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National Report on Aboriginal and Torres Strait Islander Mental Health & Wellbeing Care (2012 – 2014) with comparative QLD data

Phase 1 Report: Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP Project)

Table of Contents

Figure list

Table list

Abbreviations

ABCD	Audit and Best Practice in Chronic Disease
ABCD NRP	Audit and Best Practice in Chronic Disease National Research Partnership (the Partnership)
ATSIHW	Aboriginal or Torres Strait Islander Health Workers
BP	Blood pressure
CQI	Continuous Quality Improvement
EPGs	Evidence-practice gaps
ESP	Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement
GP	General Practitioner
MBS	Medicare Benefits Schedule
PHC	Primary Health Care
SAT	Systems Assessment Tool

Authorship

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1. Executive summary

Purpose

The purpose of this project is 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 mental health and wellbeing care. System-wide gaps are likely to be due to deficiencies in the broader primary health care (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), of the impact of Australian colonist history on Aboriginal and Torres Strait Islander people, and of how social systems – including the health system - should be shaped to meet the needs of Aboriginal and Torres Strait Islander people.

Approach

Through three cyclical phases of reporting and feedback, we aim 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 3) 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.

This report represents the first phase: identifying *current* evidence-practice gaps in mental health care. The report uses de-identified data from 17 health centres participating in the ABCD National Research Partnership that last conducted audits of care for clients with a diagnosed mental illness over the period Jan 2012 – Aug 2014 (314 client records). The data were used to identify a preliminary set of priority evidence-practice gaps, where the gap between current practice and best practice is particularly marked. The accompanying survey provides an opportunity for stakeholders to provide feedback on this preliminary set as identified by the ABCD project team in conjunction with an independent clinical expert.

Summary of findings

Although a proportion of health centres are doing well in many aspects of mental health and wellbeing care, the majority of health centres are not doing well in a number of key aspects of recommended mental health and wellbeing care.

The national ABCD data presented in the report show that aspects of care in which there is relatively better recording include Medicare numbers, some key health related behaviours and brief interventions, some aspects of mental health assessments, counselling and information following hospital admissions. However, there is wide variation between health centres in almost all aspects of mental health and wellbeing care. A general priority should therefore be to strengthen delivery of mental health and wellbeing care in those health centres with relatively low levels of delivery, commencing with those aspects of care that are identified as priorities at the local or regional level, as identified through local or regional CQI data.

A number of specific priorities for improvement are identified in this report in the areas of:

1. client records and health summaries, including completeness and consistency of recording of mental health diagnoses and comorbidities, development and documentation of shared care arrangements and referral, mental health care plans, and regular review of care plan goals;

2. risk factors and brief interventions, particularly enquiry about and recording of drug misuse, brief intervention, counselling or advice on tobacco use, nutrition and physical activity;

3. scheduled services, including consistent recording across all aspects of recommended care for clients with mental illness;

4. complete and consistent recording of relevant investigations for clients on psychotropic medication;

5. follow-up of abnormal results for clients with a deterioration or exacerbation of symptoms; and

6. health centre systems, particularly links with the community to inform service and regional planning; organisational commitment for support structures and processes that promote safe, high quality care, and team structure and function.

Next steps

This report is accompanied by a survey that is designed to assess key stakeholders' perceptions of the relative importance of various evidence-practice gaps, and to build consensus about which gaps are the most important and that warrant particular effort for achieving improvement. The results of the survey will be fed back to stakeholders in the second phase of the project. The second phase will be focussed on identifying barriers and enablers to improvement in the priority areas, and the third on identifying strategies for improvement.

To access the accompanying survey to this report, click on this link:

https://www.surveymonkey.com/s/Phase1_Mentalhealth

Feedback is due by CoB, **24 April 2015**

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2. Background

Mental health disorders

Mental health conditions account for 10% of the health gap between Aboriginal and Torres Strait Islander people and other Australians – another 4% of the gap is attributable to suicide. Aboriginal and Torres Strait Islander adults experience psychological distress (anxiety and depression symptoms) at a rate three times that of non-Indigenous adults.[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 primary health care (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 200 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 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 'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement' (ESP) Project contributes to this process, increasing understanding and use of national aggregate CQI data for achieving wider system change. The establishment of this growing dataset has been made possible by the active contributions of health centre staff, continuous quality improvement (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.

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 therefore 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/>.

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

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 and enablers to addressing these evidence-practice gaps; and 3) develop relevant system-wide strategies for improvement (Figure 1).

Figure 1. ESP Project Phases
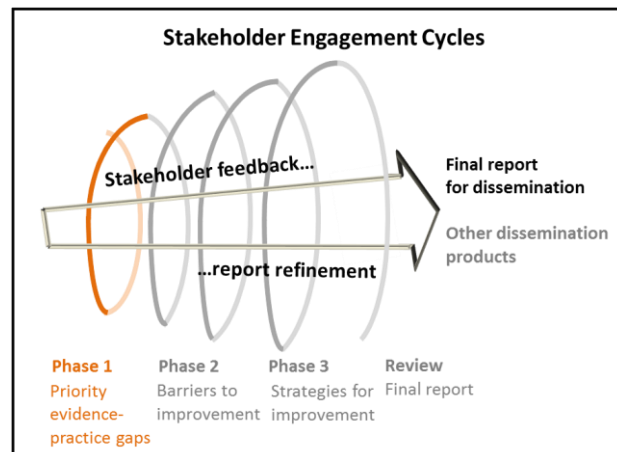
This phased approach has been adapted from systematic methods designed to link interventions to modifiable barriers to address evidence-practice gaps[2,3]. As part of their approach, French and colleagues utilised previously tested theoretical domains relevant to behaviour change of healthcare professionals to identify barriers to be addressed as part of intervention strategies[2,4,5]. 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 domain list beyond the practitioner level to include broader system factors relevant to the Aboriginal and Torres Strait Islander PHC sector[3,6,7] (Figure 2). For more information about the ESP process, see Appendix B.

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**

Mental Health Care Audit

Sample Eligibility:
- aged ≥16 yrs
- resident in community for 6 mths
- diagnosed mental health disorder
- ongoing or relapse of symptoms suggesting need for ongoing care

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

Clinical Audit

One21Seventy database

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

Research Evidence - relevant to different levels of the system

Evidence base: **including aggregate CQI data**

Current status data: 2012 – Aug 2014 (n=17 health centres; 314 records; 11 system assessments)

Trend data: 2009 – 2014 (n=22 health centres; 976 records; 30 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

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.

Strategies for improvement

Report & survey: research evidence on improving Indigenous PHC

3. Reflecting on evidence & experience, what new or refined strategies could address EPGs?

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.

3. Profile of health centres

Seventeen health centres last used the mental health audit tool in 2012, 2013 or 2014 (Table 1). The mental health audit tool had been used mostly by health centres in Qld and the NT. The data included in the analysis for this report were extracted at the end of August 2014. A total of 314 records were audited in the 17 health centres. Fourteen health centres last used the tool in 2013 (228 records audited), 2 health centres in 2012 (56 records audited) and 1 health centre in 2014 (30 records audited). To date, eleven of these health centres recorded a completed systems assessment in the One21seventy database.

Table 1. **Most recent mental health audit and systems assessment completed in 2012, 2013 or 2014 (number of client records audited, number of health centres)**

		2012	2013	2014	Total
NT	#Records	32	70		102
	#Centres	1	6		7
	#SATs		4		4
QLD	#Records	24	45	30	99
	#Centres	1	4	1	6
	#SATs	1	3		4
SA	#Records		65		65
	#Centres		2		2
	#SATs		1	1	2
WA	#Records		48		48
	#Centres		2		2
	#SATs		1		1
Total	#Records	56	228	30	314
	#Centres	2	14	1	17
	#SATs	1	9	1	11

The majority of health centres were in remote communities with an almost equal number of community-controlled and government operated centres (Table 2). Ninety-five percent of records audited were for Aboriginal or Torres Strait Islander clients. Close to 100% of audited records showed a record of attendance at the health centre within the previous 12 months and almost 60% of the most recent attendances for these clients were for mental health care. National data shows that initial assessment at the health centre was most commonly conducted by a nurse, with Aboriginal or Torres Strait Islander Health Workers (ATSIHW) being the next most common profession to do the initial assessment.

Table 2. Characteristics of health centres and clients whose records were last audited during 2012-2014 (*number & %*)

		NT 7		QLD 6		SA 2		WA 2		Total 17	
Primary Health Care Centres											
Location	Urban			1	17%	1	50%			2	12%
	Regional	1	14%	2	33%	1	50%	1	50%	5	29%
	Remote	6	86%	3	50%			1	50%	10	59%
Governance	Government	2	29%	6	100%	1	50%			8	47%
	Community Controlled	5	71%			1	50%	2	100%	9	53%
Size of population served	≤500			2	33%					2	12%
	501-999	3	43%	1	17%	1	50%			5	29%
	≥1000	4	57%	3	50%	1	50%	2	100%	10	59%
Completed mental health audit cycles	Baseline	5	71%	2	33%	1	50%	1	50%	9	53%
	1-2 cycles	2	29%	3	50%	1	50%			6	35%
	≥3 cycles			1	17%			1	50%	2	12%
Number of audited records		**102**		**99**		**65**		**48**		**314**	
Age: mean (& range)		35 (18-65)		38 (17-66)		38 (18-74)		40 (18-83)		37 (17-83)	
Gender	Male	54	53%	42	42%	28	43%	18	38%	142	45%
	Female	48	47%	57	58%	37	57%	30	63%	172	55%
Indigenous status	Indigenous	99	97%	90	91%	65	100%	43	90%	297	95%
	Non-indigenous	2	2%	9	9%			5	10%	16	5%
	Not stated	1	1%							1	0.3%
Reason for last attendance	Mental health care	63	62%	79	80%	22	34%	20	42%	184	59%
	Mental health crisis	1	1%			1	2%			20	0.6%
	Acute care	25	25%	15	15%	22	34%	20	42%	82	26%
	Other	13	13%	5	5%	20	31%	8	17%	46	15%
Profession patient first seen by	ATSIHW	17	17%	3	3%	25	38%	22	46%	67	21%
	Nurse	53	52%	36	36%	26	40%	16	33%	131	42%
	GP	5	5%	24	24%	11	17%	5	10%	45	14%
	Psychiatrist	7	7%	9	9%					16	5%
	Psychologist			2	2%			1	2%	3	1%
	Mental Health Worker	16	16%	16	16%	2	3%	1	2%	35	11%
	Counselor	1	1%			1	2%	1	2%	3	1%
	Other	3	3%	9	9%			2	4%	14	4%
Attended within past 6 months		97	95%	88	89%	59	91%	47	98%	291	93%
Attended within past 12 months		102	100%	98	99%	64	98%	48	100%	312	99%

4. Presentation of data

The presentation of audit findings follows the structure of the mental health audit tool, although there is some re-ordering of the sections. As for the audit tool, sections of this report cover recording of key client information; risk factors and brief interventions; current treatment; hospitalisation and discharge; scheduled services; investigations and follow-up of abnormal findings.

Each section of the report includes:
- A summary of key findings from the national audit data;

- Preliminary priority evidence-practice gaps (preliminary priorities for improvement) based on the national data; and

- Box and whisker plots for each of the items in the audit tools, which show the level of adherence to best practice guidelines, and variation between health centres.

Box and whisker plots

The mean percent delivery of each service item is calculated for each health centre and displayed within a 'box and whisker plot' to show the distribution (or variation) in delivery of that item across health centres.

Box and whisker plots show (Box 1):
- the 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);

- the range of service item delivery by dividing the dataset into quarters:
  - the box represents the middle 50% of the dataset (or interquartile range), 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 box plot, the greater the range (or variation).

Box 1: How to interpret box and whisker plots
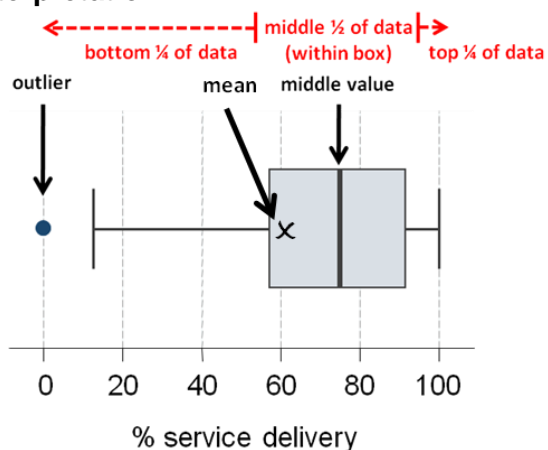
Interpretation:	Examples:
	  • Wide variation in service delivery (range 0-100%). • Health centres relatively equally dispersed across the range. 25th to 75th centile is 30-90%. • Majority of centres at lower end of range (between 0-20%) with a few health centres at higher levels – up to 100%. • Smaller variation in service delivery (range 70-100%). • All centres at higher end with 75% of centres in the 90-100% range.
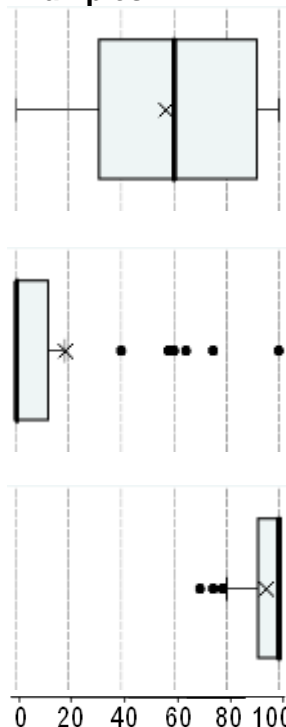
5. Identifying priority evidence-practice gaps

Criteria for determining priority evidence-practice gaps

The priorities for improvement, or priority evidence-practice gaps, reported here were determined by identifying items in the national clinical audit and systems assessment data that reflected:

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

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

c. important aspects of comprehensive PHC that were generally recorded at low levels; and,

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

These criteria were used by the ABCD Project team to identify a preliminary set of priorities. The preliminary priorities are presented in the body of the report, and are also presented below for summary purposes.

