

# Termination of pregnancy in Tasmania: access and service provision from the perspective of GPs

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**Abstract.** Termination of pregnancy (TOP) is considered an important component of sexual and reproductive health internationally, but there are known barriers in Australia and countries worldwide. This study investigated the issues for GPs regarding aiding access to TOP and providing early medical abortion (EMA) services for Tasmanian women. Specifically, the aims of the study were to identify the knowledge and attitudes of Tasmanian GPs regarding TOP services and to determine which known barriers to providing EMA are most significant for GPs in Tasmania, Australia. A survey was developed and piloted based on previous qualitative research that identified known barriers to accessing TOP. Surveys were posted to all identified GPs in Tasmania with a reply-paid envelope. In all, 211 (27.4%) responses were returned. GPs identified difficulty accessing TOP services, particularly for rural women and those on a low income. Almost half the GPs, excluding conscientious objectors, indicated they would be interested in providing EMA services, but perceived barriers were significant. The most significant barriers related to accessing appropriate training and support. There was uncertainty around financial reward, support services, medical indemnity and access to the medical abortifacient medications mifepristone and misoprostol. In conclusion, accessing TOP remains an issue for Tasmanian women. Many Tasmanian GPs are interested in providing EMA services if barriers are addressed, but there is a lack of knowledge about the practicalities of implementing EMA. Providing practical support to GPs and increasing knowledge pertaining to EMA provision in general practice could improve access in primary care.

**Keywords:** family planning services, health services accessibility, primary health care, reproductive health services, women's health services.

Received 8 December 2020, accepted 17 February 2021, published online 20 May 2021

## Introduction

The provision of access to safe termination of pregnancy (TOP) is considered internationally to be an important component of sexual and reproductive health care (World Health Organization 2012). Although there are significant barriers globally to accessing TOP (Culwell and Hurwitz 2013), even relatively non-restrictive countries such as Australia experience structural, logistic, social, economic, religious and ideological barriers for women seeking TOP (de Moel-Mandel and Shelley 2017).

In Australia, an estimated 40% of couples have experienced an unintended pregnancy, with a significant association with social disadvantage and rural residence (Rowe *et al.* 2016). TOP can be performed as a surgical procedure or medically using the

abortifacient pharmaceutical drug mifepristone along with misoprostol. Only two states in Australia collect and publish data on TOP (Grayson *et al.* 2005). In South Australia (SA), the TOP rate in 2017 was 13.2 per 1000 women aged 15–44 years (Pregnancy Outcome Unit Prevention and Population Health Branch 2019), whereas in Western Australia (WA) the TOP rate in 2018 was 14.3 per 1000 women (Galrao *et al.* 2019).

In Australia, legislative frameworks governing TOP vary from state to state (see Table S1, available as Supplementary Material to this paper). Despite decriminalisation across the country, access to TOP services is known to be challenging for many women, and clear barriers exist (Doran and Hornibrook 2014; Dawson *et al.* 2016; de Moel-Mandel and Shelley 2017;

Shankar *et al.* 2017). Inequities in access to abortion services are more prevalent for women living in rural areas, women from minority groups in developed countries, adolescents and women in low-income settings (Doran and Nancarrow 2015; Dawson *et al.* 2016).

GPs are often the first point of contact for women with unplanned pregnancy, and providing medical abortions is well within the scope of general practice (Mazza *et al.* 2020). Early medical abortion (EMA) performed with mifepristone and misoprostol was approved for use by the Therapeutic Goods Association in Australia in 2012 (Grossman and Goldstone 2015). GPs are able to become registered providers of EMA by undertaking online training. Despite known barriers (Dawson *et al.* 2017), data from WA indicates increasing uptake of EMA provision in general practice (Galrao *et al.* 2019). EMA with mifepristone and misoprostol accounted for 35% of TOP in SA in 2017 (Pregnancy Outcome Unit Prevention and Population Health Branch 2019) and for 33% of TOP in WA in 2018 (Galrao *et al.* 2019). GPs conducted 5.5% of TOPs in SA in 2017, albeit within a hospital setting (Pregnancy Outcome Unit Prevention and Population Health Branch 2019), and 10.6% of TOPs in WA in 2018 (Galrao *et al.* 2019). In order to contribute to an understanding of the challenges faced by GPs in providing TOP support, including EMA, this study aimed to investigate the knowledge and attitudes of Tasmanian GPs regarding TOP services, and which known barriers to providing EMA are most significant.

