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Priority Evidence-Practice Gaps in Aboriginal and Torres Strait Islander Preventive Health Care
Final Report

Engaging stakeholders in identifying priority evidence-practice gaps and strategies for improvement in primary health care (ESP project)

June 2016

ABCD NATIONAL RESEARCH PARTNERSHIP Improving practice through research

CRE-IQI

One21seventy
National Centre for Quality Improvement in Indigenous Primary Health Care

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Abbreviations

ABCD	Audit and Best Practice in Chronic Disease
ATSIHPs	Aboriginal and Torres Strait Islander Health Practitioners
CQI	Continuous Quality Improvement
EPGs	Evidence Practice Gaps
ESP	Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement
PHC	Primary Health Care
SAT	Systems Assessment Tool

Authors of this report

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JB played a lead role in the ESP Project design and management, data interpretation and preparation of the report. VM played a lead role in the development of the ESP project process, and in management, analysis and presentation of the ESP data. AL contributed to development of the ESP Project process, data interpretation and report writing. RS provided clinical expertise and was involved in reviewing and refining reports. RB provided overall leadership of ABCD National Research Partnership (including the ESP Project), and had a major role in data analysis and interpretation, and drafting and reviewing of ESP reports.

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1 Guide to reading this report

This Final Report presents the findings from each of the phases of the Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP) Project for preventive care.

The Final Report is presented in the following format:

- A brief statement of **key messages** – that is, the headline messages of particular interest to policy makers and managers.
- An **executive summary** that provides a brief background and description of the approach, findings and conclusions of the ESP preventive care processes. This executive summary is designed for people who want to know a little more about the project, beyond the key messages.
- The **main report** that provides a more complete description of the project, suited to the needs of those with a more specific and detailed interest in the project.

The appendices contain further detail on specific aspects of the project.

This Final Report presents findings for all participating health centres from all jurisdictions together. It collates analysis of aggregated continuous quality improvement (CQI) data and stakeholder views on priority evidence-practice gaps, barriers and enablers to addressing the priority evidence-practice gaps, and strategies for improvement.

The report is designed for people working in a range of roles including national and jurisdictional policy makers, managers, community-controlled organisations and government health authorities, peak bodies, clinical leaders, researchers, primary health care staff and CQI practitioners who may have an interest in the interpretation and use of aggregated CQI data to drive decision making.

A Data Supplement accompanies the report. The Supplement contains the detailed analysis of the findings presented in the first two phases of the project, which were the basis of the higher level findings presented in this Final Report. The Data Supplement is available by clicking here or emailing abcd@menzies.edu.au.

More detailed reports on each phase of the ESP Project are available on request.

2 Key messages

In 2015 - 2016, healthcare stakeholders in diverse roles and organisations provided input to interpret de-identified aggregated continuous quality improvement data on preventive care for Aboriginal and Torres Strait Islander people from 137 health centres. Three key messages emerged from the process of:

- Identifying gaps in recommended care that are common across health centres
- Sharing knowledge on ways to improve Aboriginal and Torres Strait Islander preventive care

The messages are relevant for developing wide-scale, multi-level policy and system refinements to overcome barriers experienced on a wide scale, and strengthen known enablers.

Key message 1: Focus on improving aspects of preventive care in which there are system-wide 'evidence-to-practice gaps' in care delivery. Identified priority gaps include: following-up clients with abnormal results; completing absolute cardiovascular risk assessments; timely recording of test results and; recording enquiries about living conditions, family relationships and substance use.

Another widely agreed priority is the provision of appropriate support and follow-up for clients at risk with respect to emotional wellbeing. System refinements that improve 'team structure and function' and 'continuity of care' are also identified priorities.

Key message 2: To achieve improvement in preventive care we need to strengthen staff capacity through targeted recruitment, training and support. Better system support is needed for CQI, and for strengthening teamwork, community engagement and health literacy.

Current knowledge highlights the importance of targeting specific barriers and enablers to improvement, and engaging a range of stakeholders in developing solutions

Key message 3: Develop strategies to improve patient-centred care, self-management and teamwork; including effective use of available staff, funds for health assessments and clinical information systems.

Clinical information system changes could focus on recalling clients for health assessments and follow-up, for recording test results and follow-up action and calculating cardiovascular risk. Consider developing one clinical information system to replace multiple systems. Strategies to support health literacy, to create more Aboriginal Health Worker positions and support client referral in remote areas are also needed. The development of strategies should take account of evidence about their effectiveness and appropriateness to different contexts.

From key messages to action: an opportunity for wide-scale improvement

Many of the barriers and enablers experienced across health centres are similar to those identified in the ESP project on other aspects of PHC (e.g., chronic illness care). Therefore, taking action on the key messages for wide-scale improvement of preventive care will strengthen other key areas of care.

Policy makers, funders, leaders, managers and staff across levels of the health system need to take a coordinated approach to supporting key strategies within their levels and areas of influence.

3 Executive summary

3.1 Purpose

The purpose of this project has been to engage key stakeholders in the use of aggregate continuous quality improvement (CQI) data to identify and address system-wide evidence-practice gaps in Aboriginal and Torres Strait Islander preventive health care. We aimed to engage a range of stakeholders in different roles and across different levels of the primary health care (PHC) system - including service providers, managers, policy-makers and researchers - and capture their knowledge on the barriers and enablers to addressing the identified priority-evidence practice gaps and their suggestions on strategies for improvement.

System-wide gaps identified through the project are likely to be due to deficiencies in the broader PHC system, indicating that system-level action is required to improve performance. Such system-level action should be developed with a deep understanding of the holistic nature of Aboriginal and Torres Strait Islander wellbeing beyond just physical health (including healthy connections to culture, community and country). It should take account of the impact of Australian colonial history on Aboriginal and Torres Strait Islander people, and how social systems – including the health system - should be shaped to meet the needs of Aboriginal and Torres Strait Islander people.

This project builds on the collective strengths within PHC services in order to continue improving the quality of care for Aboriginal and Torres Strait Islander communities.

3.2 Approach

This final report forms the final phase of the Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement (ESP) project for preventive health. We have used de-identified data from 137 health centres participating in the Audit and Best Practice in Chronic Disease (ABCD) National Research Partnership that conducted audits of care for well adults over the period 2005 – 2014 (>17,000 client records).

Through two cyclical phases of reporting and feedback, we aimed to engage stakeholders in a theory- based process using aggregate CQI data to identify:

1. priority evidence-practice gaps;
2. barriers and enablers to high quality care and system-wide strategies for achieving improvement.

Implementation research suggests that by using evidence to identify and link priority gaps to theoretical domains that are known to be system enablers or barriers, strategies can be developed that will most likely produce the desired change.

3.3 Summary of findings

Phase 1 – identifying the evidence-practice gaps

CQI data for 2012 - 2014 from 95 health centres (3,571 patient records) and 71 system assessments were used to identify preliminary priority evidence-practice gaps. Approximately 80 stakeholders provided input (as an individual or part of a group) to refine these results and confirm seven priority-evidence practice gaps in preventive care:

- Planning for follow-up of clients with abnormal blood pressure, blood glucose levels and lipid profile
- Completing absolute cardiovascular risk assessments

- Recording of urinalysis
- Recording of lipid profiles
- Recording of enquiry about environmental & living conditions, family relationships and substance use
- Providing appropriate support and follow-up for clients identified as being at risk with respect to emotional wellbeing
- Strengthening ‘team structure and function’ and ‘continuity of care’

Although a proportion of health centres were doing well in many aspects of preventive care, the majority of health centres were not doing well in key areas. There was wide variation between health centres in almost all aspects of preventive care.

Phase 2- Barriers and enablers to addressing the evidence-practice gaps and system-wide strategies for improvement

In the second phase, we presented trend audit data (2005-2014: 17,108 patient records from 137 health centres) and 367 system assessments to examine variation over time in key indicators relevant to the priority evidence-practice gaps. We also provided a brief synthesis of published evidence on improving the quality of Aboriginal and Torres Strait Islander PHC to stimulate feedback on strategies to overcome the identified barriers and enablers.

Health centre, system and staff attributes relevant to implementation of change interventions were provided as prompts to help project participants identify barriers and enablers. About seventy people (as an individual or part of a group) provided feedback on the relative importance of these domains to addressing the priority-evidence practice gaps through the phase 2 survey. We also drew on responses to the Phase 1 survey that identified barriers and enablers to addressing gaps and/or strategies for improvement. Table 1 lists the health centre, system and staff attributes considered to be the main barriers or enablers across all priority areas.

Final review of the draft report

In the final phase we presented the draft final report to stakeholders to confirm that we have accurately reflected the feedback about barriers and enablers to addressing the identified gaps in preventive care and strategies for improvement, and to gather suggestions for dissemination of the findings. Five individuals in a variety of roles provided feedback to this process.

Table 1. Key barriers and enablers to improving preventive care across all priority areas

HEALTH CENTRE AND SYSTEMS	**Finance and resources** Systems to ensure sufficient financial resources (e.g. from local/regional health authorities, government) to support best practice in preventive health care
	Self-management Systems to identify and improve self-management resources that are relevant to preventive health care
	Population health Systems to: • Ensure teams have an understanding of the size, diversity and other key features of their service populations • Ensure teams are able to apply the principles of population health
	Teamwork Systems and processes to ensure PHC staff function effectively as teams.
	Community capacity, engagement and mobilisation Systems to enhance the health literacy of community members
	Staffing/workforce support, recruitment and retention Systems to: • ensure adequate numbers of staff, and to support recruitment and retention of staff (particularly ATSIHPs and medical specialists - numbers of nursing staff were generally perceived to be adequate) • ensure PHC staff have support from experienced staff, especially when health centres are affected by staff turnover and shortages
	Training and development Systems to support inter-organisational and intra-organisational learning, and develop staff knowledge and skills.
	Patient-centred care Systems to: • support all members of the PHC team to understand the needs and aspirations of Aboriginal and Torres Strait Islander communities; • provide care that is respectful of and responsive to individual patient preferences, needs and values, so that the patient's values guide all clinical decisions; • Ensure training for all team members in the provision of patient centred care
	Management support for quality improvement systems Systems to support managers to provide clear and appropriate support for effective use of quality improvement tools and resources for monitoring and enhancing delivery of best practice care.
STAFF	**Knowledge** • PHC staff generally know the content and objectives of best practice care and are aware of how to provide this care in Aboriginal and Torres Strait Islander settings. • Staff recognise it is their professional responsibility to provide best practice preventive health care.
	Focus At times staff have trouble focusing their attention to provide best practice care in preventive health due to competing demands.

