the health sector. Development of the ICDP workforce varied, with some workers, particularly those in well-resourced and well-networked service environments, appearing to benefit substantially from training resources available, while others appearing to have difficulty identifying and accessing training that was suited to their roles or existing skill levels.

3.3.2. Variation in state of implementation

Expanding outreach and service capacity of Aboriginal Health Services and engaging Divisions of General Practice to improve access

Outreach Workers were established in both AHSs and DGPs, with greater challenges in recruitment and retention in remote than in regional and urban sites.

Outreach Workers in AHSs filled a range of roles depending on their skills and the need of the AHS. AHSs were generally already engaged in efforts to improve their accessibility to communities through various programs. Outreach Workers strengthened these efforts and improved accessibility to communities.

Across the Sentinel Sites, DGPs /Medicare Locals were generally successful in recruiting and, to a large extent, retaining Indigenous Health Project Officers and Outreach Workers. Outreach Workers in DGPs /Medicare Locals generally had higher qualifications and experience than the entry level specified in the guidelines. Outreach Workers and Indigenous Health Project Officers based in the DGPs/Medicare Locals appeared to be improving access to primary care services through assisting Aboriginal and Torres Strait Islander patients to navigate the health system, arranging transport, and providing a cultural brokerage role between community members and health professionals. They also appeared to be contributing to improving identification of Aboriginal and Torres Strait Islander patients through encouraging General Practices to make their services more welcoming of them, and through encouraging community members to self-identify at Health Services.

ICDP funded practice managers in AHSs appeared to fill one of two types of roles: 1) a fairly general role in strengthening operational aspects of the AHS; or 2) a role more focused on chronic illness care. In general, if involved in improving quality of chronic illness care, the practice manager had been appointed into an already functioning system, rather than setting up new system. There were a limited number of positions for ICDP funded practice managers, who were based in AHSs.

Workforce support, education and training

Staggered recruitment, diversity in skill level, different needs in different work environments and dispersed location of Outreach Workers presented significant challenges to providing orientation to Outreach Workers, especially remote-based Outreach Workers. Delays in roll out of orientation packages led to opportunities for transfer of learning from more experienced Outreach Workers to new workers. There was generally low uptake of funding for individualised training across the sites. Lack of organisational capability to define and source relevant training, and uncertainty over renewal of contracts, were important barriers to uptake of training.

Uptake of the ICDP funded GP Registrar positions in Sentinel Sites was low. There were more posts available than AHSs with capacity to accommodate and provide appropriate supervision, and GP Registrars to fill them. There was little evidence from the Sentinel Sites that the ICDP funded scholarships for professional development of nurses in AHSs and scholarships for nurses undertaking a clinical placement in an AHS had created opportunities not previously available to support training for nurses. The uptake of clinical placements was low, at least partly owing to lack of capacity of AHSs to host and to house students.

3.3.3. Contextual factors influencing success

The following factors were identified in the Sentinel Sites as important influences on the implementation of the various measures under this priority area.

Across all of the measures in this area that involved new workers the absorptive capacity of the employing organisation was an important influence on success. The new ICDP positions needed to be employed in organisations with a clear understanding of the new role, how to operationalise it and how it supported the broader strategy of the Health Service to improve chronic illness care.

Related to this was the state of systems and data available in the Health Services to support the new role. For example, systems and data that supported population health planning, such as being able to generate chronic disease lists regularly and have these used effectively across the scope of services, helped these roles to work effectively. In most cases, these clinical information systems were not well utilised by staff and this limited the effectiveness of the positions in relation to achieving the intent of the ICDP.

It was important for the new workforce to be able to connect both with community, and with the organisations within which they worked. This bridging role helped bring about change within organisations, for example, towards greater cultural sensitivity among specialists and GPs. Ability to provide information to GPs about the whole of the ICDP was also noted as a key aspect of work, particularly of the Indigenous Health Project Officers.

The development of Aboriginal and Torres Strait Islander health teams within DGPs /Medicare Locals helped to counter feelings of isolation and disempowerment, and helped build the confidence and ability of ICDP workers in these organisations to be change agents within the organisation. Empowered and effective workers were able to adapt to different requirements, trialling strategies to engage GPs, for example, and abandoning these strategies if they did not work.

3.3.4. Implications for refinement and strengthening

Specific issues identified that need to be considered for strengthening the effectiveness of measures in this priority area are:

- Recognising that development of effective approaches to providing supervision, support, training and mentorship for a workforce with widely differing needs and working in diverse settings is challenging, different models may need to be developed and trialled. A 'one-size fits all' approach is unlikely to meet the needs of those who most require support.
- Of particular relevance to Medicare Locals is a need to strengthen leadership, management and resources to support Aboriginal and Torres Strait Islander health teams, and to integrate these teams into the core business of Medicare Locals. Ongoing effort will be required to foster collaboration between the General Practice and AHS sectors.
- Enhancing training of GP Registrars and nurses includes the need to increase feasibility and desirability of GP Registrar posts in AHSs. This includes the development of alternative high-quality models of supervision and support to overcome the current shortage of qualified supervisors working in AHSs, high-quality infrastructure to accommodate trainees, and support for AHSs to coordinate trainee positions.
- There is a need to focus ICDP-related training, scholarships and placements on strengthening core competencies for chronic illness care, and to develop systems for ongoing evaluation and refinement to ensure these initiatives are meeting priority needs.

4. The Indigenous Chronic Disease Package as a whole

4.1. Introduction

The Indigenous Chronic Disease Package (ICDP) is a complex set of measures being implemented in a complex service environment. The evaluation showed that there is wide variation in uptake and implementation of the ICDP, and that this variation cannot be adequately explained by rurality or other relatively simple or easily measurable site characteristics (such as size of population and number of Health Services). We have used a realist evaluation approach and drawn on the principles of systems thinking to develop an understanding of this complexity.

Methods used in realist evaluation assess ‘what works for whom in what contexts, and how’.²⁰ Our realist evaluation approach has built on the program logics that were presented in the National Evaluation Framework to provide an understanding of how the ICDP works in a complex environment and across a diverse range of locations. This realist analysis identified conditions or ‘mechanisms’ that appear to support effective implementation of the ICDP in the Sentinel Sites, and the enabling and constraining influences.

Systems thinking is an approach to problem solving that views ‘problems’ as part of a wider dynamic system. It demands understanding of links, relationships and interactions between different parts of the system. The 2009 World Health Organization report on health system strengthening describes the health system as made up of six main ‘building blocks’: service delivery, health workforce, health information, medical technologies, health financing, and leadership and governance. It is the way each building block affects and influences the others, and is influenced by them, that makes them into a system.