Identified evidence-practice gaps for mental health care

There is wide variation between health centres in almost all aspects of mental health and wellbeing care. This is evident in the wide interquartile range (generally between 30% and 60%) and the wide overall range (0-100%) for delivery of many items of mental health and wellbeing care.

A *general priority* could therefore be to strengthen delivery of mental health and wellbeing care in those health centres with relatively low levels of delivery, commencing with those aspects of mental health and wellbeing care that are identified as priorities at the local or regional level, as identified through local or regional CQI data.

Areas of relatively strong performance

Aspects of delivery and recording of care that are being done well by the majority of health centres:

– Recording Medicare numbers for mental health clients

– Recording of smoking and alcohol status, and recording of brief interventions for clients identified as using alcohol at *high-risk* levels or drug misuse

– Record of a discharge letter or follow-up plan post-discharge for clients with a record of admission to hospital

– Record of a mental health assessment for the majority of clients, and relatively high levels of recording of counselling of clients or their families regarding the illness and social issues

– Relatively clear and frequent documentation of concerns about exacerbation or deterioration in symptoms.

Specific preliminary priorities for improvement

Although a proportion of health centres are doing well in many aspects of mental health and wellbeing care, the *majority* of health centres are not doing well in a number of key aspects of mental health and wellbeing care:

Client records &health summaries

–   Completeness and consistency of recording of mental health diagnoses and of comorbidities

–   Development and documentation of shared care arrangements and referral

–   Development and documentation of mental health care plans and regular review of care plan goals

Risk factors and brief interventions

–   Enquiry about and recording of drug misuse

–   Brief intervention, counselling or advice on tobacco use nutrition and physical activity

Scheduled services

–   Consistent recording across all aspects of recommended care for clients with mental illness

Investigations

–   Complete and consistent recording across all relevant investigations for clients on psychotropic medications

Follow-up of abnormal findings

–   Appropriate follow-up for clients with a deterioration or exacerbation of symptoms

Health centre systems

The system components and items within these components that have relatively low scores are clear priority areas for attention. These include:

–   *Links with the community* component to inform service and regional planning (in particular 'Communication and cooperation on regional health planning and development of health resources')

–   'Organisational commitment' within the *Organisational Influence and Integration* component referring to organisational culture and support structures and processes that promote safe, high quality health care

–   'Team structure and function' within the *Delivery system design* component referring to the extent to which the health centre's staffing profile, allocation of roles and responsibilities, client flow and care processes maximise the potential effectiveness of the centre.

6. Current status of mental health and wellbeing care service delivery (2012-2014)

Key information in client records/health summaries

The figures in this section show mean health centre percentages of clients who have a record of certain mental health diagnoses, record of comorbidities and key information in medical records such as care plans and clinical and self-management goals.

Summary of audit findings

Nearly all health centres are recording Medicare numbers for all of their clients (Figure 3). Recording of Medicare numbers for these health centres is generally higher than for the large number of health centres using child health and the vascular and metabolic audit tools. This, together with the interest in the extending their CQI activities to mental health, indicates that these health centres are at the upper end of the range in terms of delivery and organisation of care. The mental health audit data should be interpreted in this light.

There is wide variation between health centres in the recording of a number of important mental health diagnoses, notably depressive disorder, psychotic disorder and substance use disorder (Figure 4). The variation is wider than would be expected from natural variation in the prevalence of these disorders between communities. The variation is likely to be partly due to the small size of communities and partly due to variation in diagnosis and recording. As expected, depressive and psychotic disorders were recorded most frequently, followed by anxiety disorder and substance use disorder.

Recording of comorbidities is generally lower than would be expected given the prevalence of chronic disease in these communities and the common co-occurrence of mental illness and chronic disease (Figure 5).

There is wide variation between health centres in recording of shared care arrangements, and generally low rates of recording of referrals to other mental health practitioners (Figure 5).

There were generally low levels of use of the MBS funded GP mental health care plan (41/314 or 13% of all audited records), with some variation between health centres (Figure 6). However, there was some form of mental health care plan (MBS or an alternative form) in almost half of the audited records (140/314 or 45%), with wide variation between health centres. For those with some form of care plan there were generally high levels of recording of clinical goals. There were slightly lower levels of recording of self-management or recovery goals, with wider variation between health centres. Over 90% (130/140) of those with a care plan had some form of goals recorded. For these clients, recording of review of goals was also generally high (median ~75%), although there was much wider variation between health centres (0%-100%).

Priority evidence-practice gaps (or priorities for improvement)

Priority areas for improvement relevant to key information in client records/health summaries include:

- Completeness and consistency of recording of mental health diagnoses and of comorbidities

- Development and documentation of shared care arrangements and referral

- Development and documentation of mental health care plans, particularly MBS funded care plans as these provide a source of income for services

- Regular review of care plan goals, especially in health centres with low levels of recording of goal review.

Figure 3. **Mean health centre percentages of clients with a record of key information in their medical records.**

	NATIONAL % service delivery	Number centres; audit records	QUEENSLAND % service delivery	Number centres; audit records
Medicare number recorded		17; 314		6; 99
Unsuccessful follow-up attempt *(if client not seen in past 12 months)*		2; 2		1; 1
Sectioned or under protective orders in last 12 months *(according to jurisdictional Mental Health Act)*		17; 314		6; 99
Record of shared care arrangement *(if attended in last 12 months)*		17; 314		6; 99
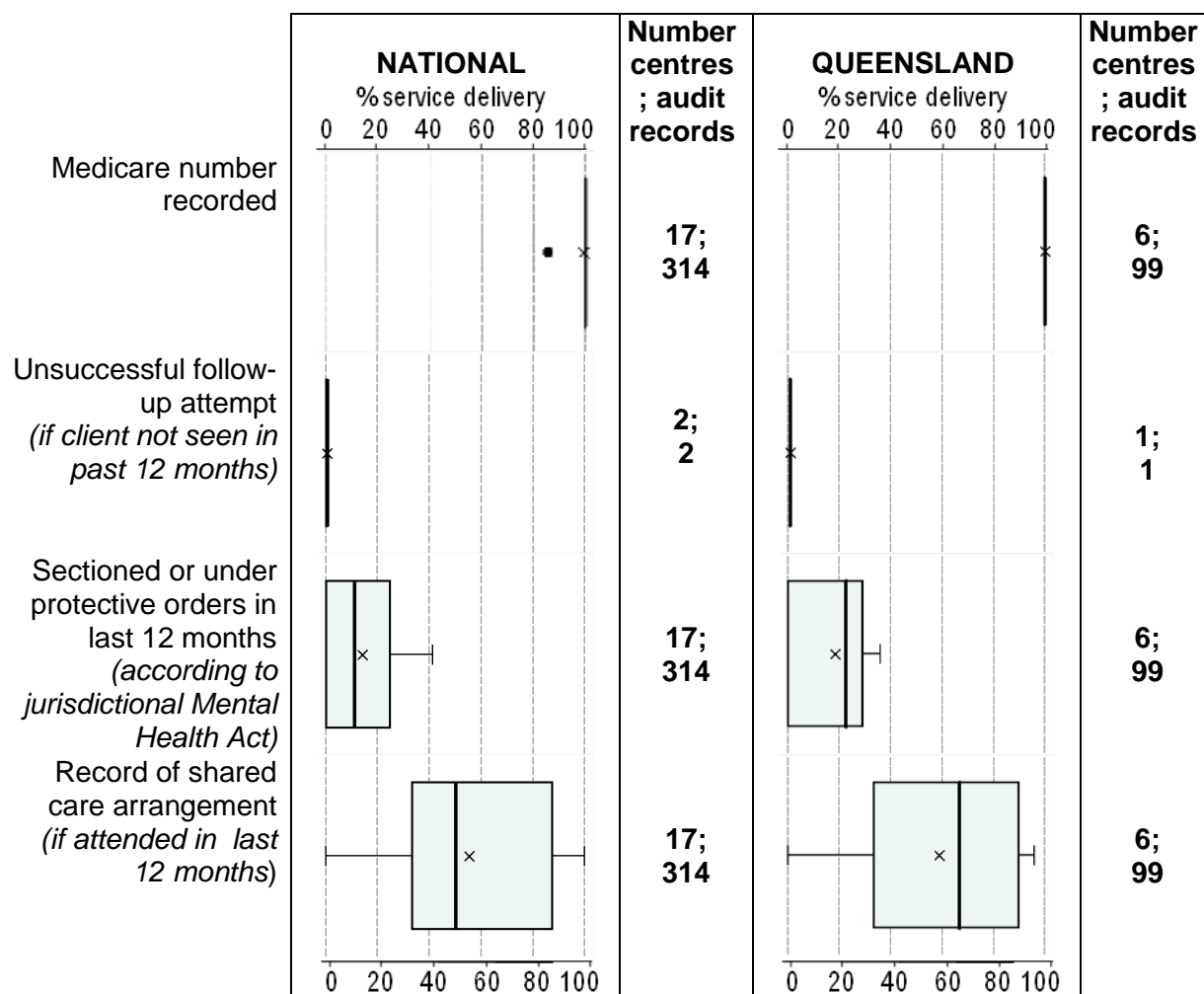
Figure 3 cont: Mean health centre percentages of clients with a record of key information in their medical records.

	NATIONAL % service delivery	Number centres; audit records	QUEENSLAND % service delivery	Number centres; audit records
If no shared care arrangement, record of referral by profession: a) Mental health worker		16; 142		6; 49
b) Psychiatrist		16; 142		6; 49
c) Psychologist		16; 142		6; 49
d) Counsellor		16; 142		6; 49
e) Traditional healer		16; 142		6; 49
f) Other profession		16; 142		6; 49
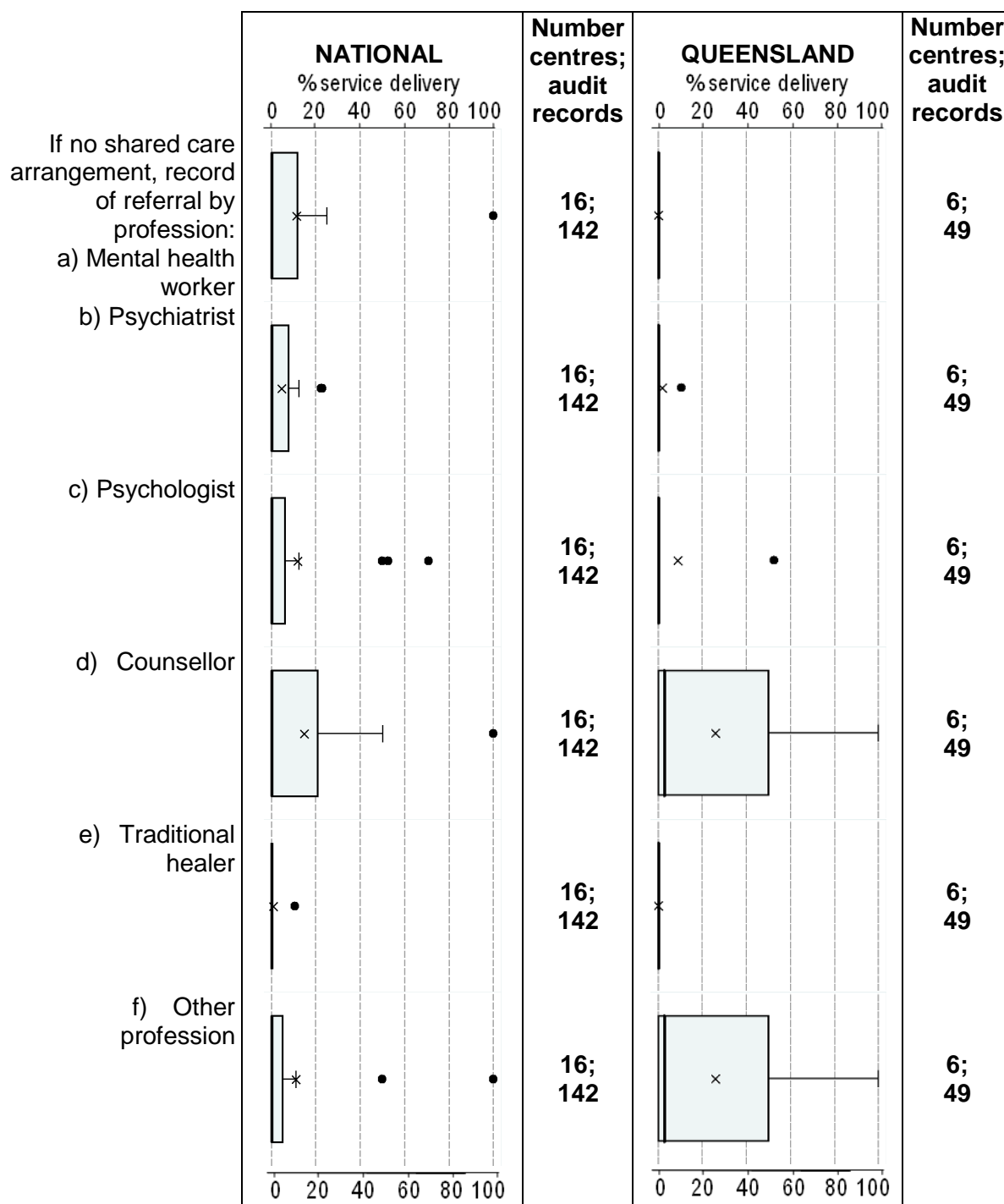
Figure 4. Health centre percentages of clients with a record of mental health diagnoses.

