

# General practitioner confidence with adolescent health:

## Baseline findings from a randomised controlled trial in general practice

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### Background and objectives

General practitioners' (GPs) confidence in caring for adolescents was explored using data from a randomised controlled trial of an adolescent health assessment.

### Methods

GPs completed an online survey. Using descriptive analyses, we assessed confidence with: (1) consulting with adolescents; (2) managing confidentiality; and (3) discussing different aspects of health. Requests for further resources were recorded.

### Results

Most GPs were female (60.6%) and aged 31–59 years (80.3%). GPs were more confident consulting with patients aged 18–24 years (high confidence: 69.7%) versus those aged 14–17 years (50.0%;  $P = 0.011$ ). Regarding patients aged 14–15 years, only 41.7% and 22.7% of GPs were highly confident negotiating time alone and making management decisions without parents, respectively. GPs were least confident discussing gender and sexuality. Many requested further information about gender diverse identities, medicolegal issues and disruptive behaviour.

### Discussion

This sample of GPs identified gaps in confidence and the need for additional support, particularly regarding gender and sexual diversity, medicolegal issues and privacy/confidentiality for younger adolescents.

**GENERAL PRACTITIONERS (GPs)** play a vital part in detecting and managing health issues and providing preventive care to patients of all ages, including adolescents. In Australia, most people aged 15–24 years see a GP at least once per year.<sup>1</sup> This age group presents with a wide range of health issues, often with complex needs. Poor mental health is prevalent among adolescents.<sup>2</sup> Each year, approximately 40% of people aged 16–24 years experience a mental health issue,<sup>3</sup> and one in five people aged 15–24 years see a health professional for their mental health.<sup>1</sup> The substantial physical, cognitive and social changes that occur during adolescence<sup>4,5</sup> are also associated with risk behaviours and experimentation.<sup>5,6</sup> These behaviours put adolescents at high risk of other adverse outcomes, which GPs are often required to manage (and may prevent), including unintentional injuries,<sup>7,8</sup> sexually transmissible infections<sup>9</sup> and unplanned pregnancy.<sup>10</sup> As GPs are often the first point of contact with the healthcare system and the cornerstone of primary care, it is essential that they are confident in the provision of care and (where necessary) referrals for their adolescent patients for a wide range of issues. Suboptimal care resulting in a negative patient experience can affect how adolescents engage with healthcare providers and may lead to avoidance of care services and/or poorer physical and mental health outcomes.<sup>11</sup>

To confidently and effectively detect and manage health concerns with adolescent patients, open and honest patient–doctor communication within the consultation is key. This may be facilitated by the GP spending time alone with the patient (ie without a parent/guardian/other person present) and initiating a discussion with the adolescent regarding their confidentiality and privacy.<sup>12,13</sup> These actions can empower the adolescent patient by validating their increasing independence and maturity as they transition into adulthood. It may also reassure the young patient that they can openly discuss all aspects of their health and lifestyle without repercussions. This is particularly important for patients who are aged under 18 years, who may not be aware of their rights to confidential healthcare.<sup>14</sup> Considering that GPs see patients of all ages, negotiating time alone and discussing confidentiality with adolescents are important skills for all GPs. In addition, all healthcare providers with

adolescent patients should have a good understanding of their jurisdiction's medicolegal requirements (including mandatory reporting requirements) and how to assess whether adolescent patients have the capacity to make independent decisions about their care and consent to treatment and their right to privacy.<sup>15</sup>

Existing research, however, suggests that adolescents can be a particularly challenging patient group, and some GPs may lack confidence in this area. For example, in focus groups conducted in New South Wales, Australia, GPs discussed feeling daunted by or uncomfortable with providing care to adolescents, an age group perceived as uncommunicative with health issues that are difficult to manage.<sup>16</sup> Similarly, in interviews with clinicians working in the UK, GPs described barriers when interacting with younger patients, finding it challenging to establish rapport and communicate with young people.<sup>17</sup> Our earlier work (which involved focus groups and interviews with key informants in Victoria, Australia) also identified variation in the level of confidence among GPs and practice nurses regarding the provision of care to young people.<sup>18</sup> Specific health issues and presentations may be particularly challenging for GPs to manage among adolescents, including complex mental health issues and emotional distress.<sup>17,19</sup>

