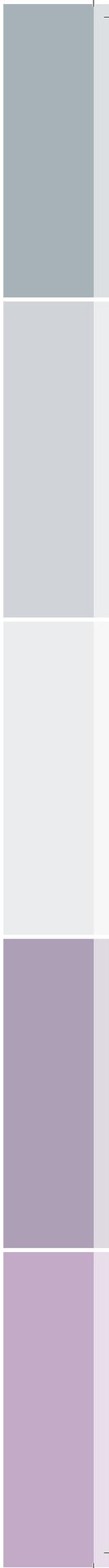


Appendix 1: Data sources and explanatory notes for Part 2



Introduction

The following notes have been prepared to assist in the interpretation of the figures and tables presented in Part 2 System-level indicators of mental health reform in Australia, 1993 to 2011.

Table A1-1 provides summary information about the data sources used, and which figures and tables are based on each source. Table A1-2 provides further explanatory detail regarding the derivation of the data presented in each figure or table.

The majority of figures and tables presented in Part 2 are derived from data tables published in the Australian Institute of Health and Welfare's Mental Health Services in Australia (MHSiA)22 series of

annual mental health reports that describe the activity and characteristics of Australia's mental health care services. MHSiA presents analyses of data from a range of sources including, but not limited to, the Mental Health Care National Minimum Data Sets (NMDSs). These NMDSs cover specialised community and residential mental health care, mental health care for patients admitted to public and private hospitals, and the facilities providing these services. In many cases the data presented in the National Mental Health Report can be extracted directly from the MHSiA tables. In some cases the data have been subject to additional analyses which may have been supplemented by unpublished data.

Data sources and explanatory notes

Table A1-1
Overview of data sources, in alphabetical order

Data source	Description	Relevant figures and tables
Australian Government analyses of jurisdiction data	Analyses undertaken by the Department of Health and Ageing and the Productivity Commission based on data submitted by jurisdictions.	Figures 3-10, 14-20, 22, 24-30, 32-33, 40-43 Tables 2, 3, 5
Australian Government analyses of mental health program data	Analyses undertaken by the Department of Health and Ageing based on data from mental health programs and other published or unpublished material.	Figures 3-9, 34-38 Tables 2, 4, 6
Community Mental Health Care National Minimum Data Set ⁷³	The Community Mental Health Care National Minimum Data Set includes data about service contacts provided by specialised mental health services for patients/clients, other than those admitted to psychiatric hospitals or designated psychiatric units in acute care hospitals, and those resident in 24 hour staffed specialised residential mental health services. It is collated by the Australian Institute of Health and Welfare.	Figure 31
Medicare Benefits Schedule data ⁷⁴	Data on the number of people receiving relevant Medicare-funded services are provided by the Australian Government Department of Health and Ageing, based on billing data maintained by Medicare Australia.	Figures 3, 36-39
National Minimum Data Set (NMDS) – Mental Health Establishments (MHE) collection 2005–06 to 2010–11 ⁷⁵	The National Minimum Data Set (NMDS) – Mental Health Establishments (MHE) is an annual collection describing the attributes of all specialised mental health services managed or funded by State or Territory health authorities. Data are provided by jurisdictions, and collated by the Australian Institute of Health and Welfare. Data from the NMDS-MHE used in this report cover the period 2005–06 to 2010–11. From 1993-94 to 2004-05, these data were collated as part of the National Survey of Mental Health Services Database maintained by the Australian Government Department of Health and Ageing.	Figures 3-30, 33, 40-43 Tables 2, 3, 5
Private Health Establishments collection ⁷⁶	The Private Health Establishments collection is an annual survey which collects information about the activities, staffing and finances of all private hospitals in Australia, conducted by the Australian Bureau of Statistics.	Figures 3-7, 34 Table 6

Table A1-2

Explanatory notes to figures and tables presented Part 2.