	NATIONAL % service delivery	Number centres; audit records	QUEENSLAND % service delivery	Number centres; audit records
Depressive disorder		17; 314		6; 99
Anxiety disorder		17; 314		6; 99
Other mood disorder		17; 314		6; 99
Psychotic disorder		17; 314		6; 99
Substance use disorder		17: 314		6; 99
Eating disorder		17; 314		6; 99
Medical disorder		17; 314		6; 99
Other disorder		17; 314		6; 99
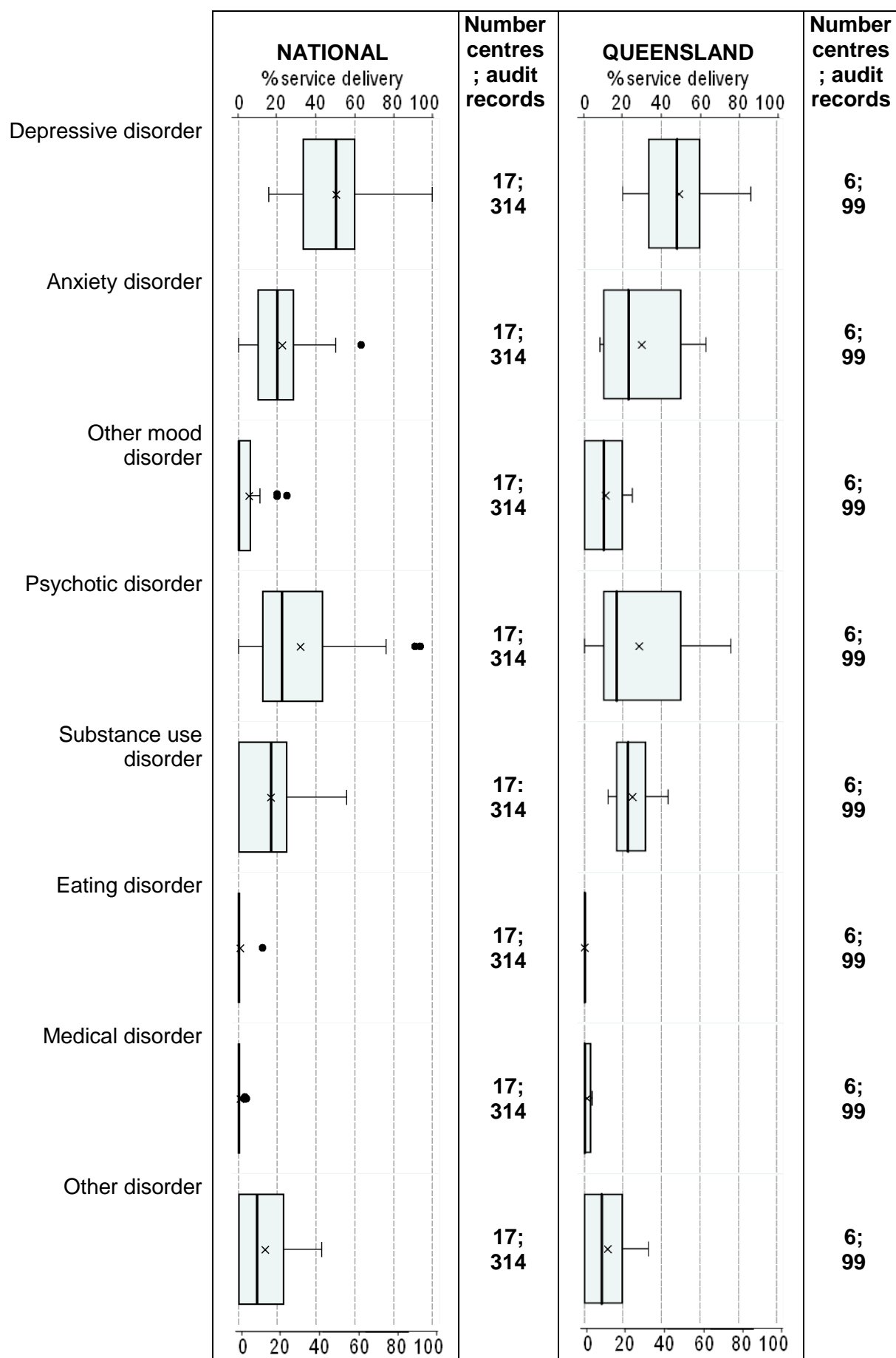
Figure 5. Mean health centre percentages of clients with a record of the following comorbidities.
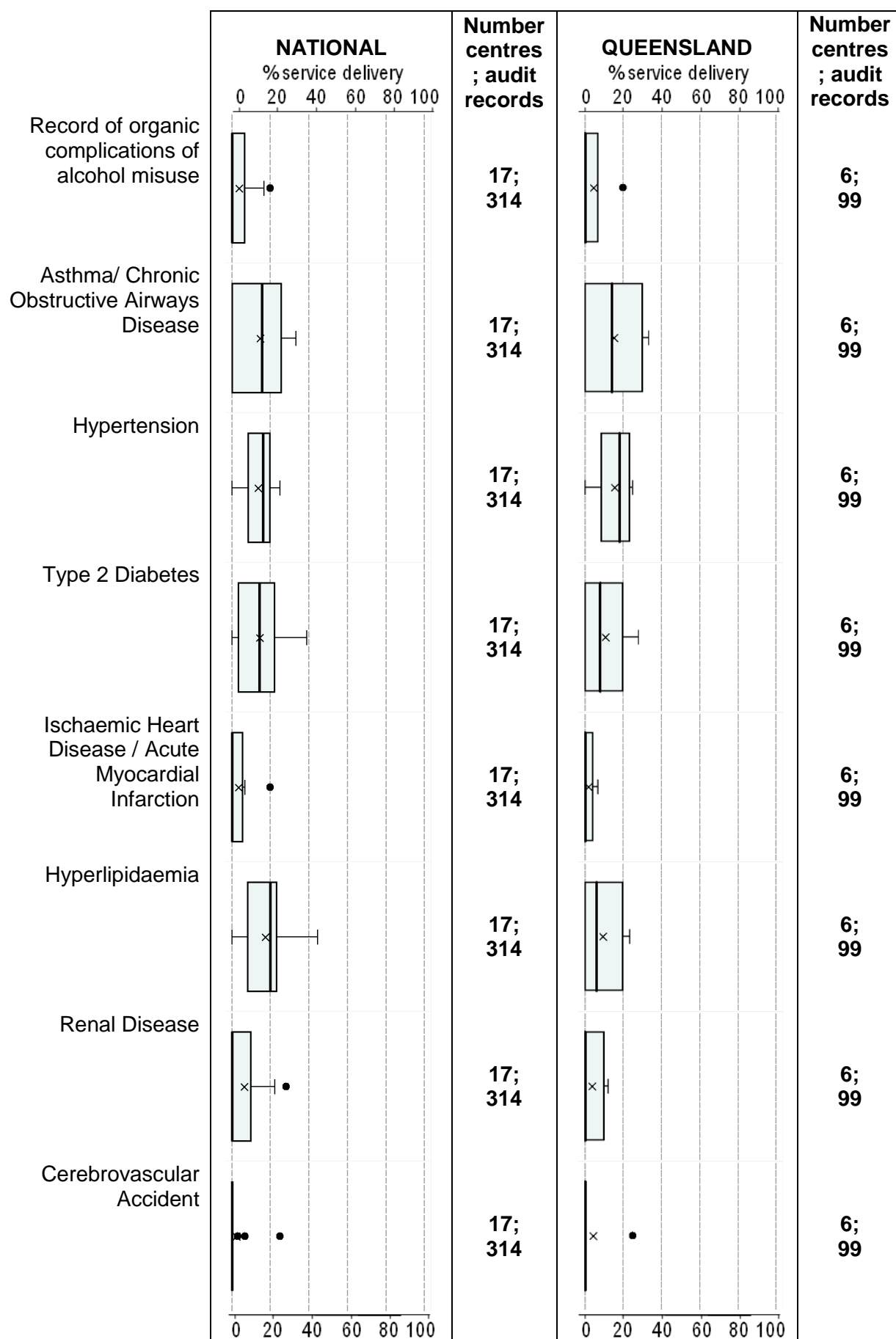
Figure 5 cont: Mean health centre percentages of clients with a record of the following comorbidities.

	NATIONAL % service delivery 0 20 40 60 80 100	Number centres; audit records	QUEENSLAND % service delivery 0 20 40 60 80 100	Number centres; audit records
Hepatitis C positive		17; 314		6; 99
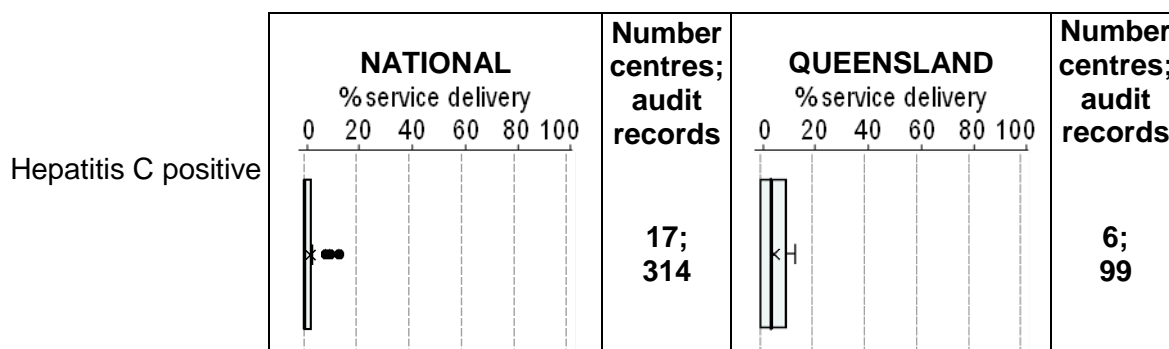
Figure 6. Mean health centre percentages of clients with a record of a care plan and associated goals in their medical records.

	NATIONAL % service delivery 0 20 40 60 80 100	Number centres; audit records	QUEENSLAND % service delivery 0 20 40 60 80 100	Number centres; audit records
GP mental health care plan (MBS items 2700, 2701, 2715 or 2717)		17; 314		6; 99
Alternative mental health care plan *(if no GP mental health plan recorded)*		17; 273		6; 88
Record of clinical goals in care plan *(if care plan documented)*		15; 140		6; 67
Record of self-management/ recovery goals in care plan *(if care plan documented)*		15 140		6; 67
Goal review in last 3 months *(if goals documented in care plan)*		15; 130		6; 67

Risk factors and brief interventions

The figures in this section show mean health centre percentages of clients with a record of a range of risk factor and brief intervention discussions.

Summary of audit findings

There was wide variation between health centres for almost all items relating to risk factors and brief interventions.

Twenty three percent (71/312) of clients had a record of using alcohol at high-risk levels and 32% (101/312) of clients had a record of drug misuse (Figure 7).

Aspects of care with relatively higher levels of performance included recording of smoking and alcohol status, and recording of brief interventions for clients identified as using alcohol at high-risk levels or drug misuse (Figure 7).

Despite relatively high levels of recording of smoking status and of BMI, the recording of a brief intervention/counselling for tobacco use or overweight/obesity was relatively low (Figures 7 & 8).

Priority evidence-practice gaps (or priorities for improvement)

Priority areas for improvement relevant to risk factors and brief interventions include:

- Enquiry about and recording of drug misuse, and brief intervention or counselling for drug misuse, particularly for health centres at the lower end of the range

- Brief intervention, counselling or advice on tobacco use nutrition and physical activity

Figure 7. Mean health centre percentages of clients with a record of the following substance use brief intervention discussions.
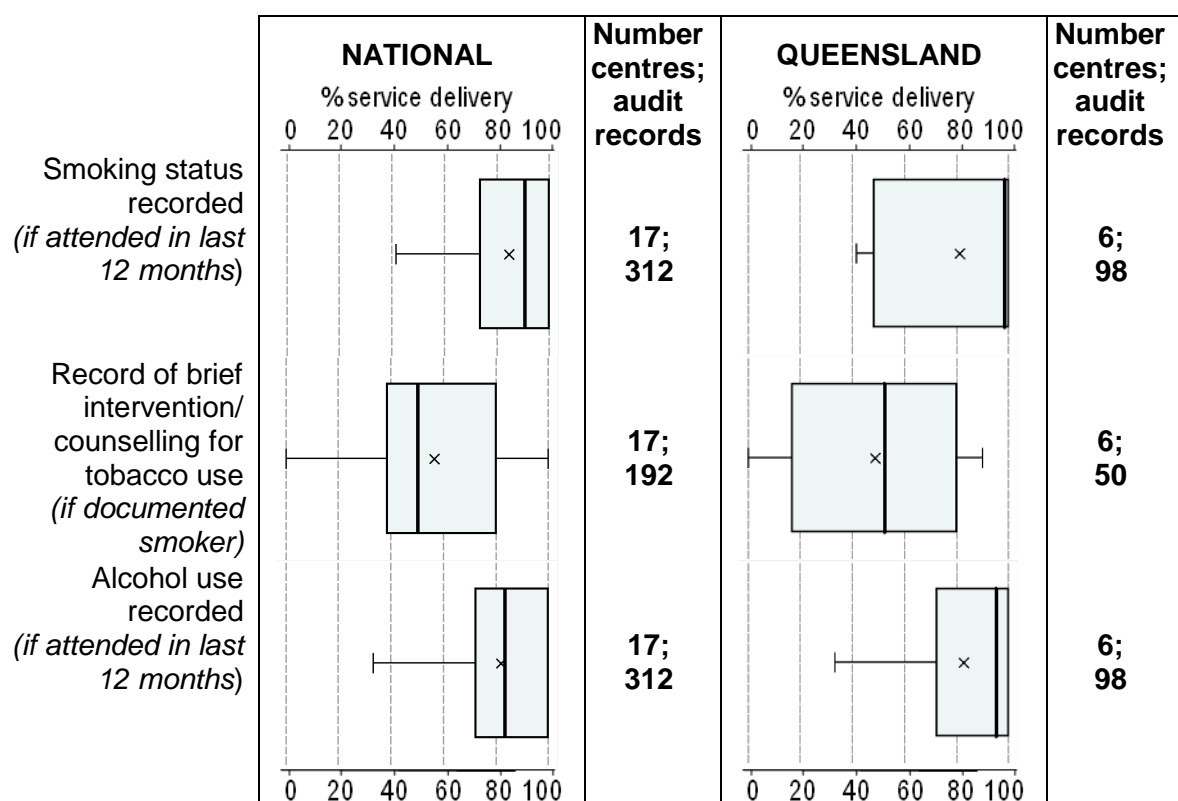
Figure 7 cont: Mean health centre percentages of clients with a record of the following substance use brief intervention discussions.