## Methods

We used a cross-sectional survey design of all GPs in Tasmania, an island state of Australia with a relatively dispersed population of 520 000 in 2018. Information about the survey, and a link to complete it online, was sent by Primary Health Tasmania to GPs on their database. This resulted in a very low response rate, and a decision was made to send out hardcopies of the survey. Practice addresses were identified through the Tasmanian Health Directory from Primary Health Tasmania (2020). Records were cross-matched with GP practice websites and, if discrepancies existed, the practices were called to determine their current practicing GPs. No exclusion criteria were applied. Surveys were sent between October and November 2018, with information on electronic completion also provided. No further reminders were sent. Participation was anonymous; however, GPs were asked to provide the rurality of their practice using the Rural, Remote and Metropolitan Areas (RRMA) classification (Australian Government Department of Health 2008). The RRMA classification was also applied to our invited population based on postcode so that we could determine whether our sample was representative. Surveys were returned in a provided reply-paid envelope. Consent was implied by survey completion and return.

The survey was developed from a review of published literature of qualitative studies investigating the barriers to the provision of and access to TOP services (Dawson *et al.* 2016, 2017; de Moel-Mandel and Shelley 2017; Shankar *et al.* 2017). Two contributors (EO and IP, see Acknowledgements) extracted themes representing barriers for both access to and provision of TOP services from these documents. In consultation with a third researcher (KO) final survey items were devised. Survey development involved transforming qualitative themes into a

statement that required a response on a 5-point Likert scale from strongly agree to strongly disagree; the survey and the themes extracted are provided in Appendix S1. This methodology was guided by a mixed-methods sequential exploratory strategy (Creswell and Creswell 2017) whereby a second quantitative phase of research builds on an initial qualitative phase, building on what is known by, in this case, quantifying the degree to which known barriers actually exist. The survey was divided into two major lines of questioning, the first relating to GPs' experiences of providing counselling for and referring to a provider of TOP services for patients, and the second relating to GPs providing EMA services to patients. Participants who were conscientious objectors to providing TOP services were not required to complete the second section. The survey (Appendix S1) was piloted by five GPs, one of whom also showed it to colleagues. The GPs found that the survey on the whole was understandable and the questions were discrete and unambiguous. Several minor improvements were made in response to feedback.

Data were analysed descriptively and are presented as percentages. The strength of agreement in each question was compared with the overall agreement/disagreement for all questions with odds ratios (ORs) calculated using ordered logistic regression, corrected for repeated measures. This allowed questions to be ranked according to strength of agreement. The effects of rurality ( $\leq 10\,000$  population) and sex were determined using ORs comparing the responses of the two groups.

This study was approved by the Human Research Ethics Committee of Tasmania (H0017039), a state-wide service convened by the University of Tasmania.

## Results

In October and November 2018, surveys were posted to 771 GPs across Tasmania and 211 responses were received (27.4% response rate). The rurality breakdown of those who responded was similar to that of the invited Tasmanian GP population (Table 1). There were minimal missing data within the survey responses.

### Access to TOP services

Ordered logistic regression allowed us to rank each question according to the degree of agreement (Table 2). The greatest level of agreement was in response to the statements that vulnerable patients should be provided with TOP in the public system (Questions (Q) 9), that greater leadership by decision-makers is needed to improve TOP access (Q15), that access is more difficult for women in rural areas (Q6) and that there are challenges finding access to TOP for women on a low income (Q4). There was support for providing TOP in the public healthcare system (Q8). Doctors were confident in their counselling skills (Q2) and in knowing where to refer for non-directional counselling as required (Q3). Participants were more likely to disagree with statements regarding lack of support for TOP for ethical reasons (Q11) or religious beliefs (Q12). They were also more likely to disagree with having concern about the legal implications of providing TOP (Q14).