Indicator(s)	Notes
National spending on mental health	
Figure 3: Distribution of recurrent spending on mental health, 2010-11 (\$millions)	<p>(a) Data source: MHSiA Tables 14.31 (national expenditure) and 14.21 (Australian Government expenditure).</p> <p>Calculation of the proportion of total health expenditure directed to mental health includes only government and private health insurance revenue sources.</p>
Figure 4: National spending on mental health, 2010-11	<p>(b) Data source: Department of Health and Ageing analysis based on data from MHSiA Tables 14.2 (state and territory expenditure), 14.14 (private hospital services) and 14.28 (Australian Government expenditure).</p>
Figure 5: National expenditure on mental health by source of funds, 1992-93 to 2010-11 (\$millions)	<p>(c) Data source: MHSiA Table 14.31.</p>
Figure 6: Cumulative growth in government spending on health and mental health, 1992-93 to 2010-11	<p>(d) Data source: Department of Health and Ageing analysis based on data from MHSiA Table 14.31.</p> <p>Mental health spending excludes funding administered by the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA).</p> <p>Excludes capital expenditure from national health accounts.</p>
Figure 7: Drivers of growth in expenditure on mental health by the Australian Government under the National Mental Health Plans, 1992-93 to 2010-11	<p>(e) Data source: MHSiA Tables 14.31 and 14.28.</p> <p>Percentage growth over each defined period is calculated as: $100 \times (\text{Expenditure in final year of period} - \text{Expenditure in final year of preceding period}) / \text{Expenditure in final year of preceding period}$.</p>
Table 2: Recurrent expenditure on mental health services by state and territory governments, 1992-93 to 2010-11 (\$millions)	<p>(f) Data source: MHSiA Table 14.30.</p> <p>Excludes Australian Government dedicated mental health funding to states and territories but includes revenue from other sources (including patient fees and reimbursement by third party compensation insurers) and non-specific Australian Government funding provided under the Australian Health Care Agreement base grants/National Healthcare Agreement specific purpose payments.</p>
Figure 8: Average per capita expenditure by state and territory governments, 1992-93 to 2010-11 (\$)	<p>(g) Data source: MHSiA Table 14.30.</p>
Figure 9: Per capita expenditure by state and territory governments, 1992-93 and 2010-11 (\$)	<p>(h) Data source: MHSiA Table 14.30.</p>
Figure 10: National summary of state and territory government mental health expenditure by program type, 2010-11	<p>(i) Data source: MHSiA Tables 14.11 (target population expenditure) and 14.2 (Other indirect and NGO expenditure).</p> <p>Youth mental health services (0.2% of total state and territory mental health expenditure) have been included in child and adolescent mental health services.</p> <p>NGO expenditure excludes residential services managed by the NGO sector. This expenditure is targeted mainly at the adult population.</p>
Figure 11: Per capita expenditure by states and territories on general adult mental health services (\$), 2010-11	<p>(j) Data source: MHSiA Table 14.12.</p> <p>(k) Estimated expenditure for each age specific population is based on the classification of services reported to the National Minimum Data Set – Mental Health Establishments collection, not the age of the consumers treated.</p> <p>(l) Analysis excludes NGO grants (other than NGO managed staffed residential services) and expenditure on services classified as Forensic Psychiatry.</p> <p>(m) Per capita rates based on age specific population denominators.</p>