	NATIONAL % service delivery 0 20 40 60 80 100	Number centres; audit records	QUEENSLAND % service delivery 0 20 40 60 80 100	Number centres; audit records
Record of brief intervention/ counselling for higher risk alcohol use *(if documented as high risk alcohol user)*		17; 71		6; 30
Drug misuse recorded *(if attended in last 12 months)*		17; 312		6; 98
Record of brief intervention/ counselling for drug misuse *(if documented as misusing drugs)*		15; 101		6; 30
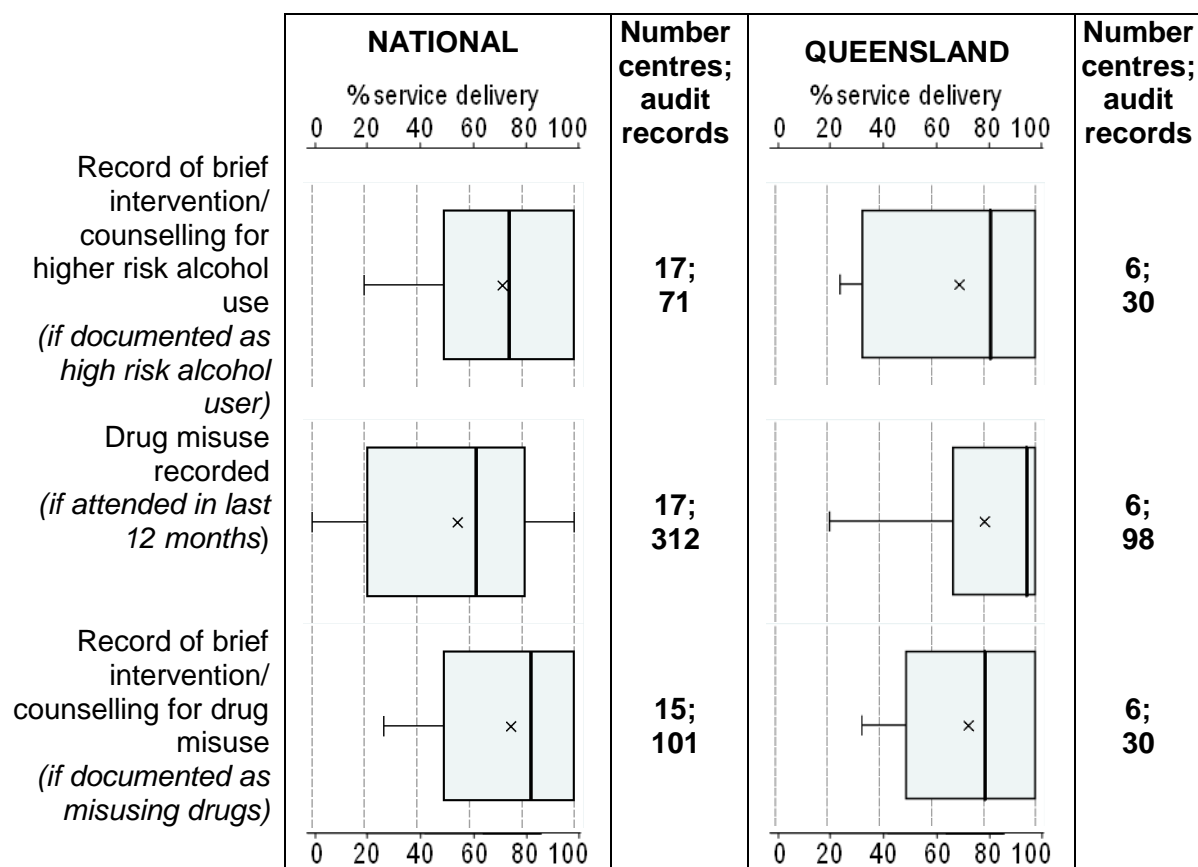
Figure 8. Mean health centre percentages of clients with a record of the following nutrition and lifestyle risk factor discussions.

	NATIONAL % service delivery	Number centres; audit records	QUEENSLAND % service delivery	Number centres; audit records
BMI *(if attended in last 12 months)*		17; 312		6; 98
Record of brief intervention/ counselling if overweight/obese *(BMI is >25)*		15; 108		4; 17
Nutrition advice *(if attended in last 12 months)*		17; 312		6; 98
Physical activity advice *(if attended in last 12 months)*		17; 312		6; 98

Current Treatment

Figure 9 shows the mean health centre percentages of clients with a record of current prescriptions.

Summary of audit findings

Over 80% (258/314) of clients with a mental health diagnosis had a record of being on some form of psychotropic medication. There is wide variation between health centres in recording of prescriptions for oral anti-depressant and for intra-muscular anti-psychotic medication (Figure 9). There was also wide variation in the use of dosette boxes of Webster packs. There was less variation in prescribing of mood stabilisers, oral anti-psychotics and of anti-anxiety and hypnotic medication. These classes of medications showed a relatively narrow interquartile range, although the latter two classes of medications showed wide overall range between health centres (Figure 9).

Priority evidence-practice gaps (or priorities for improvement)

The variation between health centres in prescribing of medication for patients with mental illness – particularly antidepressant medication - is an important issue for consideration by health centre teams, managers and clinical leaders.

Figure 9. Mean health centre percentages of clients with a record of current prescription.

	NATIONAL	Number centres; audit records	QUEENSLAND	Number centres; audit records
Oral antipsychotic		17; 314		6; 99
Oral antidepressant		17; 314		6; 99
Mood stabiliser		17; 314		6; 99
Intramuscular (IM) antipsychotic		17; 314		6; 99
Anti-anxiety and hypnotic medication		17; 314		6; 99
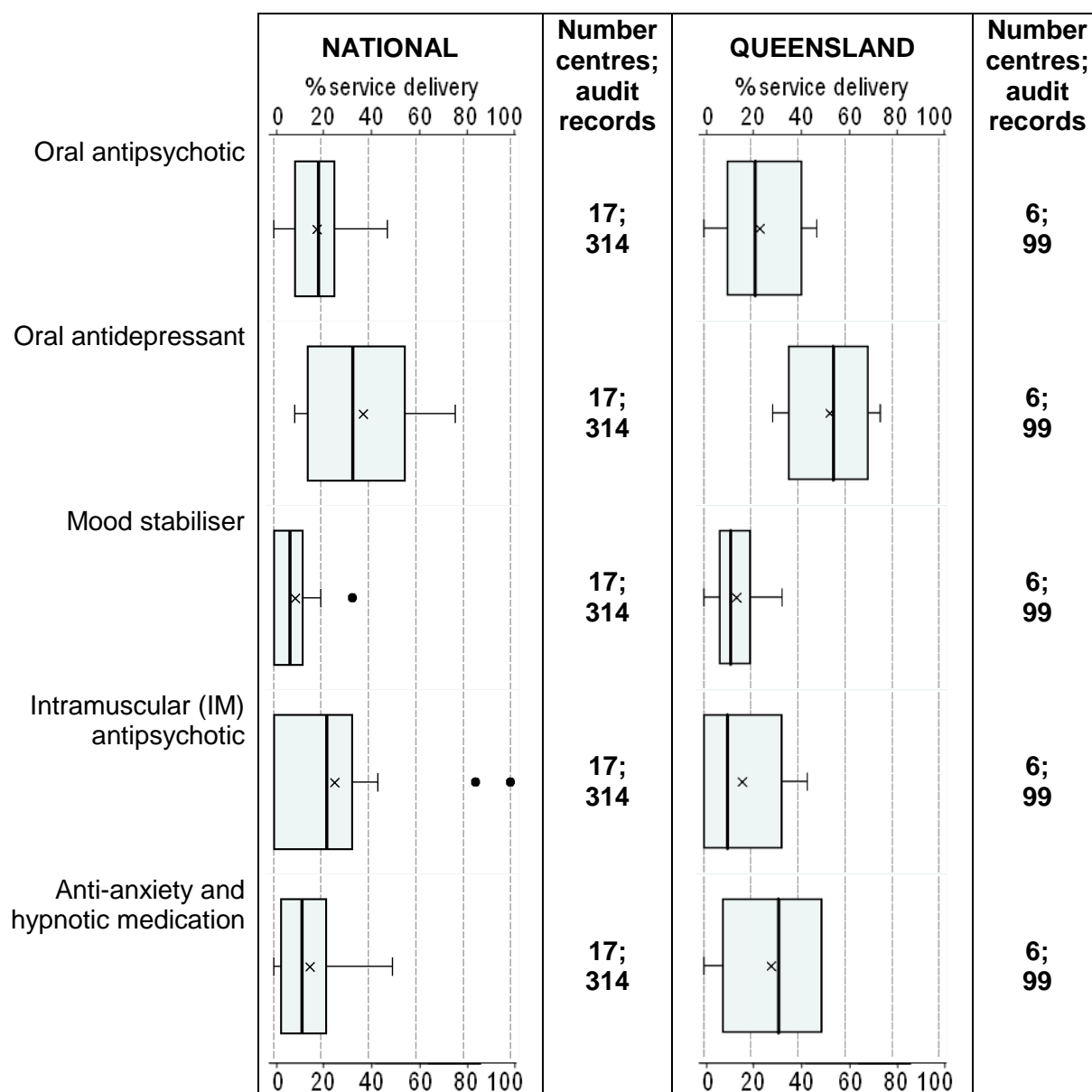
Figure 9 cont: Mean health centre percentages of clients with a record of current prescription.

	NATIONAL % service delivery 0 20 40 60 80 100	Number centres; audit records	QUEENSLAND % service delivery 0 20 40 60 80 100	Number centres; audit records
Other psychiatric medication		17; 314		6; 99
Alternative (non-prescription) treatment		17; 314		6; 99
Use of dosette or Webster pack *(if client has a record of current medication prescription)*		16; 185		6; 71
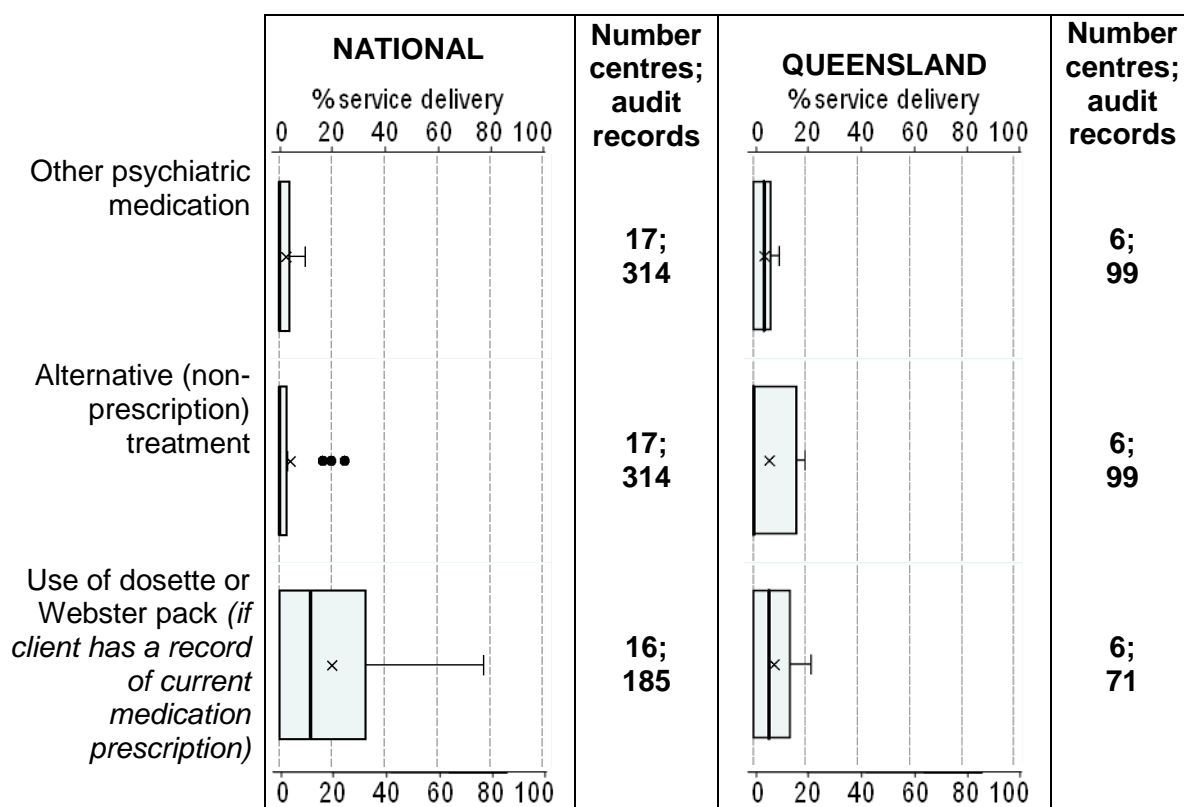
Hospitalisations and discharge

