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Supplementary Material

Leading primary care under the weight of COVID-19: how leadership was enacted in six australian general practices during 2020

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Abstract

Introduction: The coronavirus illness COVID-19 has transformed healthcare systems worldwide. Primary care providers are at the forefront of the pandemic response and have needed to rapidly adjust processes and routines around service delivery. The pandemic provides a unique opportunity to understand how general practices prepare for and respond to public health emergencies. This case study research will draw from a range of general practices to explore the ways in which general practices modify their clinical and organisational routines and to identify the factors that facilitate these changes amidst the coronavirus pandemic.

Methods and analysis: This is a prospective case study of multiple general practices using a participatory approach for the design, data collection and analysis. Our qualitative study is informed by the sociological concept of routines. The study will be set in six general practices in Melbourne, Australia during the 2020 coronavirus pandemic. General practitioners (GPs) associated with the [BLINDED] Department of General Practice will act as investigators who will shape the project and contribute to the data collection and analysis. The data will include investigator diaries, an observation template and interviews with practice staff and investigators. Data will first be analysed by two external researchers using a constant comparative approach and then later refined at regular investigator meetings. Cross-case analysis will explain the implementation, uptake and sustainability of routine changes that followed the commencement of the pandemic.

Ethics and dissemination: Ethics approval was granted by [BLINDED] University Human Research Ethics Committees. Practice reports will be made available to all participating practices both during the data analysis process and at the end of the study. Further dissemination will occur via publications and presentations to practice staff and medical practitioners.

Strengths and Limitations of this study:

- This study aims to explore the ways in which general practices modify their clinical and organisational routines in response to the coronavirus pandemic.
- We designed a prospective case study using a participatory approach to allow a detailed, intensive exploration of individuals and organisations in context.
- A multi-methods data collection strategy comprising of interviews, investigator diaries and document analysis will ensure the credibility of the findings.
- Practices are all from Melbourne Australia, an area of significant exposure to the pandemic.

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Introduction

The coronavirus pandemic has transformed healthcare systems worldwide as COVID-19 continues to cause high morbidity and mortality.(1, 2) The virus has had unprecedented health, social and economic impacts through Asia and Europe. Australia has implemented substantial economic and public health interventions to mitigate the impact of the virus. (3) Primary care providers are at the forefront of the pandemic response and have needed to rapidly adjust processes and routines around service delivery. The pandemic provides a unique opportunity to understand more about how general practices prepare for and respond to public health emergencies.

At the time of writing this protocol the majority of Australia had escaped the major public health consequences of the pandemic. The nation's relative isolation, early border closures and comprehensive physical distancing regulations had contributed to a situation where less than 100 deaths had been reported in the country during the first wave of the virus occurring between in March and April 2020.(4) A range of public health measures have been designed to augment traditional primary care - retired physicians and nurses have been recruited to a new network of government run testing centres (5) and the federal government has funded 100 new general practice respiratory clinics.(6)

National standards ask that accredited general practices have an emergency response plan for unanticipated events such as pandemics.(7) Early media responses suggest that GPs have played a vital role in the pandemic response but there have been difficulties with telehealth, billing practices, the availability of PPE and a reduction in patients presenting for healthcare.(8)

Prior to the coronavirus pandemic, there were very few studies that described the response of primary care in a pandemic setting. Those conducted in Australia had been overwhelmingly retrospective.(9-11)

This project aims to explore the ways in which general practices modify their clinical and organisational routines in response to the coronavirus pandemic. Our case study research will draw from a range of general practices to better understand the experiences of clinicians and practice staff providing care during the pandemic. We aim to explore the practices and procedures supporting the delivery of care thorough answering the following research questions:

1. What changes to clinical and organisational routines have been made in general practice due to the pandemic?

2. What contextual, organisational and individual factors facilitate these changes?

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Methods and analysis

Case study and participatory approach

We will conduct a prospective case study of multiple general practices using a participatory approach for the design, data collection and analysis. The case study methodology uses a rapid ethnographic approach informed by the sociological concept of routines.(12) Routines represent patterns of interaction enacted by individuals but determined and maintained at the organizational level.(13) Our case study approach allows a detailed, intensive exploration of individuals and organisations in context.(14) Collecting varies types of data (interviews, investigator diaries, practice profiles and practice documents/signage) enhances credibility of the findings. Design was informed by the principles of participatory action research in which processes of planning, action and reflection are conducted in close collaboration with stakeholders and participants.(15) To date, participatory action research has been primarily focused on empowering marginalised communities to shift the control and focus of research toward issues and concerns relevant to local needs.(16) Participatory health research often involves patients, not just as subjects, but as participants in the research process.(17, 18)

Participation in this case will involve general practitioners as participating investigators who will shape the project, assist with and contribute to data collection, and be a part of the analysis .(19)

Finally, the work will be informed by the principles of implementation science, incorporating contemporary approaches to quality improvement in primary care and being sensitive to the effects of local context on intervention delivery, to understand the process of embedding change in a practice. (20)

This protocol represents work to be performed after the formation of our investigator team.