A further challenge for GPs is the need to keep up to date with the ever-changing trends in adolescent health. In Australia, and other high-income countries, there have been shifts in the behaviours and health outcomes of adolescents. There have been notable declines in some behaviours that put young people at risk of adverse health outcomes, such as cigarette smoking and alcohol consumption.<sup>20</sup> On the other hand, new technologies and social norms have resulted in emerging risk factors such as vaping,<sup>21</sup> while health issues such as mental ill health and obesity continue to rise among this age group.<sup>22</sup> GPs therefore need to remain informed and aware of these changes to effectively manage their adolescent patients' health.

This paper analyses data from a baseline survey in an ongoing randomised controlled trial examining whether providing a fee-for-service payment for an adolescent

health assessment would be cost-effective in Australian general practice (RAAd Health).<sup>23</sup> Comprehensive health assessments for this age group are currently recommended, but not funded, in Australia.<sup>5,23,24</sup> Using survey data collected from participating GPs prior to practice randomisation, we investigated GPs' confidence with conducting adolescent health assessments.

## Methods

RAAd Health is an ongoing cluster randomised controlled trial in Victoria, Australia, that aims to evaluate the effectiveness of providing a fee-for-service payment to GPs for health assessments for adolescents aged 14–24 years. Full details of the trial, including eligibility of practices, are described elsewhere.<sup>23</sup> GPs working at enrolled practices completed a baseline survey prior to practice randomisation.

The online survey was administered between November 2022 and February 2024 via REDCap.<sup>25</sup> The survey had two sections: the first asked GPs questions about themselves, as well as their level of comfort providing care to adolescents. The second section further explored comfort with aspects of adolescent health and allowed participants to identify areas where they would like further information or resources. Further resources were provided on topics identified by GPs. After completing the survey, GPs were invited to undertake online training designed to assist them with the provision of health assessments for adolescents.

## Data management and analysis

We report on GP confidence with: (1) consulting with young people; (2) managing adolescent patient confidentiality; and (3) managing different aspects of adolescent health with young patients. Confidence was measured on a 7-point sliding scale and categorised as 'low or no confidence' (1–3), 'some confidence' (4–5) and 'high confidence' (6–7). We also asked GPs to identify, from a list of 13 items, aspects of adolescent health about which they would like to receive further information/resources.

Here, we explore these outcomes descriptively, using frequencies, proportions and 95% confidence intervals (95% CIs). We used a test of equality of proportions to

identify differences in the GPs' responses depending on the age group of the adolescent, and we report *P*-values where appropriate. All analyses were conducted in Stata 18.0.

Ethics approval for this study was granted by The University of Melbourne Human Research Ethics Committee (HREC 2021-22594-22100-2).

## Results

### Participant characteristics

A total of 154 GPs consented to take part in the RAAd Health trial, and of these, 132 (85.7%) completed the survey. More than half of GPs were female (60.6%), and most were aged between 31 and 44 years (47.0%) or between 45 and 49 years (33.3%). Participants had been working as a GP for a median of 10 years (range: 1–49 years). More than half had received their medical training overseas (59.8%), with most overseas-trained GPs completing their training in South Asia (42.2%) or Europe and Central Asia (28.9%). Most (62.1%) had a special interest in adolescent health, yet few (9.9%) reported any specific (postgraduate) training in adolescent health (Table 1).

### GP confidence levels

#### Confidence consulting with young patients

More than half of GPs (55.3%) reported high confidence with consulting with young people, and just under half (48.5%) reported high confidence with exploring lifestyle issues beyond the presenting problem. GPs were more likely to report high levels of confidence with consulting with older adolescents aged 18–24 years when compared with younger adolescents aged 14–17 years (69.7% [95% CI: 61.9–77.5%] vs 50.0% [95% CI: 41.5–58.5%], *P* = 0.011; Figure 1). GPs had lower levels of confidence when consulting with adolescents via telehealth. They were also more likely to report high levels of confidence when consulting via telehealth with older adolescents when compared with younger adolescents (patient age 14–17 years: 39.4% [95% CI: 31.1–47.7%] vs patient age 18–24 years: 55.3% [95% CI: 46.8–63.8%], *P* = 0.010).