Figure 10 shows the mean health centre percentages of clients with a record of hospitalisation and discharge summary.
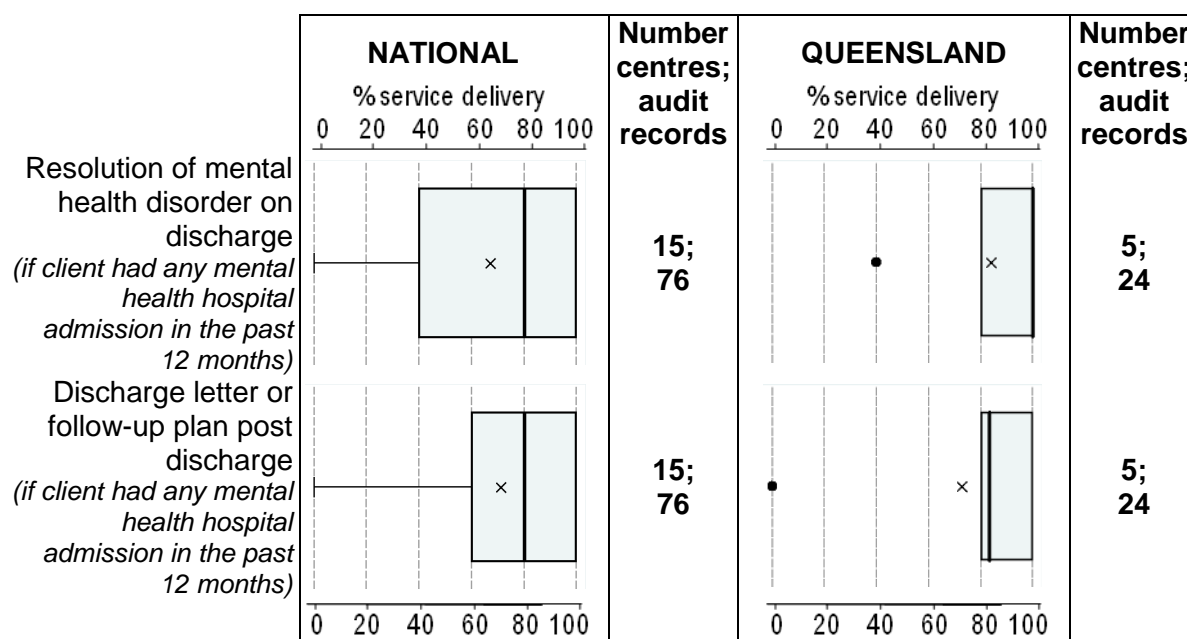
Summary of audit findings

About 23% (76/312) of records showed the client had a mental health related hospital admission within the previous 12 months (Figure 10). While records showed resolution of the mental health disorder and a discharge letter or follow-up plan post-discharge for most of these clients in most health centres, there was wide variation between health centres, with some health centres not having any such records for any clients who had an admission. It is not clear what proportion of clients may have had a hospital admission without this being reflected in the health centre record.

Priority evidence-practice gaps (or priorities for improvement)

There is a need to enhance recording of discharge letters and follow-up plans post discharge for all clients following a mental health related hospital admission, with particular attention to supporting systems to enable this in those health centres with low levels of recording.

Figure 10. Mean health centre percentages of clients with a record of hospitalisation and discharge.

	NATIONAL % service delivery	Number centres; audit records	QUEENSLAND % service delivery	Number centres; audit records
Resolution of mental health disorder on discharge *(if client had any mental health hospital admission in the past 12 months)*		15; 76		5; 24
Discharge letter or follow-up plan post discharge *(if client had any mental health hospital admission in the past 12 months)*		15; 76		5; 24

Scheduled Services

The figures in this section show mean health centre percentages of clients with a record of scheduled services according to recommended timeframes.
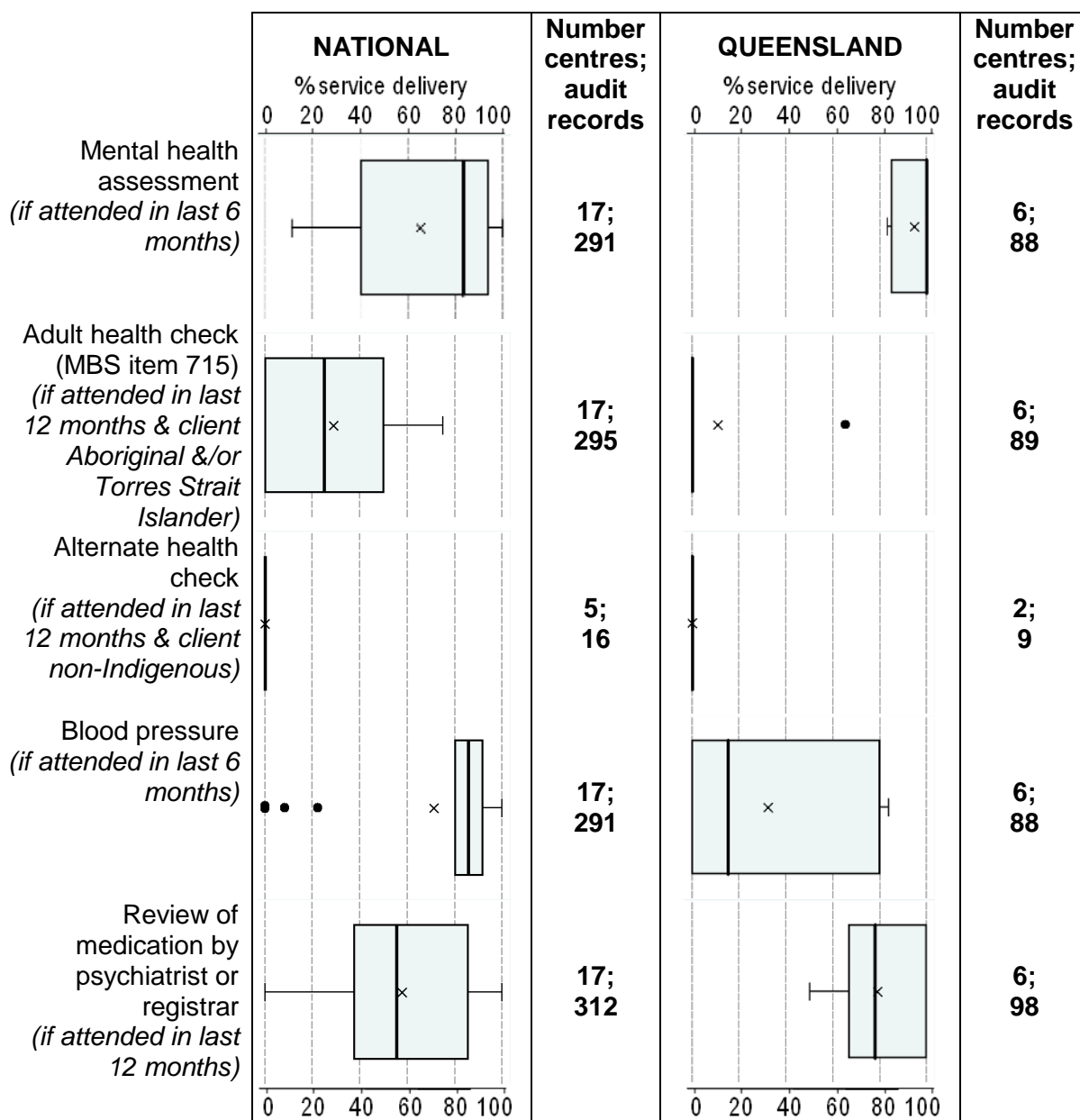
Summary of audit findings

Over 90% of clients had a record of attendance within the previous 6 months (291/314; Table 2). Most health centres had a record of a mental health assessment for 80% or more of these clients, although a number of health centres only had a record of an assessment for a minority of clients (Figure 11). In contrast, for clients who had attended in the previous 12 months (312/314; Table 2), most (in most health centres) had not had an adult health check (MBS 715) or an alternative health check (Figure 11).

While recording of BP was high, there was a wide range between health centres in recording of almost all aspects of scheduled treatment, including medication review and provision of counselling and psycho-education (Figures 11 and 12). Counselling of clients or their families regarding the illness and social issues was recorded relatively more frequently than for other aspects of care. Psycho-health education for the clients' family was recorded relatively less frequently than other aspects of care (Figure 12).
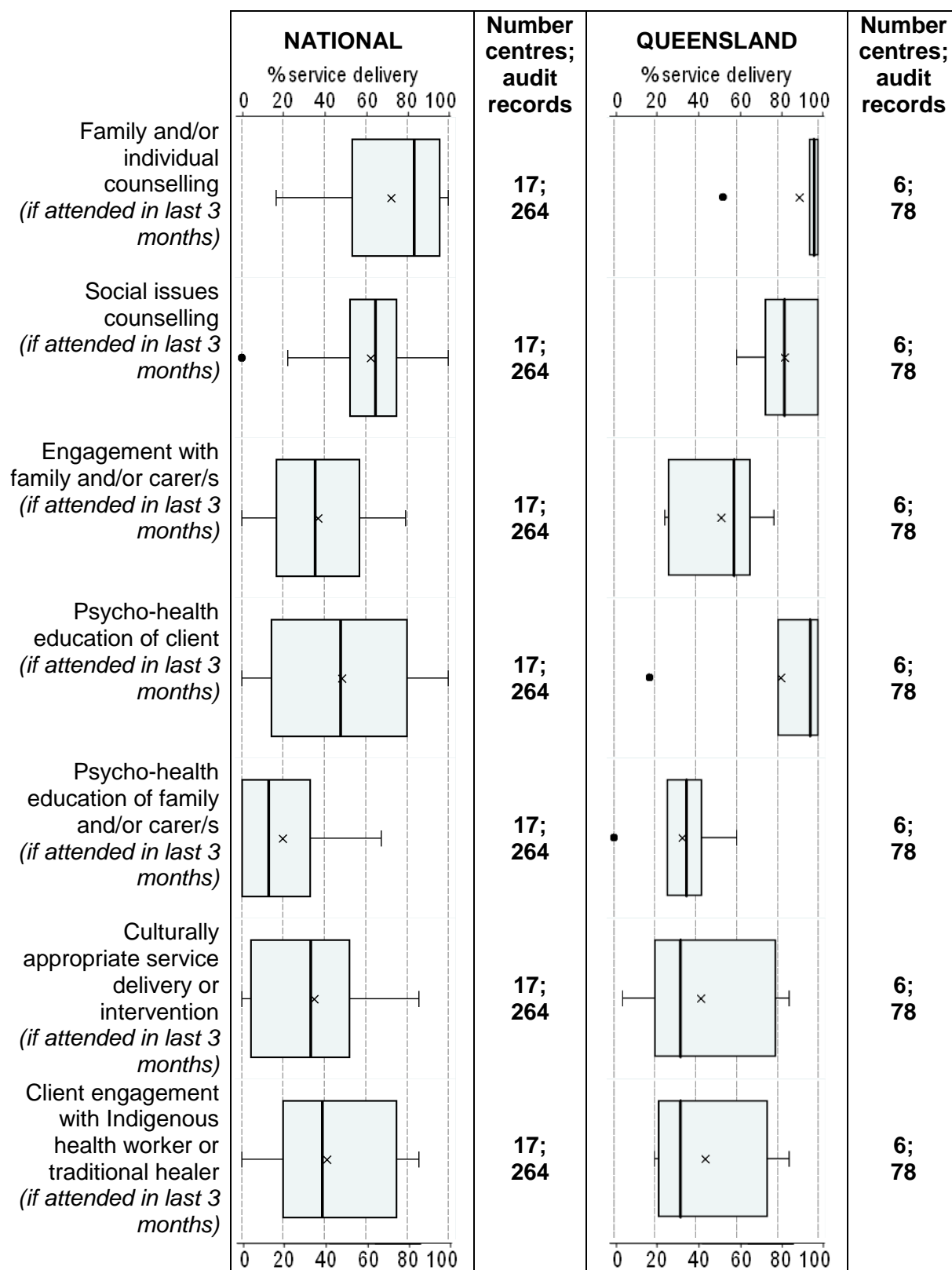
Priority evidence-practice gaps (or priorities for improvement)

Enhance completeness and consistency of recording across all aspects of recommended care for clients with mental illness, with particular attention to supporting systems to enable this in those health centres with low levels of recording.

Figure 11. Mean health centre percentages of clients with a record of scheduled services according to recommended timeframes as indicated.

	NATIONAL % service delivery	Number centres; audit records	QUEENSLAND % service delivery	Number centres; audit records
Mental health assessment *(if attended in last 6 months)*		17; 291		6; 88
Adult health check (MBS item 715) *(if attended in last 12 months & client Aboriginal &/or Torres Strait Islander)*		17; 295		6; 89
Alternate health check *(if attended in last 12 months & client non-Indigenous)*		5; 16		2; 9
Blood pressure *(if attended in last 6 months)*		17; 291		6; 88
Review of medication by psychiatrist or registrar *(if attended in last 12 months)*		17; 312		6; 98

Figure 12. Mean health centre percentages of clients with a record of scheduled treatment and care in the last 3 months.

Investigations

Figure 13 shows mean health centre percentages of mental health clients with a record of relevant investigations relating to psychotropic medications.

Summary of audit findings

For the 80%+ (258/312) of clients with a diagnosis of mental illness who were on some form of psychotropic medication, there was wide variation between health centres (0-100%, with interquartile ranges of between 30% and 50%) in the recorded delivery of relevant investigations – liver function tests, serum urea, serum creatinine, thyroid function, full blood count and lipid profile (Figure 13).

