

What do Australian primary care clinicians need to provide longacting reversible contraception and early medical abortion? A content analysis of a virtual community of practice

Sonia Srinivasan , ¹ Sharon Maree James , ¹ Joly Kwek, ¹

► Additional supplemental material is published online only. To view, please visit the journal online (https://doi. org/10.1136/bmjsrh-2024-202330).

For numbered affiliations see end of article.

Correspondence to

Dr Sonia Srinivasan; sonia. srinivasan@monash.edu

Received 27 March 2024 Accepted 4 June 2024 **Published Online First** 2 July 2024

Check for updates

@ Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.

To cite: Srinivasan S, James SM, Kwek J, et al. BMJ Sex Reprod Health 2025;**51**:94-101.

ABSTRACT

Background Uptake of long-acting reversible contraception (LARC) is lower in Australia compared with other high-income countries, and access to early medical abortion (EMA) is variable with only 11% of general practitioners (GPs) providing EMA. The AusCAPPS (Australian Contraception and Abortion Primary Care Practitioner Support) Network is a virtual community of practice established to support GPs, nurses and pharmacists to provide LARC and EMA in primary care. Evaluating participant engagement with AusCAPPS presents an opportunity to understand clinician needs in relation to LARC and EMA care.

Methods Data were collected from July 2021 until July 2023. Numbers of online resource views on AusCAPPS were analysed descriptively and text from participant posts underwent qualitative content analysis.

Results In mid-2023 AusCAPPS had 1911 members: 1133 (59%) GPs, 439 (23%) pharmacists and 272 (14%) nurses. Concise point-of-care documents were the most frequently viewed resource type. Of the 655 posts, most were created by GPs (532, 81.2%), followed by nurses (88, 13.4%) then pharmacists (16, 2.4%). GPs most commonly posted about clinical issues (263, 49% of GP posts). Nurses posted most frequently about service implementation (24, 27% of nurse posts). Pharmacists posted most about health system and regulatory issues (7, 44% of pharmacist posts). Conclusions GPs, nurses and pharmacists each have professional needs for peer support and resources to

WHAT IS ALREADY KNOWN ON THIS

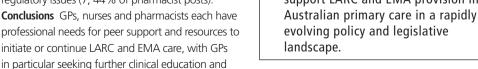
⇒ Long-acting reversible contraception (LARC) and early medical abortion (EMA) are key elements of quality sexual and reproductive health service provision but access is limited in Australian primary care. To improve patient access, it is important to understand what support clinicians need to initiate and/or continue providing these services.

WHAT THIS STUDY ADDS

⇒ Primary care clinicians' needs in relation to LARC and EMA care differ. General practitioners seek further clinical knowledge, nurses discuss service implementation issues and pharmacists most commonly address health system and regulatory issues. Concise point-of-care resources are likely to support LARC and EMA delivery in primary care.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Our findings will inform resource development, education and implementation of interventions to support LARC and EMA provision in evolving policy and legislative landscape.





upskilling. Development of resources, training and implementation support may improve LARC and EMA provision in Australian primary care.

INTRODUCTION

Long-acting reversible contraception (LARC), contraceptive implants and intrauterine devices (IUDs) are the most effective forms of contraception, but have lower uptake in Australia compared with other highincome countries.²⁻⁵ Early medical abortion (EMA) licensed in Australia as a composite pack of oral mifepristone and misoprostol to terminate a pregnancy up to 9 weeks' gestation⁶ – is safe and effective⁷ yet only 11% of Australian general practitioners (GPs) provide EMA.^{8 9} Barriers to primary care provision of LARC and EMA include a lack of provider education and training opportunities, inadequate support and stigma. 10-12 As a result, LARC and EMA services are concentrated in metropolitan areas with high out-of-pocket costs, creating additional barriers for young, rural and remote women.¹³ To address some of these barriers, nurses and pharmacists could assist GPs to expand access to LARC and EMA services. In Australian primary care, nurses typically support healthcare delivery alongside GPs, and nurse practitioners work at an advanced practice level to diagnose, prescribe and refer to specialist colleagues. 14 Nurse-led EMA services have demonstrated success in Sweden¹⁵ and are currently being trialled in rural Australian primary care settings. 16 17 Similarly, pharmacists have the potential to offer evidence-based information about LARC and EMA, for example, at the point of provision of emergency contraception.¹⁸

