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The impact of COVID-19 on Australian clinicians' decision making in line with the principles of Choosing Wisely

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Abstract

Aim: To explore the perspectives of clinicians' decision-making processes and considerations in line with the Choosing Wisely principles during the first wave of the COVID-19 pandemic.

Design: An exploratory qualitative approach was used.

Methods: Data were collected via semi-structured interviews to encourage participants to discuss their own experience in making clinical decisions during the COVID-19 pandemic. A total of 12 clinicians from across disciplines were interviewed to reach data saturation. Interview data were analysed considering the Choosing Wisely principles.

Results: Five main themes as they relate to clinician decision-making emerged and included; prioritizing care and treatment, uncertainty regarding best practice as a result of rapidly changing guidelines, organizational challenges to clinical decision-making, the use of telehealth and enabling consumer engagement with health services.

Conclusion: Despite the disruption caused by COVID-19, clinicians were mindful of necessary care and worked to ensure that core care was not compromised during the first wave of the pandemic. The need for clinicians to protect both their own safety and that of their colleagues arose as an additional factor that influenced clinicians' decision-making process during the COVID-19 pandemic.

KEYWORDS
Choosing Wisely, shared decision making, clinician decision making, COVID-19, interview, nursing practice

1 | INTRODUCTION

Clinician decisions are typically complex, dynamic, and considerate of patient outcomes (Schuttner et al., 2022). The Australian government declared a national emergency response to the COVID-19 pandemic in March 2020 and this decision-making complexity was exacerbated during the first wave of the COVID-19 pandemic as rapidly emerging evidence and experience meant that pandemic modelling, policies, and clinical protocols were constantly evolving (Chemali et al., 2020; de Caestecker & von Wissmann, 2021; Haier et al., 2022a). Clinicians were required to make decisions locally to balance patient care with their safety, determine which patients to

treat based on resource availability, and accept less comprehensive care for some patient cohorts (Iserson, 2020; Lavoie et al., 2022). This demonstrated a substantial shift away from standard care delivery and led to both frustration and confusion amongst healthcare professionals as they strived to provide good clinical care (Chemali et al., 2020; de Caestecker & von Wissmann, 2021).

Healthcare is a dynamic setting whereby clinical decisions can be characterized by eight factors; incomplete data, uncertainty in the environment, shifting goals, decisions frequently influence future actions, time pressure, patient outcome impacts, multiple stakeholders, and organizational priorities (Schuttner et al., 2022). This is particularly evident in regional Australian hospitals where clinical teams tend to be smaller and resource availability can limit the level of patient acuity for which care can be safely provided, thus creating additional considerations for clinician decision making (Alzghoul & Jones-Bonofiglio, 2020; Sedgwick et al., 2014). Such complex clinical decisions are typical in the non-COVID-19 environment, however, the worldwide COVID-19 pandemic substantially influenced both healthcare management and clinical processes (Haier et al., 2022b). The factors characterizing clinician decision making at the individual level during the COVID-19 pandemic are not yet fully understood in the Australian context. Literature suggests that decisional conflict is more likely to arise when individual clinicians are not provided with the opportunity to contribute to treatment modifications, or when they experience high levels of stress and individual burden (Eskes et al., 2020; Haier et al., 2022b). Further to this, clinicians were more likely to elect to comply with COVID-19 guidelines when they have support from and trust in their health system (Shahrabani et al., 2022).

It is unknown if these decision-making drivers are consistent amongst Australian clinicians working in regional healthcare services with an organization-wide commitment to the Choosing Wisely program. The investigators were therefore interested to understand how the COVID-19 pandemic may have influenced clinicians' decision making regarding unnecessary tests, treatments and procedures, and the ability to participate in shared decision making with patients (Yu et al., 2019). Choosing Wisely is a well-established initiative, endorsed by the Australian College of Nursing (Choosing Wisely Australia, 2016), encouraging health professionals to improve the quality of healthcare by reconsidering tests, treatments, and procedures where evidence shows they provide no benefit and involving patients in decisions about their care (Lindner, 2018). Understanding how the pandemic may have impacted clinicians' considerations in recommending low-value tests and treatments is consistent with international efforts to harness the Choosing Wisely principles to minimize the spread of COVID-19 (Cho et al., 2020; Pramesh et al., 2021).