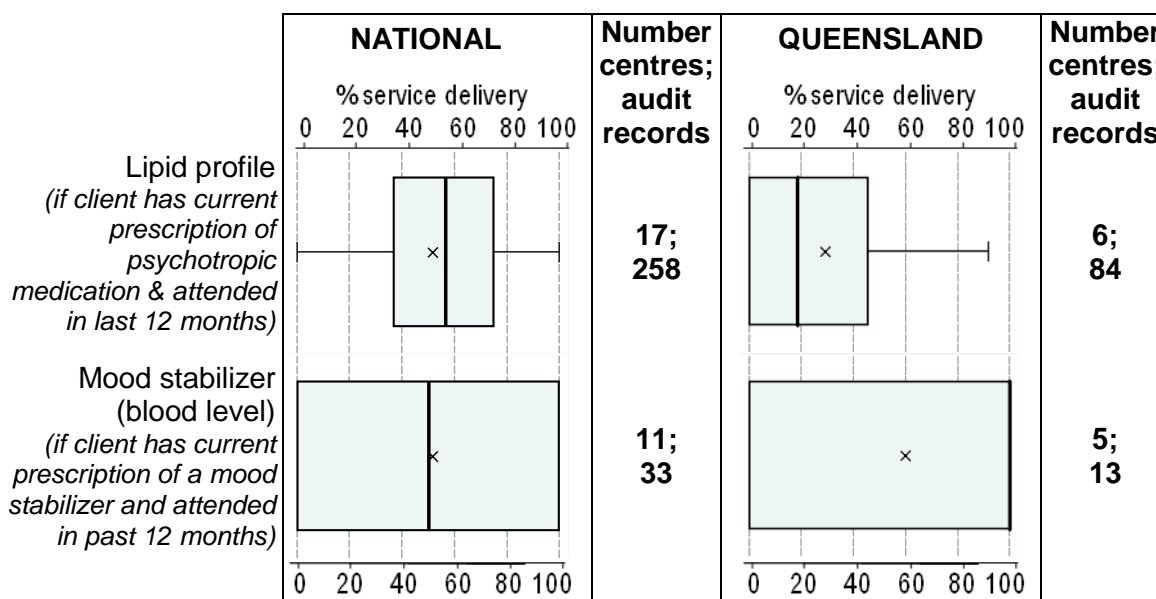### *Priority evidence-practice gaps (or priorities for improvement)*

Enhance completeness and consistency of recording across all relevant investigations for clients on psychotropic medications, with particular attention to supporting systems to enable this in those health centres with low levels of recording.

Figure 13. Mean health centre percentages of clients with a record of relevant investigations relating to psychotropic medications.
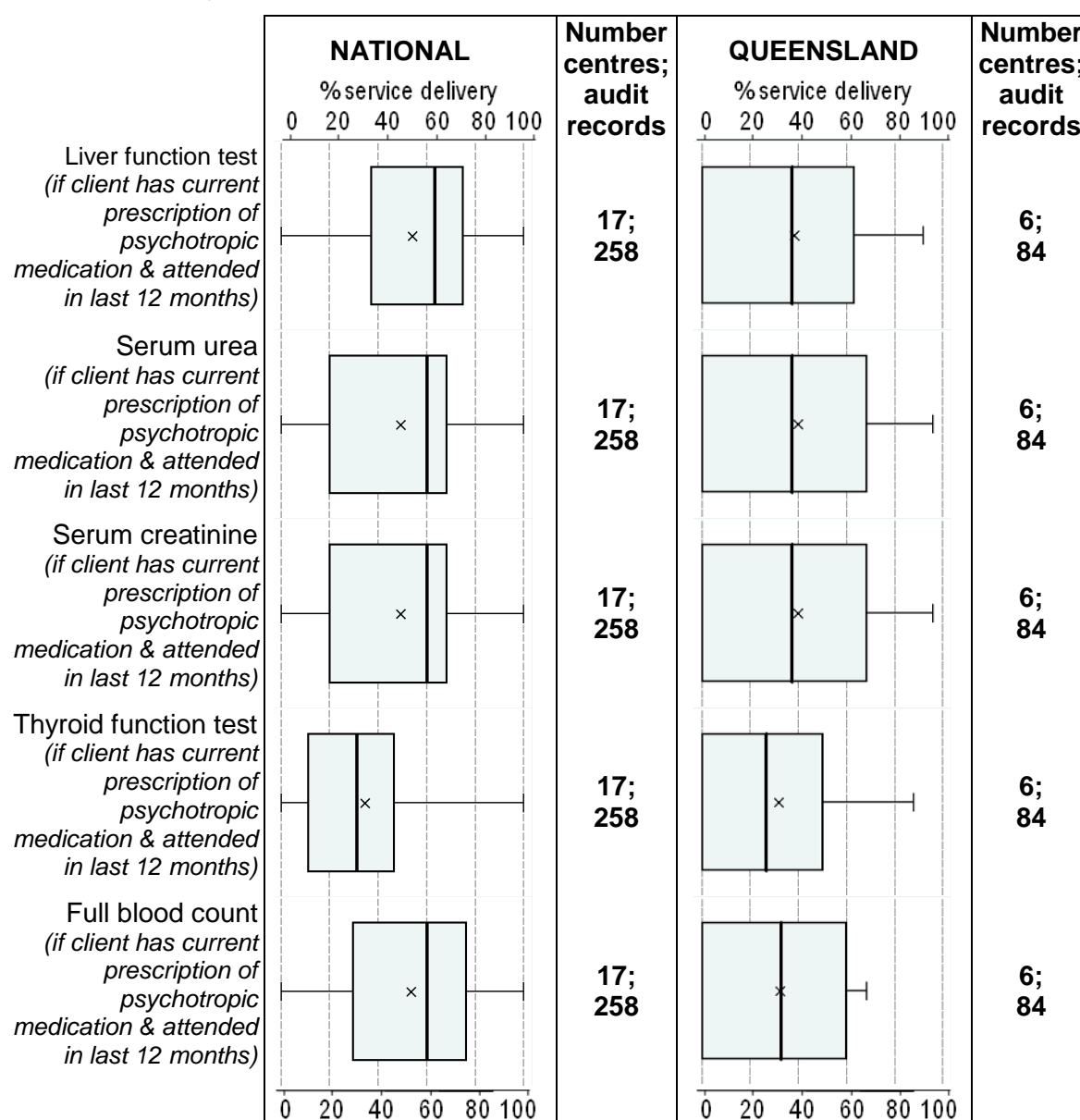
Figure 13 cont: Mean health centre percentages of clients with a record of relevant investigations relating to psychotropic medications.

	NATIONAL % service delivery	Number centres; audit records	QUEENSLAND % service delivery	Number centres; audit records
Lipid profile *(if client has current prescription of psychotropic medication & attended in last 12 months)*		17; 258		6; 84
Mood stabilizer (blood level) *(if client has current prescription of a mood stabilizer and attended in past 12 months)*		11; 33		5; 13

Follow-up of abnormal findings

Figure 14 shows mean health centre percentages of clients with a record of follow-up action if there is documentation of exacerbation or deterioration of symptoms and behaviours related to a mental health issue.

Summary of audit findings

There was a record of concern regarding exacerbation or deterioration in symptoms in 72% (226/312) of clients (Figure 14). There was wide variation between health centres in recording of symptoms. Disturbance of mood or sleep patterns were the most commonly recorded symptoms, but this varied between health centres from less than 10% of clients to 100% of clients. Recording of psychotic symptoms, hallucinations and medication side effects were lower than for other symptoms, with less variation between health centres (Figure 14).

There was wide variation between health centres in recording of follow-up actions for those clients where there was a record of concern regarding exacerbation or deterioration of symptoms, including in referral, review or adjustment of medication and for other psychosocial intervention (Figure 14).
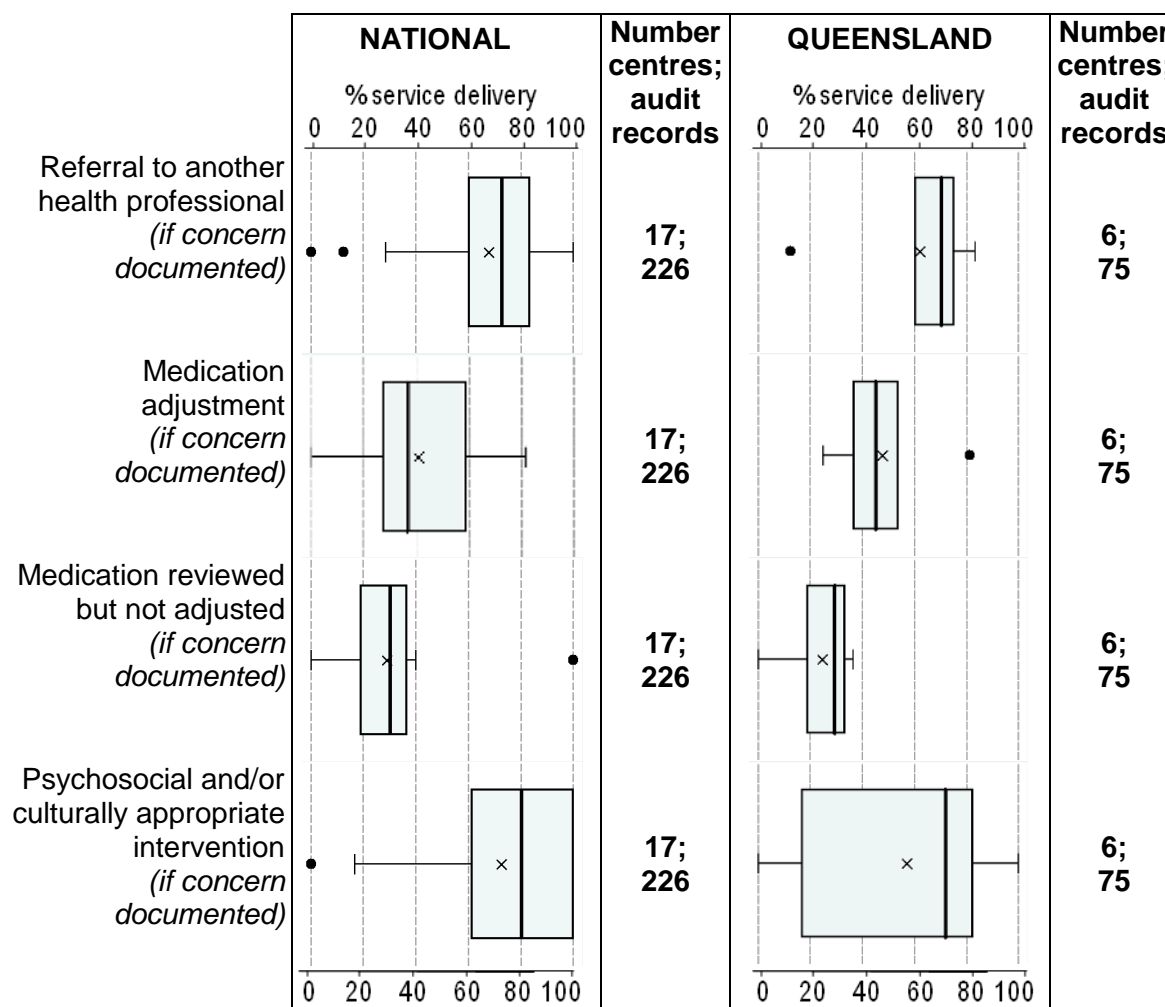
Priority evidence-practice gaps (or priorities for improvement)

Enhance completeness and consistency of recording of important symptoms, and appropriate follow-up for clients with a deterioration or exacerbation of symptoms. Particular attention should be given to supporting systems to enable recording and follow-up of symptoms in those health centres with low levels of recording or follow-up.

Figure 14. Mean health centre percentages of clients with a record of exacerbation or deterioration of symptoms and behaviours and relevant follow-up actions.
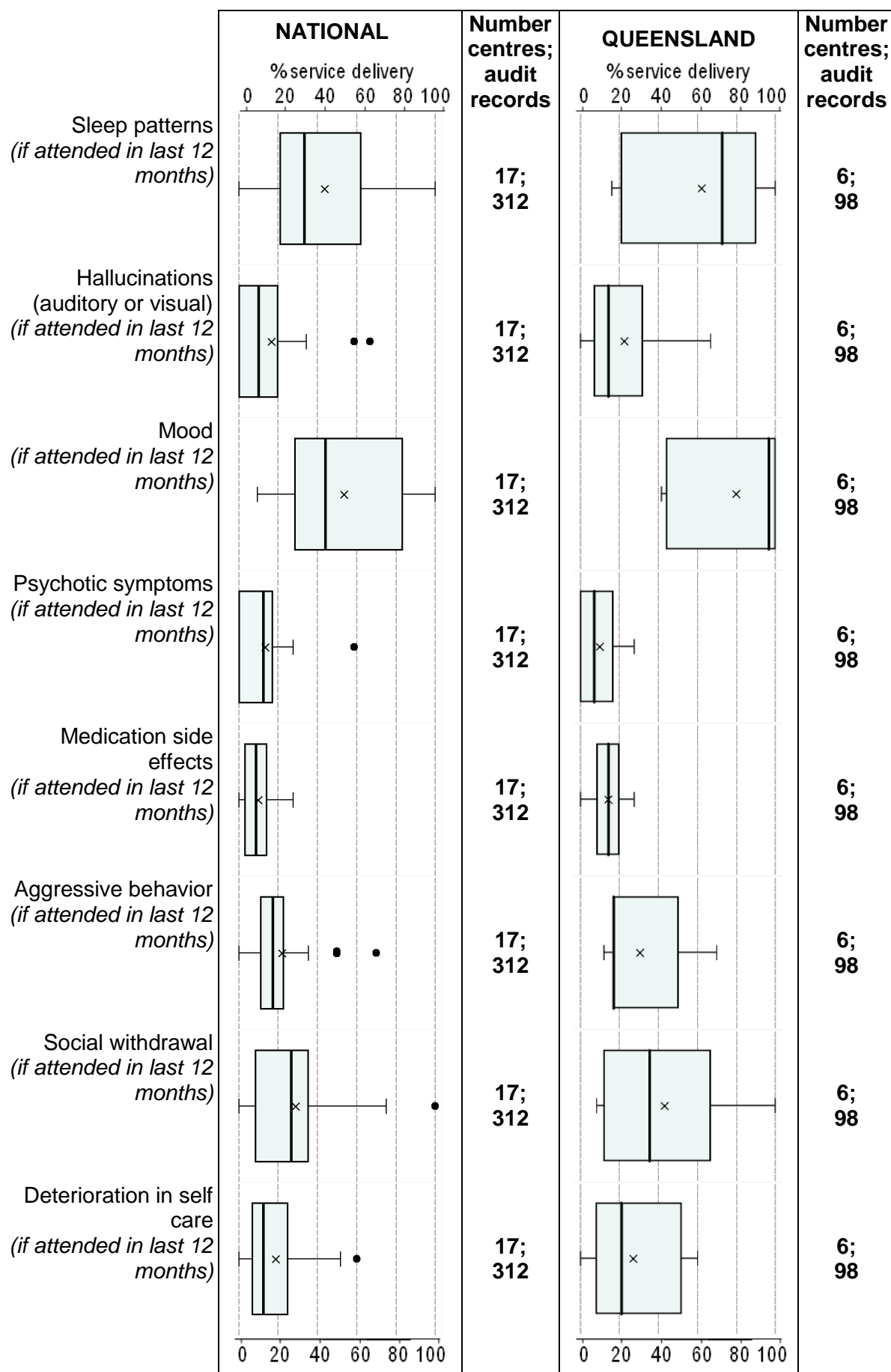
Figure 14 cont: Mean health centre percentages of clients with a record of exacerbation or deterioration of symptoms and behaviours and relevant follow-up actions.