Strategies for improving preventive care across all priority areas

Respondents were requested to identify new or refined strategies to address the most common barriers and enablers across all priority evidence-practice gaps. Stakeholder feedback on strategies highlighted the following points:

- Enhance clinical information systems to recall patients and to monitor regular conduct of preventive health assessments. Have one information system rather than multiple systems
- Improve documentation of planning and delivery of follow-up services
- Make effective use of the funding available for Aboriginal-specific health assessments and follow-up
- Use cardiovascular risk assessment calculators that are supported by clinical information systems
- Develop systems to routinely upload test results into clinical information systems to avoid duplication of tests and to enable timely access to results
- Establish systems to enable team based approaches to preventive care
- Establish systems to promote continuity of care and development of stable practitioner – client relationships
- Improve self-management support
- Enhance knowledge and skills relevant to the burden of mental illness
- Ensure adequate and flexible funding that enables use according to priorities for services with differing needs
- Develop systems to follow up health assessments with relevant steps to ensure clients receive required services
- Develop workable strategies for clients who need referral or specialised assessment in the remote context

The ESP trend data shows a small upward trend in overall delivery of preventive care for services who participated in three or more CQI cycles. This suggests that a sustained commitment to CQI will see improvements in the delivery of care for those services.

Many of the suggested strategies are relevant to a number of the identified barriers and enablers. In developing strategies for overcoming the barriers it will be important to ensure the more general strategies do include a focus on overcoming the specific identified barriers and strengthening specific enablers, rather than being too diffuse.

3.4 Next steps

System-wide change is required to address the priority evidence-practice gaps in Aboriginal and Torres Strait Islander preventive care through targeted strategies. The ESP process has enabled key people working within the Aboriginal and Torres Strait Islander health sector to reflect on aggregate data reports and has collated their views on priority system-wide evidence-practice gaps, barriers and enablers, and strategies for improvement.

Further work is required to ensure the detailed design of strategies is based on published evidence and practical experience of approaches that support effective interventions for improving the quality of preventive care for Aboriginal and Torres Strait Islander people and communities.

The main purpose of the ESP Project was to engage a variety of stakeholders in the use of aggregate CQI data and to stimulate discussion on the key areas requiring system-wide improvement and how best to achieve that improvement. The suggested strategies could provide the basis for continuing dialogue to address the most common barriers across the agreed priority evidence-practice gaps in preventive care. Through such dialogue, policy makers, managers, community-controlled organisations and government health authorities, peak bodies, clinical leaders, researchers, PHC staff and CQI practitioners can ensure that the detailed design of strategies address local contextual and organisational considerations.

The aggregated data and collated views and ideas provide a basis for stakeholders to continue to work collaboratively across regions and jurisdictions to share knowledge and experience, as strategies are put into action and evaluated.

The final report will be disseminated to respondents and more broadly to stakeholders across all levels of the health system, including national and jurisdictional community-controlled organisations and government health authorities, clinical leaders, researchers, PHC staff and CQI practitioners. We encourage stakeholders to utilise the report, along with the aggregate CQI data, to implement and advocate for change at local, organisational, regional and national levels.

4 Priority Evidence-Practice Gaps and Stakeholder Views on Barriers and Strategies for Improvement in Preventive Care

Aboriginal and Torres Strait Islander people typically die at much younger ages than other Australians and are more likely to experience disability and reduced quality of life because of ill health. Preventive health services are aimed at protecting or promoting health or preventing illness. Aboriginal and Torres Strait Islander people are less likely than non-Indigenous Australians to access a range of preventive health services [1, 2].

4.1 ABCD National Research Partnership/One21seventy

The ABCD National Research Partnership (the Partnership) and One21seventy, the National Centre for Quality Improvement on Indigenous Primary Health Care*, are founded on the premise that a holistic or comprehensive approach to PHC is fundamental to an effective health system. The One21seventy clinical audit and systems assessment tools are developed by expert reference groups and are based on widely accepted evidence-based guidelines that reflect best practice across the scope of primary health care. These tools have to date been used by more than 270 Aboriginal and Torres Strait Islander primary health care centres across the country. Automated reports are provided routinely to health centres and managers comprising their service level audit data as well as relevant regional or state comparison data to support local and regional level CQI efforts. Appendix A provides more information about the One21seventy data collection process and sources used to develop the audit tools.

One hundred and seventy five of these PHC centres have agreed to allow their data to be used to address the aims of the Partnership, including improving understanding of barriers and enablers to high quality care, and informing development of strategies for improvement. The ESP Project contributes to this process, increasing understanding and use of national aggregate CQI data for achieving wider system change. The establishment of this dataset has been made possible by the active contributions of health centre staff, CQI facilitators, managers, policy makers, community-controlled organisations and government health authorities, researchers and clinical leaders. Their ongoing contributions are vital to making the most effective use of data for improving the quality of care for Aboriginal and Torres Strait Islander people across Australia.

4.2 Large-scale health system strengthening

Large-scale improvement in the delivery of PHC requires change at multiple levels of the health system, not only at the local health centre level. Where aspects of care are not being done well across a range of health centres, this is likely to be due to inadequacies in the broader PHC delivery system. These broader systems directly impact health care and health outcomes for Aboriginal and Torres Strait Islander people. Improvements to systems should be based on evidence about what is working well and what service gaps need to be addressed. Aggregated CQI data can contribute to this evidence.

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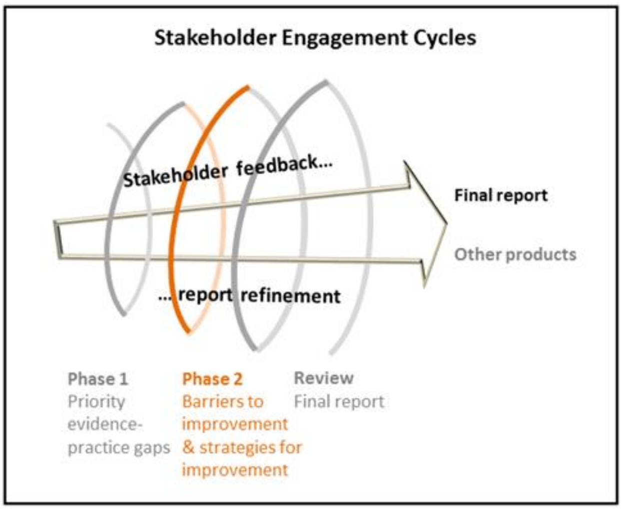
* For more information on the ABCD Partnership Project: <http://www.menzies.edu.au/abcd>.
For more information about One21seventy: <http://www.one21seventy.org.au/>.

4.3 Engaging stakeholders in identifying priority evidence-practice gaps and strategies for improvement

Figure 1. ***ESP Project phases***



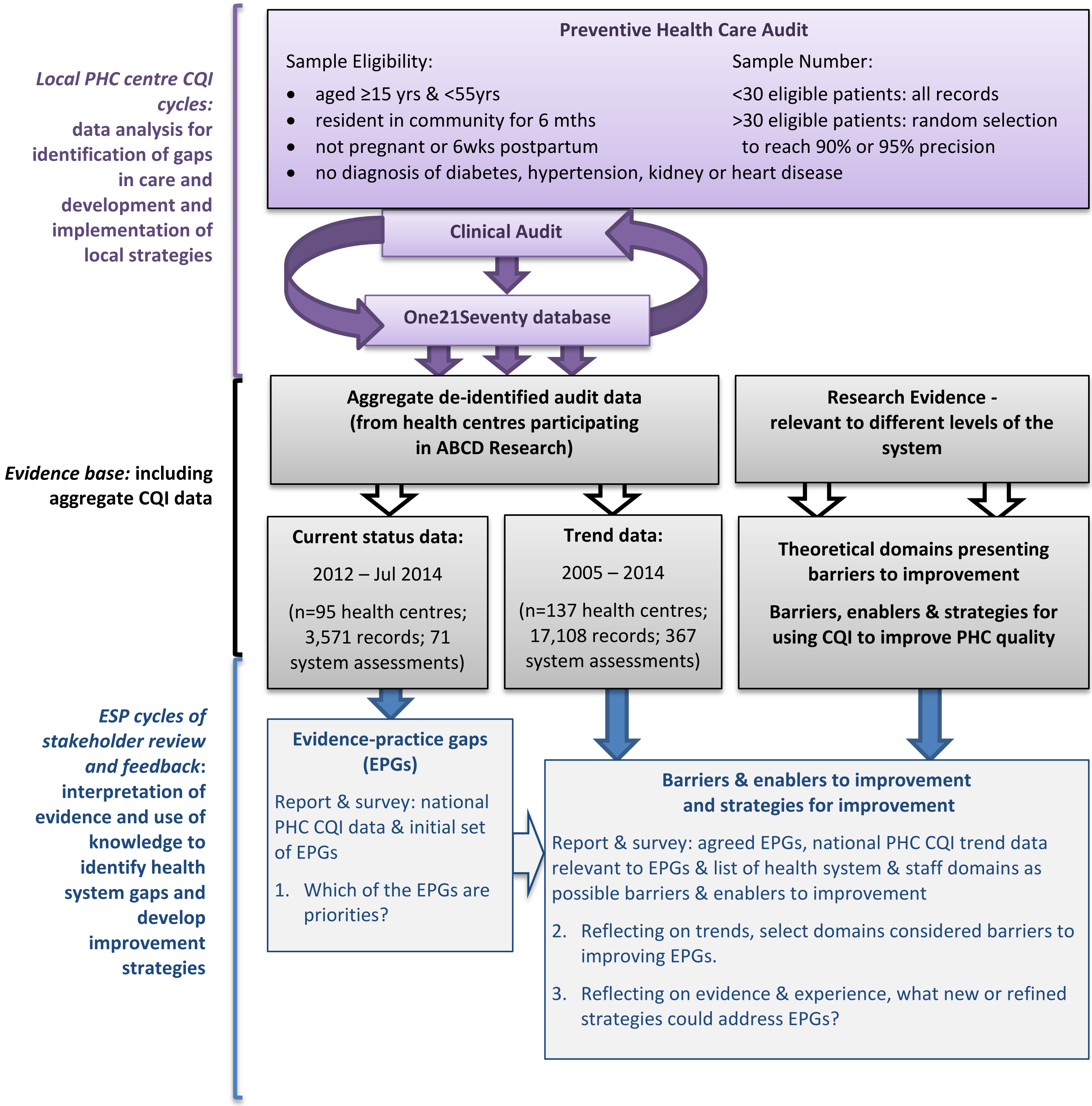
The ESP Project is a major initiative of the Partnership, and is consistent with the purpose of supporting development of the health system to provide high quality comprehensive primary healthcare on a wide-scale. It explores how aggregated CQI data can be used across the broader health system in a series of action-research cycles to: 1) identify evidence-practice gaps; 2) identify barriers, enablers and system-wide strategies to addressing these evidence-practice gaps (Figure 1).