Context / Setting

The study will be set in six general practices in North West and South East Melbourne, Victoria, Australia and conducted between April and December 2020. Practices are all locations where GP investigators based their clinical work.

Participant selection and recruitment

Our recruitment strategy has three stages. We began by forming an investigator team comprising clinician investigators linked with the Department of General Practice at [BLINDED] University; two PhD academics with backgrounds in sociology and medical anthropology will act as external researchers [BLINDED]; and two US based primary care academics, both experienced in qualitative methods and practice based primary care research will provide advice on design, implementation and analysis as the study evolves. [BLINDED]

In terms of recruitment GR and LS invited potential participant investigators via email and then telephoned them to join the study. Each needed to be willing to participate in recruitment of the practice owner or manager and other clinicians and staff within their own practices and be responsible for components of data collection. We prioritised participants working within practices of varying size and organisational models and aimed to recruit clinician investigators associated with between five and seven practices.

The second stage will involve the recruitment of general practices. Each clinician investigator will contact the practice lead (or manager in the case of a community health centre) of the practices

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where they work. This communication will occur either through email or face to face contact. This approach will outline the concept of the study and seek practice consent to participate in the data collection.

Finally, we will recruit up to four staff members from within each practice to participate in a series of semi-structured interviews over the course of the study (nine months). Members of staff will include a person in a management position in the practice (such as lead GP and/or practice manager), clinicians (GPs and practice nurses) and reception staff. In each case potential participants will first be approached by the clinician investigator to seek an expression of interest and consent for contact by the external researcher.

Data collection

Data collection will focus on clinical and organisational routines associated with accommodating the changes that have arisen from the 2020 coronavirus pandemic. Consistent with the participatory approach, data will include investigator diaries, an observation template (completed by participant investigators), and interviews with practice members. Data will be collected prospectively between April and December 2020.

Written consent obtained from the practice lead/manager will be required for the following.

- Agreement for the clinician investigator to complete a practice description tool, modelled on those used in prior work, (21, 22) at baseline and then revised at 3-6months.
- Photographs or copies of Covid-relevant signage and practice documents relating to the pandemic.
- Consent to approach practice staff.

There will be two main data collectors per practice; the clinician investigator and the external researcher. The clinician investigator is responsible for completing the practice description tool and the participant diary. They also will be tasked with obtaining copies of relevant practice documents and photographs of the practice. The external researcher is responsible for conducting in-depth interviews with members of the practice.

Data collection instruments

Our multi-method data collection strategy will utilise:

1. A practice description tool

This tool will help collate key observational and demographic data for each site. The tool will be based on a previous practice environment template(see supplementary material). (23) It will be initially completed by the clinician investigators with initial entries at baseline and then updated with ongoing collated information as the study proceeds.

2. Interviews with clinicians, non-clinical staff and participant investigators.

An external researcher will conduct semi-structured interviews with recruited practice staff. Interviews will be conducted at a minimum of two time points: the beginning of the study (by the end of May 2020) and then near to its completion (September/October 2020). Additional interviews will be planned as required. This will be dependent upon how the pandemic unfolds in the local region. This flexibility allows the study to respond to the context and enables the collection of data at potentially different stages of the pandemic.

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Each clinician investigator will be interviewed in the final months of data collection, in which questions will explore key emerging findings from the case and will allow for areas of uncertainty to be clarified.

Interviews will focus upon the participant's individual experience with the pandemic, perceived responses from the practices, and their thoughts on factors influencing the practice's performance with dealing with the pandemic. Interviews will last between 30 and 45 minutes, follow a semi structured template (see supplementary material) and be conducted by telephone or videoconferencing. These will provide additional information about the context of the interview and will assist in collecting comparable data across the regions.