Virtual communities of practice (VCoP) bring together providers around a shared domain of interest and use relationship networks to support best clinical practice, ¹⁹ reduce professional isolation²⁰ and enhance interdisciplinary collaboration.²¹ The Canadian Abortion Providers Support-Communauté de pratique Canadienne sur l'avortement (CAPS-CPCA) is a VCoP developed to support primary care provision of EMA,²² and has increased the number of EMA providers^{23–25} and influenced training and logistical support for EMA in Canadian primary care.^{26–28} Building on the CAPS-CPCA experience, the AusCAPPS (Australian Contraception and Abortion Primary Care Practitioner Support) Network is a multidisciplinary VCoP established to support Australian GPs, nurses and pharmacists in the provision of LARC and EMA.²⁹ The primary objective of AusCAPPS is to increase LARC and EMA services in Australian primary care. Secondary objectives are to increase the number of GPs, nurses and pharmacists who provide or dispense EMA and improve primary care practitioners' knowledge, attitudes and provision of LARC and EMA. Evaluating how participants engage with AusCAPPS presents an opportunity to understand what clinicians need to

start and/or continue providing these services. Therefore, the primary objective of this study was to evaluate participant engagement in AusCAPPS. Secondary objectives were to (1) describe the key concerns of GPs, nurses and pharmacists in relation to LARC and EMA provision and (2) to outline their practical and professional needs.

METHOD

Design

This mixed methods study was undertaken as part of the AusCAPPS trial (registration number ACTRN12622000655741). The research team has combined experience in academic primary care and clinical practice in sexual and reproductive health. The development of AusCAPPS and member recruitment has been described in detail elsewhere. Australian GPs, practice nurses and community pharmacists were recruited through a national health professional database, professional organisation newsletters, social media and brochures.

Patient and public involvement

There was no patient or public involvement in this study.

Data collection

Data were collected from 1 July 2021 until 1 July 2023. Registration data included member profession, current provision of LARC and EMA, and years since first professional registration. GPs were defined as medical practitioners currently working in general practice. Nurses were defined as nurses or nurse practitioners working in general practice or a sexual health service. Pharmacists were defined as those working in a community pharmacy setting. Numbers of resource views (views of online documents, live and asynchronous views of webinars and listens to podcasts) were collected from Google Analytics, ³⁰ YouTube ³¹ and the podcast hosting platform Liberated Syndication,³² respectively. These metrics were unlinked to any specific member information. Numbers of likes, follows and comments to posted discussions were collected from the AusCAPPS hosting platform Medcast.³³ Text data were collected from the AusCAPPS Network from members who consented to participate in research or 'participants'. 'Posts' were treated as the units of analysis, and refer to written text content on the discussion forum of AusCAPPS. These included 'parent' posts (original posts) and any comments, answers to questions or responses to polls with a text component. Posts made by the AusCAPPS project team were not included in the analysis. The written text from each post was extracted by the first author (SS) into an excel spreadsheet, anonymised and linked to a unique identifying number to create a dataset for screening and analysis.

Data analysis

The number of resource views and counts of likes, comments and follows in response to posts were analysed descriptively (counts, means). Text-based content on the AusCAPPS discussion forum was analysed using qualitative content analysis.³⁴ An inductive approach was used to generate categories derived directly from the data itself.35 Through a process of re-reading each post in the context of the full discussion thread, similarities between categories were reviewed and refined into codes. A deductive approach was then applied by comparison to categories identified in the Canadian VCoP study. 23 Similar to the approach described by Rolls et al, 36 a random sample of 25% of the posts were analysed by a second independent coder and the final coding framework developed based on categories agreed on by both coders. The number of posts in each category was quantified using counts and percentages and compared between professional groups. Reflexivity was maintained by the research team through regular discussion and an audit trail of coding changes was created to track the process of analysis and to appraise inter-coder reliability. The Standards for Reporting Qualitative Research checklist was used to align with recommended reporting requirements³⁷ (online supplemental file 1). The AusCAPPS project was approved by the Monash University Human Research Ethics Committee (#28002). All AusCAPPS content was securely stored on the Medcast platform.

RESULTS

Over the 24-month study period AusCAPPS reached 1911 members: 1133 (59.2%) GPs, 439 (23.0%) pharmacists, 272 (14.2%) nurses and 67 (3.5%) members of other professions such as midwife or researcher. Of these, 1101 (57.6%) had greater than 10 years in practice. In terms of current practice, 966 GPs (85.2% of GP members) and 89 nurse members (32.7%) were inserting contraceptive implants; 480 GPs (42.4%) and 20 nurses (7.3%) were inserting IUDs; and 546 GPs (48.1%), 13 nurses (4.7%) and 202 pharmacists (46.0%) were prescribing or dispensing EMA at the time of initial registration with AusCAPPS.