This phased approach (Figure 1) has been adapted from systematic methods designed to link interventions to modifiable barriers to address evidence-practice gaps [3,4]. As part of their approach, French and colleagues utilised previously tested theoretical domains relevant to behaviour change of healthcare professionals to identify barriers to be addressed as part of intervention strategies [3,5,6]. In recognition that there are multiple barriers at different levels of the health system, the ESP Project has drawn on other research to extend the theoretical domains to include broader system factors relevant to the Aboriginal and Torres Strait Islander PHC sector [4,7,8]. For more information about the ESP process, see Appendix B or Laycock et al (2016) [9].

The ESP Project aims to encourage national and State/Territory level conversations about systemic barriers or enablers that could affect improvement in the delivery of PHC, and help inform system changes to direct resources and efforts where they can most improve the health of Aboriginal and Torres Strait Islander communities.

Figure 2 illustrates the components of the ESP project cycle for preventive health care.

Figure 2. *Use of aggregated CQI data for stakeholder identification of system wide evidence-practice gaps and strategies for improvement*



Local PHC centre CQI cycles: **data analysis for identification of gaps in care and development and implementation of local strategies**

Preventive Health Care Audit

Sample Eligibility:
- aged ≥15 yrs & <55yrs
- resident in community for 6 mths
- not pregnant or 6wks postpartum
- no diagnosis of diabetes, hypertension, kidney or heart disease

Sample Number:
<30 eligible patients: all records
>30 eligible patients: random selection to reach 90% or 95% precision

Clinical Audit

One21Seventy database

Evidence base: **including aggregate CQI data**

Aggregate de-identified audit data (from health centres participating in ABCD Research)

Research Evidence - relevant to different levels of the system

Current status data:
2012 – Jul 2014
(n=95 health centres; 3,571 records; 71 system assessments)

Trend data:
2005 – 2014
(n=137 health centres; 17,108 records; 367 system assessments)

Theoretical domains presenting barriers to improvement

Barriers, enablers & strategies for using CQI to improve PHC quality

ESP cycles of stakeholder review and feedback**: interpretation of evidence and use of knowledge to identify health system gaps and develop improvement strategies**

Evidence-practice gaps (EPGs)

Report & survey: national PHC CQI data & initial set of EPGs

1. Which of the EPGs are priorities?

Barriers & enablers to improvement and strategies for improvement

Report & survey: agreed EPGs, national PHC CQI trend data relevant to EPGs & list of health system & staff domains as possible barriers & enablers to improvement

2. Reflecting on trends, select domains considered barriers to improving EPGs.
3. Reflecting on evidence & experience, what new or refined strategies could address EPGs?

5 Aboriginal and Torres Strait Islander Preventive Care

From 2005 to 2014, 137 PHC centres in five States/Territories conducted One21seventy quality improvement audits for well patients. Over 17,000 clinical records were audited over this period and 87% were those of Aboriginal or Torres Strait Islander patients. A patient's health record was eligible for inclusion if they were: between 15 and up to 55 years; had no diagnosis of diabetes, hypertension, coronary heart disease, chronic heart failure, rheumatic heart disease or chronic kidney disease; were not pregnant or were less than 6 weeks postpartum; and had been resident in the community for 6 months or more in the last 12 months. Appendix A provides further information on audit sampling methods.

5.1 Stakeholder engagement

The ESP process for Aboriginal and Torres Strait Islander preventive care began in February 2015. Our aim was to circulate reports as widely as possible to engage a variety of stakeholders in the use and interpretation of aggregate data on the quality of preventive care. We adopted a snowballing distribution technique, whereby key stakeholders were requested to forward reports on to other interested people. Our purpose was to draw on stakeholder knowledge and experience to identify priority evidence-practice gaps, barriers and enablers to improvement and gather views on strategies to address the gaps.

Around 260 stakeholders provided feedback through online surveys over the course of the project (Table 2). Organisations represented included community controlled and government health services, support organisations, research organisations and policy makers. Respondents included practitioners, Aboriginal and Torres Strait Islander Health Practitioners (ATSIHPs), managers, policy-makers, and researchers (Appendix C).

Table 2. Level of engagement in the preventive health care ESP Project

(n= Approximate number of stakeholder responses)	**Phase 1 (n=77)**		**Phase 2 (n=70)**		**Final report review (n=5)**	
	Individual	**Group**	**Individual**	**Group**	**Individual**	**Group**
Number of survey responses	**15**	**4**	**3**	**4**	**5**	**0**
Number of attendees per group: Less than 5	▨	0	▨	0	▨	0
5 to 10		1		1		0
11 to 20		1		0		0
More than 20		2		3		0
Jurisdictions of interest for respondents#						
National	1		1		0	
NSW	0		1		0	
Queensland	5		1		2	
NT	6		1		2	
SA	1		0		0	
WA	3		1		2	

Note: Some groups indicated large numbers – considerably more than 20 and in some instances more than 100. It was not clear how many individuals provided actual input. For the purpose of estimating the numbers who provided actual input we have used a figure of 20 individuals for groups that were reported to be larger than 20. The estimate of the number of people who provided input may therefore be conservative.

Numbers may not tally with total number of respondents, as respondents were able to select multiple answers and groups may have selected a jurisdiction collectively.

5.2 Phase 1: Identifying priority evidence-practice gaps

During Phase 1 we presented national clinical audit and systems assessment data on adherence to best practice across the broad scope of care for the purpose of consulting with stakeholders to identify priority evidence-practice gaps. A total of 3,571 records and 71 systems assessments were included in this analysis from 95 health centres.

To start the discussion, the ABCD Project team and a clinical expert identified a preliminary set of priorities using the following criteria:

a. important aspects of comprehensive PHC that were generally recorded at low levels;

b. aspects of care where there was wide variation in recorded delivery of care;

c. basic aspects of clinical care that were being delivered and recorded at a high level of performance by the majority of health centres, but that were being delivered at a much lower level by a proportion of health centres; and

d. components of PHC centre systems that were relatively poorly developed.

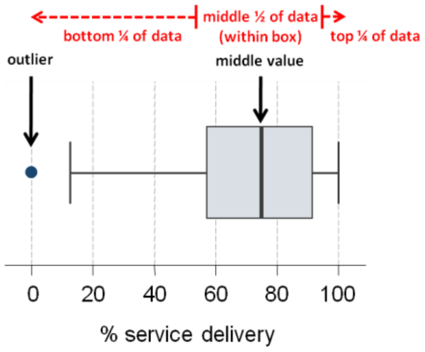
Although a proportion of health centres are doing well in many aspects of preventive care, the majority of health centres are not doing well in a number of key aspects of preventive care. The evidence-practice gaps identified as priorities for improvement in Phase 1 are listed below. More detail on these and other parameters are presented in the Phase 1 Data Supplement and in Appendix D.

The data and preliminary priorities were circulated to key stakeholders in a Phase 1. The data were presented as boxplots to show distribution of performance across health centres (Figure 3).

Figure 3. ***How to read boxplots representing service delivery in 2012-2014***

Box and whisker plots show:

- minimum and maximum values (ends of whiskers if no outliers);
- outliers which are values far away from most other values in the data set (or a distance that is greater than 1.5 times the length of the box);
- range of delivery by dividing the dataset into quarters:
  - the box represents the middle 50% of the dataset, and the line within the box represents the median (or middle value);
  - the right hand whisker (and outliers if present) represents the top 25% of the data
  - the left hand whisker (and outliers if present) represents the bottom 25% of the data; and
- the longer the boxplot, the greater the range (or variation).



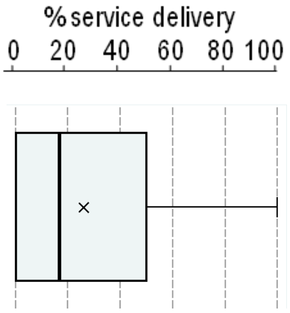
The report was accompanied by an online survey that asked respondents to comment on the importance of each of the preliminary priorities; whether the number of priorities was about right, too many or too few; whether they aligned with priorities they were already aware of; and whether other priorities should be included. Approximately 85 people (15 individuals and 4 group responses on behalf of 62 people) provided input into the identification of priority evidence-practice gaps. The priority evidence-practice gaps, as confirmed by respondents, are shown below with relevant indicators from the Phase 1 report.

