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# Emerging Minds.

## Health service use among children at risk of social-emotional problems

Opportunities for early intervention

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### Overview

This research brief presents key findings from the exploratory analyses of data from *Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)* and Medicare Benefit Schedule (MBS)<sup>1</sup> from 2008–16. We investigated children's use of health and support services by risk of social-emotional problems, and children's unmet service needs. Identifying the characteristics of children and families who are less likely to access services is an important step towards enhancing the provision of appropriate health care among Australians who need it.

This research was conducted by the Australian Institute of Family Studies (AIFS) for the Emerging Minds: National Workforce Centre for Child Mental Health. Using data from both LSAC (Waves 3–7) and the Medicare Benefits Schedule (Medicare) collected during 2008–16, the research aimed to investigate:

1. patterns of health care service use among children over time as reported by parents (in the past 12 months) and according to Medicare records (in the past 24 months)
2. use of health care services and family support services among families with children classified as experiencing elevated risk of developing social-emotional problems, as measured by the Strengths and Difficulties Questionnaire (SDQ)
3. unmet need among children accessing various Australian health care services.

### Key messages

- General Practitioners (GPs) are the most commonly accessed service throughout childhood and early adolescence.
- Children at increased risk of social-emotional problems had higher rates of contact with various service types, including psychiatric and behavioural therapy services, GPs, paediatricians, speech therapists, and hospital outpatient and emergency services. There were differences in service access among children in low-income households and in non-metropolitan areas of the country.
- Rates of support services use, such as counselling and parenting education, were often higher among families with children at elevated risk of social-emotional problems.
- Many children at elevated risk of social-emotional problems did not access the professional support they needed.
- There are valuable opportunities for frontline medical, health and social support professionals to identify children who may be at risk of mental health problems and provide parents with advice or referrals to services that may prevent these issues from progressing into more serious and persistent mental health problems.

<sup>1</sup> The Medicare Benefit Schedule is a list of Medicare services subsidised by the Australian government, which is part of the wider Medicare Benefit Scheme.

## Background

Despite the high costs associated with health service provision in Australia – total expenditure on health during 2016–17 was around \$180.7 billion (Australian Institute of Health and Welfare, 2018) – unmet need for professional support and intervention continues to exist among young Australians. For example, matched data from *Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)* and Medicare have indicated that less than one in four children with a mental health problem visited a mental health professional in the 18 months following their LSAC interview (Hiscock et al., 2019).

Although early intervention and prevention initiatives exist to engage at-risk children with appropriate services and reduce the prevalence of poor psychological adjustment among Australians in general, barriers to professional support continue to exist for some children and their families (Corscadden et al., 2017). Identifying the characteristics of children and families who are less likely to access services is an important step towards enhancing the provision of appropriate health care among Australians who need it.

## Implications: opportunities for early intervention

The findings show GPs to be the key health contact for many children and families and gatekeepers to the wider health care system. Children at greater risk of social-emotional problems are often in contact with paediatricians, speech therapists and other specialists. These health service providers can be important sources of information and professional advice for parents with children at risk of social-emotional difficulties, including for recommending treatment options. Mental health providers who are treating family members of children at risk of social-emotional issues may also be able to recommend effective options for addressing such concerns.

Equipping professionals in these roles with adequate knowledge and skills to identify and assist children at elevated risk of adverse social-emotional outcomes could be an important step towards intervening earlier to help at-risk children.

Other researchers (e.g. Stiffman, Pescosolido, & Cabassa, 2004) have suggested that non-health care workers (e.g. juvenile justice authorities and teachers) and also non-professionals (primarily parents) are also integral to engaging at-risk children with suitable services, given their regular contact with these children. Indeed, this research demonstrated that the odds of accessing a guidance counsellor (i.e. a professional working in a non-health specific field) are higher among children at elevated risk of experiencing emotional symptoms, conduct problems, hyperactivity and peer problems, compared to those with only normative risk of experiencing such concerns.

## GPs are the most commonly accessed service

The percentage of children using health and social support services varied with age (Table 1). The most common service accessed at every age was a General Practitioner (GP); according to parental reports, more than two-thirds of children had accessed a GP in the past year between the ages of 4–5 and 12–13.