Systems thinking recognises that ‘every intervention, from the simplest to the most complex, has an effect on the overall system, and the overall system has an effect on every intervention.’²¹

The principles of systems thinking are helpful for understanding what happens when an intervention is introduced into a complex system – as is the case for the ICDP. Systems thinking offers the potential for early identification of intended and unintended consequences of activities or programs, both positive and negative, and encourages adaptation of activities or programs to maximise emerging benefits and minimise emerging harms.²²

From an evaluation perspective, attributing any observed change to specific interventions or influences within a complex intervention and in the context of a complex system is difficult, with inherent and unavoidable uncertainties. Use of systems thinking principles to analyse data about ICDP implementation acknowledges this challenge.

4.1.1. Key findings in relation to the program logic

Before going on to discuss the evaluation findings in relation to enablers and constraints for effective implementation for the whole of the ICDP, this section presents the expected early results for years 2–4 for cross-cutting outputs for the whole of the ICDP as specified in the program logic contained in the National Evaluation Framework (presented below as headings in bold text), followed by a brief discussion of relevant findings from the Sentinel Sites Evaluation (SSE).

The workforce required to implement the ICDP is recruited, oriented and trained

Recruitment generally took longer than expected, primarily due to time taken to establish guidelines and funding contracts with host organisations for the new positions, (justifiable) plans in some sites to recruit to higher level positions (e.g., Regional Tobacco Coordinators and Indigenous Health Project Officers) before recruiting to other positions, and time taken to find suitable candidates for some positions in some sites. Recruitment has subsequently generally progressed well.

The timing and staggered recruitment, the diverse range of skill levels among people recruited to ICDP positions, and the different needs of workers in various sites and in different host organisations, presented significant challenges for orientation and training. There appeared to be a lack of emphasis in the orientation and training on recognised competencies for chronic illness care, and lack of capacity in many host organisations to design and source training that would build the specific competencies relevant to these new positions. The general design and guidelines for orientation and training were not well suited to the needs of some types of workers in some sites, particularly those in remote locations.

ICDP measures are implemented in accordance with agreed guidelines and timelines

Implementation of many measures was slower than expected, for reasons similar to those outlined above, in addition to time taken to establish working relationships between the various organisations with key roles in implementation of the ICDP. With progress in recruitment to new positions, with establishment and refinement of guidelines, development of structures and processes suited to local conditions, and establishment of working relationships between various organisations, there has been recent progress with implementation of all of the ICDP measures, albeit with some variation in progress between different measures and between different locations.

Monitoring and reporting requirements are met

Collecting data, monitoring and reporting progress on the national implementation of a complex package of varied measures is challenging at all levels, particularly in relation to assessing the quality of progress and services, and the emphasis in this establishment phase has been on reporting service data. To date there has been limited attention to monitoring and reporting on quality of services. As a result, for all measures there is limited or no evidence of effective support or use of systems that enhance both quality of services and quality of reporting, with the focus being almost exclusively on meeting contractual reporting requirements.

There is evidence from the SSE that the focus on meeting contractual reporting requirements at times results in managers providing reports that demonstrate compliance with contractual requirements that do not necessarily provide a meaningful reflection of progress with implementation or quality of services. There is also evidence of limited focus and capability at various levels of the system to design, manage, interpret and use data for the purpose of improving system performance.

There are significant limitations in the extent to which administrative data can be used to assess changes in access or quality of care, and there is good potential to improve the quality of reporting in the next stage of program implementation.

Internal and external stakeholders, Sentinel Sites and service-providers consider the implementation of the ICDP to be addressing identified needs and enhancing the existing service system

There were generally increasingly positive perceptions from key stakeholders in the Sentinel Sites regarding the progress with implementation of all measures and the extent to which measures were addressing identified needs, albeit with some variability in perceptions regarding different measures and in different locations. The general perception was that elements of the package were addressing identified needs and enhancing the service delivery system, but it was clear that services with the greatest capacity, which were generally those that were already performing at relatively high levels, were gaining greatest benefit, and those services with relatively limited capacity (which constituted a large proportion of services) and the populations that were served by these services, were gaining relatively limited benefit from many of the ICDP measures. To this extent, the ICDP in general does not yet appear to be delivering an appropriate level of benefit to services and populations that are most in need of support.

4.2. Effective implementation of the whole of ICDP

Local context (the site environment) greatly affected implementation of the ICDP as a whole. Contexts varied widely between sites and services.

To reflect the aim of the ICDP overall, we have defined implementation ‘success’ as: ‘a workforce with skills and capacity, and systems and services with capacity to improve access to, and delivery of, high-quality services and programs for prevention and management of chronic disease.’

This definition of success is consistent with the original overall aim of the ICDP, but with additional reference to capacity and to systems as these have been identified through the evaluation as vital to achieving long-term population health impact.

The realist analysis identified seven main conditions or ‘mechanisms’ which appear to support the ICDP to operate effectively in sites and to achieve ‘success’. These are outlined below, and shown in Figure 7. The analysis also identified factors that appeared to enable or constrain effective operation of these mechanisms, reflecting ‘what works for whom under what circumstances’. These enablers and constraints describe features such as organisational or broader system context, program stakeholders and their actions, staffing, geographical and historical context and so on.