Participant engagement with components of AusCAPPS

Participants engaged with all AusCAPPS resource types. There were 94 documents (total views n=506). The top three most frequently viewed documents were patient information handouts (n=111), short clinical guideline summaries (n=102) and clinic resources such as clinical service posters (n=85). The least frequently viewed documents were product information sheets (n=21), research publications (n=8) and local sexual health service brochures (n=7). Eight webinars were delivered live to AusCAPPS participants via Zoom video meeting software³⁸ with recordings later uploaded to the AusCAPPS website via the hosting platform YouTube³¹ (total live views n=870, asynchronous

views n=424). Webinars provided general overviews on topics such as helpful hints for LARC insertion and updates on legislative changes concerning abortion. Five podcasts were recorded and uploaded to the AusCAPPS Network, and included content about general topics such as how to provide a comprehensive EMA consultation (total listens n=324).

Qualitative content analysis of discussion posts

During the study period there were 2232 posts on the discussion forum; 655 text-based units were included for analysis (figure 1).

Of the 655 posts, the majority were created by GPs (532, 81.2%), followed by nurses (88, 13.4%) then pharmacists (16, 2.4%). The majority of posts were by IUD inserters (512, 78.2%), EMA providers (489, 74.7%) and participants with less than 10 years in clinical practice (432, 66.0%). The 655 posts were created by 138 unique participants (7% of all members). The median number of posts per unique participant was 2 (range 1–70 posts). GPs had the highest average number of posts per participant (n=5), followed by nurses (n=4) then pharmacists (n=2). IUD inserters had a higher average number of posts (n=6) compared with non-inserters (n=3); similarly, EMA providers had a higher average number of posts (n=6) compared with non-providers (n=3).

Six major categories were identified through qualitative content analysis. These were related to: clinical knowledge (n=288, 44.0% of all posts), health system and regulatory issues (n=90, 13.7%), service implementation (n=84, 12.8%), tools for practice (n=77, 11.8%), training and upskilling (n=71, 10.8%) and ethical issues (n=45, 6.9%) (figure 2; online supplemental table 1).s

GPs and nurses posted about all six categories whereas pharmacists did not post about any concerns relating to training and upskilling or ethical issues. GP posts most commonly addressed clinical issues (263, 40.2% of GP posts) such as side effects and complications of LARC and EMA, decision-making around contraceptive choice and strategies for LARC insertion/removal (table 1). Nurses posted most often about service implementation (24, 27.3% of nurse posts) such as funding and fee structure for LARC and EMA, models of care and task-sharing with GPs in LARC and EMA services. Pharmacists most commonly posted about health system and regulatory issues (7, 43.8% of pharmacist posts), addressing concerns such as abortion referral pathways, patient cost for abortion care and contraceptive availability or shortage.

In terms of current practice, almost half of all posts by GP and nurse LARC providers were related to clinical knowledge (contraceptive implants, 274, 46.7%; IUDs, 251, 49.2%). Similarly, almost half of posts by EMA providers were related to clinical knowledge (229, 46.8%). In comparison, approximately one-third of posts by GPs and nurses not providing LARC were related to

Figure 1 Inclusion and exclusion criteria for posts included in content analysis. AusCAPPS, Australian Contraception and Abortion Primary Care Practitioner Support; EMA, early medical abortion; LARC, long-acting reversible contraception.

clinical knowledge (contraceptive implants 9, 31.0%; IUDs 32, 29.9%), followed closely by posts about training and upskilling (contraceptive implants 8, 27.6%; IUDs 26, 24.3%). Similarly, just over one-third of posts by participants not providing EMA (including pharmacists not dispensing EMA) were related to clinical knowledge (54, 38.5%), followed by posts about service implementation (21, 15.0%).

DISCUSSION

This study evaluated primary care clinician engagement in the AusCAPPS Network and found that GPs, nurses and pharmacists sought peer support and resources to facilitate LARC and EMA clinical practice provision. GP participants were primarily concerned with improving their clinical knowledge. These findings are similar to those found in a Canadian VCoP study where just over half of physician

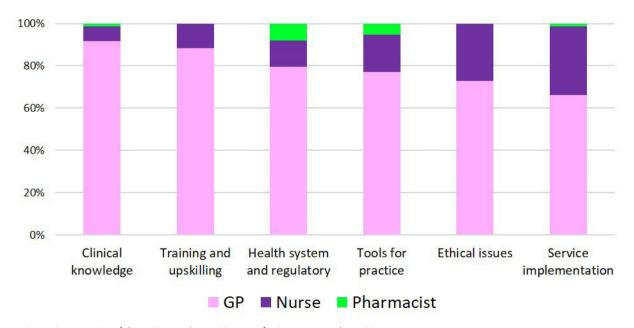


Figure 2 Major categories of discussion post by participant profession. GP. general practitioner.

Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

Table 1 Major categories, key concerns and participant quotes from discussion forum posts relating to long-acting reversible contraception and early medical abortion

Supporting participant quotes from posts
"I am looking for some latest evidence behind giving Anti D [after EMA] for Rh neg blood group, there seems to be mixed medical opinions." [Nurse, provides EMA] "Any tips for inserting IUDs in nulliparous young women? Last fortnight I had two consecutive young women in whom I was unable to insert a [hormonal] IUD due to not being able to get the sound through a tight cervix is [there] anything else I could try?" [GP, inserts IUDs]
"Has anyone done a GP early pregnancy ultrasound course? My clinic has an ultrasound machine so I'd love to do a course to provide dating/location scan for EMA provision." [GP, does not provide EMA] "I am looking for guidance about how many IUDs a GP is required to insert per year to maintain competence? I work only part time and feel that losing my competency is likely as I may only do a handful per year." [GP, does not insert IUDs]
"I cannot find the guidelines for RPOC [retained products of conception], can you point me in the right direction?" [GP, does not provide EMA] "Hi all, I wondered whether or not any of you have any experience in using any handy tools to help retrieve strings that are curled up within the cervical canal in a GP setting? I have tried the [endocervical sampling brush] but find I only have occasional success with it!" [GP, inserts IUDs]
"I am a nurse that provides [EMA] counselling. A consult can be anywhere from 10 min to ~30 min This is all before they see the GP! I discuss consult costs and routine follow-up and send reminders." [Nurse, provides EMA] "I am wondering what most people do when following up a patient post-IUD insertion. Do you do a string check after 4–6 weeks or a formal ultrasound by Radiology to check IUD placement?" [GP, inserts IUDs]
"I remind myself it isn't my place to judge whether they have one abortion or ten, and whether they will accept contraception or not we need to concentrate on providing safe medical service not MORAL services." [GP, provides EMA] "We began screening for both intimate partner violence [IPV] and reproductive coercion [RC] we can offer hidden options for contraception if that's wanted" [Nurse, inserts contraceptive implants and IUDs]
"Can I ask if the pharmacy then just charges the PBS [Pharmaceutical Benefits Scheme] price for dispensing [EMA] or are there any other charges for the patient? I assume that only approved prescribers can obtain an authority script and you wouldn't ever see it prescribed privately, is that right? [Pharmacist, does not dispense EMA] "For those interested, the ACT [Australian Capital Territory] Legislative Assembly have published their findings and recommendations for the inquiry into abortion and reproductive choice" [GP, provides EMA]

posts related to clinical questions around EMA.²³ Despite the availability of EMA in Australia for over 10 years,⁶ our results reiterate that critical barriers to primary care provision of LARC and EMA provision include a lack of knowledge around side effects and complications and a lack of training opportunities to gain competence and confidence in delivering these services. 10 12 This is likely due to inconsistent exposure to these topics in medical school³⁹ and vocational training years.⁴⁰ The current Australian GP training curriculum focuses on patient counselling and referral rather than on direct provision of EMA,⁴¹ and training opportunities in IUD insertion are generally limited to fixed-term, time-intensive placements in dedicated family planning clinic settings. 42 Our findings indicate that even experienced practitioners providing LARC and EMA sought support around clinical issues, demonstrating the ongoing role VCoPs play in responding to continuing professional needs for both experienced and emerging providers.

Nurses posted most about service implementation on AusCAPPS, highlighting the value they place in

multidisciplinary engagement and their interest in role development for LARC and EMA services. Support for nursing role optimisation and task-sharing arrangements with GPs aims to address workforce shortages and both are endorsed by the WHO in relation to safe abortion care and post-abortion LARC insertion.⁴³ Across international settings, nurses and midwives play important roles in abortion care, 44 and midwifery-led abortion services have become standard practice in Sweden.⁴⁵ While nurse-led models of care are well established to support chronic disease management in Australian primary care, 46-48 their place in LARC and EMA services is still evolving. 17 Recent Australian regulatory changes now permit expanded prescribing of EMA by nurse practitioners and endorsed midwives in line with state-based legislation.⁴⁹ The practical and professional needs of nurses and nurse practitioners around LARC and EMA provision are likely to change as their role in direct service provision emerges in line with these regulatory developments.