Indicator(s)	Notes
Figure 12: Per capita expenditure by states and territories on child and adolescent mental health services (\$), 2010-11	<p>(n) Data source: MHSiA Table 14.12.</p> <p>(o) As per notes (k)-(m) above.</p>
Figure 13: Per capita expenditure by states and territories on older persons' mental health services (\$), 2010-11	<p>(p) Data source: MHSiA Table 14.12.</p> <p>(q) As per notes (k)-(m) above.</p> <p>(r) Specialised older persons' mental health services are not available in the Northern Territory.</p>
National workforce trends	
Figure 14: Number of direct care staff (FTE) employed in state and territory mental health service delivery, 1992-93 to 2010-11	<p>(s) Data source: MHSiA Table 12.40.</p> <p>'Direct care staff' include those within the health professional categories of 'medical', 'nursing', 'allied health' and 'other personal care'.</p>
Figure 15: Number of direct care staff (FTE) employed in state and territory mental health service delivery per 100,000, 1992-93 to 2010-11	(t) Data source: MHSiA Table 12.41.
Table 3: Change in the health professional workforce (FTE) in state and territory mental health services, 1994-95 to 2010-11	<p>(u) Data source: MHSiA Table 12.36.</p> <p>(v) Totals differ slightly from those in Figure 14 because they do not include other personal care staff and do include a small number of staff employed at the organisational level.</p>
Figure 16: Growth in service expenditure compared with growth in direct care staff (FTE), 1992-93 to 2010-11	<p>(w) Data source: MHSiA Tables 12.40 (FTE) and 14.3 (expenditure).</p> <p>Total expenditure is calculated as the sum of expenditure for the following categories: Public Psychiatric Hospital + Specialised psychiatric units or wards in public acute hospitals + Community mental health care services + Residential mental health services. NGO services are out of scope.</p>
Table 4: Health professional direct care workforce (FTE) in Australian Government funded primary mental health care and private hospitals, 2010-11	<p>(x) Data source: Australian Government analyses of mental health program data.</p> <p>Analysis based on data describing workforce involved in delivering relevant services under the Medicare Benefits Schedule, Access to Allied Psychological Services (ATAPS) program, and the Mental Health Nurse Incentive Program (MHNIP).</p> <p>Primary mental health care FTE excludes general practitioners because their numbers cannot be accurately estimated.</p> <p>Primary mental health care FTE excludes providers funded through the Department of Veterans Affairs, or providers offering services through headspace, the National Youth Mental Health Foundation.</p> <p>Private hospital FTE excludes psychiatrists and other medical practitioners with admitting rights who work in private hospitals on a fee for service basis through the Medicare Benefits Schedule.</p>
Trends in state and territory mental health services	
Figure 17: Distribution of total state and territory expenditure on mental health services, 1992-93 to 2010-11	<p>(y) Data source: MHSiA Table 14.3.</p> <p>(z) Prior to 1999-00, all services provided by NGOs were reported only in terms of total funds allocated by state and territory governments. Commencing in 1999-00, staffed residential units managed by the sector began to report separately and were grouped with 'government managed' residential services in previous <i>National Mental Health Reports</i>.</p> <p>(aa) For this analysis, NGO estimates exclude staffed residential services managed by NGOs for 2002-03, 2007-08 and 2010-11. These amounts are reported in the residential service category.</p> <p>Excludes Other indirect expenditure category shown in MHSiA Table 14.3.</p>