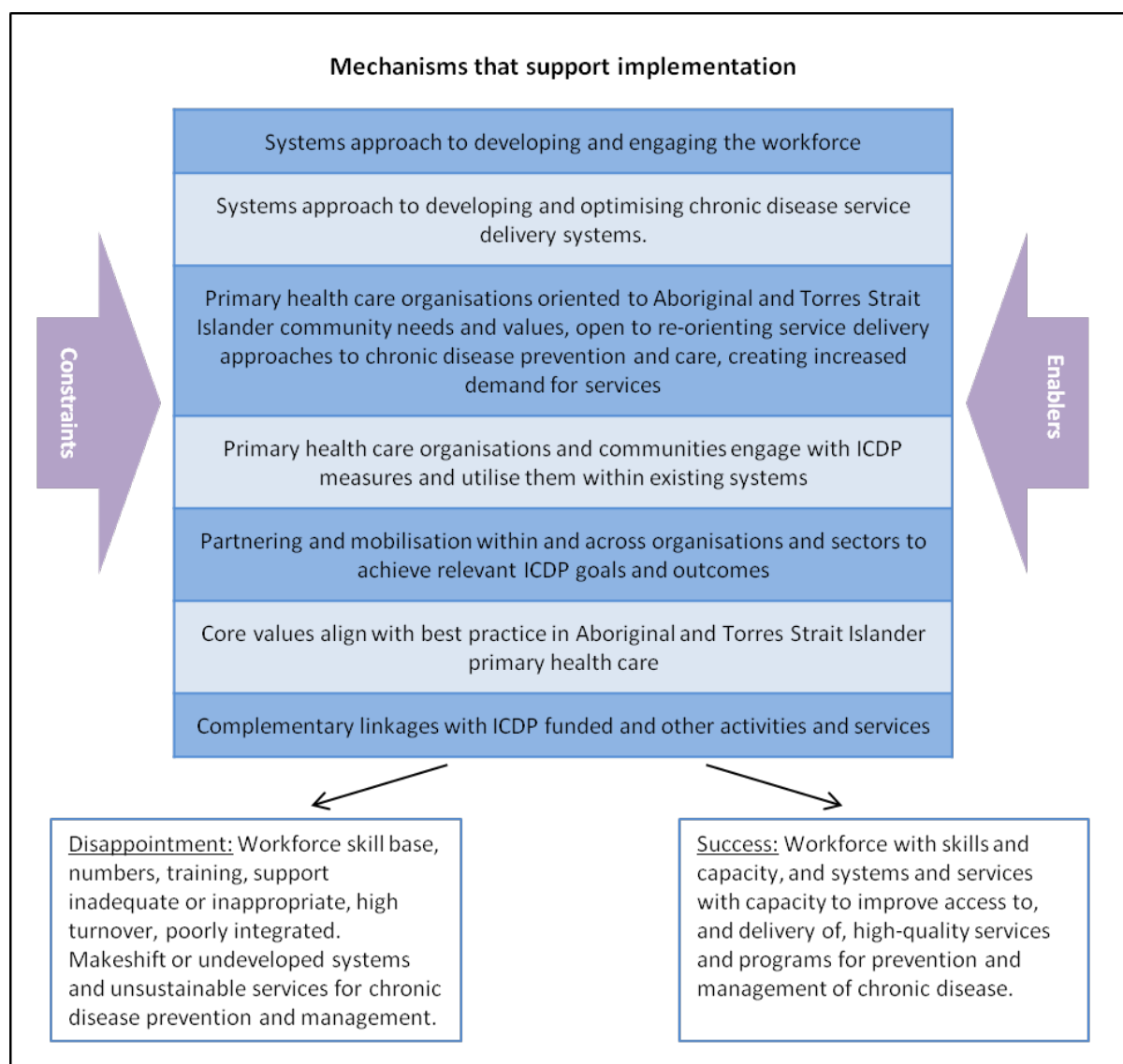


Figure 7: Mechanisms through which effective implementation of the Indigenous Chronic Disease Package is achieved[‡]

Our summary of the enablers and constraints identified through the SSE reflects several general findings:

- Specific local contexts were more significant influences on ICDP implementation than geographic location (urban, regional or remote). Geographic location was, however, associated with some particular contexts. For example, common features of remote sites included poor infrastructure, vast distances, relatively few service providers and populations made up predominantly of Aboriginal and Torres Strait Islander people. Common features of urban sites included multiple service providers, relatively complex service environments, and Aboriginal and Torres Strait Islander people making up a relatively small proportion of the population and being relatively dispersed among the general population.

[‡] The term 'disappointment' in the figure is used to denote a partial success, rather than an emotion, or a program failure. It is consistent with prior use in some presentations of realist evaluation (See for example "How Do You Modernize a Health Service? A Realist Evaluation of Whole-Scale Transformation in London *Milbank Q.* 2009 June;87(2):391-416.").

- The nature of the constraints and enablers was diverse, and included structural/systemic, administrative, relationship, physical, individual/behavioural, socio-cultural and economic dimensions of the site environment. Particular dimensions were present in individual sites and circumstances.

Each of the mechanisms and the factors identified in the Sentinel Sites that appeared to constrain or enable them, are discussed below.

4.2.1. Systems approach to developing and engaging the workforce

The SSE found that a systems approach to developing and engaging the health workforce needed to be operating for the ICDP to work effectively in sites. Taking a systems approach meant that workforce development and engagement were considered to be part of a whole-of-service system response to providing improved chronic disease services to Aboriginal and Torres Strait Islander people. A systems approach to developing and engaging the health workforce in the ICDP recognises complexity and local variation, is informed by feedback, and uses adaptive and learning processes to use available resources effectively in a way that is suited to local context. Organisations at different levels, including the State Based Organisations, Divisions of General Practices, Medicare Locals, National Aboriginal Community Controlled Health Organisation, AHSs and General Practices, differed in the extent to which they adopted this kind of approach.

It is important to note that in general in the Sentinel Sites, systems approaches to developing and engaging the workforce in the ICDP were not well developed. This suggests that significant potential exists for enhancing effectiveness of the ICDP through strengthening this mechanism.

At the site level, the use of a systems approach was relevant to: planning and integrating the varied roles and role functions; the use of ICDP guidelines and resources; the approach to ICDP orientation and training of new workers; and integration of training and professional development of existing workers with other relevant chronic disease activities, and within broader primary health care systems.

Factors enabling development of a systems approach to workforce development and engagement

A systems approach to developing and engaging the workforce was more likely where host organisations were stable and functioning well, and where there was already capacity and leadership for systems thinking. Organisations also needed resources in place to support new and existing staff to develop the knowledge and competencies to take on the tasks involved in implementing ICDP measures.

Although in many Sentinel Sites, interviewees could identify with the overall vision of ‘closing the gap’, they were generally not able to articulate how this was to be achieved – or how the ICDP practically was able to support progress. Health Services needed to be able to articulate the steps along the way to achieve this vision, and this understanding needed to be shared and ‘owned’ at the different levels of the health system. Leadership capacity to articulate the ICDP vision at all levels – including national, jurisdictional and local – was an important underlying determinant of successful implementation. The extent to which influential leaders at all levels of the system had a good understanding of the ICDP as a whole, and of what is required for good chronic illness care varied widely between different organisations and in different sites. In some sites, clear articulation and communication of the ICDP vision appeared to be hindered by high turnover of staff and managers.

Leadership needed to be committed to workforce development in order for staff to have access to training, practical support, mentoring and adequate supervision. This included leadership commitment at middle levels of the organisation or system. Where this occurred, we generally found that a culture of support for learning, and systems to help staff access training and development, had been in place prior to the ICDP.

A high level of competency before being involved in ICDP work was an important factor. This was evident where professionally experienced workers came into ICDP funded positions and were able to take initiative to develop systems for engaging community and health service providers. This finding highlighted the value of appointing experienced and well-connected workers into these roles. For example, where Indigenous Health Project Officers were able to advocate 'up' and 'down' to help prioritise Aboriginal and Torres Strait Islander health issues within their host organisations, this supported systems approaches to workforce development through the ICDP.

A great deal of information about the ICDP was widely available to services. Systems approaches to workforce development were more likely where information sharing and practical support occurred across multiple levels of the system and organisations – and was tailored to local context. This meant that service providers and individual workers had the right information to do their ICDP-related work and to understand how the work and activities fitted into the wider package of measures, and into their operational systems. In several of the sites, experienced managers and practice support organisations developed resources to support ICDP implementation that suited the needs of specific professional groups with whom they needed to engage and to suit the particular systems and processes that were used in their organisations. These kinds of resources were particularly important for those services that relied on locum staff and those where services were provided by visiting clinicians, including specialists and General Practitioners (GPs).