Figure 4. Evidence Practice Gap priorities with a selection of representative indicators from Phase 1 report (n=health centres, patient records)

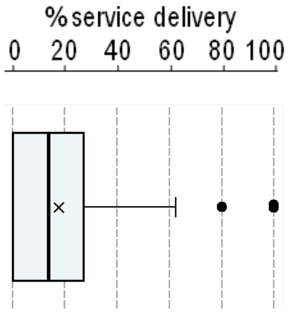
1. Follow-up of abnormal findings

Record of plan for follow-up of abnormal blood pressure, blood glucose level and lipid profile (100% of respondents regarded this as a priority area)

Plan for follow-up blood pressure recording in 2-4 weeks if abnormal result
(n=78; 251)



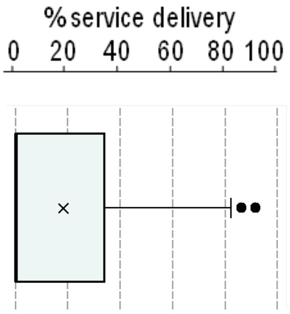
Plan for follow-up blood glucose level recording if abnormal result
(n=90; 945)



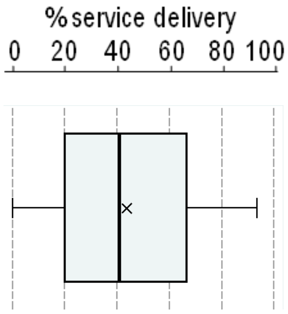
2. Record of scheduled checks

- **Record of absolute cardiovascular risk assessment (100% regarded this as a priority area)**
- **Record of urinalysis (100% regarded this a priority area)**
- **Record of lipid profile (95% regarded this a priority area)**

Absolute cardiovascular risk assessment
(n=92; 1831)



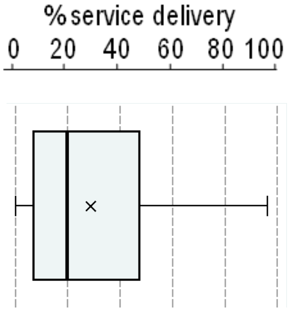
Lipid profile
(n=95; 3406)



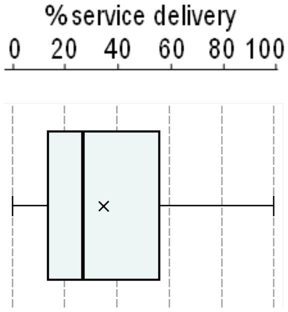
3. Record of risk factor discussions

Record of enquiry regarding environmental and living conditions, family relationships and substance use (94% regarded this a priority area)

Environmental and living conditions
(n=95; 3406)



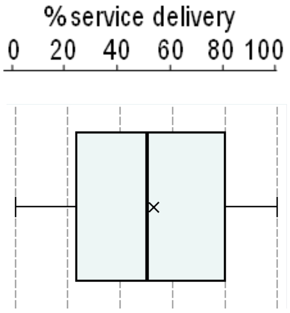
Family relationships
(n=95; 3406)



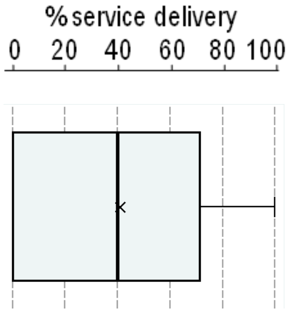
4. Emotional wellbeing support

Improving capability to provide appropriate support and follow-up for clients identified as being at risk of an emotional wellbeing issue (94% regarded this a priority area)

Record of external referral within 3 months of client being assessed ‘at risk’ (n=66; 290)



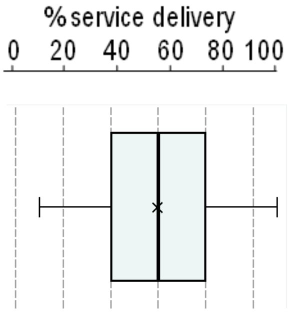
Record of counselling by health centre team (n=66; 290)



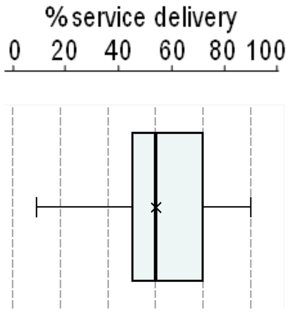
5. Health centre systems to support high quality care

Delivery system design components: ‘team structure and function’ and ‘continuity of care’ (94% regarded these a priority areas)

Team structure and function (n=71 centres)



Continuity of care (n=71 centres)



All respondents stated that the evidence-practice gaps highlighted in Phase 1 were consistent with their views prior to reading the report. Respondents also highlighted other priorities such as health promotion, mental health and wellbeing that were not identified in the Phase 1 data. While not every respondent answered every survey question, most (2/3 group responses; 9/14 individual responses) reflected that the priority evidence-practice gaps for their State/Territory would be the same as those arising from the national data. Others suggested there would be different regional priorities due to the diversity of context across geographies and cultures.

5.3 Phase 2: Identifying barriers and enablers to addressing the priority evidence–practice gaps and strategies for improvement

In the second phase, we presented trend audit data (2005-2014: 17,108 audited records from 137 health centres) in boxplots to examine variation over time in key indicators relevant to the priority evidence-practice gaps (Figure 5). We asked respondents to focus on the trends in general over time, particularly whether the variation between health centres was getting less, and whether there was improvement for health centres at the lower end of the range. Table 3 summarises the trend data presented in the Phase 2 report (see Data Supplement).

Figure 5. ***How to read trend boxplots over years and cycles***

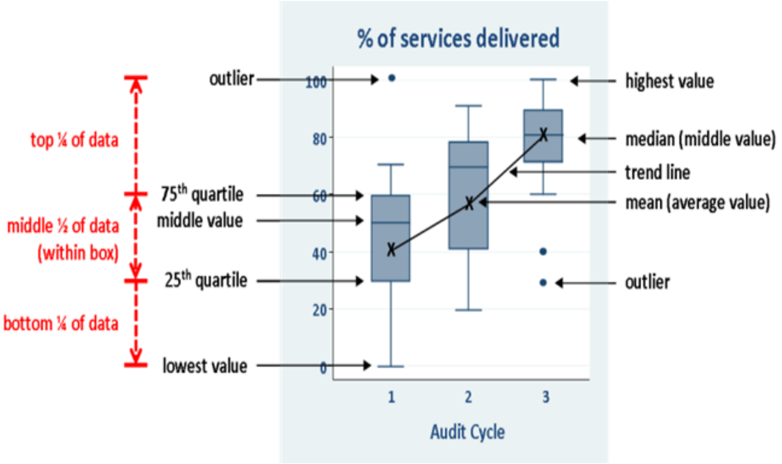
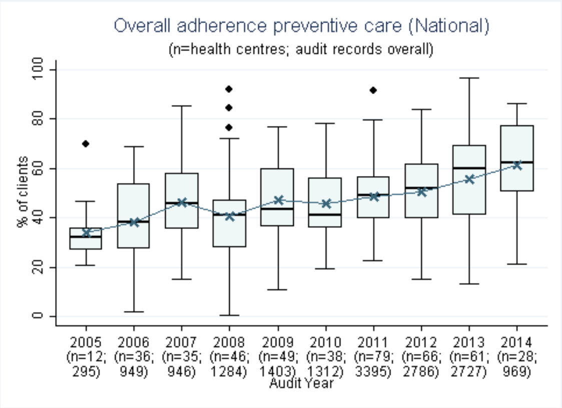


Table 3. Trends in key indicators of the priority evidence-practice gaps

Over years 2005-2014

- There are clear improvements in the overall service delivery of preventive health care. The mean and median level of care delivery improved 30-35% in 2005 to about 60% in 2014.
- There was no reduction in variation in service delivery between health centres.

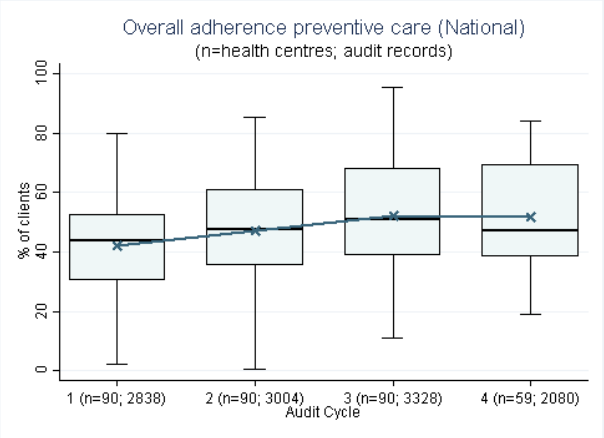
Example indicator from Phase 2 report
Overall service delivery to well clients[*]



Over at least three audit cycles

- For health centres that completed three or more audit cycles for preventive health, there were improvements, albeit small, in the mean level of care according to best practice guidelines.

There was little evidence of narrowing in the variation between health centres over successive audit cycles.



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[*] Overall preventive care service delivery composite figure includes: weight, waist circumference, blood pressure, urinalysis, blood glucose level, sexually transmitted infections (gonorrhoea and chlamydia; syphilis), pap smear, oral health, nutrition, physical activity, smoking and alcohol status recorded, brief intervention if smoker and/or high risk alcohol user.