3. Investigator diaries

Investigators will collect notes of their experiences working in general practice during the pandemic in reflective diaries collected during the study. Data collection will be focussed on generating contemporaneous records of the experience from the perspective of the clinician investigator. The diary will be structured around a basic template and can be either written or collected by audio recording (in which case it will be transcribed). We will generally require entries every 1-2 weeks.

4. Document analysis

We will also collate practice policies and information sheets outlining practice management of the coronavirus. Documents will include the practice's prior emergency response plan and any government required plans for documenting approaches to mitigating the introduction and spread of coronavirus (COVID-19) in the work premises and any templates or scripts used for communication with patients and members of the community.

5. Photographs

Further, we will collect digital photographs of relevant practice signage, leaflets, the layout of practice waiting rooms, reception areas and any other practice structural changes that are made during the pandemic.

6. Presentation of findings to practices.

Practices will receive a mid-project overview of findings across the practices. In the final stages of data analysis, we will share emergent findings with practices through electronic presentations of summarised practice findings. We will use this member checking procedure (24) to check areas of uncertainty in the interpretation of the data. Responses to the presentation will be collected and will inform the final analysis.

Data management

Clinical and non-clinical staff interviews will be professionally transcribed and all identifying information will be removed. Interview transcripts and observational data (diaries, practice documents and field notes) will be coded using NVivo12.(25) All digital data will be stored on a secure server only accessible by the external researchers, to protect the confidentiality of the investigators and their respective practices. The social scientists will be responsible for the initial coding of the data. They will work with a subgroup of the study team, comprising three of the clinician investigators, to conduct the analysis.

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Data analysis

Data analysis will be conducted iteratively using a constant comparative approach. The approach will be further informed by prior Canadian and Australian investigations of how primary care practice routines evolve in response to contextual change.(12, 26) Data will first be analysed by [BLINDED], assisted by [BLINDED]. (27) After this, the analysis will then be refined at regular investigator meetings and at a data retreat with all investigators.(27)

The analysis of the interview data will commence with the refinement of the existing coding template. This has been based on the initial reading and familiarisation with the raw data, as well as a priori broad theoretical concepts from Stange and Glasgow's Context Tool and the Relationship Centred Approach to primary care practice development.(28) The template in the first instance includes: Domains of the Context Tool; Question clusters within each interview guide; Free text nodes.

Subsequent interview transcripts will be coded against this coding template. First cycle coding will commence against the initial coding tree. The tree will evolve following the iterative phases of qualitative data analysis.

Given the case study approach, we will use matrices to help organize and analyse the data and generate case descriptions. With our knowledge of the data and the theories underpinning the analysis we will generate a series of draft matrices, using the concepts generated by Miles, Huberman and Saldafia. (29) This will be facilitated by the matrix and framework analysis functions within the N-Vivo software. Early matrices will be oriented to the preliminary coding template (rows), with columns representing each practice. The matrices will be further informed by a series of node reports that help refine and articulate themes and concepts emerging from the data. Final consolidated matrices will then be used to generate Covid experience narratives of 2-3 pages. These will describe the key elements of changes in each practice and facilitate the process of connection.

We will consider second cycle coding to address additional and emerging questions. In this case we will be informed by Miles, Huberman and Saldafia's concept of second order coding (29) - a process to organise and refine material from first order coding into a more parsimonious model, with a particular focus on the emerging categorization of causes, key relationships among participants (such as practice staff) and/or theoretical constructs. In keeping with the iterative nature of data analysis, the decisions and details relating to this will emerge during the process of data analysis.

Finally, intervention narratives and the generated matrices will be further analysed through a process of cross-case analysis at and after the data retreat to develop hypotheses to explain the implementation, uptake and sustainability of routine changes that followed the commencement of the pandemic.

Techniques to enhance trustworthiness

We will use a variety of techniques to enhance trustworthiness in this study. Our member checking approach is described above.

The authors have a range of experience in primary care in both clinical and academic practice. [BLINDED] are all experienced primary care clinicians, each working in urban general practice in Melbourne, Australia. [BLINDED] have conducted health services research in the primary care setting for 20 and 5 years respectively. [BLINDED] have doctoral education in health sociology and have been working in a range of primary care-oriented studies for 10 and 7) years. [BLINDED] have worked closely together for over three decades on a series of studies investigating

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primary care reform in the United States and beyond. Several of these have had an international perspective and been conducted in collaboration with **GR and JA**.