Local level adaptation of some of the measures was necessary within services and practices in order to implement the measures in local contexts. An important enabler was flexibility in the package and measure guidelines. Flexibility enabled 'systems thinking' to integrate workforce development activities and to integrate ICDP funded positions into existing staff and organisation structures and work planning. In some cases this involved modification of position descriptions and staffing configurations.

Factors constraining a systems approach to workforce development and engagement

Constraints to a systems approach to developing and engaging the workforce in the ICDP were largely influenced by structural and/or system-related factors in sites. A key requirement for a systems approach to workforce development and engagement is a proactive, rather than reactive approach to service delivery. Where Health Services were focused on acute care needs, and had a limited pool of workers who were skilled in chronic disease care, this was a key constraint on their taking a systems approach to developing and engaging the workforce in the ICDP. Other constraining factors included limitations in policies and procedures – for example, there was little or no evidence that organisations were being guided by overarching training program guidelines that might help them align ICDP workforce development activities with internationally endorsed core competencies for chronic illness care (patient centred care, partnering, quality improvement, information and communication technology, public health perspective).²³ In some sites, host organisations lacked the capacity to identify and organise appropriate training for their ICDP workforce.

The engagement of the workforce in the ICDP was also constrained by information management and technology system constraints. This is reflected in the extent to which different type of health

professionals are able to – and do effectively – use these systems for decision support, and to support coordinated delivery of care and effective follow-up.

4.2.2. Systems approach to developing and optimising chronic disease service delivery systems

A systems approach to developing and making the best use of chronic disease service delivery systems was necessary for the ICDP to operate well in sites. This involved coordination between workers, services and measures so that patients could get the most possible benefit. A systems approach to developing chronic disease systems pays attention to how the different building blocks of a chronic disease system (including information, financing, service delivery, human resources, medicines and technologies, and governance) fit together and impact on one another. A systems approach was evident where sites implemented the ICDP in a way that recognised how the different measures might flow through, connect, react with, and change ‘business as usual’. This kind of approach needed to be taken *at organisation and site levels*, so that services and staff could make the improvements needed to integrate services and improve community and patient access and experiences.

Factors enabling development and optimisation of chronic disease service delivery systems

In general, well-organised Health Services, which generally were able to identify, access and use resources effectively, were also more likely to be able to make effective use of the resources available through the ICDP, and use a systems approach to further develop chronic disease service delivery systems. Positive influences on the ability of Health Services to implement the ICDP included stable management and governance; leadership and management experience; and commitment to developing systems for service improvement provided support. Where these influences were stronger, strategic approaches to resourcing, planning and delivering chronic disease services were more likely. This included Health Services developing more systematic approaches to referrals, information sharing and service coordination.

Where organisations had working partnerships and patient referral pathways in place prior to the ICDP, systems approaches to developing chronic disease service delivery systems appeared to be more likely. In practice, these organisations already were used to working in teams, and there were some collaborative and professional links established between workers in different organisations within a site.

Health Services and support organisations that already targeted Aboriginal and Torres Strait Islander patients, and had dedicated resources and arrangements in place for integrated chronic disease care before the ICDP, were generally more likely to take a systems approach to developing and implementing chronic disease delivery systems. This included both AHSs and some DGPs/Medicare Locals who had experience with Aboriginal health programs.

Other enablers were clinical information systems that functioned to support quality chronic illness care, and staff who had the skills to use these information systems effectively. Good utilisation of information systems for population health monitoring and evaluation was a further enabler to a systems approach; this required information systems to be set up to support population health monitoring.

Factors constraining development of chronic disease service delivery systems

It was evident in the Sentinel Sites, that many Health Services do not have the key elements needed to provide continuity of care – for example, good clinical information systems that allow for recall and reminder; patient counselling and adherence support; linkages between clinical, laboratory and pharmacy services and secondary and tertiary care; and capacity for outreach to communities for tracking and supportive services. Further, shortages or inequitable distribution of health workers make it difficult to develop the multi-disciplinary teams needed to provide comprehensive care that is responsive to patient needs. This was particularly the case in some of the remote sites.

A further constraint was that many members of the workforce did not recognise the usefulness of data for systems improvement. Together these constraints helped to explain why several organisations in the Sentinel Sites had not taken a systems approach to using the resources available through the ICDP to develop their chronic disease service delivery systems.

4.2.3. Primary health care organisations oriented to community needs and values and to chronic illness care

One of the ways in which the ICDP achieved its aims was through primary health care organisations becoming oriented to Aboriginal and Torres Strait Islander community needs and values and to chronic illness care. Orientation to community needs and values was demonstrated for example, by Health Services adapting their activities and approaches to accommodate cultural values and needs. Re-orientation of general and specialist practices' business models in order to increase access for Aboriginal and Torres Strait Islander patients were other examples, as demonstrated through strategies such as bulk-billing for consultations, and use of Outreach Workers to enhance cultural safety. For some Health Services, there was greater acknowledgement of the validity of Aboriginal and Torres Strait Islander-specific programs, and increased priority given to setting up the links necessary to improve care for Aboriginal and Torres Strait Islander communities.

Factors enabling orientation of primary health care organisations to community needs and values and to chronic illness care

In general, orientation to Aboriginal and Torres Strait Islander community needs and openness to re-orienting service delivery approaches were more evident in contexts where services were set up to specifically meet community needs (including representative governance arrangements) and/or where health professionals and managers had experience working in the Aboriginal and Torres Strait Islander services sector. At least some AHSs appeared to have effective structures for community participation in decision-making about how the ICDP was implemented. This was evident, for example, in one remote site where the all-Aboriginal and Torres Strait Islander governing Board was directly involved in the selection of ICDP funded staff. The Board also determined the targeting and nature of ICDP funded health promotion activities in accordance with regional priorities.

In another AHS, the regional council determined how position descriptions would be modified and located to optimise reach and benefit to the community. In the General Practice sector, DGPs/Medicare Locals in the Sentinel Sites were fairly diverse in terms of how they obtained input from Aboriginal and Torres Strait Islander communities. The ICDP positions in DGPs/Medicare Locals were particularly effective in obtaining this input when they were held by experienced professionals known and respected in the community. These workers were also most effective in influencing change where they were integrated within the broader workplace and accorded authority and respect.

Where Health Services had good knowledge of the local service delivery context, they were able to identify and refer patients to those providers (specialists and allied health professionals) who were providing culturally appropriate services, or were open to doing so. Orientation to community needs and values was more likely where programs brought providers together (such as care coordination programs). These arrangements meant that organisations were more receptive to the links needed to implement the ICDP.

