

### **Supporting Information**

#### **Supplementary material**

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

Appendix to: Shah K, Newton N, Charlston E, et al. Defining a core set of research and development priorities for virtual care in the post-pandemic environment: a call to action. *Med J Aust* 2024; doi: 10.5694/mja2.52524.

# **Appendix 1** *Priority Setting Matrix presented to workshop participants*

#### **DOMAIN 1:** How do we structure and implement our virtual care services?

Key questions	Detailed questions	
How do we best	How do we define and describe virtual care as it evolves?	
integrate virtual care	How do we co-design/co-produce virtual care/hybrid services?	
services with	How do we ensure all key stakeholders are involved?	
existing care	How do you select which service approach you will use for	
pathways?	virtual care delivery e.g., central versus distributed across	
	services?	
	How do we allow for variation even within settings to support	
	appropriate implementation and elements of access within	
	safe practice and care?	
	What organisational, disease and population specific factors	
	influence the design of a virtual model of care?	
	What models of care are suitable for virtual care services?	
	Which aren't and how do we define those?	
	What features are unique to each virtual model of care and	
	what can be transferred across conditions?	
	How do we maintain positive working relationships with key	
	stakeholders such as specialists?	
	What barriers are there to establishing virtual care models?	
How do we integrate	How can we structure virtual care services to best support	
acute, primary,	general practitioners and ambulance services?	
community and	What communication tools support general practitioners and	
ambulance care in	acute care communication?	
virtual care	How do we promote virtual care services with primary,	
services?	community and ambulance services?	
How do we optimise	How do we effectively and efficiently select vendors and	
our technology use	understand each vendor's capability and compare vendors?	
and integration?	How do we work with vendors to improve their maturity,	
	capability, and capacity?	
	How do we tailor vendor products to fit within our virtual care	
	services?	
	How do we optimise the integration of existing devices into	
	our virtual care services such as removing analogue steps?	
	How do we expand on and evaluate the use of new	
	technologies and devices into our virtual care services?	
	How do we supply devices to patients at scale? How do we	
	ensure the right monitoring devices/technology is provided to	
	patients at the right time and place (that is determined by	
	clinical care)?	

	How do we work with options for communities where
	connectivity is a problem e.g., virtual hubs in community
	centres?
	What are the optimal human resource requirements to be able
	to look after the technical requirements for virtual care
	services?
	How do we improve interoperability across virtual care
	services systems?
	How do we maintain the privacy and security of information
	in virtual care services?
	How do we enhance the sharing of information and data
	between acute, primary, community and ambulance care in
	virtual care services?
	How do we introduce and/or improve e-prescribing in the
	context of virtual care services?
	How do we measure digital maturity and readiness for
	introducing virtual care services?
	How do we integrate and improve clinical decision support
	such as the detection of deterioration in a remote patient?
	How do we improve the experience of consumers, clinicians,
	and administrative staff in the use of virtual care services and
	technologies?
	How do we ensure the technology developed is designed
	specifically for the priority groups using virtual care services
	e.g., ensuring paediatric patients have specifically designed
	tools?
How do we maintain	What factors such as culture, socioeconomic, age, location,
equity of access in	disability, sexual identity and health and digital literacy
virtual care	impact on equity of access to virtual care services?
services?	What resources can best support consumers with virtual care
	services and technologies?
	How can we increase consumer acceptance, engagement and
TT 1 1	compliance with virtual care services?
How do we work	How do we clarify roles and responsibilities across service
with external authorities and	and centralised government teams?
enablers such as	
enablers such as eHealth NSW to	
optimise virtual care	
services?	
SCIVICCS:	

What changes or challenges do we need to address regarding existing policies and governance frameworks to support virtual care services?	How do we adapt and evaluate existing clinical and ICT governance to support virtual care services?
How do we support new ways of	What key barriers exist between teams such as culture, timelines, approaches to project management and language?
collaboration and working between teams such as ICT and clinical?	How do we support a shared understanding between clinical and ICT services?

#### **DOMAIN 2: How do we evaluate our virtual care services?**

Key questions	Detailed questions	
How do we	Are virtual care services and virtual care models as safe and	
demonstrate that	effective as traditional face-to-face models?	
virtual care services	How do we measure safety and effectiveness in virtual care	
are effective?	services?	
	How do we get results focused information to persuade senior	
	decision makers - and quickly?	
	How do we keep champions engaged and balance careful	
	piloting with pressure to demonstrate activity?	
What outcomes do	What mode of delivery works for which patient population?	
we measure?	What mode of delivery works best for which condition and	
	activity/service offering?	
	What data should we collect for evaluation?	
	Can we collect a common set of data points across sites?	
	How do we emphasise producing interim evaluation results -	
	to address above (many research projects take too long)?	
How do we	How do we build this into our ongoing virtual care services	
measure the overall	development?	
experience of our	Do virtual care services support patient autonomy and	
consumers?	empowerment?	
How do we	How do we build this into our ongoing virtual health model	
measure the overall	development?	
experience of our		
clinical and		
administrative		
teams?		

