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### **Supplementary Material**

#### **Vaccine provider views on the impact of COVID-19 on immunisation in general practice: a qualitative study**

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## Table S1: Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Developed from:

Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

No. Item	Guide questions/description	Reported on Page #
<b>Domain 1: Research team and reflexivity</b>		
<i>Personal Characteristics</i>		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	TM. Methods (page 3, line 92)
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	4 <sup>th</sup> year medical student. Methods (page 3, line 92)
3. Occupation	What was their occupation at the time of the study?	Full time medical student and medical receptionist. No GPs or GPNs from TM's place of employment were interviewed (page 3, lines 92-94)
4. Gender	Was the researcher male or female?	Male (Page 3, line 92)
5. Experience and training	What experience or training did the researcher have?	<p>TM received training and supervision in qualitative interviewing and analysis from supervisors (co-authors). (Page 3, lines 94, 97)</p> <p>MH has extensive experience in mixed methods research in primary care including conducting qualitative interviews with primary care providers and qualitative analysis. AM is proficient in qualitative research methods. AH has conducted and supervised mixed methods research in immunisation and general practice.</p>
<i>Relationship with participants</i>		
6. Relationship established	Was a relationship established prior to study commencement?	Methods (page 3, lines 87-88, 92-93)
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	Participants were informed by TM that he was a student conducting research as part of a medical degree as outlined in the PISCF. (Page 3, lines 93-94)
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the	TM was a medical student and employed as a medical receptionist at the time of this

	research topic	<p>study (See point 5 and 7).</p> <p>Due to experience and prior knowledge at this topic (contribution to the COVID-19 vaccine rollout in an administrative role), TM may have made assumptions which inadvertently influenced data collection, interpretation of findings and writing of the report. However, such bias was mitigated by debriefing interviews with supervisors post-interviews, researcher triangulation (TM and AM independently analysing transcripts) and all authors reaching consensus on themes and data saturation. Pages 3 and 4, lines 94-99.</p>
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## Domain 2: study design

### *Theoretical framework*

9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	<p>Thematic analysis was undertaken, which is not linked specifically to a pre-existing theoretical framework.</p> <p>Thematic analysis is noted as the method: Methods (page 4, line 114-118)</p>
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### *Participant selection*

10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	Methods (page 3, lines 83-88)
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	Methods (page 3, lines 83-88)
12. Sample size	How many participants were in the study?	15. Results (page 4, line 128).
13. Non-participation	How many people refused to participate or dropped out? Reasons?	18 participants expressed interest in the study, of which 15 were interviewed. Of the remaining 3, 2 were excluded from the study (one with existing relationship with TM, one outside geographical region) and 1 did not respond to follow-up email. (Page 3, line 87)

### *Setting*

14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	Methods (page 3, lines 90-91)
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15. Presence of non-participants	Was anyone else present besides the participants and researchers?	No. (Page 3, lines 91-92)
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	Results (pages 4-5, lines 129-133). Table 1 (end of main text) includes a summary of demographic information.
<i>Data collection</i>		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Appendix A
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	Repeat contacting of participants was not required for further clarification of the interviews. (Page 4, line 110)
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	Methods (page 4, line 105)
20. Field notes	Were field notes made during and/or after the interview or focus group?	No.
21. Duration	What was the duration of the interviews or focus group?	Results (page 4, line 134).
22. Data saturation	Was data saturation discussed?	Methods (page 4, lines 123-124)
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No, but points were summarized back to participants during interviews to check and clarify. Methods (page 4, lines 106-107).
<b>Domain 3: analysis and findings</b>		
<i>Data analysis</i>		
24. Number of data coders	How many data coders coded the data?	Two. Methods (page 4, lines 118-120)
25. Description of the coding tree	Did authors provide a description of the coding tree?	N/A
26. Derivation of themes	Were themes identified in advance or derived from the data?	Methods (page 4, lines 114-122)
27. Software	What software, if applicable, was used to manage the data?	NVivo 12. Methods (page 4, line 120)
28. Participant checking	Did participants provide feedback on the findings?	No.
<i>Reporting</i>		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	Yes. Results (pages 4-7)
30. Data and findings consistent	Was there consistency between the data presented and the findings?	Yes. Results (pages 4-7)
31. Clarity of major themes	Were major themes clearly presented in the findings?	Themes are outlined in the discussion section (pages 7-10)
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Yes, included in the Results (pages 4-7) and Discussion



## Appendix A: Interview guide

**Study title: Vaccine provider views on the impact of COVID-19 on immunisation in general practice: a qualitative study**

*Thank you for agreeing to participate in this interview today. As you are aware the purpose is to explore GPs and practice nurse views towards routine immunisation provision in the COVID-era, as well as perceived challenges of providing the COVID-19 vaccine itself, and to identify areas in which immunisation providers may need more information and support.*

*As you have been informed, we would like to discuss your experience with routine adult immunisation in the COVID-19 era and your perceptions of the COVID-19 vaccine rollout.*

*Do you have any questions before we proceed?*

*Let's first start by talking about the impact of the COVID-19 pandemic on delivery of routine immunisation in your practice.*

- 1. What has been the effect of the COVID-19 pandemic on your practice in the last 12 months?**
  - e.g. clinical demand, telehealth, vaccine hesitancy, patients rescheduling
  
- 2. How do you think that COVID-19 and the social distancing policies/lockdowns have impacted routine vaccination in your practice?**
  - Probe: what about specifically during the lockdown?
  - Can you describe any barriers to your patients in returning to complete routine immunisations on the NIP?
  - Has there been a noticeable change in attitudes to vaccination among your patients or information seeking?
  
- 3. How can vaccine providers best maintain regular routine immunisation during the COVID-19 era?**
  - What have been facilitators of routine vaccination in your practice during the last 12 months?
  - Did you change the way you managed immunisation in your practice to maintain coverage? E.g. patient reminders, immunisation days.

*Now let's move onto talking about the roll-out of the COVID-19 vaccine and the impact on your practice.*

- 4. Have you registered to be a COVID-19 immunisation provider?**
  - If so...**
    - What motivated you to register?
  - If not...**

- For what reasons have you chosen not to register?
- 5. These next questions relate to your understanding of the COVID-19 rollout**
- Are safety concerns a barrier for providing the vaccine at your practice?
  - Have adverse effects been a barrier?
  - How do you foresee the success of vaccine uptake?
  - What other concerns do you have about the vaccine roll-out?
  - What do you see the role of General Practice with regards to this issue?
- 6. What sources of information do you use for your own education on COVID-19 vaccines?**
- What sources do you use to provide information to patients?
- 7. How could GPs/Practice Nurses and General Practices be better supported, given their crucial role in the success of the vaccine rollout?**
- 8. What strategies does your practice have in place for provision of the AstraZeneca vaccine?**
- Can you describe how you plan to deliver the vaccine in your practice, for example, will you set up COVID-19 vaccination days? Which rooms will be used? Etc...
  - Probe:
    - Barriers to uptake e.g. patient perceptions, hesitancy
    - Logistical challenges e.g. storage, wastage
- 9. What are your future perceptions of continued routine and COVID-19 immunisation moving forward?**
- 10. Anything else?**