Pharmacists posted most frequently about health system and regulatory issues, although their posts

were the fewest on AusCAPPS. This may reflect their current limited role in LARC and EMA service provision as dispensers of medications. Historically pharmacist dispensing of EMA required training certification and registration, but recent regulatory changes now allow any pharmacist to dispense EMA in Australia.⁴⁹ Following non-medical prescribing frameworks implemented in the UK, 50 51 pharmacists' scope of practice in Australia is evolving to address workforce shortages and enhance patient access to sexual and reproductive health services. 52 State-wide trials are currently underway across Australia allowing pharmacist resupply or prescription of oral contraceptives, 53-56 and contraceptive counselling and referral to LARC providers are being trialled at the point of provision of emergency contraception and when EMA is dispensed. 18 Key findings from a recent independent scope-of-practice review commissioned by the Australian Government include the need to promote interdisciplinary learning and ensuring ongoing accessibility of education, training, supervision and mentoring.⁵² As such, ongoing access to interdisciplinary communities of practice like AusCAPPS may facilitate tailored support to address the needs of pharmacists as their role in LARC and EMA care develops.

Our study also found that the most frequently viewed documents were concise resources that could be used at the point of patient–clinician interaction or 'point-of-care'. This suggests that clinicians value the use of summarised guidelines, checklists and structured consent forms to guide their informed consent discussions with patients around LARC and EMA. These findings are in keeping with the recently released clinical abortion guideline developed by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, which recommends the use of a structured decision aid to guide the discussion with patients about abortion options. Future resource development focusing on accessible, easy-to-use resources that summarise clinical guidelines may further support the delivery of LARC and EMA care.

In terms of study limitations, we were unable to collect user demographic parameters for online resource engagement counts and so could not determine which members engaged with specific resources. Second, results are limited to the study period and may not reflect current member engagement. Finally, posts on the discussion forum were created by a small subset of active AusCAPPS members; in particular, those experienced in IUD insertion and EMA provision posted more frequently than inexperienced members. While having a small number of highly active members is a common finding in social networks, ⁵⁹ there may be additional uncaptured professional needs by other members who did not post, particularly clinicians with limited clinical experience in LARC and EMA. Further qualitative work is required to gain insight into AusCAPPS members' experiences with and perspectives on using a VCoP to support LARC and EMA provision.

CONCLUSIONS

GPs, nurses and pharmacists each have professional needs for peer support and resources to initiate or continue LARC and EMA provision, and concise point-of-care resources to support these services were most frequently accessed by clinicians. The needs of primary care clinicians may change given the currently evolving policy and legislative landscape for scope of practice in Australian sexual and reproductive health services. The results of this study could form future areas of focus for resource development, education and implementation of interventions to support LARC and EMA provision in Australian primary care.

Author affiliations

¹SPHERE, NHMRC Centre of Research Excellence, School of Public Health and Preventive Medicine, Monash University, Melbourne, Victoria, Australia ²Discipline of Obstetrics, Gynaecology and Neonatology, Faculty of Medicine and Science, University of Sydney, Sydney, New South Wales, Australia ³Judith Lumley Centre, La Trobe University College of Science Health and Engineering, Melbourne, Victoria, Australia

⁴The Daffodil Centre, The University of Sydney Faculty of Medicine and Health, Sydney, New South Wales, Australia

⁵Department of Family Practice, The University of British Columbia Faculty of Medicine, Vancouver, British Columbia, Canada

⁶Public Health, Environments and Society, London School of Hygiene and Tropical Medicine Faculty of Public Health and Policy, London, UK

X Sharon Maree James @Sharon_MJames, Deborah Bateson @DrDebBateson and Wendy V Norman @wvnorman

Acknowledgements The researchers offer sincere thanks to Dr Alissia Kost for her contributions to data analysis. They also gratefully acknowledge the Royal Australian College of General Practitioners (RACGP) Foundation for their support of this project.

Contributors SS conducted the data collection, analysis and preparation of the manuscript. JK provided technical assistance for data analysis. SMJ and DM supervised the project, and DM is the guarantor for this work. All authors discussed the results, provided critical feedback to analysis and contributed to the final manuscript. Dr Alissia Kost contributed to data analysis and interpretation. The corresponding author attests that all listed authors meet authorship criteria and that no others meeting the criteria have been omitted.

Funding This study was funded by Royal Australian College of General Practitioners (Charles Bridges Webb Memorial Award 2023).

Competing interests SMJ is a Board Director for the Australian Primary Healthcare Nurses Association. DB has provided education for clinicians at sessions sponsored by Bayer, Mayne Pharma and Besins Healthcare. DM has received research grant funding and honoraria from Bayer and Organon, and has been a member of advisory boards for Bayer and Organon.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and the AusCAPPS project was approved by the Monash University Human Research Ethics Committee (#28002). Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies

Data availability statement Data are available upon reasonable request.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work noncommercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is noncommercial. See: http://creativecommons.org/licenses/by-nc/4.