How do we	How do we measure the experiences of key external
evaluate the	stakeholders that are key to successful delivery such as
experiences of key	specialists?
external	
stakeholders?	
What evaluation	Could we develop a common evaluation approach/framework
approach should we	across sites?
apply?	How could we benchmark across sites at a local, state,
	national and international level?

#### **DOMAIN 3:** How do we fund our virtual care services?

Key questions	Detailed questions	
What economic models	How do we ensure that virtual care services attract sufficient	
support ongoing	funds, including acute and subacute payments for services?	
funding?	How do we work with state and federal funding agencies to	
	ensure ongoing funding including block funding?	
	What economic evaluation and budget impact analyses are	
	required to justify funding models?	

## **DOMAIN 4:** How do we develop and support virtual care services workforce?

Key questions	Detailed questions	
What competencies	How can we develop the workforce skills required for	
are required of health	effective delivery of virtual care? E.g., communication,	
professionals and	recognising deterioration, technical skills	
administrative and	What do universities and other educational institutions need to	
managerial staff to	do to ensure that graduates are equipped with skills and	
deliver optimal care in	competencies to operate in virtual care services?	
the context of virtual	What, if any, changes are needed for indemnity cover of	
care services?	clinicians providing virtual care?	
How do we ensure	How much face-to-face time is required to maintain skills and	
clinicians employed in	connection with patients when practising in a virtual care	
virtual care services	service?	
maintain	What models should be explored to ensure that clinicians	
competencies in face-	remain current with clinical skills and practice when	
to-face care?	employed in virtual care settings?	
How do we best	What changes to existing role descriptions are needed to	
structure and deploy	support virtual care services?	
workforce to support	What changes to existing state awards and professional	
virtual care	regulatory requirements are needed to support virtual care	
services?	services?	
	What new service roles may best support virtual care services	
	rollout?	

What is the optimal workforce design and structure of virtual
care services?

#### **DOMAIN 5:** How do we share learnings and undertake continuous improvement?

<b>Key questions</b>	Detailed questions
How do we learn from	Where do we find information on best practice and others'
what others have done	experiences?
at a state, national and	What factors need to be regularly audited and should these be
international level?	shared?
How do we establish	What processes currently exist and how can we enhance these
processes to share	or develop and champion new approaches?
experiences on an	
ongoing basis at a	
state, national and	
international level?	

DOMAIN 6: How can we ensure consistency in high quality care is delivered and mitigate risk?

Appendix 2
Standards for Reporting Qualitative Research (SrQR) Checklist

No.	Topic Qualitative Re	Item	Page No.
	Title and abstract		
S1	Title	Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended	1
S2	Abstract  Introduction	Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions	1
S3	Problem formulation	Description and significance of the	3
33	Problem formulation	problem/phenomenon studied; review of relevant theory and empirical work; problem statement	3
S4	Purpose or research question	Purpose of the study and specific objectives or questions	3-4
	Methods		
S5	Qualitative approach and research paradigm	Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/interpretivist) is also recommended; rationale	5-6
S6	Researcher characteristics and reflexivity	Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, and/or transferability	4
S7	Context	Setting/site and salient contextual factors; rationale	4
S8	Sampling strategy	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale	4-5

S9	Ethical issues pertaining to human subjects	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	6
S10	Data collection methods	Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale	4-6
S11	Data collection instruments and technologies	Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study	4-6
S12	Units of study	Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	4-5
S13	Data processing	Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/de-identification of excerpts	5-6
S14	Data analysis	Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale	5-6
S15	Techniques to enhance trustworthiness	Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale	5-6
	Results/findings		
S16	Synthesis and interpretation	Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	6-10
S17	Links to empirical data	Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings	Table 4

	Discussion		
S18	Integration with prior work, implications, transferability, and contribution(s) to the field	Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/generalizability; identification of unique contribution(s) to scholarship in a discipline or field	10-12
S19	Limitations	Trustworthiness and limitations of findings	11
	Other		
S20	Conflicts of interest	Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed	Title page
S21	Funding	Sources of funding and other support; role of funders in data collection, interpretation, and reporting	Title page