#### Confidence with managing patient confidentiality for adolescents

A higher proportion of GPs reported high confidence with managing patient

**Table 1. Characteristics of general practitioners (GPs) who participated in the online survey (n = 132)**

Characteristic		n	%
Age group (years)	<30	7	5.3
	31-44	62	47.0
	45-59	44	33.3
	≥60	19	14.4
Gender <sup>A</sup>	Male	52	39.4
	Female	80	60.6
Years as a GP		10 (median) <sup>B</sup>	
Location of where medical training received	Australia	53	40.2
	Overseas	79	59.8
Special interest in adolescent health	Yes	82	62.1
	No	50	37.9
Training in adolescent health <sup>C</sup>	Yes	13	9.9
	No	119	90.2
Currently part of Doctors in Secondary Schools <sup>D,E</sup>	Yes	8	6.3
	No	120	93.8
Practice location	Metropolitan	92	69.7
	Rural/remote	40	30.3
Practice billing	Bulk billing	17	12.9
	Mixed or fee for service	115	87.1

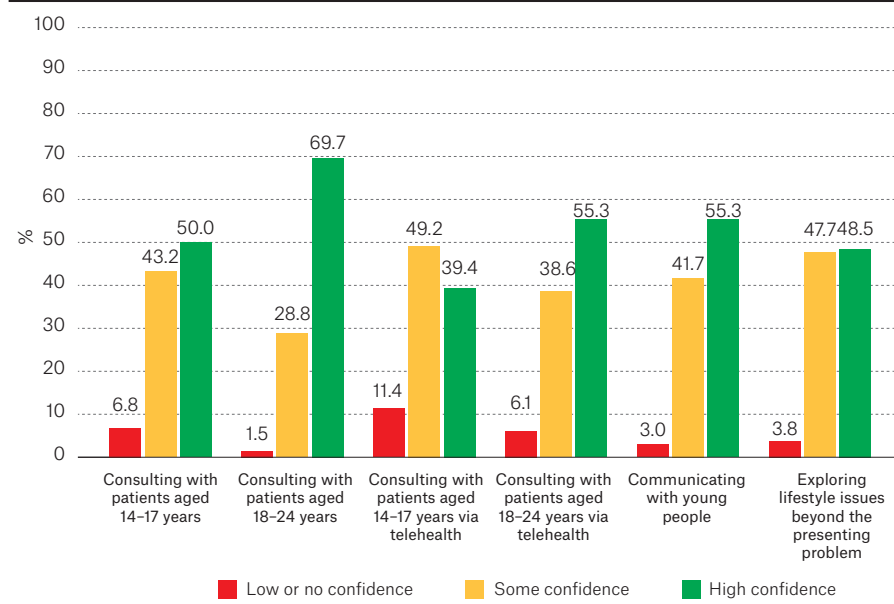
<sup>A</sup> Sex = sex at birth. Gender identity largely aligned with sex (male = man; female = woman), although one female respondent selected 'prefer not to answer' for gender identity. Options given were: woman or female; man or male; non-binary; I/they use a different term (please specify); prefer not to answer.

<sup>B</sup> Interquartile range 5-18; range 1-49.

<sup>C</sup> Including graduate qualifications in adolescent health or youth mental health.

<sup>D</sup> Doctors in Secondary Schools is a Victorian state government program that funds GPs and nurses to provide medical advice and healthcare to students in 100 Victorian government secondary schools (up to one day per week).

<sup>E</sup> Missing 4/132; 3.0%.



**Figure 1.** General practitioner level of confidence with consulting with young people (n = 132).

confidentiality for patients aged 16-18 years when compared with those aged 14-15 years. This was observed for negotiating to spend time alone in consultations (59.1% [95% CI: 50.7-67.5%] vs 41.7% [95% CI: 33.3-50.1%],  $P = 0.005$ ) and making management decisions without parental knowledge (46.2% [95% CI: 37.7-54.7%] vs 22.7% [95% CI: 15.6-29.9%],  $P < 0.001$ ). However, there was weak evidence that patient age group affected high confidence when discussing confidentiality (63.6% [95% CI: 55.4-71.8%] vs 53.8% [95% CI: 45.3-62.2%],  $P = 0.104$ ; Figure 2).