	NATIONAL	Number centres; audit records	QUEENSLAND	Number centres; audit records
Referral to another health professional *(if concern documented)*		17; 226		6; 75
Medication adjustment *(if concern documented)*		17; 226		6; 75
Medication reviewed but not adjusted *(if concern documented)*		17; 226		6; 75
Psychosocial and/or culturally appropriate intervention *(if concern documented)*		17; 226		6; 75

7. 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 tool and from the World Health Organization's Innovative Care for Chronic Conditions 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 3). 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.

Table 3.   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.

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.

Scores for each system component from health centres that undertook a systems assessment in 2012, 2013 or 2014, is shown in Figure 15. Nationally, 11 of the 17 health centres that completed a mental health audit undertook a systems assessment.

Priorities for health centre systems improvement to enable health centres to provide high quality mental health and wellbeing care

Summary of systems assessment findings

The component with the highest score was 'Information systems and decision support', and that with the lowest score was 'Links with community, other health services and other services and resources' (Figure 15).

In the component 'Delivery system design', the items on 'Care planning' and 'Systematic approaches to follow-up' both showed relatively high median scores. The item 'Team structure and function' item had a relatively low median score, while the item 'Clinical leadership' showed the most marked variation between health centres of any item in this component (Figure 16).

For the component of 'Information systems and decision support', the item on 'maintenance and use of electronic client list' had a high median score, but there was relatively wide variation between health centres (Figure 17). The items 'evidence based guidelines' and 'specialist-generalist collaborations' also had high relatively scores, and both showed relatively little variation between communities.

For the component of 'Links with community, other health services and other services and resources', there was wide variation between health centres for all items. The item 'working out in the community' had a relatively high median score, while the item 'communication and cooperation on regional health planning and development of health resources' had a relatively low median score.

The only other item with a score of around 5 or less was the 'organisational commitment' item in the 'Organisational influence and integration' component (Figure 20).

Priority evidence-practice gaps (or priorities for improvement) in relation to the Systems Assessment

The system components, and items within these components that have relatively low scores are clear priority areas for attention. These include:

– The component 'Links with community, other health services and other services and resources', particularly the item on 'communication and cooperation on regional health planning and development of health resources'

– The item on 'organisational commitment' in the 'Organisational influence and integration' component

– The item 'Team structure and function' in the 'Delivery system design' component.

The wide variation between health centres in various components and some specific items indicates there is a need to focus on strengthening these system components and items in those health centres in the lower part of the range. These areas include:

– All items in the 'Links with community, other health services and other services and resources' component

– The 'Maintenance and use of electronic client list' item in the 'Information systems and decision support' component

– The item 'Clinical leadership' in the 'Delivery system design' component

There are a number of system assessment scores that appear inconsistent with the clinical audit data. These include:

- the relatively high score for 'Care planning' seems out of line with the low median and / or wide variation between health centres in recording of adult health checks and mental health assessments

- the relatively high score for 'Systematic approaches to follow-up' seems out of line with the low median and / or wide variation between health centres in recording of follow-up actions for clients with deterioration of symptoms

Discrepancies between system assessment scores and clinical audit data indicate a need to encourage health centre staff to think more critically about how well the health centre systems are actually working to support high quality care for all clients, and to identify areas for system improvement. CQI processes should be used to support constructive engagement of all health centre staff, clinical leaders and managers in developing and implementing systematic improvements in identified priority areas.

Figure 15.   Mean system component scores as assessed by health centres.
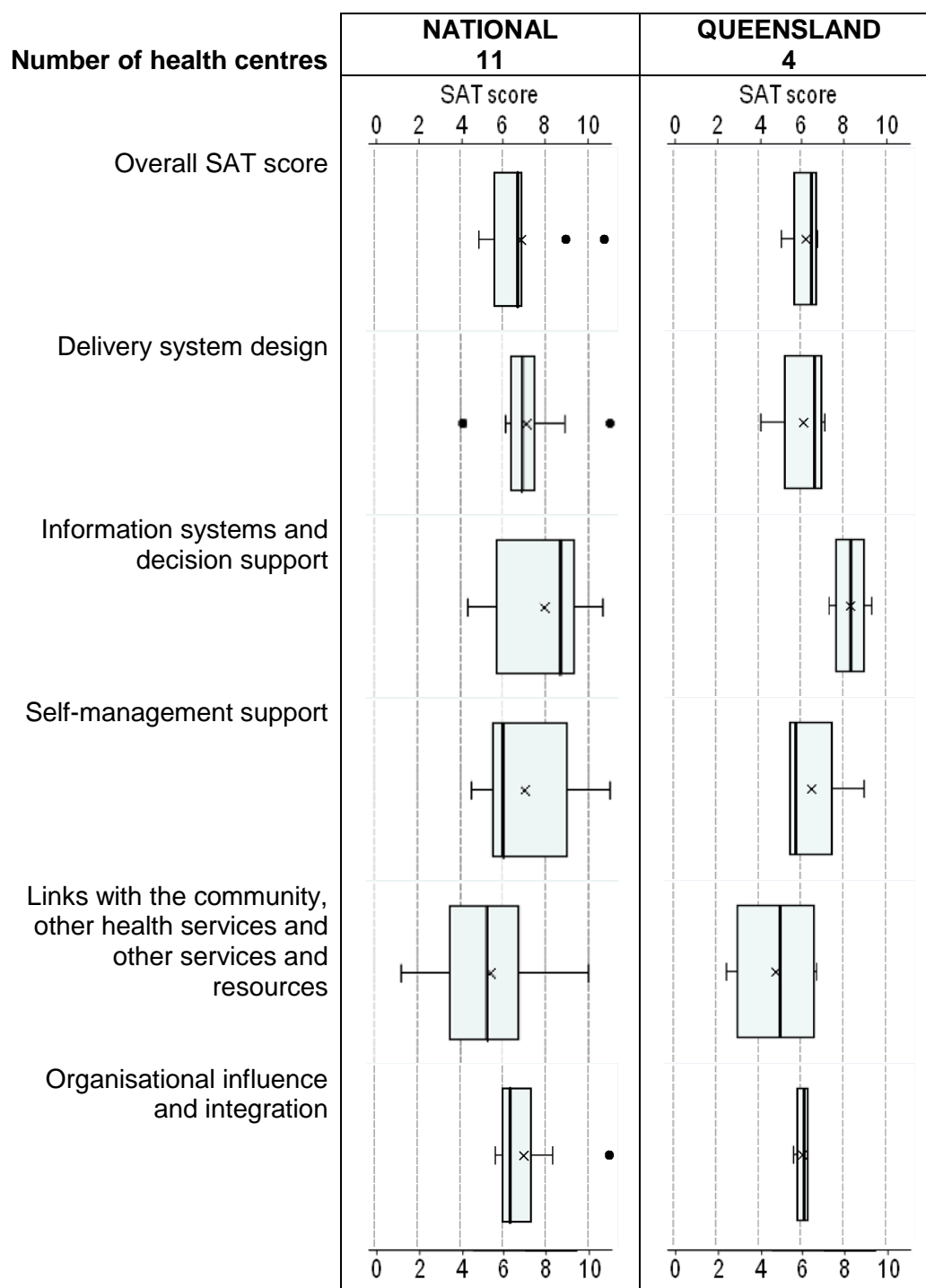
Scores for the individual items within each system component, aggregated for all health centres nationally, are shown in the figures below.

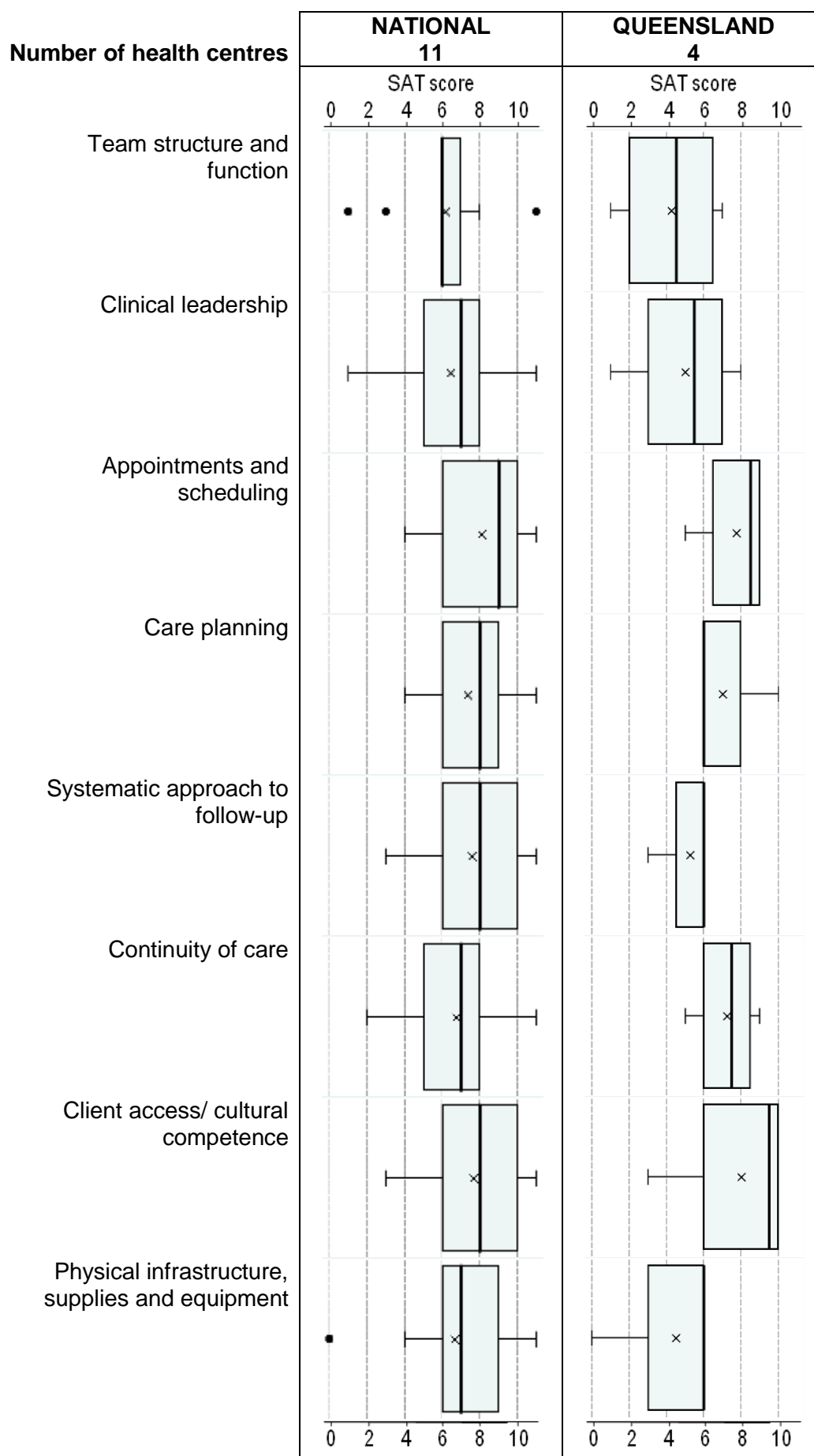Figure 16. Delivery system design component scores as assessed by health centres.