The Standards for Reporting Qualitative Research will be used to report the research to improve its transparency, usability and reliability.(30)

Limitations

The use of purposive sampling of practice staff may limit the collected data to only those individuals who are willing to disclose their perspectives on practice operations and management. Other members of staff may be reluctant to participate in the study given the investigators are members of their own practice. However, efforts will be made to protect the confidentiality of the practices as only the external researchers will have access to the initial identifiable data on a secured drive. Given this is a case study, the number of practices will limit the generalisability of the data to Victorian general practices. Despite this, purposive sampling of diverse locations and sizes of each practice aim to provide comprehensive data that will increase our understanding of the facilitators and barriers to routine changes in general practice. Thus, enhancing possible transferability to other contexts. Case studies make up in depth what they often lack in breadth and this makes the findings transferable to other locations but not universally generalizable.

Ethics/Dissemination

Ethics approval has been obtained from the [BLINDED] University Human Research Ethics Committee . All participants will receive complete written and verbal information about the research prior to giving full, non-coercive consent in accordance with the ethical guidelines. Participants and the practices in which they work are free to withdraw from participation at any time, without impacting on either their employment at the health services, or any future services.

Procedures will be followed to minimise any potential harm or distress to participants, including the provision of contact details for further assistance (available at no cost to the participant) if required. Participant privacy and confidentiality will be respected by the removal of any identifying information from data, assigning pseudonyms and storing all data safely on password-protected systems or in locked cabinets at the university. Primary data will be accessible only to [BLINDED]. All data will be destroyed after 7 years in accordance with the agreed ethical standards.

Beyond ethics approval, this study raises a number of ethical questions that have been considered in some detail by the investigator team. Participatory research requires what Banks et al. describe as "everyday ethics--the daily practice of negotiating the ethical issues and challenges that arise through the life of," our participatory case study. (31) For many community-based participatory studies, unequal distribution of power is of major concern. Since we are collecting data from practice owners, managers and other employees, we must be mindful of the impact staff critique can have for investigators and the practice as a whole. Of these ethical concerns, most relevant for this project is the blurring of boundaries between researchers and participants and the impacts this can have on confidentiality and reliability. Numerous steps have been taken to ensure confidentiality, including ongoing reflexivity and discussion between researchers and the decision to provide the access to raw data only to external researchers. Extra care will also be taken with dissemination to anonymise practices and participants, at times not using verbatim quotations or, where necessary, changing certain details, given the researchers' own workplaces are the sites of the study.

Dissemination will begin from early in the data analysis when practice reports will be made available to all participating practices. At the end of the study, all practices will receive more comprehensive

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comparative reports. We will disseminate the results of this study via presentations at relevant local, national and international conferences, peer-reviewed journals and through social media including personal Twitter accounts and those of the Department of General Practice, [BLINDED] University, and the [BLINDED]. Only anonymised, non-identifiable characteristics and quotations will be used in any arising publications/reports.

Public involvement statement

This research will be carried out without patient involvement, as patients are not the study subjects.

Importance of the Study

This prospective case study is a unique opportunity to document an important moment in general practice in Australia. The use of a participatory research approach offers a promising approach to examining the challenges in and changes to general practice during the coronavirus pandemic and the factors that facilitate these changes. The approach is particularly valuable in the midst of the pandemic – the use of clinician participant investigators eases the road to gaining informed consent, and overcomes the concerns associated with the interface between community-based research and existing government restrictions associated with the pandemic. In addition, it allows rapid tailoring of the methodology to accommodate the evolving consequences of the pandemic at a clinical, community and policy level.

As literature is emerging on the impact of the Coronavirus pandemic on primary care globally, the few international papers exploring changes to general practice have predominantly focused on the increase in telehealth consultations(32, 33), the impact on delayed disease diagnosis in primary care(34), the health and wellbeing of affected health workers(35, 36), policy reviews(37) and recommendations(38, 39). Only one Belgium study, to our knowledge, has used a qualitative methodology to capture the transformation to primary care and subsequent challenges posed by the coronavirus pandemic, as experienced by general practitioners.(40) This study however did not examine the factors that either aided or hindered the change of practice procedures and did not incorporate the perspectives of non-clinical practice staff.

Our findings should broaden our understanding of routines in general practice, practice decision making and the ways in which practices manage an unanticipated public health emergency. The study's data collection strategy will allow us to capture the organisational process of identifying necessary adjustments in general practice routines followed by the quick implementation of new procedures and processes. We anticipate important insights into primary care training, workforce planning, and practice preparedness in the midst of an extraordinary global health challenge.