**Confidence with managing key aspects of adolescent health**

Regarding management of key adolescent health priorities, GPs were most confident with discussing education and employment (69.7% high confidence; 0.8% no/low confidence), home life (67.4% high confidence; 0.0% no/low confidence) and mental health and self-harm (62.1% high confidence; 1.5% no/low confidence) with their patients (Figure 3).

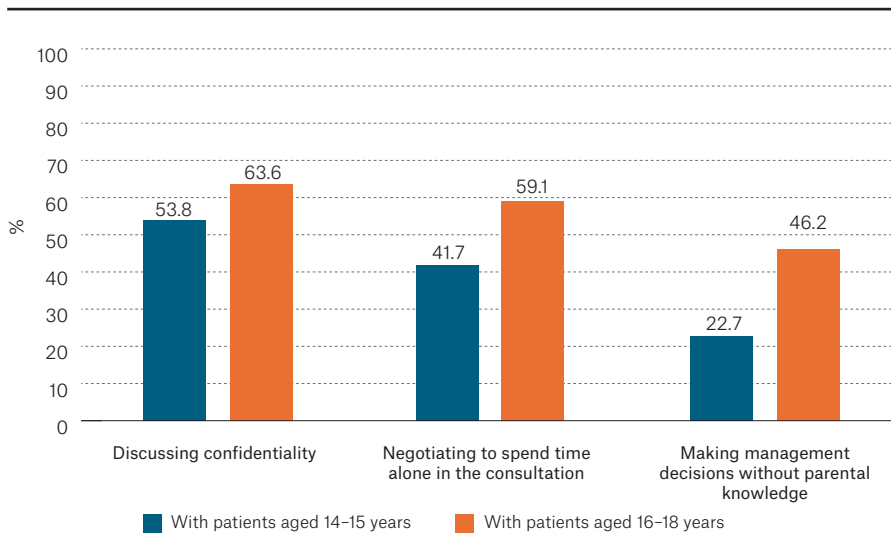
GPs were least confident discussing gender (42.2% high confidence; 11.4% no/low confidence) and sexuality (52.3% high confidence; 9.1% no/low confidence) with young patients.

**Information needs**

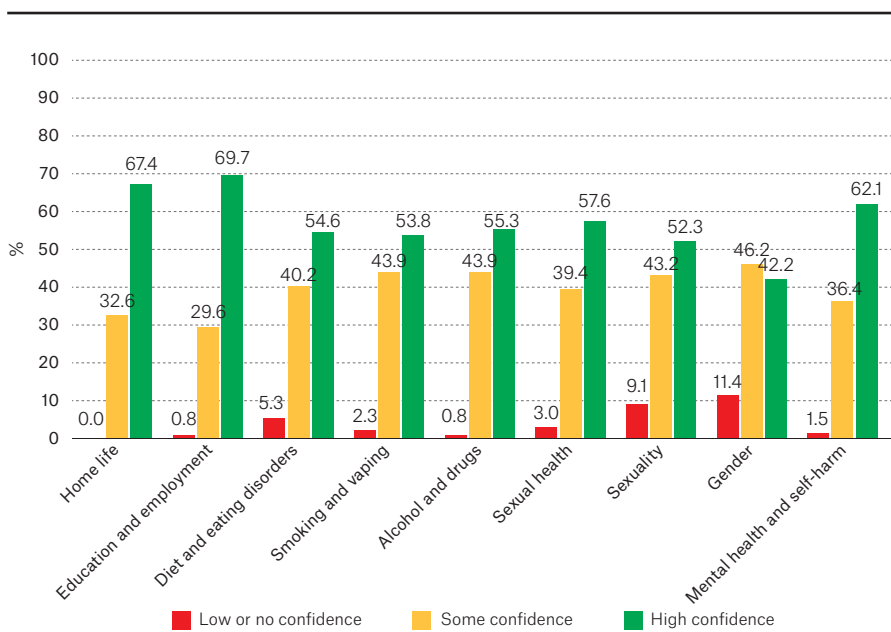
The most common adolescent health topics about which GPs indicated they would like further information (Table 2) were transgender and gender diverse identities (56.1%), medico-legal issues (47.7%) and disruptive behaviour (47.0%).