Health Service staff participated in many different forms of cultural awareness training as part of the ICDP. Training appeared to be most effective in helping Health Services to reorientate to Aboriginal and Torres Strait Islander community needs where it was interactive and face-to-face – in contrast to online or academic-type training – and where there was a strong focus on the relevance of cultural competence to clinical needs or to improving clinical care. For example, some DGPs conducted cultural awareness sessions in pharmacies, which included role play to highlight culturally appropriate and inappropriate interactions. The ICDP workforce's involvement in the delivery of cultural awareness training had not been envisaged in the program design but, where this emerged, it provided an entry point for ongoing engagement with Health Services.

General Practices and pharmacies that were adopting ICDP measures in culturally appropriate ways became known through local community networks. Community informants talked about these providers having appropriate communication styles and an understanding of people's financial and transport issues, and having non-racist attitudes.

Factors constraining orientation of primary health care organisations to community needs and values and to chronic illness care

Orientation to Aboriginal and Torres Strait Islander community needs was less likely where it was perceived that there was limited demand for services by Aboriginal and Torres Strait Islander people and limited motivation to change service approaches for a particular small population group. For many General Practices, limited reach into target populations (suggested by low absolute and relative numbers of Aboriginal and Torres Strait Islander patients) did not warrant the work and financial investment needed to re-orient practice systems and approaches. Orientation to Aboriginal and Torres Strait Islander community needs was constrained when providers did not understand, or did not accept, the relevance of Aboriginal and Torres Strait Islander history and identity to health outcomes.

There were also constraints related to staff shortages and recruitment challenges. The ICDP workforce did not always have the competencies needed to fulfil ICDP roles or work effectively towards program aims. For example, an ICDP funded worker in a remote site lacked English literacy and cross cultural competence to undertake orientation and other recommended training, negotiate travel requirements or connect with ICDP workers across other sites. Some workers lacked the necessary historical social connections with community despite good skills sets relevant to community engagement. Conversely, some ICDP funded workers were technically 'over-qualified' for their roles, for example, several workers in 'entry level' Regional Tackling Smoking and Healthy Lifestyle positions had specialist allied health professional and/or post graduate qualifications. This sometimes detracted from their ability to focus on the core responsibilities of the position.

The skills and competencies of people within the organisations, including team members, direct supervisors and managers, was also a critical aspect constraining orientation of Health Services to community needs and to chronic illness care. Some organisations were well equipped to support ICDP workers whereas others were not. Practice managers and Aboriginal Health Workers in AHSs were expected to support, mentor and supervise Outreach Workers and this could not always be

achieved. Similarly DGPs/Medicare Locals were not always able to manage and support an Aboriginal and Torres Strait Islander workforce.

4.2.4. Primary health care organisations engage with ICDP measures and use them within existing systems

Effective operation of the ICDP in sites required primary health care organisations to engage with ICDP measures and use them within existing operational systems, so they became part of a holistic approach to chronic disease prevention and care, rather than ‘add-on’. ‘Engagement’ implies proactive involvement and taking initiative to support the uptake and use of measures. In the context of the SSE, engaging with ICDP measures involved making the necessary adjustment to procedures, staff orientation and training to use ICDP measures within, and to augment, existing programs and operational systems. This mechanism is linked to the mechanisms that focus on systems approaches.

Factors enabling engagement of primary health care organisations with ICDP measures and utilisation within existing systems

In general, engagement with ICDP measures and use of the measures within existing systems was evident in contexts in which primary health care organisations knew the operating environment well, and had well-functioning information and organisational systems that supported managers and leaders to adapt the ICDP measures and available resources to local contexts. Positive staff attitude and skills were important contextual factors. These were more apparent in sites with stable management, good infrastructure and adequate staffing.

Primary health care organisations that took up ICDP measures and made them part of operational systems tended to be staffed by those with positive attitudes towards using the relevant MBS items, and considered delivery of these service items as part of their ‘core business’.

Knowledge and experience in using the systems to efficiently manage and integrate chronic disease management and care enabled engagement with ICDP measures, as did sound knowledge of services beyond the organisation. Engagement across sectors or, at the least, understanding the values and priorities of another sector supported uptake of some measures.

Information and delivery systems capable of identifying and prioritising patients who would benefit from chronic disease management helped Health Services to engage with the ICDP measures. At a basic level, clinical information systems needed to include record of identification of patients as Aboriginal and Torres Strait Islander people. Ideally, they needed to be capable of identifying and prioritising Aboriginal and Torres Strait Islander patients for chronic disease services such as General Practice Management Plans (GPMP) and Team Care Arrangements (TCAs). Underpinning this enabler is motivation and understanding of requirements at management level, and procedures to support coordination and continuity of patient care.

Information about the ICDP measures needed to include practical information, tools and support to understand how to use and link the measures to improve quality of care. Staff in Health Services could identify the broad intent of measures (‘Closing the Gap’), but many needed assistance to develop a vision of what engagement with the measures could mean to patients, such as how to use ICDP resources and income to improve patient experiences.

Primary health care organisations were more likely to adapt their systems and processes to incorporate the ICDP where the patient population were knowledgeable about available services for chronic disease – this was most often related to advocacy work or the ICDP workforce, and

sometimes also to the work of the Sentinel Sites evaluation team. For example, community advocacy, facilitated by an Indigenous Health Project Officer, resulted in early and broad registration of General Practices in the PIP Indigenous Health Incentive program in one urban site. Participation in the SSE community focus groups raised expectations about the scope of chronic disease-related services delivered by General Practices, AHSs and specialist providers – that also may have contributed to increasing demand for certain services, particularly the PBS Co-payment measure.

Factors constraining engagement of primary health care organisations with ICDP measures and utilisation within existing systems

Many primary health care services were unable to fully engage with and utilise ICDP measures because they did not have systems to identify and follow-up patients with complex care needs. Nor were they well oriented to using GPMPs/TCA's or other team care planning to support multi-provider service delivery. As a result, coordination of patient management between service providers often relied, where it occurred, on informal links. Information sharing between primary health care clinicians and specialists was inefficient. Continuity of care between different providers is a key element of effective care for chronic conditions.

Poor identification of Aboriginal and Torres Strait Islander patients in a number of Health Services meant that clinical information systems did not function well to support electronic annotation of PBS Co-payment measure prescriptions; this caused inefficiencies for pharmacists and difficulties for patients. Some services were reluctant or struggled to make the changes necessary to implement ICDP measures, particularly those struggling to meet 'business as usual' demands due to management instability, high staff turnover or service populations who relied upon the Health Service to provide accident and emergency care (remote communities). Such pressures led to a deferral of the set up of systems to record Aboriginal and Torres Strait Islander identity, delays in completing patient registration for ICDP benefits and lack of attention to claiming additional Medicare Benefit Schedule (MBS) items. Resistance to changing established practices, administrative burden and ICDP program design and administrative requirements not suited to the variety of patterns of service utilisation were further constraints.

While some AHSs welcomed the opportunity to strengthen services through funding tied to additional Medicare items (as opposed to program grants), many services, including AHSs, did not have the staff or system capability to access the funding available through Medicare.