There were some significant differences between female and male GPs (Table 2). Female GPs were more confident in

**Table 1. Rurality of practice and sex breakdown for survey respondents**

The Rural, Remote and Metropolitan Areas (RRMA) categories are as follows: M1 and M2, metropolitan (capital cities, population centre >100 000; includes Hobart); R1, rural (large rural centres, urban population centres between 25 000–99 999; includes Launceston); R2, rural (small rural centre, urban centre population 10 000–24 999; includes Devonport, Burnie, Somerset, Blackman's Bay, Kingston); R3, rural (other rural area, urban centre population <10 000); Rem 1, remote (remote geographically, with population >5000); Rem 2, remote (remote geographically, with population <5000)

	No. respondents (%)	% Invited population
RRMA category		
M1 and M2	70 (34.3)	34.1
R1	43 (21.1)	18.5
R2	41 (20.1)	16.1
R3	39 (19.1)	28.2
Rem1	1 (0.5)	0
Rem2	10 (4.9)	4.2
Total no. responses (7 missing)	204	
Sex		
Female	119 (58.3)	
Male	85 (41.7)	
Total no. responses (7 missing)	204	
Conscientious objector		
Yes	22 (10.8)	
No	182 (89.2)	
Total no. responses (7 missing)	204	

**Table 2. Provision of services for counselling and referral for termination of pregnancy (TOP) in Tasmania**

CI, confidence interval; OR, odds ratio

Question	OR <sup>A</sup> (95% CI)	P-value	Female vs male GPs	
			OR <sup>B</sup> (95% CI)	P-value
Mean response for each respondent	1.00		0.82 (0.70–0.96)	0.015
Q9. Vulnerable patients should be provided with TOP in the public system	10.53 (7.90–14.04)	<0.001	1.14 (0.67–1.93)	0.64
Q15. Greater leadership by decision-makers can improve TOP access	7.21 (5.68–9.13)	<0.001	1.26 (0.79–2.01)	0.33
Q6. It is more difficult for women in rural areas	6.67 (5.18–8.57)	<0.001	1.73 (1.07–2.81)	0.026
Q2. Confident in my counselling skills for unplanned pregnancy	6.01 (4.71–7.66)	<0.001	2.75 (1.75–4.32)	<0.001
Q4. Challenging to find access to TOP for low income women	4.26 (3.28–5.52)	<0.001	0.95 (0.57–1.60)	0.86
Q7. No opportunities to refer patients for TOP in the public system	2.74 (2.04–3.69)	<0.001	0.41 (0.22–0.76)	0.004
Q3. I know where to refer women for non-directional counselling	1.96 (1.47–2.61)	<0.001	2.09 (1.17–3.72)	0.012
Q5. Challenging to find access to TOP for all women	1.27 (0.98–1.64)	0.070	1.24 (0.72–2.14)	0.43
Q18. Women in my area are required to travel to access TOP	1.22 (0.94–1.57)	0.13	0.56 (0.34–0.94)	0.028
Q16. Unacceptable delays in TOP when patients are referred	0.98 (0.83–1.16)	0.82	0.75 (0.53–1.07)	0.12
Q10. TOP service availability is adequate within the private system	0.57 (0.44–0.74)	<0.001	1.42 (0.83–2.43)	0.20
Q1. Unsure about TOP service availability in my area	0.55 (0.42–0.72)	<0.001	0.56 (0.32–0.98)	0.042
Q13. Limited demand for TOP advice and services in my practice	0.54 (0.43–0.68)	<0.001	0.51 (0.31–0.83)	0.007
Q14. Concerned about the legal implications of providing TOP services	0.26 (0.20–0.33)	<0.001	0.89 (0.54–1.46)	0.64
Q17. A shortage of female staff impacts on TOP advice	0.26 (0.22–0.31)	<0.001	0.67 (0.45–0.99)	0.043
Q8. TOP should not be a priority for the public care system	0.15 (0.11–0.21)	<0.001	0.61 (0.34–1.10)	0.10
Q11. I don't support TOP because of ethical reasons	0.08 (0.06–0.11)	<0.001	0.59 (0.33–1.07)	0.081
Q12. I don't support TOP because of my religious beliefs	0.07 (0.05–0.10)	<0.001	0.72 (0.40–1.30)	0.28