**Discussion**

Our analysis found that just over half of the GPs participating in the RAD Health trial reported high levels of confidence with managing adolescent patients, although this was affected by the age of the patient, and there were some gaps in confidence and a self-reported need for further information regarding some key aspects of adolescent health. Notably, GPs reported lower levels of confidence when consulting with younger adolescents (aged 14-15 years) without a parent present when compared with older adolescents. GPs were least confident



**Figure 2.** Proportion of general practitioners reporting high confidence with managing adolescent confidentiality (n = 132).



**Figure 3.** General practitioner level of confidence with key aspects of adolescent health (n = 132).

discussing sexuality and gender with young patients, and many expressed that they would like to receive further resources on several aspects of adolescent health, most commonly transgender and gender diverse identities, disruptive behaviour, eating disorders and medicolegal issues. Finally, fewer than half of GPs surveyed reported high confidence with exploring lifestyle issues beyond the presenting problem.

Our study highlights that GPs may be less comfortable with providing confidential care to younger adolescents, and that the creation and/or dissemination of resources that provide medicolegal information relating to adolescent health and mandatory reporting is valued by GPs. Existing research from Australia and overseas highlights challenges associated with managing adolescent health and disclosures. For this age group, GPs and

**Table 2. Adolescent health topics and issues that general practitioners (GPs) identified about which they would like further information (n = 132)<sup>A</sup>**

Topic	n	%
Transgender and gender diverse identities	74	56.1
Medico-legal issues	63	47.7
Disruptive behaviour	62	47.0
Eating disorders	57	43.2
Substance use/abuse	50	37.9
Mandatory reporting	48	36.4
Refugee/asylum seekers	47	35.6
Dysmenorrhea in teens	37	28.0
HEEADSSS <sup>B</sup> training	37	28.0
Mental health resources	32	24.2
Stages of puberty	30	22.7
Mental health issues	29	22.0
Contraception	17	12.9

<sup>A</sup> GPs were invited to tick all that applied (ie multiple responses permitted).

<sup>B</sup> HEEADSSS = Home, Education/Employment, Eating, Activities, Drugs, Sexuality, Suicidal ideation and Safety.<sup>5</sup>

other primary care providers must determine the patient’s safety and capacity to consent for treatment,<sup>14</sup> and must consider and manage the expectations and best interests of both the patient and their parent/s or guardian/s. While adolescent patients are highly concerned about maintaining their confidentiality and privacy when accessing healthcare (particularly for sensitive issues),<sup>26</sup> parents of adolescents may worry that they will not be informed about important information relating to their child’s health and wellbeing.<sup>27</sup> Managing this ‘triadic relationship’ whereby the adolescent’s privacy is protected and the parent is appropriately informed can at times be challenging for healthcare providers. As part of the RAd Health trial, we have developed and distributed a resource for GPs that provides a breakdown by age of an adolescent’s ability to consent to sexual activity, likelihood of mature minor status, Medicare card eligibility

and mandatory reporting requirements for GPs. A digital version of this is available on the RAd Health website ([www.radhealth.org.au](http://www.radhealth.org.au)), and preliminary verbal feedback from GPs and nurses (from process evaluation telephone interviews undertaken as part of the trial) is that this has been a useful and novel resource.