Author Contributions: [BLINDED] conceived the original study design. The protocol paper was written by [BLINDED] based on an earlier draft written by GR and LS with contributions from [BLINDED]. All authors approved the final manuscript.

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Competing interests: None declared.

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Data sharing: We support the journal's policy on data availability. While we have indicated that no data are available for the study, we are reviewing the situation with our ethics committee and, depending on their response may need to amend this response prior to potential publication.

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Supplementary Material

1. ULTRA TOOL - Practice Environment Template. Covid in general practice

Using a modified version of Crabtree et al's ULTRA Practice Environment Template.

Name –
Practice ID
Date -

General guidelines:

Use this template to generate data to inform a case study of how primary care practices manage the routine changes associated with the Coronavirus pandemic. The intent is that the template should help to generate a narrative of between 2 and 3 pages for each practice. Practice documents generated to manage the pandemic or those regularly referred to may help complete the picture.

The data tends to be richer if you can document examples. **Please particularly focus on areas where there have been significant recent changes due to the pandemic.**

NEW ITEM

Practice staffing

Describe how the practice is organised and governed

Doctors

- Numbers; Part time / full time; gender; experience; special skills and interests; employment status (partnership/corporate/salaried etc)

Nursing staff and allied health

- Numbers; Part time / full time; gender; experience; special skills and interests;

Reception and admin staff

- Numbers; Part time / full time; gender; experience; special skills and interests;

Ownership and governance

- how is the practice managed? Who owns it? Meetings? Divisions of responsibility? Role of leaders?

1. **Practice Context**

Briefly describe the local area surrounding the practice:

- population characteristics
- its geography
- the population mix
- Access to the practice setting e.g. proximity to public transport, Complete this section with particular reference to patients who are more vulnerable

2. **Physical Location**

a. Outside

- Location of the practice: describe building, setting and proximity to other health and social resources.

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- Entry to the practice disability access, parking.
- Signage (photograph), note information covered, language and cultural sensitivity.

- Any evidence of the Coronavirus epidemic (signage, patients waiting etc)

b. Reception and waiting areas

- Describe the layout and general appearance of the practice (a rough floor plan may be worth drawing).
- Include a description of the reception area, number and location of examination rooms, treatment space, and any on-site allied health, lab or x-ray capabilities.
- Describe general ambience and the availability, type and range of patient information

- Signage in the waiting area (photograph), note information covered, language and cultural sensitivity
- Describe evidence of accommodation to the Coronavirus? (ie separate rooms/ waiting areas etc)
- Describe the materials and resources that relate to the virus or infection control

3. Business Office Operations

- Describe general approach to booking of appointments, arrangements for billing and referrals.
- How does the practice setting handle unscheduled/walk in patients?
- How do these operations take account of the needs of patients with risk factors for the coronavirus.
- Describe how the practice highlights alternative consultation methods (ie telephone/video consultations)

4. Practice Communication with Patient

- How does the office communicate office hours, call schedule, payment expectations, etc, especially changes since the onset of the pandemic?
- Describe how the practice setting handles issues related to language and culture. For example, how do they handle interpreter needs?
- What information is given to patients who ring the practice about coronavirus?

5. Clinical Systems

- How does the practice ensure relational continuity of care (ie seeing the same doctor for care)?
- How does the practice track and monitor patient care? Is the process different for patients with more vulnerable patients?

6. How does the practice manage the Coronavirus burden

- Roles and responsibilities
- Use of particular professional or government resources
- Copies if available of practice protocols for reception and clinical staff

7. How does the practice triage patients at risk of Coronavirus?

- Waiting routines
- Use of patient mask etc
- What is available on your practice website for patients about coronavirus?
- Separate room?
- Use of PPE by staff
- Pathology?
- Follow up?

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2. Investigator Diary Template

Investigator Name _____ Date of diary entry: _____

Entry #1

The diary aims to capture your recollection of the changes that have occurred to normal practice since the commencement of the 2020 Coronavirus.

As time passes by we are going to try to get information from you on how things evolve over time. Since we are starting a month or so after the first impact of the pandemic, we would like you to document your recollections of how things started in the practice.

Bullet points are fine, but we are trying to gain an understanding of what happened as the practice manages the changes (if any that are consequent on the effects of coronavirus)

The box below has some hints as to what could be included.