<sup>A</sup>The strength of agreement in with the different questions was compared against the mean response for each respondent: ORs for each question were estimated using ordered logistic regression, corrected for repeated measures. Male and female respondents are not separated in this OR column. The 'agreement/disagreement' scale is ordered in nature, and the ranking of the ORs is used to provide a rough ordering of the comparative strength of the different propositions posed by the questions. Because there is no obvious way of standardising the 'agreement/disagreement' measurements between different respondents, the mean 'agreement/disagreement' response for each respondent was calculated, and this was used as the standardised baseline for judgement of the strength of agreement.

<sup>B</sup>The relative strength of agreement among female respondents was compared with that among male respondents.

their counselling skills for unplanned pregnancy (Q2) and knowledge of where to refer women for non-directional counselling (Q3). Female GPs disagreed more strongly with the

statement that there was limited demand for TOP advice and services (Q13), were more certain about service delivery in their area (Q1) and were more likely to believe that access is

**Table 3. Responses regarding enablers and barriers for GPs providing medical termination of pregnancy (MTOP<sup>A</sup>) services, excluding conscious objectors**Data are presented as *n* (%). Note that the denominators (*n*) vary slightly for each question due to randomly missing data

Question	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Q1. I would be interested in providing MTOP under the right circumstances ( <i>n</i> = 186)	21 (11.3)	45 (24.2)	34 (18.3)	53 (28.5)	33 (17.7)
Q2. There is not enough financial reward for me to provide MTOP ( <i>n</i> = 183)	12 (6.6)	41 (22.4)	90 (49.2)	30 (16.4)	10 (5.5)
Q3. There are inadequate support services for me to offer MTOP ( <i>n</i> = 182)	4 (2.2)	29 (15.9)	71 (39.0)	66 (36.3)	12 (6.6)
Q4. I do not have adequate training or knowledge to provide MTOP ( <i>n</i> = 182)	10 (5.5)	32 (17.6)	11 (6.0)	98 (53.8)	31 (17.0)
Q5. There are a lack of opportunities for training and education on MTOP ( <i>n</i> = 183)	9 (4.9)	34 (18.6)	68 (37.2)	61 (33.3)	11 (6.0)
Q6. I do not have the time in my practice to offer MTOP ( <i>n</i> = 183)	13 (7.1)	75 (41.0)	29 (15.8)	54 (29.5)	12 (6.6)
Q7. My workload is too high to incorporate providing MTOP into my practice ( <i>n</i> = 183)	12 (6.6)	78 (42.6)	24 (13.1)	59 (32.2)	10 (5.5)
Q8. The inability to provide after-hours care impacts on the ability for me to provide MTOP services ( <i>n</i> = 183)	7 (3.8)	45 (24.6)	25 (13.7)	75 (41.0)	31 (16.9)
Q9. I am concerned about being stigmatised if I provide MTOP services ( <i>n</i> = 183)	45 (24.6)	87 (47.5)	23 (12.6)	23 (12.6)	5 (2.7)
Q10. Medical indemnity is a barrier to me providing MTOP services ( <i>n</i> = 184)	20 (10.9)	44 (23.9)	100 (54.3)	18 (9.8)	2 (1.1)
Q11. It is difficult to access misoprostol and mifepristone where I practice ( <i>n</i> = 183)	16 (8.7)	37 (20.2)	118 (64.5)	10 (5.5)	2 (1.1)
Q12. I am concerned about how my colleagues would react if I provided MTOP services ( <i>n</i> = 185)	49 (26.5)	87 (47.0)	34 (18.4)	12 (6.5)	3 (1.6)
Q13. A lack of hospital support in case of complications prohibits me from providing MTOP services ( <i>n</i> = 185)	17 (9.2)	50 (27.0)	61 (33.0)	39 (21.1)	18 (9.7)
Q14. If teleconferencing was available to assist in MTOP I would use this service ( <i>n</i> = 181)	12 (6.6)	45 (24.9)	63 (34.8)	48 (26.5)	13 (7.2)
Q15. I am concerned about legal implications of providing MTOP ( <i>n</i> = 187)	62 (33.2)	73 (39.0)	30 (16.0)	19 (10.2)	3 (1.6)