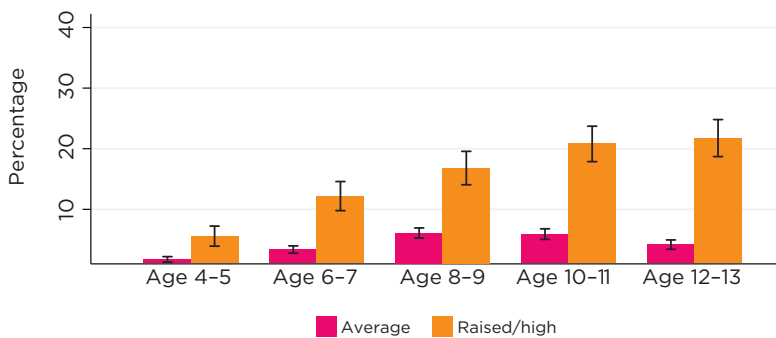
Most children (93.6%) had used at least one of the services in the last year at age 4–5, compared to 89.2% at age 12–13, although the use of health services declined as children aged. This change was observed specifically in relation to the use of services provided by GPs (77.6% vs 67.3%) and speech therapists (12.6% vs 2.0%). In contrast, the use of psychiatric services or behavioural therapy (2.8% vs 7.5%) and guidance counsellors (1.1% vs 6.2%) increased with age.

**Table 1:** Use of health care and support services, by age of study child (%)

Service	Age 4-5 (2008)	Age 6-7 (2010)	Age 8-9 (2012)	Age 10-11 (2014)	Age 12-13 (2016)
General practitioner	77.6	73.1	67.3	66.8	66.8
Paediatrician	8.1	8.5	8.7	8.6	6.5
Other specialist	10.8	11.5	12.1	12.8	13.9
Hospital emergency	19.0	14.6	15.8	16.1	16.9
Hospital outpatient services	6.4	5.9	6.0	6.5	7.0
Psychiatric services or behavioural therapy	2.8	4.5	6.2	6.7	7.5
Guidance counsellor	1.1	3.4	4.5	5.3	6.2
Speech therapy	12.6	9.4	5.5	3.5	2.0
Dental services	33.7	55.9	62.3	65.4	67.8
Used any of the above	93.6	89.9	89.1	89.9	89.2
Needed any of the above, but could not get	7.9	5.7	4.2	3.5	3.5
<b>Total (n)</b>	<b>4,385</b>	<b>4,237</b>	<b>4,048</b>	<b>3,696</b>	<b>3,299</b>

**Source:** LSAC B cohort, age 4-5 to 12-13, weighted

Medicare data mirrored parents' reports, indicating that a GP was the most commonly used health care service among Australian children. Specifically, most had accessed a GP for less than 20 minutes; smaller percentages accessed GPs for longer periods and after hours. Medicare rates of any service use also decreased over time, although the percentages of children accessing psychologists and GPs for mental health-specific concerns increased substantially between the ages of 4-5 (around 1%) and 12-13 (just under 10%) (e.g. see Figure 1). These findings highlight the integral role of GPs as the first point of contact to the wider health care system.

**Figure 1:** Medicare data: Use of GP services in the past year specifically for mental health concerns, by level of emotional symptoms (%)

**Notes:** GP (MH) use corresponding with years of data collection; i.e. 2008/09-2015/16

**Source:** LSAC B cohort, age 4-5 to 12-13. 95% confidence intervals are shown by 'I' bars in each column.

## Children at risk of social-emotional problems have higher service contact

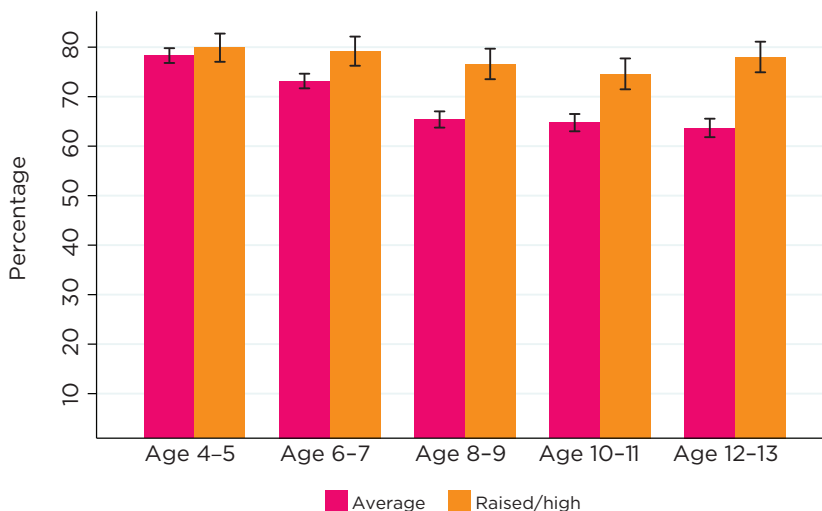
### Box 1: Children's social-emotional wellbeing