There was a perception that some ICDP program guidelines were over prescriptive and lacked flexibility for Health Services to respond appropriately to local population needs and contexts. Access to some services, for example, specialist outreach services, could be constrained by inflexible interpretation of guidelines by fundholders, program managers or administrators, or by not taking a problem solving approach to implementing guidelines in ways that enabled programs to meet patient and community needs. For example, some AHSs believed ICDP guidelines restricted their scope to modify job specifications and allocate resources to meet the priorities set by governance bodies and the needs of service populations (e.g., in relation to cultural safety, population coverage or targeted approaches, local capacity development). Some clinicians believed measure guidelines did not provide scope for professional discretion in interpreting eligibility of patients for particular benefits and making decisions about patient care requirements.

4.2.5. Partnering and mobilisation within and across organisations and sectors to achieve relevant ICDP goals and outcomes

One way in which the ICDP could achieve effective implementation was through its role in increasing partnerships and mobilisation between and within organisations. It was necessary for partnership to be developed or strengthened within organisations and across programs and teams. In particular, in some organisations Aboriginal Health teams were formed to drive ICDP implementation, and it was particularly critical that these teams partnered with other parts of the organisation and with other organisations.

Factors enabling partnering and mobilisation within and across organisations and sectors

In general, partnering and mobilisation within and across organisations were evident in contexts where organisations and sectors understood the nature of each other's work, and staff communicated well across sectors. This tended to occur in locations where staff had high-level skills, cross-sector work experience and were well established within sites. This mechanism was also evident where Aboriginal and Torres Strait Islander patients were accustomed to consistent good quality care.

Indigenous Health Project Officers, Outreach Workers and Care Coordinators who were experienced and knowledgeable in AHS approaches and values were highly influential in setting up and supporting partnerships between Health Service providers to improve patient access to chronic disease services, particularly when they had well-developed professional networks and ability to advocate for the necessary changes. Partnerships were encouraged and supported where staff from DGPs /Medicare Locals with good knowledge of clinical information and other organisational systems worked to support AHSs.

Conventional peer relationships between service providers, such as referral links between GPs and specialists, and appreciation of each others' service models, enabled organisation of resources to achieve ICDP goals. This was evident in several regional and urban sites for example, where the service providers came together to solve difficulties with getting the outreach service model to work effectively in their area. The service providers agreed on a solution to implementation that appreciated the others' service models. In these cases, the AHSs transported patients to specialist rooms for appointments, rather than the specialist visiting the AHS.

In other situations, it was apparent that where organisations and sectors came together this led to greater understanding of each others' core business, providing a foundation for partnership working. Examples included shared orientation sessions for ICDP funded workers, workshops organised by State Based Organisations, and ICDP workers joining with other members of the primary health care team in training events.

Individuals with cross cultural competence working within and across organisations enabled partnering. This competence incorporated understanding and skills to work with those from different organisational cultures as well as competence to work with people from another cultural background. Newly appointed workers, and service providers with limited or no experience working with Aboriginal and Torres Strait Islander people, often found cross-cultural awareness training to be an important foundation for developing cultural knowledge, understanding and skills.

Cross-sector and cross-organisation action to achieve ICDP goals was supported where individuals were active in roles to make Aboriginal and Torres Strait Islander health everybody's business. At site

level this included advocacy by ICDP funded workers and negotiation by high profile Aboriginal and Torres Strait Islander leaders of AHSs to encourage Health Service providers to expand service provision to Aboriginal and Torres Strait Islander communities. DGPs /Medicare Locals were crucial in mobilising the General Practice sector. Some Outreach Workers supported patients during specialist and General Practitioner consultations, leading to ongoing partnering arrangements for improved cultural safety.

Factors constraining partnering and mobilisation within and across organisations and sectors

Some primary health care organisations working within the Sentinel Sites were not motivated to cooperate around ICDP implementation owing to lack of trust. Others felt that their values and service delivery models were too different to allow them to partner and work together. This was often linked to lack of previous experience in working together.

In some cases, staff shortages restricted opportunities to form partnerships with other organisations to achieve program goals, apparently due to low staff morale and inability to set up procedures and resources to support the partnerships.

There was a perception among key stakeholders (for example, in DGPs/Medicare Locals, General Practice, and AHSs) in some sites that Aboriginal and Torres Strait Islander health is primarily the domain of AHSs, with little appreciation of the potential complementary roles of the AHS and General Practice sectors in providing care for Aboriginal and Torres Strait Islander people. This lack of appreciation, and tensions between the AHS and General Practice sectors in some sites, appeared to have restricted cross-sector work. In addition, some service providers in both sectors were reluctant to change their way of working to accommodate ICDP measures and the partnering required for effective implementation of the measures.

It was evident in some sites that where an influential individual did not have the understanding or motivation to engage with the relevant ICDP measures and support the ICDP workforce, partnering was unlikely to occur. Partnering between organisations, particularly those that did not have a history of working together, needed to be driven from above. ICDP workers, often in entry level positions, were unable to negotiate partnering arrangements.

4.2.6. Core values aligned with best practice in Aboriginal and Torres Strait Islander primary health care

For the ICDP to be implemented effectively, it was necessary that the core values of Health Services and other implementing organisations were aligned with best practice in Aboriginal and Torres Strait Islander health care.^{24,25} An organisation's core values include the deeply held principles, beliefs or philosophy that underpins decision-making. In some contexts, outlined below, the ICDP 'worked' through this alignment. Where core values of Health Services did not align with best practice, it was less likely that the ICDP would be implemented effectively.

Factors enabling alignment of core values with best practice in Aboriginal and Torres Strait Islander primary health care

In general, alignment of values with best practice in Aboriginal and Torres Strait Islander primary health care occurred in contexts where organisations and individuals had relevant understanding, knowledge, skills, motivation and support. In some cases, this was related to a commitment to continuous quality improvement approaches. When Health Service providers could see that the ICDP

measures and funding were used in a way that had benefit to their patients, effective implementation was more likely.

Where staff had a good understanding of the determinants of the 'gap' in health status between Aboriginal and Torres Strait Islander people and other Australians, it was more likely that the core values of the organisation would align with best practice – and lead to effective implementation of the ICDP. The two pertinent resources available through the ICDP which were particularly relevant here were cultural awareness training and introduction of Aboriginal and Torres Strait Islander workers into DGPs (MLs). These two resources had potential to increase staff understanding of the 'gap', and in the longer-term, possibly enable an alignment of core values to best practice.

The commitment of individuals who provided community representation on Health Service governance and advisory groups appeared important for aligning organisational values with best practice in Aboriginal and Torres Strait Islander primary health care.