<sup>A</sup>Note, MTOP is used in this table in place of early medical abortion (EMA) because this was the terminology used in the survey. The terms can be used interchangeably.

more difficult in rural areas (Q6) and that women had to travel to access TOP (Q18).

#### Provision of EMA services

Of the 211 respondents, 22 GPs (10.4%) stated they were conscientious objectors to providing TOP services, 182 stated they were not, two of whom failed to respond further despite this, and seven did not answer the question but provided subsequent responses that were included (Table 1). Just under half the GPs said that they would be interested in providing EMA services under the right circumstances (28.5% agree, 17.7% strongly agree), with a further 18.3% unsure (Table 3). There were more doctors prepared to provide EMA services in rural (<10 000 population) than larger centres (54.5% vs 43.4% respectively). An important finding in the raw data (Table 3) is the relatively high number of respondents who were uncertain about potential barriers. Over one-third of participants were unsure whether financial reward (49.2%), inadequate training opportunities (37.2%), inadequate support services (39.0%), medical indemnity (54.3%) or access to medications (64.5%) posed a barrier for them.

The questions regarding potential barriers to providing EMA were ranked according to the degree of agreement, with differences between male and female GPs also presented in Table 4. There was significant variation in responses, with greatest barriers being inadequate training or knowledge (Q4), a lack of opportunities for training (Q5), a lack of after-hours care (Q8) and inadequate support (Q3). Issues that were seen as providing

less of a barrier to providing EMA (greater disagreement with the statements) were indemnity (Q10), access to the medications (Q11), concern about being stigmatised (Q9) and colleagues' reactions (12).

Female GPs were more likely than male GPs to be interested in providing EMA (Q1). Financial reward (Q2) and a lack of training opportunities (Q5) were less likely to be viewed as barriers by female compared with male GPs. Workload (Q7) and time (Q6) were also less likely to be seen as barriers by female than male GPs, but the difference did not reach statistical significance. eHealth was seen more strongly by female GPs as a potential facilitator (Q15).

We compared respondents from centres with populations ≤10 000 and >10 000. The only trend noted was that after-hours care was less of a barrier to providing EMA for respondents from smaller population centres (OR 0.44; 95% CI 0.19–1.01; *P* = 0.054; data not shown).

#### Discussion

Our research has highlighted challenges in accessing TOP services in Tasmania, and has identified that there is a relatively large proportion of GPs who would be interested in providing EMA services under the right circumstances. The research has identified that the most significant barriers to GPs providing EMA are inadequate knowledge and training opportunities, and inadequate opportunities for support and after-hours care. Further, we demonstrated that there is uncertainty around important



**Table 4. Provision of medical termination of pregnancy (MTOP<sup>A</sup>) services in your practice: all GPs and female versus male GPs**  
CI, confidence interval; OR, odds ratio