We encouraged stakeholders to reflect on the influences underlying the data trends, and on their experience in PHC, to identify barriers and enablers to improvement. To assist this process, the Phase 2 report survey listed health centre, system and staff domains drawn from international and national research [5,7,8] that could present potential obstacles to improvement. Respondents were asked to rate each domain according to its relative importance in improving each of the priority evidence-practice gaps. Approximately 70 stakeholders (3 individuals and 4 group responses on behalf of approximately 70 people) provided input, representing the community-controlled and government health sectors, general practice and research organisations. Roles represented included nurses, doctors, public health physicians, policy officers, middle and senior management, researchers, ATSIHPs and CQI facilitators. We also drew on the qualitative comments from several Phase 1 survey respondents who identified barriers and enablers to improvement and/or strategies to address gaps.

In relation to respondents' assessment of current health centre systems, the areas with the greatest impact on quality of care are listed below. Appendix E has all responses.

Finance and resources

Most respondents strongly disagreed that there were sufficient financial supports from government or health authorities to support best practice in preventive health care.

Staffing/workforce support, recruitment and retention

Most respondents indicated that there were inadequate numbers of staff in PHC services. In terms of staff roles, most agreed that there were inadequate numbers of ATSIHPs and medical specialists. In terms of support systems for recruitment and retention, respondents felt there were adequate systems in relation to nursing, allied health workers and administrative staff, but more work to be done to recruit and retain ATSIHPs and medical specialists.

Training and development

A majority of respondents indicated that there are insufficient systems to support inter-organisational and intra-organisational learning. Respondents identified the priority areas for staff training were patient centred care and, to a lesser extent, team work and self-management support.

Teamwork

The majority of respondents disagreed that PHC staff function effectively in teams. There were mixed views that PHC staff are generally clear on their respective roles and trained to work effectively in teams.

Self- management and patient-centred care

A majority of respondents indicated there were inadequate systems to support all members of the PHC team to:

- understand the needs and aspirations of Aboriginal and Torres Strait Islander communities
- provide care that is respectful of and responsive to individual patient preferences, needs and values and that patient values guide all clinical decisions

Respondents perceived a lack of good self-management resources relevant to preventive care and identified a need for further training in providing patient centred care.

Population health

Most respondents indicated that systems were lacking for the purpose of ensuring PHC teams have a clear understanding of the size, diversity and key features of their service populations and to apply this knowledge in relation to the principles of population health.

Management support for quality improvement systems

Most respondents disagreed that managers provide clear and appropriate support for staff to use quality improvement tools and resources.

Community capacity, engagement and mobilisation

Most respondents disagreed that there were good systems in place to enhance the health literacy of community members.

5.4 Strategies for addressing the priority evidence-practice gaps

We presented a brief synthesis of published evidence on improving the quality of Aboriginal and Torres Strait Islander PHC (Appendix F). The purpose of this 'evidence brief' was to stimulate feedback on strategies to overcome the identified barriers and enablers.

Respondents proposed the following strategies:

- Enhance clinical information systems to recall patients and to monitor regular conduct of preventive health assessments. Have one information system rather than multiple systems
- Improve documentation of planning and delivery of follow-up services
- Make effective use of the funding available for Aboriginal-specific health assessments and follow-up
- Use cardiovascular risk assessment calculators that are supported by clinical information systems
- Develop systems to routinely upload test results into clinical information systems to avoid duplication of tests and to enable timely access to results
- Establish systems to enable team based approaches to preventive care
- Establish systems to promote continuity of care and development of stable practitioner – client relationships
- Improve self-management support
- Enhance knowledge and skills relevant to the burden of mental illness
- Ensure adequate and flexible funding that enables use according to priorities for services with differing needs
- Develop systems to follow up health assessments with relevant steps to ensure clients receive required services
- Develop workable strategies for clients who need referral or specialised assessment in the remote context

The ESP trend data shows that for overall delivery of care of preventive services there was a small increasing trend for services who participated in three or more cycles of CQI. This suggests that a sustained commitment to CQI will see improvements in the delivery of care for those services.

5.5 Final review of the draft report

In the final phase we presented the draft final report to stakeholders to confirm that we have accurately reflected the feedback about barriers and enablers to addressing the identified gaps in preventive care and strategies for improvement and to gather suggestions for dissemination of the findings. Five individuals in a variety of roles provided feedback to this process. Respondents indicated that the information in the report was well presented, though one respondent felt the information in the report could be supplemented with multimedia or a ‘webinar’ to make the material more accessible. Respondents did not identify any additional barriers to and strategies for improvement. Respondents highlighted the importance of effective dissemination of evidence, and of development and implementation of appropriate strategies.

6 ESP Project strengths and limitations

The dataset used for the ESP Project is the most comprehensive and broad scale dataset relating to health centre performance available for Aboriginal and Torres Strait Islander preventive care. As stated, the aggregate CQI data are from around 17,000 clinical records of patients from multiple services across several jurisdictions, audited against best practice over multiple audit cycles. From this evidence base, stakeholders were able to identify current priority evidence-practice gaps.

An open process was used to engage stakeholders, consistent with the principle that 'CQI is everybody's business'. Stakeholders could choose to participate in any or all project phases. However, the ESP project has relied, in part, on stakeholders sending reports to others, thus it has not been possible to accurately measure reach or response rates. Although the survey information from Phase 2 may be of relatively limited generalisability, the data on barriers and enablers and on strategies for improvement are valuable in that they reflect tacit knowledge of front-line health workers and others working within the health system. In recognition that barriers exist across multiple levels of the health sector, we included questions on broader health centre and system determinants of performance in the Phase 2 survey. These additional questions on influences on quality of care have not been validated in the way that has been done for other questions covering the theoretical domains framework.

Responses to surveys could be made as an individual or representing a group. We have actively encouraged the facilitation of group discussion and group responses.

It will be important to ensure the detailed design of strategies is based on published evidence and expert knowledge of approaches that support effective interventions for improving the quality of preventive care for Aboriginal and Torres Strait Islander people and communities. Strategies implemented in community settings need to be developed and/or adapted by people with local knowledge. It will also be important to evaluate the effectiveness of these strategies in a range of contexts. If intervention efforts are documented appropriately, use of this theory-based process will assist with developing the knowledge base of what works and in what contexts to improve preventive care for Aboriginal and Torres Strait Islander communities.

An iterative process was used to develop and refine reports through the project phases, with adjustments to content and presentation made over time in response to stakeholder feedback. A concurrent developmental evaluation is guiding ESP process improvements. Based on the evaluation, further refinements are being incorporated into ESP projects on other aspects of Aboriginal and Torres Strait Islander PHC, in an effort to improve engagement and use of reports.

7 Conclusions

To our knowledge, this is the first use of a large-scale aggregate CQI dataset beyond the regional level to enable a range of key stakeholders to identify priority gaps in delivery of best practice preventive care in Aboriginal and Torres Strait Islander communities. The main purpose of ESP was to engage a variety of stakeholders in the use of aggregate CQI data and to stimulate conversation on priority areas for improvement and how best to achieve improvement. Implementation research suggests that interventions to achieve improvement should be focussed on the key barriers and enablers of good performance, and that such interventions are more likely to produce the desired change.

Stakeholder feedback on the priorities for improvement, barriers to addressing gaps and strategies is consistent with recently published research on preventive care for Indigenous people [2]. Bailie C et al (2016) found that health centre factors were responsible for the majority of variation in the delivery of preventive health services. ESP findings show that stakeholders identified the barriers to addressing the identified gaps in care were health system attributes rather than staff-level attributes. The study by Bailie C et al (2016) found a lack of documented evidence for follow-up of identified risk factors and wide variation in delivery of preventive services. Through the ESP process stakeholders identified follow-up of abnormal clinical findings as the highest priority for improvement.

The identified barriers and suggested strategies present areas of opportunity for those developing PHC policy and interventions to develop barrier driven, tailored interventions to improve health outcomes for Aboriginal and Torres Strait Islander people. Our hope is that the suggested strategies will spark conversations and ideas on how to address the known barriers to care, and that these will lead to wide-scale action for improving care.

We encourage stakeholders to take on the key messages and utilise the report, along with the aggregate CQI data, to implement and advocate for change at the local, regional and national level.

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Appendix A: One21seventy data collection and reporting

Where do the data in this report come from? The report is based on analysis of audits of clinical records of well adults who attend services that use One21seventy CQI tools AND participate in the ABCD National Research Partnership. The preventive health audit tool was developed by an expert working group, with participation of experts and health service staff. The tool is designed to enable services to assess their actual practice against best practice standards, and is accompanied by a protocol that includes reference to the guidelines and standards that form the basis of the tool. The audit data are supported by a summary of system performance as assessed by staff in health centres that completed a systems assessment tool (SAT) related to preventive health care delivery. Copies of the One21seventy Preventive Health Audit Tool and how the audits are conducted are available on request.

Who collects the audit and systems assessment data? The clinical audits are generally done by health centre staff, trained in the use of One21seventy tools and supported by quality improvement facilitators and One21seventy staff. In some centres where staff are not available or lack skills or confidence the audits are done by CQI facilitators. The systems assessment is completed by health centre staff in a process that is facilitated by a CQI facilitator.

How do health centres use the data? The data collected through One21seventy CQI tools and entered into the One21seventy web-based information system are analysed and made available to health centres in real time for use in quality improvement processes. Reports of aggregated data for clusters of health centres, by region or by state are also available through the One21seventy web-based information system in order to support regional or State/Territory level CQI efforts. The ESP Project is intended to contribute to enhancing the quality of reporting and use of aggregated CQI data for the purpose of service improvement.

Restrictions and limitations on the data presented. The data in this report are not expected to be representative of all health centres nationally or for specific jurisdictions because participation of health centres is either through self-selection or through regional decision making processes. In jurisdictions where a high proportion of health centres are participating, the data may be more generalisable; for jurisdictions where there are relatively few health centres participating the data are less generalisable.