Indicator(s)	Notes
Figure 18: Changes in resourcing of ambulatory care services, 1992-93 to 2010-11	(ab) Data source: MHSiA Tables 14.3 (expenditure) and 12.40 (FTE).
Figure 19: Full-time equivalent (FTE) direct care staff per 100,000 population employed in ambulatory mental health care services, 1992-93 to 2010-11	(ac) Data source: MHSiA Table 12.41.
Figure 20: Percentage of total mental health services expenditure allocated to non-government organisations, 1992-93 to 2010-11	<p>(ad) Data source: MHSiA Tables 14.3 (expenditure) and 14.10 (residential services delivered by NGOs).</p> <p>As per note (z) above.</p> <p>For this analysis, funding to NGO-managed staffed residential services has been combined with non-residential NGO programs to ensure greater consistency in monitoring the 18 year spending trends. The estimate of expenditure allocated to NGOs in this figure differs from that in Figure 17 because, in the latter, NGO-managed residential programs are grouped with other residential services.</p> <p>NGO expenditure includes Total grants to NGOs plus expenditure on the component of residential services delivered by NGOs. Total state and territory expenditure is calculated as Total expenditure less Other indirect expenditure.</p> <p>Classification of service types is based on a national taxonomy for funded mental health NGO programs developed in 1999. Service grants are classified by states and territories when reported to the National Minimum Data Set – Mental Health Establishments collection.</p>
Figure 21: Types of services funded by state and territory grants to non-government organisations, 2010-11	(ae) Data source: MHSiA Table 14.15.
Figure 22: Total beds in general adult and older persons' residential services, 1992-93 to 2010-11	<p>(af) Data source: MHSiA Table 12.19.</p> <p>No graphic is provided for child and adolescent beds because they are very few in number (13).</p> <p>Data on 'less than 24 hour staffed' beds not available prior to 1999-00.</p>
Figure 23: Number of beds per 100,000 in general adult and older persons' residential services by jurisdiction, 2010-11	<p>(ag) Data source: MHSiA Table 12.18.</p> <p>No graphic is provided for child and adolescent beds because they are very few in number (13).</p> <p>Estimation of per capita rates is based on age specific populations for each target group:</p> <ul style="list-style-type: none"> • General adult (based on population aged 18-64 years); and • Older persons (based on population aged 65 years and over). <p>Caution is required when interpreting residential services data for Queensland. A substantial number of general adult beds in Queensland that meet the definition of beds in staffed residential services were reported by Queensland as non-acute inpatient beds. Queensland has foreshadowed that it will review reporting of these beds in future years.</p>
Figure 24: Growth in supported public housing places (absolute and per 100,000), 2002-03 to 2010-11	<p>(ah) Data source: MHSiA Table 12.26.</p> <p>(ai) Number of places refers to the number of persons who can be accommodated, not the number of houses.</p>
Figure 25: Number of supported public housing places per 100,000 by state and territory, 2010-11	(aj) Data source: MHSiA Table 12.26. As per note (ai) above.

Indicator(s)	Notes
Figure 26: Acute and non-acute psychiatric inpatient beds per 100,000, 1992-93 to 2010-11	<p>(ak) Data source: MHSiA Table 12.14.</p> <p>Acute and non-acute bed totals are calculated as the sum of Public psychiatric beds plus Specialised psychiatric units or wards in public acute hospitals.</p>
Figure 27: Total psychiatric inpatient beds per 100,000 by target population, 1993-94 to 2010-11	<p>(al) Data source: MHSiA Table 12.17.</p> <p>Estimation of per capita rates is based on age specific populations for each target group:</p> <ul style="list-style-type: none"> • General adult (based on population aged 18-64 years); • Child and adolescent (based on population aged 0-17 years); • Older persons (based on population aged 65 years and over); and • Forensic (based on target population aged 18 years and over). <p>General adult beds include a small number of youth beds in 2010-11.</p> <p>General adult beds include a small number of youth beds in 2010-11.</p> <p>Data available from 1993-94 onwards.</p>
Figure 28: Average costs per day in psychiatric inpatient units, 1992-93 to 2010-11	<p>(am)Data source: MHSiA Table 14.7.</p>
Figure 29: Changes in the number of psychiatric inpatient beds, patient days, expenditure and direct care full-time equivalent staff relative to 1992-93	<p>(an) Data source: MHSiA Tables 12.3 (inpatient beds), 12.27 (inpatient days), 12.40 (direct care FTE) and 14.3 (expenditure).</p> <p>Growth in total inpatient services is calculated as the sum of Public psychiatric beds plus Specialised psychiatric units or wards in public acute hospitals (Table 14.3).</p> <p>FTE is for Hospital admitted patient services (Table 12.40).</p>
Figure 30: Average number of direct care staff (FTE) per bed, psychiatric inpatient units, 1992-93 to 2010-11	<p>(ao) Data source: MHSiA Tables 12.27 (inpatient days) and 12.40 (total inpatient direct care FTE).</p>
Table 5: Inpatient and community residential beds per 100,000 population, 2010-11	<p>(ap) Data source: MHSiA Tables 12.14 (total acute and non-acute inpatient beds per capita), 12.17 (inpatient beds per capita by target population), and 12.20 (residential beds).</p> <p>Estimation of per capita rates is based on age specific populations for each target group:</p> <ul style="list-style-type: none"> • General adult (based on population aged 18-64 years); • Child and adolescent (based on population aged 0-17 years); • Older persons (based on population aged 65 years and over); and • Forensic (based on target population aged 18 years and over). <p>Residential beds includes both 24 hour and Less than 24 hour staffed beds, separately identified.</p>
Figure 31: Number of service contacts provided, 2001-02 to 2010-11, and number of people seen by state and territory community mental health services, 2006-07 to 2010-11	<p>(aq) Data source for service contacts: MHSiA Table 4.2.</p> <p>Includes unregistered contacts. Not all jurisdictions report unregistered contacts and reporting practices may have changed over time.</p> <p>(ar) Data source for number of people seen by state and territory community mental health services: As provided by states and territories to Department of Health and Ageing for National Mental Health Report purposes. Note that there are small discrepancies for some jurisdictions compared with data provided to the AIHW and published in MHSiA Tables 4.1 and 4.2.</p>
Figure 32: Average number of treatment days per three month period of community mental health care, 2005-06 to 2010-11	<p>(as) Data source: Report on Government Services 2013²⁸ Table 12A.45.</p>