**Children's social-emotional wellbeing** was assessed using primary carers' responses to the SDQ at each LSAC interview. The SDQ identifies problematic emotions and behaviours across a range, from 'normative' to 'highly elevated' (Stone et al., 2010). It includes five sub-scales: four 'problem' sub-scales – *emotional symptoms, conduct problems, hyperactivity and peer problems* (which form the total difficulties score) – and a 'prosocial behaviour' scale. For each sub-scale, cut-points indicate where there is elevated risk of clinically significant symptoms (Australian Mental Health Outcomes and Classification Network, 2005). A '*total difficulties*' score is also calculated to indicate the likelihood of experiencing social-emotional problems overall; total difficulties scores below 14 (and below 13 at age 4–5) are close to average.

There were significant and often substantial differences in children's use of health services depending on whether or not they were at elevated risk of social-emotional problems as measured by the Strength and Difficulties Questionnaire (SDQ, Box 1). Examples include:

- Across all age groups, the percentage of children who had accessed paediatricians was significantly higher among those with poor social-emotional outcomes.
- From age 6–7 onwards, the percentage of children who had seen a GP in the past 12 months was significantly higher specifically among those who had elevated levels of emotional symptoms (see Figure 2). Longer GP consultations (more than 20 minutes) and use of after-hours GP services and other specialists was also higher among children with elevated risk of emotional symptoms (see Figure 1).
- Utilisation rates of speech therapists, hospital emergency and other specialist services were higher among children with elevated levels of hyperactivity.
- Even when considering the different characteristics of children and their families (e.g. residential location), the odds of having used psychiatric or behavioural therapy services were significantly higher among those with elevated levels of all social-emotional problems.
- Medicare statistics further demonstrated that children with social-emotional problems were accessing services more frequently than other children.

**Figure 2:** Use of GP services in the past year, by risk of emotional symptoms (%)



**Source:** LSAC B cohort, age 4–5 to 12–13. 95% confidence intervals are shown by 'I' bars in each column.

Other factors were shown to be associated with service use:

- Males were more likely than females to have accessed paediatricians, hospital emergency, speech therapy and psychiatric services.
- Children who spoke a language other than English at home were less likely than English-speaking children to have accessed most service types.
- First-born children were more likely than younger children to have used GPs, paediatricians and psychiatric and behavioural therapy services.
- Children in households with high income or with private health insurance were more likely to access health services requiring out-of-pocket expenses (e.g. paediatricians, other specialists).
- Geographical location was associated with service use; for example, the odds of having seen a GP were 33 percentage points lower for children who lived in an inner-regional area, and 43 percentage points lower for those in outer-regional or remote areas compared to children in metropolitan areas.

## Support services are used at the family level

Across all age groups, around one-in-five to one-in-four parents reported using some type of support service, such as parenting education, family support groups, counselling or other mental health services, for a family member. For some services, such as parenting education and phone or internet helplines, the percentage of families who had used these services decreased with the age of the study child (7.6% at 4–5 years to 3.9% at 12–13 years for parenting education and 6.7% to 2.5% for helplines), while for other services, such as adult mental health services and other counselling, levels of use increased as children got older (3.5% to 5.3% for mental health services and 8.9% to 12.6% for other counselling). Very few parents (1.9–3.4%) reported difficulties accessing these services. This suggests that, for most families, support for emotional issues is available when needed.

Rates of support services use was often higher among families with children at elevated risk of social-emotional problems. For example, compared to children with normative risk of social-emotional problems:

- Use of parenting education, adult mental health services, family support groups, phone or internet help services and other counselling services was significantly higher in families of children with elevated levels of emotional symptoms.
- Use of phone or internet help services was significantly higher in families of children with an increased risk of conduct problems.
- Use of family support groups was significantly higher in families of children with lower prosocial skills.

## There is unmet need for professional support among some families

Unmet need for health care services was a problem for a minority of Australian children and their families, especially for those with elevated levels of risk of social-emotional problems. Among parents of children with elevated levels of risk of conduct problems, for example, the percentage who reported experiencing difficulties accessing services ranged from 11% when children were aged 4–5 to 7% when children were aged 12–13. In comparison, among parents of children with a normative risk of conduct problems, the percentage reporting difficulties accessing services ranged from 7.9% at age 4–5 to 3.5% when children were aged 10–11 and 12–13.

This suggests that Australian families are experiencing barriers to professional health care and support services. Medicare statistics indicate that children in regional and remote areas used most service types less frequently than children in major cities, which could be due to factors including limited service availability and substantial travel times.

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