The data reflect what has been documented in electronic and paper based client records, depending on what record systems are used in each health centre. There has been a trend in recent years to increasing use of electronic records. Some health centres are still using paper-based systems, and some are using a mix of paper and electronic systems. The quality of recording of clinical care is variable in both paper and electronic systems, and the audit data may not provide a true reflection of actual care. We have no way of reliably collecting data or reporting on services that are not recorded. Accurate and clear recording of care is an important aspect of quality of care and has important implications for continuity and coordination of care, for medico-legal purposes and for efficient use of resources.

Criteria for inclusion of records in the audit: To be eligible for inclusion in a preventive health clinical audit, a client must: be between 15 and up to 55 years; have no diagnosis of diabetes, hypertension, coronary heart disease, chronic heart failure, rheumatic heart disease or chronic kidney disease; not be pregnant or less than 6 weeks postpartum; and have been resident in the community for 6 months or more in the last 12 months. Where the eligible population is 30 clients or less, the audit protocol recommends including all records. Where the eligible population is greater than 30, the protocol provides guidance on the random selection of a number of records, with the number depending on the precision of estimates required by health service staff.

Systems assessment data

The ABCD/One21seventy Systems Assessment Tool (SAT) has been developed to enable providers of Aboriginal and Torres Strait Islander primary health care services to undertake a structured assessment of the strengths and weaknesses of their systems to support best practice care. The SAT evolved from the Chronic Care Model and the associated Assessment of Chronic Illness Care (ACIC) tool and from the World Health Organization's (WHO) Innovative Care for Chronic Conditions (ICCC) Framework.

International experience has identified five key components of health systems to be effective across primary health care in improving the quality of care of clients with chronic illness (Table A1). These five components are incorporated into the SAT. Each component contains a number of items that health centre teams (managers and staff) discuss and come to a consensus about how well their systems are working. Each item is scored separately on a scale of 0-11. System component scores are derived from the average of the scores for each item within the system component. Higher scores reflect better function.

Table A1: ABCD/One21seventy systems assessment tool components and items

Components of systems	Items for each component
Delivery system design This component refers to the extent to which the design of the health centre's infrastructure, staffing profile and allocation of roles and responsibilities, client flow and care processes maximise the potential effectiveness of the centre.	• Team structure and function • Clinical leadership • Appointments and scheduling • Care planning • Systematic approach to follow-up • Continuity of care • Client access/cultural competence • Physical infrastructure, supplies and equipment
Information systems and decision support This component refers to clinical and other information structures (including structures to support clinical decision making) and processes to support the planning, delivery and coordination of care.	• Maintenance and use of electronic client list • Evidence-based guidelines • Specialist–generalist collaborations
Self-management support This component refers to structures and processes that support clients and families to play a major role in maintaining their health, managing their health problems, and achieving safe and healthy environments.	• Assessment and documentation • Self-management education and support, behavioural risk reduction and peer support.
Links with the community, other health services and other services and resources This component refers to the extent to which the health centre uses external linkages to inform service planning, links clients to outside resources, works out in the community, and contributes to regional planning and resource development.	• Communication and cooperation on governance and operation of the health centre and other community-based organisations and programs • Linking health centre clients to outside resources • Working out in the community • Communication and cooperation on regional health planning and development of health resources.
Organisational influence and integration This component refers to the use of organisational influence to create a culture and support organisational structures and processes that promote safe, high quality care; and how well all the system components are integrated across the centre.	• Organisational commitment • Quality improvement strategies • Integration of health system components.

Appendix B: Overview of the ESP Project

Phase 1 – Evidence-practice gaps

This phase focuses on the identification of priority areas for improvement (priority evidence-practice gaps) in the delivery of preventive care in Aboriginal and Torres Strait Islander primary health care.

Information provided to participants

1. aggregated continuous quality improvement data (2012-2014) about the delivery of care presented in national and State/Territory reports
2. preliminary priority areas for improvement, based on national data

Feedback/data collection

Online survey, workshop sessions and email responses.

Outputs

Draft report on preliminary priority evidence-practice gaps in best practice care. Refinements based on stakeholder feedback and survey data will be incorporated into Phase 2 report.

Phase 2 – Barriers and enablers to addressing gaps and strategies for improvement

This phase focuses on trends in indicators relevant to the identified priority evidence-practice gaps, and on influences that may enable or hinder improvement at different points in the health system. In particular, it seeks to:

1. identify those factors that may be most important in addressing the identified priority evidence-practice gaps in best practice care identified in Phase 1.
2. identify new or existing strategies that could be introduced or strengthened to enable improvement in priority evidence-practice gaps.

Information provided to participants

- Report on trends over time for key indicators relevant to priority evidence-practice gaps in best practice care.
- An evidence brief synthesising findings from research about barriers, enablers and strategies for improvement in the delivery of PHC, with particular attention to research in the Australian Aboriginal and Torres Strait Islander health context.

Feedback/data collection

Online survey, including questions about barriers and enablers to improvement based on international, national and Aboriginal and Torres Strait Islander-specific evidence and frameworks.

Participants will be encouraged to draw on their own experience, the evidence brief and the data presented throughout the project to identify strategies to address priority evidence-practice gaps.

Outputs

Draft report on barriers and enablers to improvement in care relevant to identified priority evidence-practice gaps and identified strategies for improvement, based on responses to the online questionnaire. The draft report will be returned to participants for review.

Review and final report

A draft report on strategies for improvement will be returned to participants for review. Comments from the review will be used to inform a final report on strategies for improvement in identified priority-evidence practice gaps. This final report will be provided to key stakeholders in all participating jurisdictions. Project findings will be reported in academic journals and in conference presentations and workshops.

Appendix C: Survey respondents

	Phase 1		**Phase 2**		**Draft final report review**	
	Individual responses	**Group responses**	**Individual responses**	**Group responses**	**Individual responses**	**Group responses**
Number of responses	15	4	3	4	5	0
Number of attendees per group (recorded attendees in group)						
Less than 5		0		0		0
5 to 10		1		1		0
11 to 20		1		0		0
More than 20		2		3		0
Jurisdictions of interest for respondents*						
National	1		1		0	
NSW	0		1		0	
SA	1		0		0	
Queensland	5		1		2	
WA	3		1		2	
NT	6		1		2	
Victoria	4		2		0	
Tasmania	0		0		0	
ACT	0		0		0	
Rurality of population group to which responses relate*						
Urban	7		6		3	
Regional	8		4		2	
Remote	13		4		2	
Number of group responses to question about Indigenous status						
All		0		0		0
Majority (more than half)		2		2		0
Minority (less than half)		2		2		0
None		0		0		0
Number of individual responses identified as Indigenous						
Indigenous	2		1		1	

Non Indigenous	13		2		4	
Not stated	0		0		0	
Position types						
Nurse	5	3	0	3	0	0
Middle Manager	0	2	0	3	0	0
Doctor	0	1	0	1	1	0
Public Health Physician	1	0	0	0	0	0
Other Medical Specialist	0	1	0	0	0	0
Senior Management/executive	3	1	0	2	1	0
CQI facilitator	1	1	1	1	0	0
Board member	0	0	0	1	0	0
Policy officer	0	0	0	1	1	0
Aboriginal and/or Torres Strait Islander practitioner	0	2	0	4	1	0
Research/Academic	1	1	0	0	0	0
Other	4	1	2	1	1	0
Organisation types						
Community controlled health centre	4	2	0	1	2	0
Community controlled peak body	2	0	0	0	0	0
Government health centre	4	1	0	0	0	0
Government health department	4	0	1	0	1	0
Medicare Local	0	0	0	2	0	0
General Practice	0	0	0	0	0	0
University/Research organisation	0	1	1	0	1	0
Other	1	1	1	1	1	0

*Numbers may not tally with total number of respondents as respondents were able to select multiple answers

Appendix D: Responses to phase 1 survey on relative importance of gaps

Respondents were asked to rank the relative importance of the identified evidence-practice gaps on a scale of 1-10, where 10 is the most important and 1 is least important.

Table D1: Ranking by respondents of the most important gaps to address, scored 7 – 10.

Priority evidence-practice gaps	% and n
Absolute cardiovascular risk assessment	100% 18/18)
Record of urinalysis	100% (18/18)
Plan for follow-up of abnormal BP, BGL and lipid profile	100% (18/18)
Record of lipid profile	95% (17/18)
Record of enquiry regarding environmental & living conditions, family relationships & substance abuse	94% (16/17)
Improving capability to provide appropriate support and follow-up for clients identified as being at risk	94% (16/17)
‘Team structure and function’ and ‘continuity of care’ – within the component ‘delivery system design’	94% (16/17)
Pap smears and mammography	89% (16/18)
Record of BMI, waist circumference	89% (16/18)
Record of visual acuity	89% (16/18)
Record of check of oral health, ears and hearing	89% (16/18)
Emotional well-being screening	88% (15/17)
Record of discussion of sexual & reproductive health	88% (15/17)
Links with the community, other health services and other services and resources	88% (15/17)
Improve levels of adult health assessments	85% (16/19)
Record of alcohol use and of smoking status	83% (15/18)
Self-management support	82% (14/17)
Record of enquiry regarding continence	56% (10/18)
Provision of advice on nutrition and physical activity	See Note 2

Note 1: Total responses represent the number of responses entered; it includes 4 groups.

Note 2: Provision of advice on nutrition and physical activity - This evidence-practice gap was identified in the first phase as a preliminary priority. It was not included in the survey for stakeholders to rank its relative importance.