Indicator(s)	Notes
Figure 33: Total number of patient days in psychiatric inpatient settings, 1992-93 to 2010-11	(at) Data source: MHSiA Table 12.27.
Trends in private sector mental health services	
Table 6: Activity in private hospitals with psychiatric units, 1992-93 to 2010-11	(au) Data source: MHSiA Table 12.25.
Figure 34: Selected indicators of change in the private psychiatric hospital sector, 1992-93 to 2010-11	(av) Data source: MHSiA Tables 12.25 (beds, patients days, staffing) and 14.14 (expenditure). Data for 2007-08 describing beds, patients days, and staffing were not available because the Private Health Establishments Collection was not conducted.
Figure 35: MBS expenditure on mental health services (\$millions), 1992-93 to 2010-11	(aw) Data source: MHSiA Table 14.28.
Figure 36: Distribution of MBS expenditure on mental health services, 1992-93 to 2010-11	(ax) Data source: MHSiA Table 14.17. (ay) 2007-08 was the first full year of operation of the Better Access program.
Figure 37: Number of people treated by MBS-subsidised mental health service providers, 2006-07 to 2011-12	(az) Data source: MHSiA Table 6.3. (ba) Data are shown from 2006-07 only, because a significant component of the data includes services provided under Better Access program, which commenced on November 1 2006. As per note (ay) above.
Figure 38: Number of people treated by MBS-subsidised mental health service providers, by provider type, 2011-12	(bb) Data source: MHSiA Table 6.3. The sum of people seen by individual provider groups will be greater than the total number of people seen MBS-subsidised services shown in Figure 37 because an individual may consult more than one type of provider. As per note (ay) above.
Figure 39: Number of MBS-subsidised mental health services provided, by provider type, 2006-07 to 2011-12	(bc) Data source: MHSiA Table 6.9. As per notes (ay) and (ba) above.
Consumer and carer participation in mental health care	
Figure 40: Consumer committee representation within mental health service organisations, 1993-94 to 2010-11	(bd) Data source: MHSiA Table 12.8. Data are available from 1993-94.
Figure 41: Other participation arrangements for consumers and carers, 1998-99 to 2010-11	(be) Data source: MHSiA Tables 12.9 (consumers) and 12.10 (carers).
Figure 42: Number of full-time equivalent consumer and carer workers employed in state and territory mental health services, 2002-03 to 2010-11	(bf) Data source: MHSiA Table 12.36.
Figure 43: Consumer and carer workers employed per 1,000 full-time equivalent direct care staff, 2002-03 to 2010-11	(bg) Data source: MHSiA Table 12.36. Calculated as 1000 x Consumer (or carer) worker FTE/ Sum of all staff categories excluding Administrative and clerical staff and Domestic and other staff.