1.1 | Aim

To capture the perspectives of clinicians in a regional Australian tertiary health service on their decision-making processes during the first wave of the COVID-19 pandemic.

2 | METHODS

An exploratory qualitative study with semi-structured interviews was used (Bearman, 2019). This study was conducted in a tertiary-level 750-bed hospital in regional Queensland, Australia. The hospital provides both inpatient and outpatient services across specialties. Purposive sampling was used to recruit participants who were involved in providing clinical care. A total of 12 clinicians were recruited, which was the point at which no new themes emerged from the data (i.e. saturation of data was reached; Vaismoradi et al., 2013).

2.1 | Data collection and recruitment

Potential participants were identified through internal hospital communication channels including clinician-targeted emails and newsletters with the support of the hospital's executive team. All the clinicians working in the participating hospital were included. The interviews were conducted by an experienced researcher who has experience in qualitative methodology. Open-ended questions to encourage participants to discuss their own experience in managing patients during the COVID-19 pandemic were used (Bearman, 2019). The face-to-face interviews were conducted in a private room, each lasting 30–40 minutes. All interview data were digitally recorded.

2.2 | Data analysis

The interview data were professionally transcribed verbatim into text files. Data analyses were performed by two researchers (MG, LW) to capture the relationships among the data and then code the data by significant meaning into categories (Bengtsson, 2016). These categories were then clustered into main themes to enable reporting on the key perspectives of the participant clinicians. Throughout the data analysis process, the researchers (MG, C-JW, LW) continuously discussed the process and content to ensure there was consensus on the results presented (Bengtsson, 2016; Vaismoradi et al., 2013).

2.3 | Ethical considerations

Ethical approval for this study was obtained from the Human Research Ethics Committee (anonymized for review) prior to commencing the study. Individual written informed consent was obtained prior to organizing the interview schedule. Data were stored on a secure hospital server with password protection and were only accessible by authorized research personnel as per the Australian National Statement on Ethical Conduct in Human Research 2007 (updated 2018) (National Health and Medical Research Council (NHMRC), 2018).

3 | RESULTS

3.1 | Participants

A total of 12 participants were recruited. The mean of clinical working experience of participants was 16.6 (SD = 13.1), ranging from one to 45 years (Table 1). In total, 50% of participants reported they had been working clinically for between 10 and 20 years. Departmental areas included anesthetics, infectious diseases, obstetrics and gynecology and pediatrics, along with newly graduated clinicians who indicated they were employed on a rotational basis, working in multiple departments during the first wave of the COVID-19 pandemic.

3.2 | Themes

While some clinicians were more expressive than others, all clinicians who participated in the interviews answered each of the open-ended questions. They shared their individual experiences of working during the first wave of the COVID-19 pandemic, reflecting on their considerations and decision making as it related to patient care. The main themes and sub-themes to arise out of the clinician interviews are described below (Table 2).

3.3 | Theme 1: Prioritizing core treatment and care

Clinicians consistently reported that there was little impact of the COVID-19 response on the delivery of core treatment and care. It was acknowledged that non-urgent care and elective procedures may have been delayed, but core treatment was minimally affected. Participants were challenged to justify which tests or treatments were clinically necessary rather than simply expected. Provided they could provide a robust justification, the clinicians experienced little difficulty in delivering that care to the patient.

> ... under those precautions, airborne or droplet precautions, we'd sort of think twice about whether they really needed a CT or whether they needed a digital form of imaging because we knew that would involve a lot more effort for getting them down to radiology and transporting them. ... (P3).

> ... if we thought there was a need for a face-to-face we would do that, and so we, ...made it quite clear to the juniors that lack of access to the hospital, that access to hospital can't be denied if we think that there's a legitimate need to see the patients. So if patient needs to be seen, we see her, no matter what (P8)

> ...trying to limit that contact as much as possible, just having a better think about whether they needed an appointment or whether they could do... fewer appointments or... make it one less scan or sort of try and rationalise appointments and testing ... (P6).