Appendix E: Responses to Phase 2 survey on barriers and enablers to addressing priority evidence-practice gaps in preventive care

Table E1: Responses regarding the extent to which health centre and system attributes present barriers or enablers to addressing priority evidence-practice gaps

		Strongly Disagree	Partly Disagree	Partly Agree	Strongly Agree	Don't know	No. of respondents
Within the socio-political context, there is sufficient financial support (e.g., from local/regional health authorities, government) to support best practice in preventive health care as relevant to the priority evidence-practice gaps		5	1	1	0	0	7
PHC facilities are generally of adequate, size, design, and condition		1	2	4	0	0	7
PHC facilities generally have adequate equipment		2	1	4	0	0	7
PHC centres generally have adequate numbers of staff		2	3	1	0	1	7
PHC centres generally have appropriate numbers of each of the following categories of staff	Nurses	1	1	3	2	0	7
	Aboriginal or Torres Strait Islander Health Practitioners	4	1	1	1	0	7
	Doctors (GPs)	0	3	3	1	0	7
	Medical specialists	2	3	2	0	0	7
	Allied health workers	2	1	3	1	0	7
	Administrative staff	1	2	3	1	0	7
There are good systems in place to ensure PHC staff have support from experienced staff, especially when health centres are affected by turnover of staff and staff shortages		3	2	2	0	0	7
There are good systems in place to recruit, retain and support each of the following categories of staff (full time or visiting) as integral members of PHC teams.	Nurses	1	2	3	1	0	7
	Aboriginal or Torres Strait Islander Health Practitioners	4	0	3	0	0	7
	Doctors (GPs)	2	1	3	0	1	7
	Medical specialists	1	3	2	0	1	7
	Allied health workers	1	1	5	0	0	7
	Administrative staff	1	1	5	0	0	7
PHC staff function effectively in teams		1	4	0	2	0	7
PHC staff are generally clear about their roles in relation to other members of the PHC team		2	1	3	1	0	7
PHC staff are trained to work effectively in teams		1	3	2	1	0	7

	Strongly Disagree	Partly Disagree	Partly Agree	Strongly Agree	Don't know	No. of respondents
There are good systems in place to support staff development, including the development of knowledge and skills required	2	1	2	1	1	7
There are good systems in place to support inter-organisational and intra-organisational learning	3	2	2	0	0	7
Staff are well trained in the principles of client self-management as relevant to preventive health care	1	3	3	0	0	7
There are good self-management resources that are relevant to preventive health care available to PHC staff	0	5	1	1	0	7
There are good systems in place to support all members of PHC teams in understanding the needs and aspirations of people living in Aboriginal and Torres Strait Islander communities for the purpose of providing best practice preventive health care	3	1	1	0	0	5
There are good systems in place to support all members of PHC teams to provide care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions	2	2	1	0	0	5
There are good systems in place to train all members of PHC teams in providing patient-centred care for people living in Aboriginal and Torres Strait Islander communities	2	2	1	0	0	5
There are good systems in place to ensure PHC teams have a clear understanding of the size, diversity and other key features of their service populations and to apply this knowledge	2	2	1	0	0	5
There are good systems in place to ensure PHC teams are able to apply the principles of population health	1	3	0	0	0	4
There are good systems in place to ensure PHC teams staff are well trained in the principles of population health	1	1	3	0	0	5
Best practice guidelines and other decision support resources are available to PHC staff	1	0	4	0	0	5
PHC staff are adequately trained to use the available best practice guidelines and other decision support resources	1	2	2	0	0	5
The clinical information systems and communication technology in place have the functionality to support provision of best practice care	2	0	2	1	0	5
PHC staff are trained and effectively supported to use clinical information systems and communication technology for supporting and providing best practice	2	1	2	0	0	5
There are good quality improvement tools available in health centres for supporting and improving delivery of best practice care	2	0	2	1	0	5
PHC staff are adequately trained to use quality improvement tools and resources for supporting and improving delivery of best practice care	2	1	1	1	0	5
Managers are adequately trained to support effective use of quality improvement tools and	3	0	2	0	0	5

	Strongly Disagree	Partly Disagree	Partly Agree	Strongly Agree	Don't know	No. of respondents
resources for monitoring and enhancing delivery of best practice care						
There is good local ownership by PHC staff of CQI data and CQI processes for supporting and improving delivery of best practice care	3	0	2	0	0	5
Managers provide clear and appropriate support for effective use of quality improvement tools and resources by PHC staff for monitoring and enhancing delivery of best practice care	4	0	1	0	0	5
PHC staff generally believe that CQI data and CQI processes can be used for supporting and improving delivery of best practice	2	1	0	2	0	5
There are good systems in place to increase the expectation of community members with regard to best practice care	2	1	2	0	0	5
There are good systems in place to strengthen community leadership for quality with regard to best practice	2	1	1	0	0	4
There are good systems in place to enhance the health literacy of community members with regard to best practice care	2	3	0	0	0	5
There are good systems in place to build the capability and to support PHC staff to develop effective links to work in partnership with the communities they serve in providing best practice care	1	2	2	0	0	5
There is good clinical and management leadership at the regional, state, national level for supporting and providing best practice	1	1	2	0	1	5
There are good networks and regional coordination between parties involved in supporting and providing best practice	2	2	1	0	0	5
Managers actively support the development of partnerships across the health sector for the purpose of enhancing delivery of best practice care	3	0	1	1	0	5

Note: PHC, primary health care; CQi, continuous quality improvement. Group responses are counted as one respondent.

Table E2: Responses regarding the extent to which primary health care staff attributes present barriers or enablers to addressing priority evidence-practice gaps

	Strongly Disagree	Partly Disagree	Partly Agree	Strongly Agree	Don't know	No. of respondents
PHC staff know the content and objectives of best practice care	0	0	5	0	0	5
PHC staff are aware of how to provide best practice care in preventive health care for Aboriginal and Torres	1	0	4	0	0	5
PHC staff have the skills to provide best practice care in preventive health care for Aboriginal and Torres Strait Islander people	0	2	2	1	0	5
PHC staff recognise that it is their professional responsibility to provide best practice care in preventive health care for Aboriginal and Torres Strait Islander	0	1	1	3	0	5
PHC staff are confident in their ability to provide best practice care in preventive health care for Aboriginal and Torres Strait Islander people	0	2	2	1	0	5
With regard to providing best practice care in preventive health care for Aboriginal and Torres Strait Islander people, PHC staff are optimistic about the future	1	2	1	1	0	5
PHC staff believe that if they provide best practice care in preventive health care for Aboriginal and Torres Strait Islander people, it will have benefits for the health of Aboriginal and Torres Strait Islander people more generally at a population level	1	1	3	0	0	5
PHC staff believe that if they provide best practice care for Aboriginal and Torres Strait Islander people it will have disadvantages for their relationships with Aboriginal and Torres Strait Islander people	2	0	3	0	0	5
How strong is the intention of PHC staff to provide best practice care in preventive health care every day to Aboriginal and Torres Strait Islander people attending their services *Note response options: Not strong at all; Quite strong; Mostly strong; Always very strong; Don't know*	1	2	1	1	0	5
How often do PHC staff remember to provide best practice care in preventive health care for Aboriginal and Torres Strait Islander people *Note response options: Never; Occasionally; Often; Always; Don't know*	0	3	1	1	0	5
PHC staff believe that when they need to concentrate to provide best practice care in preventive health care for Aboriginal and Torres Strait Islander people, they have no trouble focusing their attention	2	2	1	0	0	5
Most people of influence in Aboriginal and Torres Strait Islander PHC services are seen by primary health care staff to support the provision of best practice care for Aboriginal and Torres Strait Islander people	0	1	2	1	1	5
Are PHC staff who provide preventive health care for Aboriginal and Torres Strait Islander people currently able to enjoy their normal day-to-day work activities? *Note response options: Never; Occasionally; Often; Always; Don't know*	0	3	1	0	1	5
Do PHC staff who currently provide preventive health care for Aboriginal and Torres Strait Islander people feel unhappy, anxious or depressed about their work? *Note response options: Never; Occasionally; Often; Always; Don't know*	1	2	2	0	0	5

Note: PHC, primary health care; CQi, continuous quality improvement. Group responses are counted as one respondent.

Appendix F: Evidence Brief

Improving the quality of Aboriginal and Torres Strait Islander primary health care

What the research shows

This evidence brief has been prepared for the 'Engaging Stakeholders in Identifying Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP)' project. You are invited to provide feedback to refine the brief, using the online project questionnaire**.**

The Aboriginal and Torres Strait Islander primary health care (PHC) sector has embraced continuous quality improvement (CQI) as a way of improving the overall quality of care delivered to Aboriginal and Torres Strait Islander Australians, in order to **improve health outcomes**. This evidence brief presents an overview of findings from local and international research about **barriers, enablers and strategies** for using CQI to make improvements in PHC quality.

Local research has reflected the diversity and complexity of Aboriginal and Torres Strait Islander PHC delivery – geographic diversity, remote-rural-urban health care settings and community-controlled, government, non-government or private providers. Data have been gathered in settings in which political, cultural, social, educational, technological, emotional and ideological factors interact in complex ways. Despite this diversity and complexity, there are some common messages from the research findings, which are supported by international literature about CQI.

Who is this evidence brief for?

Primary health care policy makers, managers, clinical governance groups. The information will also interest providers and practitioners.

Key messages

- Don't wait for perfect data before commencing CQI. Even where good quality data on care processes are not consistently available at the start, the use of data in CQI cycles can act as a catalyst for improved data quality. Meanwhile, invest in developing good health centre systems and staff skills in using data.
- Emphasise use of CQI data for improving care for patients and populations. Practical use of CQI data helps to motivate clinicians and managers to participate in CQI.
- Design improvement strategies to suit local conditions – or adapt strategies that are working successfully in similar settings.
- Build on staff skills and strengths to implement improvement strategies. Share success stories and information about CQI between health centres to enable learning between peers.
- Work on developing a common vision and culture for CQI. Address any underlying organisational leadership and management issues that may detract from implementing CQI.
- Empower Aboriginal and Torres Strait Islander staff and managers to lead, participate in and promote CQI, to ensure improvement strategies match local population and community needs.
- Invest in developing leadership for CQI at each level of the system.
- Use system-wide approaches to integrate CQI across the whole system. Use CQI processes to achieve large-scale change.