ORCID iDs

Sonia Srinivasan http://orcid.org/0000-0003-3861-2769 Sharon Maree James http://orcid.org/0000-0003-2211-3447 Kirsten Black http://orcid.org/0000-0003-0030-2431 Deborah Bateson http://orcid.org/0000-0003-1035-7110 Wendy V Norman http://orcid.org/0000-0003-4340-7882 Danielle Mazza http://orcid.org/0000-0001-6158-7376

REFERENCES

- 1 Winner B, Peipert JF, Zhao Q, et al. Effectiveness of longacting reversible contraception. N Engl J Med 2012;366:1998– 2007.
- 2 Richters J, Fitzadam S, Yeung A, *et al*. Contraceptive practices among women: the second Australian study of health and relationships. *Contraception* 2016;94:548–55.
- 3 Frost JJ, Darroch JE. Factors associated with contraceptive choice and inconsistent method use, United States, 2004. Perspect Sex Reprod Health 2008;40:94–104.
- 4 Moreau C, Bohet A, Trussell J, *et al.* Estimates of unintended pregnancy rates over the last decade in France as a function of contraceptive behaviors. *Contraception* 2014;89:314–21.
- 5 Firman N, Palmer MJ, Timæus IM, et al. Contraceptive method use among women and its association with age, relationship status and duration: findings from the third British National Survey of Sexual Attitudes and Lifestyles (Natsal-3). BMJ Sex Reprod Health 2018;44:165–74.
- 6 Pharmaceutical Benefits Scheme. Mifepristone (&) misoprostol. 2022. Available: https://www.pbs.gov.au/medicine/ item/10211K
- 7 World Health Organization. Safe abortion: technical and policy guidance for health systems, 2nd ed. 2012. Available: https:// iris.who.int/handle/10665/70914
- 8 MS Health. January update 2023. Melbourne, Australia MSI Reproductive Choices; 2023.
- 9 Australian Health Practitioner Regulation Agency. Ahpra & National Boards: Annual report 2020/21. Melbourne, 2021. Available: https://www.ahpra.gov.au/Publications/Annual-reports/Annual-Report-2021.aspx
- Subasinghe AK, Deb S, Mazza D. Primary care providers' knowledge, attitudes and practices of medical abortion: a systematic review. BMJ Sex Reprod Health 2021;47:9–16.

- 11 Linton E, Mawson R, Hodges V, et al. Understanding barriers to using long-acting reversible contraceptives (LARCS) in primary care: a qualitative evidence synthesis. BMJ Sex Reprod Health 2023;49:282–92.
- 12 Mazza D, Bateson D, Frearson M, et al. Current barriers and potential strategies to increase the use of long-acting reversible contraception (LARC) to reduce the rate of unintended pregnancies in Australia: an expert roundtable discussion. Aust N Z J Obstet Gynaecol 2017;57:206–12.
- 13 Shankar M, Black KI, Goldstone P, *et al.* Access, equity and costs of induced abortion services in Australia: a cross-sectional study. *Aust N Z J Public Health* 2017;41:309–14.
- 14 Nursing and Midwifery Board (Australian Health Practitioner Regulation Agency). Fact sheet: scope of practice and capabilities of nurses. 2023. Available: https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/Fact-sheet-scope-of-practice-and-capabilities-of-nurses.aspx
- 15 Kopp Kallner H, Gomperts R, Salomonsson E, et al. The efficacy, safety and acceptability of medical termination of pregnancy provided by standard care by doctors or by nursemidwives: a randomised controlled equivalence trial. BJOG 2015;122:510–7.
- 16 Tomnay JE, Coelli L, Davidson A, et al. Providing accessible medical abortion services in a Victorian rural community: a description and audit of service delivery and contraception follow up. Sex Reprod Healthe 2018;16:175–80.
- 17 Mazza D, Shankar M, Botfield JR, *et al*. Improving rural and regional access to long-acting reversible contraception and medical abortion through nurse-led models of care, task-sharing and telehealth (ORIENT): a protocol for a stepped-wedge pragmatic cluster-randomised controlled trial in Australian general practice. *BMJ Open* 2023;13:e065137.
- 18 Mazza D, Assifi AR, Hussainy SY, et al. Expanding community pharmacists' scope of practice in relation to contraceptive counselling and referral: a protocol for a pragmatic, steppedwedge, cluster randomised trial (ALLIANCE). BMJ Open 2023;13:e073154.
- 19 Linkewich E, Quant S, Bechard L, et al. Using a virtual community of practice to support stroke best practice implementation: mixed methods evaluation. JMIR Form Res 2022;6:e31827.
- 20 Barnett S, Jones SC, Caton T, et al. Implementing a virtual community of practice for family physician training: a mixedmethods case study. J Med Internet Res 2014;16:e83.
- 21 McLoughlin C, Patel KD, O'Callaghan T, *et al.* The use of virtual communities of practice to improve Interprofessional collaboration and education: findings from an integrated review. *J Interprof Care* 2018;32:136–42.
- 22 Contraception and Abortion Research Team-Groupe de recherche sur l'avortement et la contraception (CART-GRAC). Canadian Abortion Providers Support-Communauté de Pratique Canadienne sur L'Avortement (CAPS-CPCA), Available: https://caps-cpca.ubc.ca/
- 23 Dunn S, Munro S, Devane C, et al. A virtual community of practice to support physician uptake of a novel abortion practice: mixed methods case study. J Med Internet Res 2022;24:e34302.
- 24 Ennis M, Renner R, Guilbert E, et al. Provision of first-trimester medication abortion in 2019: results from the Canadian abortion provider survey. Contraception 2022;113:19–25.