Our study also identified that there are some adolescent health issues that GPs may feel less equipped to manage. Firstly, GPs reported feeling less confident managing adolescent sexuality and gender when compared with other health issues. It is well established that young lesbian, gay, bisexual, transgender, intersex, queer/questioning, asexual and other sexually or gender diverse identities (LGBTIQ+) people experience a range of barriers to accessing healthcare; LGBTIQ+ people are more likely to experience poor mental health and discrimination from healthcare providers and more likely to engage in health risk behaviour,<sup>28,29</sup> with many reporting concerns about disclosing their sexuality in healthcare settings.<sup>30</sup> Considering these barriers, along with the increasing numbers of young people who disclose identity as gender diverse and non-heterosexual in Australia,<sup>31</sup> it is important for GPs to have access to up-to-date and useful information to ensure that the care they provide is safe and acceptable to young LGBTIQ+ people. Even though only two-fifths of GPs in this study reported high confidence with discussing gender, it is encouraging that more than half indicated that they would like further information about transgender and gender diverse identities. Evidence-based strategies to promote learning and change in clinicians should be developed, including academic detailing and interactive, multimodal, repeated and reinforced clinical professional development (CPD) approaches.<sup>28</sup> Existing resources about gender and sexuality for GPs can also be promoted, including *The Australian standards of care and treatment guidelines*<sup>32</sup> and QLife short guides for health professionals ([www.qlife.org.au/resources/guides](http://www.qlife.org.au/resources/guides)).

A substantial number of GPs who completed our survey wanted more information about disruptive behaviours in young people, with nearly half of GPs requesting further resources on this topic.

Existing research has identified that some GPs find it challenging communicating with and providing management for behavioural issues in adolescents,<sup>16</sup> and their emotional issues can be particularly difficult for GPs.<sup>17</sup> This, too, is another area where additional resources may be useful for GPs. Finally, our survey identified that more than half of GPs reported lower levels of confidence, compared with other topics, with exploring issues with patients beyond the presenting problem. The existing literature has outlined some of the barriers that healthcare providers encounter to opportunistically undertake preventive activities with young patients in general practice, including the lack of time and adequate funding<sup>16,23</sup> as well as provider concerns about patient discomfort when enquiring about sensitive issues such as sexual health.<sup>33</sup> Nonetheless, the benefits of preventive care are well established, and the *Guidelines for preventive activities in general practice* (Red Book) recommend GPs conduct various preventive activities with adolescent patients, including actively promoting a healthy lifestyle, providing testing for sexually transmissible infections and assessing for risky behaviours.<sup>24</sup> This important care has many benefits, including early detection of disease and the empowerment of patients.<sup>24</sup>

Strategies to make comprehensive health assessments more acceptable and/or appropriate in this environment, such as a fee-for-service payment for adolescent health assessments, will be further tested in the RAd Health trial. Additionally, GP training programs have been shown to improve confidence and competence with adolescent health,<sup>34,35</sup> and integrating these strategies with a rebate may support GPs to more effectively communicate with adolescent patients and conduct important preventive activities.

This study has several limitations. It relies on a relatively small, self-selected sample who self-reported on levels of confidence, and it is unlikely that these findings are generalisable to Australian GPs more broadly. In particular, we note that the RAd Health trial focuses on adolescent health, and as such, the GPs enrolled in the trial are likely to have a particular interest in young people's health, given that practice eligibility included seeing at least 600 young people aged between

14 and 24 years in a 12-month period.<sup>23</sup>

A further limitation relates to the survey tool, where GPs were asked if they would like to receive more information about adolescent health topics. However, the provided list of topics was not exhaustive.

Regardless of these limitations, our findings provide some important insight into the confidence and information needs of GPs working in Australia regarding adolescent health. In the context of the RAd Health trial, these findings have already been used to inform the content of newsletters and resources circulated to GPs throughout the trial period. This included, for example, the development of a video that provided tips on managing patient confidentiality and negotiating time alone with younger patients. Importantly, it is evident that there were variable levels of confidence with adolescent health, even among this sample of GPs who are likely highly engaged in adolescent health because of their involvement in the RAd Health trial. It is possible that confidence is lower and/or the need for resources to support the management of adolescents is higher among the broader GP population.

## Conclusion

Among this sample of GPs participating in a randomised controlled trial, we identified some gaps in their confidence in managing adolescent health and areas where GPs may benefit from additional support and resources. This includes exploring and managing patients' sexuality and gender questions/concerns and managing medicolegal issues and privacy/confidentiality when treating younger adolescents. These findings signal the importance of curriculum in adolescent healthcare principles for all medical students and general practice registrars. They also highlight that if a rebate for adolescent health assessments were to be available, there needs to be accessible and effective strategies for established GPs to increase their confidence and skills in adolescent healthcare.

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