Don’t wait for perfect data before commencing CQI. Even where good quality data on care processes are not consistently available at the start, the use of data in CQI cycles can act as a catalyst for improved data quality. Meanwhile, invest in developing good health centre systems and staff skills in using data.

In PHC generally, clinical information systems are often poor and fragmented. Policy makers may therefore find it difficult to access consistent and broad scale data on relative need, priorities, performance and quality of care. In addition, there is limited focus and capability at various levels of the system to manage, interpret and use data for the purpose of improving system performance[1], and skills in the use of data to inform improvements in service delivery appear highly variable across all levels of the health system[2,3].

The quality of data is important. Technical advancements (electronic patient information and recall systems, tools, guides, practice standards) can make CQI processes easier and quicker, but if CQI data are perceived to be inaccurate it will not be credible[4,5]. At the health centre level, there is evidence that the quality of health system data can be improved by staff carrying out audits of client records[4].

Competing pressures and perceptions about unreasonable workloads, poor resources and support are often seen as barriers to CQI in Aboriginal and Torres Strait Islander health centres. Staffing constraints influence capacity to deliver guideline-scheduled care – or to make improvements in care. Health centres able to sustain performance in the face of high staff turnover tend to have strong regional support systems together with commitment to good health centre systems[6].

Emphasise use of CQI data for improving care for patients and populations. Practical use of CQI data helps to motivate clinicians and managers to participate in CQI.

For CQI to work successfully, staff need to value the use of data for improvement purposes and believe they can influence change[6]. Local staff increase their support for CQI when they see demonstrated improvements in care and clinical outcomes for clients. Hands-on auditing and participation in feedback and planning sessions by nurses and Aboriginal and Torres Strait Islander practitioners also increases staff support[2,4].

Many staff in Aboriginal and Torres Strait Islander PHC have enthusiasm and a sense of urgency to improve health outcomes[4]. In remote areas in particular, staff may also have a sense of burden and hopelessness (due to long work hours and lack of apparent improvement in health and social determinants) that can lead to clinical inertia. Quality improvement initiatives have been demonstrated to boost morale in these contexts, because they can demonstrate that the hard work is producing results[4,6].

Design improvement strategies to suit local conditions – or adapt strategies that are working successfully in similar settings.

There is strong evidence that improving the quality of care requires a good match between the conditions or context for care delivery, and the strategies used to achieve improvement[7]. Decision makers need to consider **what works, for whom, under what conditions** when planning for improvement. A one-size-fits-all approach is unlikely to be successful. However, successful strategies for improvement may require taking on the core elements of a proven product or strategy and adapting the way it is presented or used locally[8].

Adaptability is important in large-scale application of strategies for improvement; however the underpinning logic of a new product or strategy should be made explicit, so implementers understand the core that should not be compromised. In addition, problem-solving suggestions may help implementers make adaptations for the local context[9]. This approach may help policy makers and program managers to meet the dual challenges of supporting large-scale implementation of best practice, while also enabling local decision making and tailoring to specific needs.

Build on staff skills and strengths to implement improvement strategies. Share success stories and information about CQI between health centres to enable learning between peers.

Strategies for improvement need to build on the skills and attributes of the existing Aboriginal and Torres Strait Islander PHC workforce. Staff need to be involved in completing the latter steps of CQI cycles in order to strengthen the interpretation of data, but also to go beyond focusing only on data or specific indicators to define and act on systemic problems, including through group interpretation and community consultation[3]. The ability to work and communicate effectively in cross- and inter-cultural settings is a critical component of the skills and attributes needed to achieve improvements[10,11].

CQI networks and training events are important opportunities to build relationships, share CQI knowledge and learn practical information about 'what works' from others[2,3]. The remote location and geographic dispersion of many health centres serving Aboriginal and Torres Strait Islander populations mean that staff tend to value opportunities to connect through CQI and to form CQI networks[6].

How evidence was identified

We drew evidence from the ABCD program of work and other publications on CQI in Aboriginal and Torres Strait Islander PHC, then extended our search to include relevant national and international literature about implementation of CQI and innovations in PHC.

Work on developing a common vision and culture for CQI. Address any underlying organisational leadership and management issues that may detract from implementing CQI.

Effective and sustained quality improvement needs a shared understanding of the purpose of CQI and a common vision shared by multiple stakeholders. CQI needs to be embedded into the day to day work of front-line health workers, clinical leaders and managers through routines and relationships that function across and between organisations[4].

What helps to develop a culture of quality improvement?

- Top and middle managers aligned in their CQI vision and goals.
- Commitment to workforce development, with management and staff participation in CQI training at all levels of an organisation.
- Strong team orientation and 'no blame' culture.
- Active management of CQI (e.g., dedicated CQI facilitators, regular progress reviews)
- Use and promotion of small scale projects that demonstrate change is possible and which, if successful and appropriate, may be scaled up across the health system.
- Willingness to embrace change and initiative[4,5,12,13].

Organisations with a strong CQI culture treat barriers such as funding or staff shortages as motivators for CQI. Instead of being viewed as 'extra work', CQI is seen as 'a way of working smarter and making jobs easier'. Disruptions such as restructuring or disease outbreaks can slow CQI work, but can also be used as a platform to apply CQI approaches in responding to the issue[13].

Where there is a culture of CQI, staff values are more likely to align with best practice in Aboriginal and Torres Strait Islander PHC[1].

Where there is poor management, uncertainty and confusion over roles, staff are discouraged and place less value on their data. Interventions to tackle unfavourable service delivery conditions need to be developed alongside CQI implementation[6].

Poor support for collaboration for CQI can lead to competitiveness, fatigue, staff who feel disillusioned with CQI and lack of cooperation. Identifying health centres with similar conditions and working to build adequate trust for networking might help staff believe they can influence change[6].

Empower Aboriginal and Torres Strait Islander staff and managers to lead, participate in and promote CQI, to ensure improvement strategies match local population and community needs.

Aboriginal and Torres Strait Islander leadership in CQI is most important[4,5,14], for example, through active involvement of community health boards or Aboriginal and Torres Strait Islander staff and managers committed to CQI. This leadership for CQI can help ensure the 'cultural, linguistic and practical relevance of health care and population health services'[14].

When planning or implementing strategies for change, the risk of overlooking cultural and historical influences on Aboriginal and Torres Strait Islander health care contexts is reduced where Aboriginal and Torres Strait Islander health practitioners actively lead or are engaged in CQI initiatives. Aboriginal and Torres Strait Islander health practitioners' involvement in clinical care and CQI processes is important in influencing the extent to which CQI processes result in improvements in delivery of guideline-scheduled services[15].

In Aboriginal and Torres Strait Islander settings the credibility of a strategy for improvement is likely to be influenced by who makes the decision to adopt a particular strategy, and how that decision is made[10,16].

Invest in developing leadership for CQI at each level of the system.

Leadership for improving the quality of care is needed at all levels of the health system to guide, support and facilitate CQI efforts[4,5,7,13]. Leaders for CQI are not necessarily in management roles; 'distributed' leadership with leadership functions vested in 'a set of people who can collectively perform them' is effective[12]. Shared responsibility and control of CQI by local staff as well as area/regional and jurisdiction managers is important for successful and sustainable CQI in health systems[5,17].

The attitudes of leaders and managers within the health system towards CQI can influence how clinic staff respond[4,13]. If management or reporting requirements are focused more on using data for accountability than to drive improvements in care, other managers and staff are likely to be suspicious of CQI and perceive it as 'checking up'[3-5].

Use system-wide approaches to integrate CQI across the whole system. Use CQI processes to achieve large-scale change.

The Australian health system operates at three levels; the service and health centre level (individual organisations), the regional level (regional and state/territory health bodies, community-controlled peak bodies, general practice networks), and the national level (nationwide policies and programs, accreditation and regulatory regimes)[18]. At each level, multiple factors influence the context in which improvement might take place. What happens at each level is partly dependent on, and influences, what happens at other levels. So achieving large-scale improvement in the quality of care is likely to require specific attention at each level of the health system[7].

Mechanisms needed to support improvement at the upper levels of the system are often overlooked. Large-scale change may require a package of interventions and long term 'institution-building' for regional and national level organisations to adapt to new ways of functioning[19].

Building a system wide and sustainable approach to CQI across Aboriginal and Torres Strait Islander PHC centres requires certain and sustained funding[3,5]**.** Dedicated funding has resulted in measurable improvement outcomes in service delivery, often achieved by allocating responsibility for CQI processes to a particular staff member and/or establishing regional quality systems[5,6,15]. Resources invested in CQI facilitator roles enable health centres to move to a higher level of capability and capacity in CQI[3].

Applied system-wide, integrated CQI uses multi-site, multi-faceted approaches that reflect the enablers described by the evidence and aim to achieve change at various levels of the system. In successfully integrated CQI models, CQI programs are: part of core business (rather than an add-on or one-off project); engage front-line workers, clinical leaders, and managers in CQI processes; distribute leadership for CQI across the whole health system; use CQI processes and tools to address multiple enablers of good quality care, and; use data from different stakeholders at different levels of relevant organisations to understand and inform broader system level performance[17,20,21].

A **Partnership Learning Model**[20] illustrates how large-scale change can lead to improved Aboriginal and Torres Strait Islander population health outcomes, through the interaction of comprehensive PHC, integrated CQI, system-based research networks, and system-based participatory action research. In its development and application through the ABCD National Research Partnership (2010-2014), the model showed potential for achieving wide-scale engagement of researchers, practitioners, managers, and policy makers in efforts to scale-up and spread effective quality improvement programs. It provides mechanisms to build or strengthen the capacity of a health system to continually work towards improving its performance.

For more information

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