Factors constraining alignment of core values with best practice in Aboriginal and Torres Strait Islander primary health care

Many Health Services seemed unclear how to develop responsive and equity-oriented systems for delivering high-quality care to Aboriginal and Torres Strait Islander people. This was particularly the case in General Practice where many providers lacked exposure to Aboriginal and Torres Strait Islander health and equity issues, and many practices had few identified Aboriginal and Torres Strait Islander patients. For these General Practices, involvement in the ICDP did not make business sense, owing to the few numbers of patients who could conceivably, in their view attend their practice (depending, for example, on location). For other practices, where the potential for business growth through providing services to Aboriginal and Torres Strait Islander people was more substantial, it was important that General Practice involvement in the ICDP was motivated primarily by professional and personal values if Aboriginal and Torres Strait Islander people were to feel culturally safe and to register with the practice. Community networks appeared to work in this respect.

Some providers in the General Practice sector did not recognise, or were reluctant to acknowledge, the special population health needs of Aboriginal and Torres Strait Islander people. A few clinicians argued that they provided equitable care to patients of all cultural backgrounds. Some highlighted that their practices did not have the time to create systems for one particular group among the numerous cultures represented by their patients.

Stakeholders from both sectors argued that completion of adult health assessments, GP Management Plans and Team Care Arrangements did not necessarily indicate high-quality care, and felt that use of these Medicare items did not fit well with many service contexts. Some services argued that they provided high-quality care without use of these Medicare items – and these services with their fixed approaches to operation found it difficult to see how the ICDP was aligned with good practice.

4.2.7. Complementary linkages between programs, activities, and services

Complementary linkages between programs, activities and services were important to effective implementation of the ICDP as a whole. In one urban site complementary linkages were highlighted by a clinician, who was able to describe the ICDP as an effective model that flowed from clinical care to prevention and healthy lifestyle. However, in general, the health workforce interviewed in the SSE did not have a good understanding of how the different ICDP measures were able to work together.

Primary health care organisations needed to identify and facilitate complementary linkages, not only between ICDP measures, but also between programs and services more broadly.

Factors enabling complementarity between programs, activities and services

Complementary linkages were more likely when leaders of Health Services and regional support organisations at middle and higher levels understood the inter-dependent nature of ICDP measures, and worked to set up and support links within and beyond their organisations. Members of the workforce also needed to understand the links and the relevance of their own work to the package of measures (and broader chronic disease relevant services) as a whole, in order to establish linkages between activities.

Some organisations, including DGPs /Medicare Locals, General Practices and AHSs promoted and implemented the ICDP as a 'package' with eligible patients, assisted by DGP/Medicare Local based ICDP workers who promoted awareness in communities and in General Practices. This enabled complementary links, as did opportunities for workers and organisations to work collaboratively. Training events which brought ICDP workers together fostered linkages and information sharing, especially when they included the non-ICDP workforce, as they served as orientation to the ICDP for these workers, and reinforced its complementary nature in relation to other programs. Some linkages between the different ICDP funded activities emerged as the ICDP was implemented. For example, as implementation progressed, Healthy Community Days included drives to increase uptake of adult health assessments – this had not been originally envisaged. Further, in some sites, the clinical teams in AHSs referred patients to the Regional Tackling Smoking and Healthy Lifestyle teams for follow-up care, following adult health assessments. In some sites, Indigenous Health Project Officers took more formalised roles in orientation and supporting pharmacists to implement the PBS Co-payment measure – again, not a role that had been specifically planned for.

Factors constraining complementarity between programs, activities and services

The business or service models, and information systems, of many Health Services do not support integrated and complementary delivery of programs and services. For some providers, changing ways of working to foster and expand complementary linkages between ICDP measures and other programs has been challenging or not feasible. A few workers have been restricted in their capacity to form complementary linkages by resource constraints, or by physical location when isolated from other providers.

Some Health Services and sites experienced substantial instability in their workforce, with high staff turnover, and recruitment and retention difficulties. This appeared to constrain the establishment of complementary linkages between programs, activities and services. This is because ICDP implementation relies on the primary health care workforce in sites having local knowledge, well-developed systems and resources to make appropriate and timely referrals and provide coordinated support and care. Local solutions to workforce shortages such as the employment of locum clinicians (nursing staff and GPs), generally did not support these linkages due to the poor local knowledge of many locum staff – and systems that were not well developed or used. This issue was particularly evident in remote sites, and in some regional sites.

5. Conclusions and policy considerations

There have been some notable achievements in the first four years of implementation of the ICDP. These include:

- improved access to primary health care services and to affordable medication for many Aboriginal and Torres Strait Islander people;
- improved orientation of the General Practice sector to the needs of Aboriginal and Torres Strait islander people;
- significant steps in the early establishment of a new workforce that is focused on health promotion and in development of local health promotion initiatives; and
- increased attention to enhancing access to specialist, allied health and team-based approaches to chronic illness care.

The SSE was intended to inform ongoing refinements in design and implementation of the ICDP, and the findings need to be interpreted in this light. As expected, there is scope for improvement in many aspects of this vitally important initiative.

A key finding of the SSE was the local variation in the effectiveness of the ICDP implementation. The innovative evaluation approach of the SSE has enabled early identification of barriers and enablers to implementation that underlie this variation. This information should be useful for informing refinement and ongoing implementation at the local, regional and policy level.

Priority issues for each of the specific measures that make up the ICDP are addressed in the full final SSE report. This final section of the summary report highlights the higher-level conclusions that are relevant to achieving the general objectives of the ICDP. These conclusions indicate where the greatest potential gains could be made to enhancing practice in chronic illness care and achieving population impact. These are framed as considerations for refining the design and management of the ICDP and for policy development. These policy considerations have common elements, and should be seen as synergistic rather than standing alone.

Integrate the ICDP measures into existing service delivery systems to enhance capability to provide high-quality chronic illness care

The wide variation in implementation effectiveness shown in the SSE highlighted the importance of well-functioning systems within services and sites. ICDP policies and programs mostly worked well in those services and sites that were functioning well in relation to chronic illness management and care prior to the ICDP. They also had the capacity and readiness to optimise the additional resources available, and could integrate the measures into existing well-functioning service systems. Five of the seven mechanisms identified as necessary for effective implementation of the overall ICDP relate in a direct way to the state of development and the capacity to utilise systems thinking or service systems.

Enablers that worked across a number of mechanisms were:

- clear information, guidelines, communication and processes about the ICDP
- management and leadership commitment (e.g., to vision, implementation, appropriate workforce development)
- organisational stability
- cultural competency and values (e.g., staff cultural competency, culturally appropriate services, structures and processes for community/patient participation)
- commitment to best practice, professional experience and local knowledge.

Constraints (other than systems-related described above) that worked across several mechanisms were:

- limited service capacity to engage
- diverse and complex service delivery contexts
- workforce limitations and development issues (e.g., shortage of skilled workers, required skill sets, mentoring and training capacity)
- inability to make linkages (e.g., between services and community, staff, organisations, measures)
- resistance to change (approaches, attitudes, procedures).

These key enablers and constraints, and the importance of systems thinking, evaluation and systematic improvement strategies, are relevant to a number of the key policy considerations identified below.