- 25 Renner RM, Ennis M, Contandriopoulos D, et al. Abortion services and providers in Canada in 2019: results of a national survey. CMAJ Open 2022;10:E856–64.
- 26 Rebic N, Munro S, Norman WV, et al. Pharmacist checklist and resource guide for mifepristone medical abortion: usercentred development and testing. Can Pharm J 2021;154:166– 74.
- 27 Munro S, Guilbert E, Wagner M-S, et al. Perspectives among Canadian physicians on factors influencing implementation of mifepristone medical abortion: a national qualitative study. Ann Fam Med 2020;18:413–21.
- 28 Munro S, Wahl K, Soon JA, et al. Pharmacist dispensing of the abortion pill in Canada: diffusion of innovation meets integrated knowledge translation. *Implement Sci* 2021;16:76.
- 29 Mazza D, James S, Black K, et al. Protocol: increasing the availability of long-acting reversible contraception and medical abortion in primary care: the Australian Contraception and Abortion Primary Care Practitioner Support Network (AusCAPPS) cohort study protocol. BMJ Open 2022;12:e065583.
- 30 Google. 2024. Available: https://marketingplatform.google. com/about/
- 31 YouTube. 2024. Available: https://www.youtube.com
- 32 Liberated Syndication. 2024. Available: https://libsyn.com/
- 33 Medcast. 2022. Available: https://medcast.com.au
- 34 Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res* 2005;15:1277–88.
- 35 Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs* 2008;62:107–15.
- 36 Rolls KD, Hansen MM, Jackson D, et al. Intensive care nurses on social media: an exploration of knowledge exchange on an intensive care virtual community of practice. J Clin Nurs 2020;29:1381–97.
- 37 O'Brien BC, Harris IB, Beckman TJ, *et al*. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med* 2014;89:1245–51.
- 38 Zoom Video Communications. 2024. Available: https://zoom. us
- 39 Cheng HC, de Costa C. Abortion education in Australian medical schools. Aust N Z J Obstet Gynaecol 2021;61:793–7.
- 40 Turner R, Tapley A, Sweeney S, *et al*. Prevalence and associations of prescribing of long-acting reversible contraception by general practitioner registrars: a secondary analysis of recent data. *BMJ Sex Reprod Health* 2020;46:218–25.
- 41 The Royal Australian College of General Practitioners. RACGP curriculum and syllabus for Australian general practice:
 Pregnancy and reproductive health 2024. 2022. Available:
 https://www.racgp.org.au/education/education-providers/
 curriculum/curriculum-and-syllabus/units/pregnancy-andreproductive-health
- 42 Bateson D, Stewart M, Digiusto E, *et al.* Outcomes of intrauterine device insertion training for doctors working in primary care. *Aust Fam Physician* 2016;45:837–41.
- 43 World Health Organization. Health worker roles in providing safe abortion care and post-abortion contraception. 2015. Available: https://iris.who.int/handle/10665/181041
- 44 Mainey L, O'Mullan C, Reid-Searl K, et al. The role of nurses and midwives in the provision of abortion care: a scoping review. J Clin Nurs 2020;29:1513–26.
- 45 Endler M, Cleeve A, Sääv I, *et al*. How task-sharing in abortion care became the norm in Sweden: a case study of historic