Mean response	OR <sup>B</sup> (95% CI)	P-value	Female vs male GPs	
			OR <sup>C</sup> (95% CI)	P-value
Mean level of agreement/disagreement	1.00		1.03 (0.80–1.34)	0.80
Q4. I do not have adequate training or knowledge to provide MTOP	3.65 (2.70–4.94)	<0.001	0.62 (0.36–1.07)	0.084
Q8. The lack of after-hours care impacts on my ability to provide MTOP	2.46 (1.77–3.41)	<0.001	1.95 (0.97–3.90)	0.060
Q3. There are inadequate support services for me to offer MTOP	1.76 (1.45–2.14)	<0.001	1.05 (0.71–1.56)	0.81
Q1. I would be interested in providing MTOP under the right circumstances	1.51 (1.01–2.24)	0.043	2.24 (1.00–5.02)	0.049
Q14. Appropriate training would make me be interested in providing MTOP	1.50 (1.07–2.10)	0.018	2.79 (1.44–5.42)	0.002
Q5. There is a lack of opportunities for training and education on MTOP	1.46 (1.17–1.82)	0.001	0.61 (0.39–0.94)	0.024
Q15. eHealth facilities would make me be interested in providing MTOP	1.12 (0.85–1.48)	0.41	1.88 (1.06–3.34)	0.032
Q13. A lack of hospital support for complications prohibits me providing MTOP	0.96 (0.74–1.25)	0.76	1.33 (0.79–2.22)	0.28
Q2. There is not enough financial reward for me to provide MTOP	0.93 (0.76–1.13)	0.47	0.64 (0.42–0.99)	0.044
Q7. My workload is too high to incorporate providing MTOP into my practice	0.82 (0.60–1.10)	0.19	0.55 (0.29–1.01)	0.054
Q6. I do not have the time in my practice to offer MTOP	0.81 (0.60–1.10)	0.18	0.54 (0.28–1.03)	0.061
Q11. It is difficult to access misoprostol and mifepristone where I practice	0.69 (0.59–0.80)	<0.001	0.76 (0.54–1.07)	0.12
Q10. Medical indemnity is a barrier to me providing MTOP services	0.64 (0.55–0.75)	<0.001	0.85 (0.59–1.22)	0.38
Q9. I am concerned about being stigmatised if I provide MTOP services	0.23 (0.17–0.30)	<0.001	1.03 (0.61–1.74)	0.92
Q12. I am concerned about my colleagues' reactions if I provided MTOP	0.20 (0.15–0.25)	<0.001	0.91 (0.56–1.49)	0.70

<sup>A</sup>MTOP is used in this table in place of early medical abortion (EMA) because this was the terminology used in the survey. The terms can be used interchangeably.

<sup>B</sup>The strength of agreement with the different questions was compared against the mean response for each respondent: ORs for each question were estimated using ordered logistic regression, corrected for repeated measures. Male and female respondents are not separated in this OR column. The 'agreement/disagreement' scale is ordered in nature, and the ranking of the ORs is used to provide a rough ordering of the comparative strength of the different propositions posed by the questions. Because there is no obvious way of standardising the 'agreement/disagreement' measurements between different respondents, the mean 'agreement/disagreement' response for each respondent was calculated, and this was used as the standardised baseline for judgement of the strength of agreement.

<sup>C</sup>The relative strength of agreement among female respondents were compared with that among male respondents.

factors such as indemnity, financial reward and access to medications.

GPs felt strongly that vulnerable women should be provided with TOP in the public health system and that greater leadership from decision-makers was required. Equitable access is known to remain an aspiration in many areas of Australia (Bateson *et al.* 2019), and lack of access in public clinics leads to financial challenges for many, particularly in rural and outer urban settings (Bateson *et al.* 2019). At the time of this research there was considerable change in the landscape of provision of TOP in Tasmania. In December 2017 the last dedicated provider of surgical terminations in Tasmania closed, requiring many women to travel outside their region to access surgical termination with private providers, and with limited accessibility to low-cost services (C. Manen, CEO Family Planning Tasmania, pers. comm., 6 February 2020). GPs in the present study clearly identified a need for greater leadership by decision-makers in ensuring equitable access to TOP in Tasmania and other outer urban and rural areas.

Access to and information about TOP is more challenging for women living in rural and remote areas (Family Planning Alliance Australia 2018). Although there was a greater proportion of GPs in rural areas willing to provide EMA, the barriers, with the exception of after-hours care, were similar to those in urban locations. Other studies have found specific challenges for women accessing EMA in rural areas, including access to and availability of services locally, financial barriers, poor integration of care, privacy concerns and stigmatisation (Doran and Hornibrook 2014; Hulme-Chambers *et al.* 2018). We did not ask

about access to ultrasound directly, but this has been identified as a further potential barrier for rural GPs (Keogh *et al.* 2019). Providing training opportunities, support and ongoing mentoring for GPs is vital for increasing the number of EMA providers for Australian women, particularly for women who are vulnerable or living in rural areas (Mazza 2020). The present study provides evidence that with the correct support and training there is a potential workforce for providing EMA in rural Tasmania.