Figure 17. Information systems and decision support component scores as assessed by health centres.
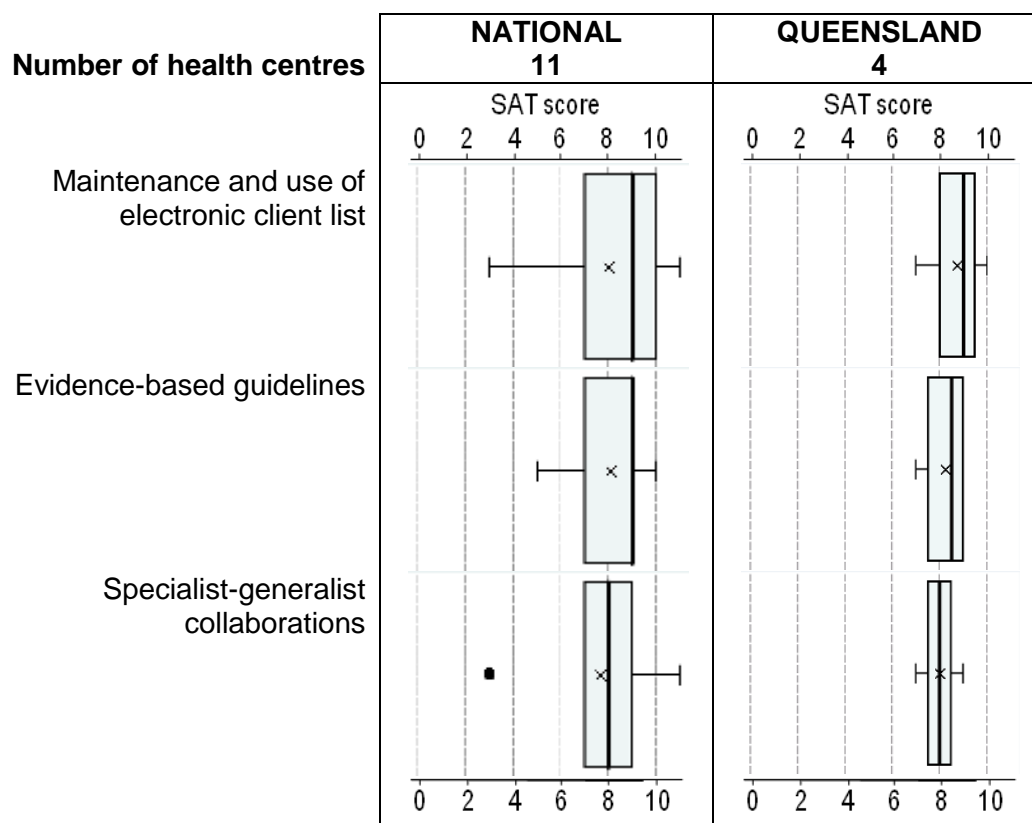
	NATIONAL 11	QUEENSLAND 4

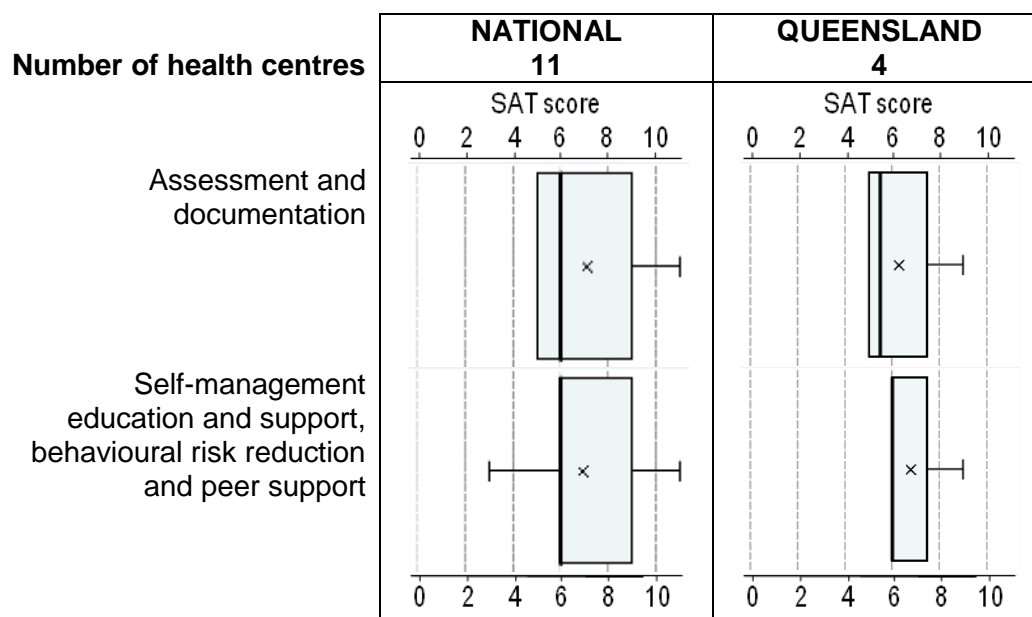|	NATIONAL 11	QUEENSLAND 4

Figure 18. Self-management support component scores as assessed by health centres.

Figure 19. Links with the community, other health services and other services and resources component scores as assessed by health centres.
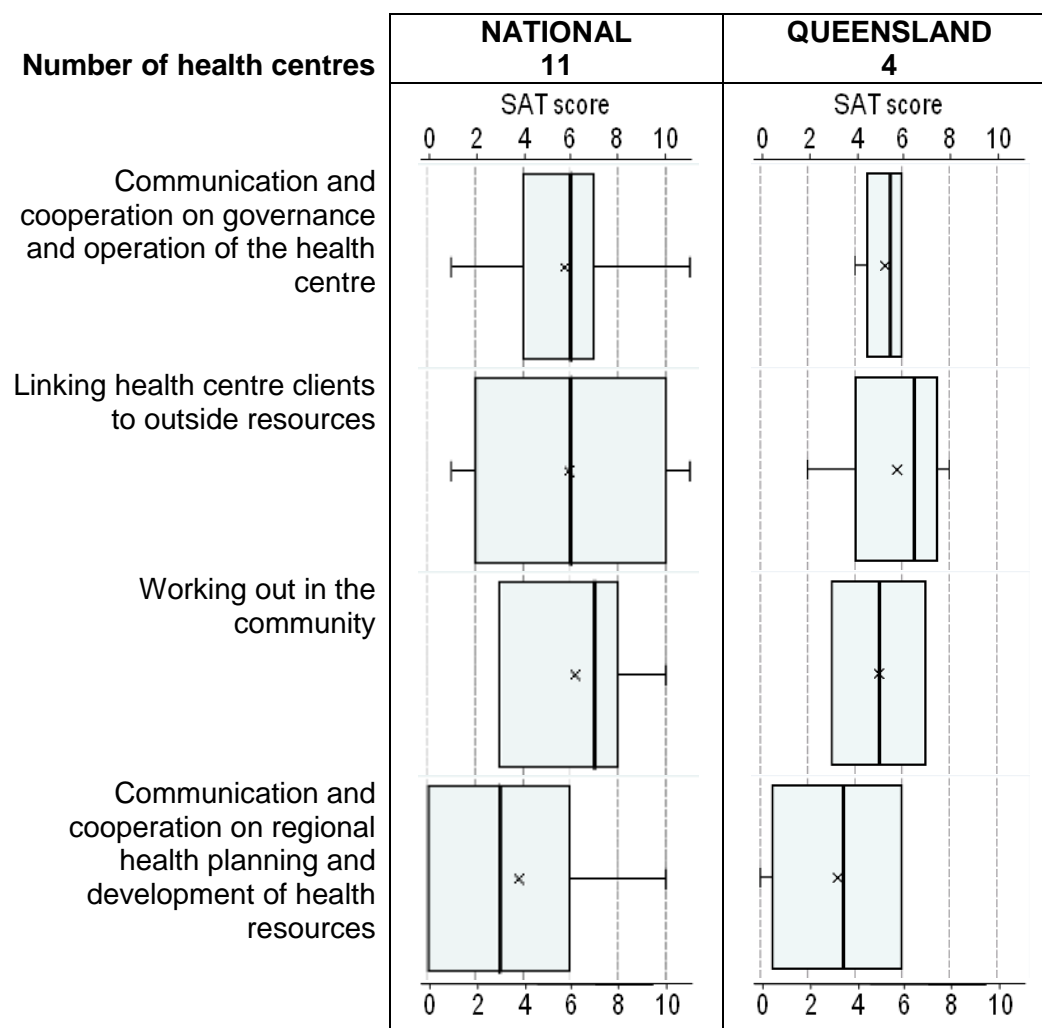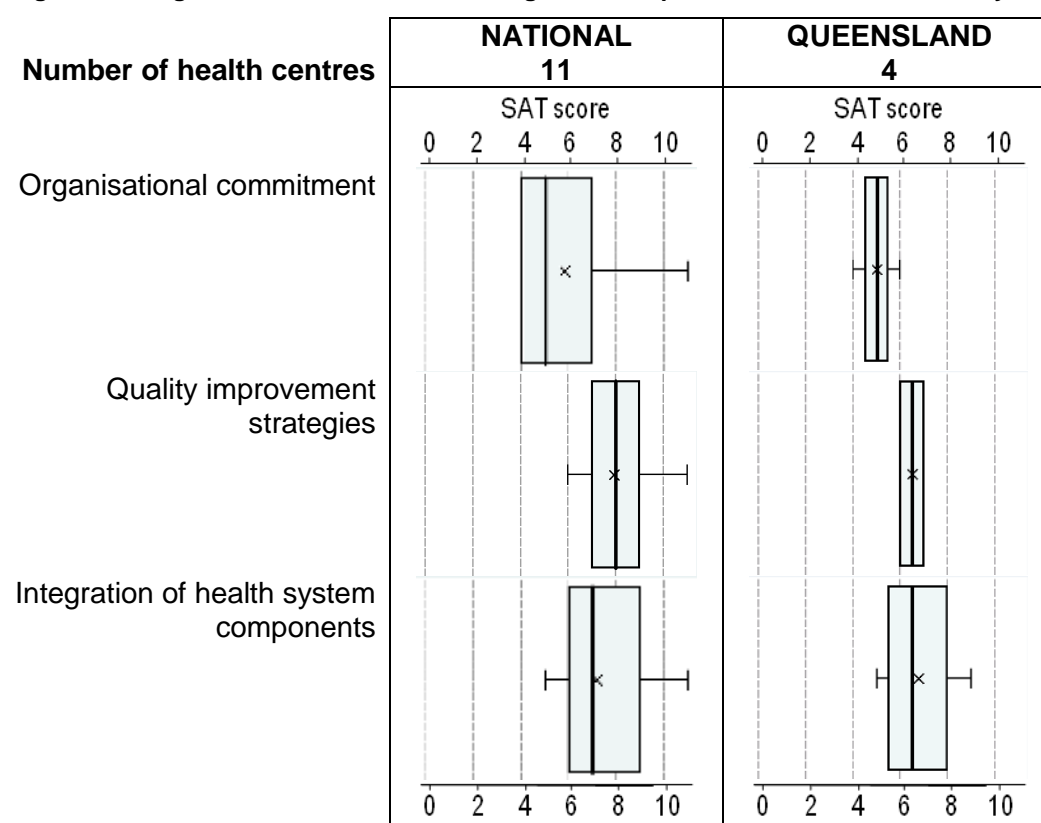
Figure 20. Organisational influence and integration component scores as assessed by health centres.

8. Discussion and conclusions

High quality primary health care is achievable and has been demonstrated in a number of services. There is however wide variation between health centres in almost all aspects of mental health and wellbeing care. A summary of the preliminary priorities for improvement is presented in section 5.

The identification of barriers to provision of good quality care and development of strategies for improvement are the focus of upcoming phases of the ESP process.

Before moving on to these phases of the process, we aim to get input from a wide range of stakeholders on the priorities for improvement. This report is accompanied by a survey that is designed to assess key stakeholders' perceptions of the relative importance of various evidence-practice gaps identified in this report, and to build consensus about which gaps are the most important and that warrant particular effort for achieving improvement. The results of the survey will be fed back to stakeholders in the second phase of the project. The second phase will be focussed on identifying barriers and enablers to improvement in the priority areas, and the third on identifying strategies for improvement.

The analysis of the system assessment data shows the aspects of health centre systems that are identified by health centre staff as being generally relatively weak or strong across a large number of health centres. This information should help management and leadership to focus on areas that appear to be most in need of development, and thereby reduce systematic barriers to high quality care.

The key points from the analysis of the systems assessment data are also presented in section 7. An important point that emerges from this analysis is that a number of scores from the systems assessment data appear inconsistent with the clinical audit data. An example is the contrast between the generally low levels of recording of follow-up action for patients with deteriorating symptoms as reflected in the audit data, and the relatively positive assessment by health centre staff of 'systematic approach to follow-up' as

reflected in the systems assessment data. This is a good example of the way in which comparison between the audit data and the data on health centre system development can be used to encourage reflective thinking and ideas for improvement among health centre teams, and among managers and clinical leaders. It is this sort of reflection that we aim to encourage through the next phases of the ESP Project. The ESP Project aims to capture and share the ideas that emerge from this sort of reflection, in order to encourage wider learning and reflection. Thus the ESP Project aims to support the use of data in CQI processes to achieve system wide improvements.

Leadership at multiple levels of the system is vital to achieving wide engagement in CQI processes, and managers and clinical leaders have a key role in supporting the sort of reflective processes that are enabled by the ESP Project.

9. References

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Appendix A – 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 mental 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 mental health care delivery. Copies of the One21seventy mental 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. Many 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 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 mental health clinical audit, a client must: be 16 years or older; have a diagnosed mental illness or a mental health disorder; have experienced symptoms for more than six months in the past or at least one relapse/recurrence of symptoms suggesting a need for ongoing care; be currently unwell or have been identified as unwell in the last 12 months; 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.

Appendix B – ESP Project processes

Phase 1 – Evidence-practice gaps

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

Information provided to participants

1. aggregated CQI 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

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 identify those factors that may be most important in addressing the identified priority evidence-practice gaps in best practice care identified in Phase 1.

Information provided to participants

Report on trends over time for key indicators relevant to priority evidence-practice gaps in best practice care.

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.

Outputs

Draft report on barriers and enablers to improvement in care relevant to identified priority evidence-practice gaps, based on responses to the online questionnaire. The draft report will be returned to participants for review in Phase 3.

Phase 3 – Strategies for improvement

This phase focuses on identifying new or existing strategies that could be introduced or strengthened to enable improvement in priority evidence-practice gaps.

Information provided to participants

- draft report on barriers and enablers to improvement in care relevant to the identified priority evidence-practice gaps (report from Phase 2)
- 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. 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 strategies to address priority evidence-practice gaps. This report will be based on the Phase 2 report on barriers and enablers and on expert input on strategies for improvement provided through Phase 3.

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.