- *About when did the coronavirus pandemic first have an impact on the practice?*
- *What was the first thing that was done?*
- *How were decisions made?*
- *Who was leading?*
- *What was done with respect to appointment scheduling/e-health/roster/ protective equipment / coronavirus tests/*
- *Early problems?*

We would like an entry in the diary every week or two that documents any reflections that you may have on the ongoing ways in which the practice is managing the changes:

Date of entry

_____

What is the main issue(s) that the practice is working with at the moment?

_____

Since your last entry in the diary what has changed in the practice (*e.g. clinical changes, organisational changes, relationships, availability of PPE, swabs, teaching, etc)*

_____

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What are the major factors influencing these changes? *(think about factors outside the practice (guidelines, government policy, PHN activity) and inside the practice (routines, relationships, processes, clinical challenges etc)*

What are the plans for the future within the practice?

How are you feeling about your role as a General Practitioner? (e.g. personal safety, income, clinical care)

Is there anything else that seems important?

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3. Semi-structured interview guide – clinical and non-clinical staff

The interview will take about half an hour and we can pause at any time if you need to. If you would prefer to skip any question, that is no problem.

1. **I wonder if you could start by telling me a bit about what you do at the practice**

   (prompts: role, teaching, how long there, other roles/positions)

2. **Tell me more about the practice**

   (*prompts = history, size, location, recent changes-over the last couple of years, leadership/ governance / meetings / working as a team, interprofessional)*

Explanation for the interviewee:
We are interested in how things have changed in the work that you and your practice does during the pandemic. We are particularly interested in working out what may have facilitated these changes.

3. **What has happened in the practice since the pandemic commenced?**

   (Prompts: Workflow/PPE/safety/billing/telehealth/upskilling/)

   (Prompts: for comparisons compared to pre-COVID era)

   *(Prompts: If variations in routines are discussed, probe for factors that may explain these. **EXAMPLES**)*

   (Prompt for changes over time, since pandemic started)

4. **Tell me about how the practice has sourced most information about coronavirus.**

   a. Probe for different sources earlier in the pandemic – has it changed?

   b. Degree to which it has met the practice's needs

5. **In terms of decision making how did the changes happen**

   Who have been the individuals or groups most involved in decisions about how the practice has responded?

   How have the practice and its members learned about what needed to be done?

6. **Now, at this stage in the pandemic, can you describe a typical day for you in the practice?**

   How different is it from your normal way of working?

   How do you feel about these changes?

7. **Now thinking about the practice as a whole, to what degree have different parts of the practice been on board with the changes?**

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(Prompts: invested/see it as a good idea / giving ongoing support)

8. **What has been the impact of this time on the practice?**

   Specifically on the leadership, general practitioners, nurses reception and administrative staff?

   How has it impacted relationships in the practice (within and between disciplines)

9. **How has the practice been able to adapt or improve during this time?**

   (Prompts: meetings/staff input / patient input)

10. **What has been the impact on patients?**

    Probe for comparisons prior to COVID

    Probe about "now" vs "ideal"

11. **From your perspective, what does it mean to provide "high quality clinical care" during this pandemic?**

a. Probe for enabling/constraining factors.

12. **Finally I wanted to ask about how you are personally handling your work role?**

    Unpack any personal safety and cognitive load issues.

13. **Is there anything else you think is important to highlight?**

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Research checklist

– Please note as this is a protocol paper not all the required criteria will be presented in this paper.

Consolidated criteria for reporting qualitative studies (COREQ): 32 item checklist.(1)	If present in paper
Domain 1: Research team and reflexivity	
1. Interviewer/Facilitator	V
2. Credentials	V
3. Occupation	V
4. Gender	-
5. Experence and training	V
6. Relationship established	V
7. Participant knowledge of the interviewer	V
8. Interviewer characteristics	V
Domain 2: Study Design	V
9. Methodological orientation and theory	V
10. Sampling	V
11. Method of approach	V
12. Sample size	V
13. Non-participants	NA
14. Setting of data collection	V
15. Presence of non-participants	V
16. Description of sample	V
17. Interview guide	V
18. Repeat interviews	V
19. Audio/visual recording	V
20. Field notes	V
21. Duration	V
22. Data saturation	-
23. Transcripts returned	V
Domain 3: analysis and findings	V
24. Number of data coders	V
25. Description of coding tree	V
26. Derivation of themes	NA
27. Software	V
28. Participant checking	V
29. Quations presented	NA
30. Data and findings	NA
31. Clarity of major themes	NA
32. Clarity of minor themes	NA

NA- Not applicable.

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1. Tong A SP, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care. International Journal for Quality in Health Care. 2007;19(6):349-57.