- and current determinants and events. *Int J Gynaecol Obstet* 2020;150:34–42.
- 46 Stephen C, Halcomb E, Fernandez R, et al. Nurse-led interventions to manage hypertension in general practice: a systematic review and meta-analysis. J Adv Nurs 2022;78:1281–93.
- 47 Zwar NA, Richmond RL, Halcomb EJ, et al. Quit in general practice: a cluster randomized trial of enhanced in-practice support for smoking cessation. Fam Pract 2015;32:173–80.
- 48 Harris MF, Harris-Roxas B, Knight AW. Care of patients with chronic disease: achievements in Australia over the past decade. *Med J Aust* 2018;209:55–7.
- 49 Australian Government. Department of Health and Aged Care. Amendments to restrictions for prescribing of MS-2 Step (Mifepristone and Misoprostol). 2023. Available: https://www.tga.gov.au/news/media-releases/amendments-restrictions-prescribing-ms-2-step-mifepristone-and-misoprostol
- 50 Graham-Clarke E, Rushton A, Noblet T, et al. Non-medical prescribing in the United Kingdom National Health Service: a systematic policy review. PLOS One 2019;14:e0214630.
- 51 Royal Pharmaceutical Society. A competency framework for all prescribers. 2021. Available: https://www.rpharms.com/resources/frameworks/prescribing-competency-framework/competency-framework
- 52 Australian Government. Department of Health and Aged Care. Unleashing the potential of our health workforce Scope of practice review Issues paper 1. 2024. Available: https://www.health.gov.au/resources/publications/unleashing-the-potential-of-our-health-workforce-scope-of-practice-review-issues-paper-1
- 53 Government of South Australia. SA Health. UTI treatment and contraceptive pill access. 2024. Available: https://www.sahealth.sa.gov.au/wps/wcm/connect/Public+Content/SA+Health+Internet/Clinical+Resources/Clinical+Programs+and+Practice+Guidelines/Medicines+and+drugs/sa+community+pharmacy+uti+services/sa+community+pharmacy+uti+services
- 54 State Government of Victoria. Department of Health. Victorian community pharmacist statewide pilot. 2023. Available: https://www.health.vic.gov.au/primary-care/victorian-community-pharmacist-statewide-pilot
- 55 NSW Government. NSW Health. NSW pharmacy trial. 2024 Available: https://www.health.nsw.gov.au/pharmaceutical/Pages/ community-pharmacy-pilot.aspx
- 56 Queensland Government. Queensland Health. Queensland community pharmacy pilots: Scope of practice pilot. 2024
 Available: https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/community-pharmacy-scope-of-practice-pilot/about
- 57 Campbell R, Ash J. An evaluation of five bedside information products using a user-centered, task-oriented approach. *J Med Libr Assoc* 2006;94:435–41.
- 58 The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG). Clinical guideline for abortion care. 2024. Available: https://ranzcog.edu.au/resources/abortion-guideline/
- 59 Rolls KD, Hansen M, Jackson D, et al. Analysis of the social network development of a virtual community for Australian intensive care professionals. Comput Inform Nurs 2014;32:536–44.

Supplementary File 1: SRQR Checklist

Standards for Reporting Qualitative Research (SRQR): a synthesis of recommendations

All topics and numbers directly cited from O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med. 2014;89(9):1245-1251.

No	Topic	Manuscript location	Page number in submitted manuscript	
S1	Title	Title	Page 1	
S2	Abstract	Abstract	Page 1	
S3	Problem Formulation	Introduction	Page 2-3	
S4	Purpose or research	Introduction	Page 2-3	
S5	Qualitative approach and	Methods, Design	Page 3	
	research paradigm			
S6	Researcher	Methods, Design	Page 3	
	characteristics and reflexivity	Methods, Data analysis	Page 4	
S7	Context	Methods, Design	Page 3	
S8	Sampling strategy	Methods, Design	Page 3	
S9	Ethical issues pertaining	Methods, Data analysis	Page 4	
	to human subjects			
S10	Data collection methods	Methods, Data collection	Page 3	
S11	Data collection	Methods, Data collection	Page 3	
	instruments and			
	technologies			
S12	Units of study	Methods, Data collection	Page 4	
S13	Data processing	Methods, Data analysis	Page 4	
S14	Data analysis	Methods, Data analysis	Page 4	
S15	Techniques to enhance	Methods, Data analysis	Page 4	
	trustworthiness			
S16	Synthesis and	Results	Pages 5-8	
	interpretation			
S17	Links to empirical data	Results, Supplementary file 1	Page 6-8, Supplementary file 1	
S18	Integration with prior	Discussion, Conclusion	Page 8-10	
	work, implications,			
	transferability and			
	contribution(s) to field			
S19	Limitations	Discussion	Page 10	
S20	Conflicts of interest	Conflicts of interest	Page 10	
S21	Funding	Acknowledgements	Page 10	

Supplementary Table 1: Frequency of categories of discussion post by participant profession

Catagory	Number of posts		
Category	GP	Nurse	Pharmacist
Clinical knowledge	263	20	4
Training and upskilling	61	8	0
Health system and regulatory	70	11	7
Tools for practice	57	13	4
Ethical issues	32	12	0
Service implementation	49	24	1