A delay in referral to a service provider is a common barrier reported by women trying to access TOP services (Dawson *et al.* 2016) that contributes to psychological distress (Doran and Hornibrook 2014). The present study supports previous studies that identified affordability as a major barrier to accessing TOP services (Doran and Hornibrook 2014; Dawson *et al.* 2016; Shankar *et al.* 2017) and supports more publicly funded TOP services being available to address this barrier (de Moel-Mandel and Shelley 2017).

One in 10 GPs identified as conscientious objectors; of those who did not, almost half were willing to provide EMA, with the number greater among rural doctors. Training opportunities, after-hours care and the availability of other support were seen as the most significant barriers by all GPs. In Tasmania, 91 doctors (including GPs and gynaecologists) are registered prescribers of the mifepristone/misoprostol for EMA, but it is suggested that the numbers are lower than this because not all registered prescribers are actively prescribing (Saxena 2020). Given the strength of opinion among our respondent GPs that adequate training was one of the greatest barriers, it is possible to

hypothesise that GPs do not feel that the relatively accessible online training required to become a registered prescriber is sufficient to gain confidence to prescribe. Confirming this would require further research. We found that structural barriers such as time, workload and legal, ethical and religious concerns about involvement with TOP management did not appear to be of significant importance in our cohort of GPs. This is encouraging, because these barriers would be more difficult to address.

Another important finding of the study was the high level of uncertainty about many potential barriers. GPs appear unsure as to the implications for indemnity, access to the required medication, whether it would be financially rewarding and whether training and tertiary support services would be available. This indicates that GPs who are prepared to provide EMAs are held back due to uncertainty about how the services would be implemented in their practice and that assistance in developing the necessary protocols may alleviate concerns. This research therefore strongly supports the concept recently put forward by the Centre of Research Excellence (CRE) in Sexual and Reproductive Health for Women in Primary Care (SHPERE; Mazza 2020; SPHERE CRE 2020) that supports the development of a community of practice and peer support network, which could address the high degree of uncertainty around aspects of providing EMA services uncovered in the present study. Frameworks for providing EMA in primary care vary according to practice circumstances (Deb *et al.* 2020), and Mazza *et al.* (2020) provide a framework to help design such a service.

The strengths of the present study include a reasonable response rate from GPs in Tasmania and a representative geographic sample of the wider Tasmanian GP population. Ideally, we would have liked to send a reminder to GPs for them to complete the survey, but resource constraints limited our ability to do that by mail. We also recognise that there may have been a self-selection bias, with GPs more interested in TOP more likely to complete the survey. Rapid changes in the landscape of access to TOP in Tasmania at the time of this survey may have also influenced responses.

There is interest and a willingness to provide EMA services among Tasmanian GPs, including those working in rural and remote areas. However, poor knowledge about EMA is a major barrier to provision, and this is a common research finding across countries (Subasinghe *et al.* 2021). The main barriers to providing the service are factors that can be relatively easily addressed, such as providing training opportunities and practical support to implement EMAs into practice in primary care. By addressing these concerns, there is potential to improve equitable access to services for Tasmanian women seeking TOP. Responses to this survey indicate that the GPs' experiences on the ground are informative and that they should be part of the political conversation, at both a state and federal level, in advocating for improved access to TOP services, including EMAs, for all women.

### Conflicts of interest

Emily Ingram and Kathryn Ogden are both practitioners at Family Planning Tasmania, an organisation that openly advocates for reproductive justice. The authors declare that Family Planning Tasmania financially supported open access

publication of the paper, but did not provide financial support for the research itself. The authors declare no financial or other conflicts of interest.

### Declaration of funding

This research did not receive any specific funding.

### Acknowledgements

The authors acknowledge the valuable contribution of Beth Grimmer, Eliza Walker, Ione Patten and Ella Orłowski to this work in the early stages.

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