Take a systems approach to the ICDP ensuring that the measures work effectively at multiple levels

A systems approach was implicit in the design of this complex program, particularly in its framing as a 'package' of measures. However, in general there is a need for greater emphasis on supporting the development and implementation of the measures to ensure they function in a complementary way. This was evident at the national level, with an apparent need for enhancing communication and coordination processes to support complementary development and implementation. This flowed through to State/Territory and regional levels where there were a variety of fundholder arrangements for different measures, and to the local site level for those organisations involved in the coordination and delivery of primary care services.

There was evidence in some sites of local or regional organisations taking the initiative in promoting engagement between ICDP workers and others employed in complementary programs. There was a patchy and generally limited understanding among key stakeholders at the local level of the scope or the complementary nature of the ICDP measures. This was further complicated by variable levels of engagement and cooperation between the General Practice and the AHS sectors at the local and regional level.

Support systems-thinking, evaluation and quality improvement for the purpose of strengthening systems at local, regional and national level.

Important strategies for shifting the practice of the existing workforce and the orientation of health service organisations to providing high-quality chronic illness care include the development of systems-thinking capability and processes for monitoring, evaluation and improvement. There is a need for strengthening of competency of the workforce at multiple levels of the system – and in both the existing and the new workforce – in system design and management, and provision of high quality chronic illness care. There are now well-developed quality improvement models that have demonstrated potential for improving quality of care in services with varying levels of capability, including specifically in the Aboriginal and Torres Strait Islander primary health care setting. These models have potential for achieving influence at multiple levels of the system, including at the policy level. With appropriate infrastructure support such models are showing their potential to enhance quality of care on a large scale. Ongoing evaluation is important to enhancing local service systems as well as increasing understanding of various policy levers – including policy levers that encourage implementation of evidence based quality improvement strategies – and their relative effectiveness.

Increase emphasis on strengthening workforce competencies for chronic illness care in the existing as well as the new workforce

A major objective in considering integration of the ICDP measures into existing service delivery systems should be shifting both the practice of the existing workforce and the orientation of Health Services for the explicit purpose of achieving large-scale population health impact. There needs to be specific attention to building internationally recognised workforce competencies in chronic illness care – patient centred care, partnering, quality improvement, information and communication technology, public health perspective.²²

To date, increasing the capacity of the primary health care system through the ICDP has largely focused on establishing new workforce positions, with some focus on cultural awareness training for existing workers. These programs have limited potential to influence the practice of the existing workforce, which provides most care. There has been relatively limited attention to re-orienting the existing workforce to delivery of high quality chronic illness care through other evidence-based strategies, such as integrated quality improvement initiatives. A systems-oriented workforce development strategy designed specifically to re-orient the existing workforce to provide high-quality chronic illness care is required to address inequity in access to high-quality care.

Enable adaptation of programs to fit regional and local circumstances

The extent to which the measures were achieving the intended aims of the ICDP was strongly influenced by local context. The ability to make effective use of available resources was enabled where there was greater potential for interpretation of guidelines and adaptation of measures to suit regional and local circumstances, and to complement and strengthen existing systems. In many situations there was insufficient capability within regional or local service organisations for effective adaptation of the measures to suit local contexts. This was at least in part because of real or perceived constraints in the design of the measures. The lack of capability within many regional or local service organisations is evident in the substantial variation in uptake of the individual measures between sites, and the extent to which this uptake was translated into improvements in the capacity of Health Services to more effectively prevent and manage chronic illness among Aboriginal and Torres Strait Islander people. In general the design of the measures needs to enable adaptation for effective implementation in different local contexts.

Enhance capability of workforce to use information systems to support high quality chronic illness care at the individual and population level

Analysis of data relating to different measures consistently identified the difficulties posed by high staff turnover and the use of locum staff. This is an ongoing reality within the contemporary Health

Service environment, which further emphasises the need for well-functioning, widely understood information systems with consistent approaches to training the workforce in their effective use. This issue is reinforced by the data on clinical indicators that were made available for the evaluation. These data clearly show inconsistency in the capacity of staff to use clinical information systems for patient care, monitoring and improvement purposes. This points to a clear need to build competence in the design, development and effective use of information systems to support delivery of high-quality chronic illness care, including capability for ongoing evaluation and improvement at local and regional levels.

Enhance capability of less developed services

Current investment is heavily oriented to operate through Medicare funding channels. It is clear that many of the services most in need of development, and services providing care to the populations most in need of improved access to high-quality care, are not able to benefit from funding that is dependent on having system and service capability to provide and bill for Medicare-related items. This means that the funding channelled through these incentives provides relatively little benefit to these services or populations.

Within the general objective of shifting the practice of the existing workforce and the orientation of health service organisations to providing high-quality chronic illness care, greater attention needs to be given to effective strategies that support the large number of less developed services and those with relatively limited capability to re-orient their systems to providing high quality chronic illness care.

Strengthen emphasis on evidence-based practice in prevention and health promotion, and strengthen evaluation and effectiveness of local health promotion initiatives

While there was substantial progress in developing a new and dedicated health promotion workforce, there was a general lack of adequately developed local evidence-oriented monitoring and evaluation systems to support preventive and health promotion programs. There was consequently a lack of adequate quality data on activities and processes, and on the extent to which these were consistent with evidence-based practice. It was therefore difficult to form an assessment of how well the resources that had been developed were meeting community needs. Stronger systems for monitoring and evaluation, and increased attention to evidence-based practice, should be developed at all levels of the systems. These systems should be used to guide programs to ensure they provide the best possible potential for health benefit.

Focus investment on limited numbers of General Practices

With regards to improving the capacity of General Practice to provide care for Aboriginal and Torres Strait Islander people, the relative cost-effectiveness of spreading investment and incentives across all General Practices in terms of population health benefit for Aboriginal and Torres Strait Islander people – including equity considerations - is likely to be limited and requires review. Investment could be focused on a limited number of General Practices that have a demonstrated interest in providing high quality care for Aboriginal and Torres Strait Islander people rather than spreading investment across all General Practices, many of which have relatively little interest or potential to improve quality of care for Aboriginal and Torres Strait Islander people.

Ensure sustained attention to achieving large-scale population health impact

The re-orientation of Health Services and systems development that is needed to achieve demonstrable impact at the community and population level will take sustained attention. It will require ongoing monitoring, evaluation and refinements of systems and programs for the explicit

purpose of improving the prevention and management of chronic illness and achieving large-scale population impact.

The findings of the SSE should be considered with the understanding that health authorities around the world are struggling to re-orient their health systems to address the epidemic of chronic disease. The challenges of providing high quality chronic illness care are complex. Successful re-orientation of the health system will require stakeholders at multiple levels of the system to grapple with new concepts and emerging challenges, and to develop and implement sophisticated, responsive and sustained strategies to achieve system change.

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