> The glucose screening changed. ... we stopped doing formal GTT and did fasting glucose instead. ... like there's some people who get, ... serial scans in their pregnancy ... not, ... still order them but try and get them done in the community (P2)

3.4 | Theme 2: Frequently changing clinical protocols

The second theme to emerge was uncertainty regarding best practices as a result of rapidly changing guidelines. Clinicians reported that their decision-making confidence was impacted by changing rules, such as personal protective equipment (PPE) requirements and which tests and treatments could be recommended for respiratory patients in particular due to COVID-19. They were unsure of whether they were consistently making decisions based on the most current information available and thus best for their patients.

> ... the initial period, knowing what options for high flow and, like, BiPAP, ... as a junior officer ... the rules

TABLE 1 Years of clinical working experience according to the department in which participant worked ($n = 12$).

	Clinical working experience – years (number/%)					
Department in which participant worked	**<5**	**5–10**	**11–20**	**21–30**	**31–40**	**>41**
Rotating junior clinician	3 (25.1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Paediatrics	0 (0)	0 (0)	0 (0)	1 (8.3)	1 (8.3)	0 (0)
Obstetrics and gynaecology	0 (0)	0 (0)	2 (16.7)	0 (0)	0 (0)	1 (8.3)
Infectious diseases	0 (0)	0 (0)	1 (8.3)	0 (0)	0 (0)	0 (0)
Anaesthetics/surgical	0 (0)	1 (8.3)	1 (8.3)	0 (0)	0 (0)	0 (0)
Emergency	0 (0)	0 (0)	1 (8.3)	0 (0)	0 (0)	0 (0)
Total	3 (25.1)	1 (8.3)	5 (41.7)	1 (8.3)	1 (8.3)	1 (8.3)

TABLE 2 Main themes and sub-themes which emerged through the clinician interviews.

Theme	Subtheme
Prioritizing core treatment and care	Determining urgent vs. non-urgent care
	Evidence based decision making to reduce unnecessary care
Frequently changing clinical protocols	Uncertainty regarding current protocols
	Challenges in remaining up-to-date
Organizational challenges to clinical decision making	COVID/isolation requirements hindered clinician availability
	Telehealth infrastructure was not intuitive
Telehealth delivery during COVID-19 for consumers	Accessibility of healthcare
	Telehealth as an enabler of healthcare delivery
Consumer engagement with health services	Consumer understanding of public health risks
	Establishing rapport

were always changing in terms of people you could use masks for and things. … just a little unclear (P8)

… like practical changes… all of the screening questions that happened. So all the patients being screened who came to theatre…there was changes in the PPE – a lot of discussion about what PPE was appropriate. Getting the whole … COVID theatres for suspected and actual COVID patients… (P10)

… because the changes were happening so quickly to what the standard was, who was on airborne or who was on droplet and what the right airborne or droplet things were, like which doors to go out of or into in isolation rooms…it was hard to keep everyone up to date all the time (P3)

3.5 | Theme 3: Organizational challenges to clinical decision making”

Organizational and management barriers which impeded decision making ‘on the floor’ were also reported. For example, human resource directives designed to protect the workforce, such as close contact isolation requirements, led to staff shortages amongst patient-facing clinical teams, and whilst strongly encouraged as the preferred communication mechanism for delivering care in the COVID-19 environment, the existing telehealth infrastructure was not intuitive, and the technology was difficult to use at both the clinician and consumer ends.

…We tried to move a lot of our stuff onto telehealth, but also to allow women enough face-to-face … mitigate the risk of missing important diagnoses. So we reconfigured the staffing in our department … younger consultants did a lot of the face-to-face care, and the seniors tended to do the telehealth … (P8)

…we realised that …we couldn't lose too many senior clinicians before we couldn't provide a safe service… So we dropped the gynae appointments …we made everything by phone where we could (P2)

… patients were fearful to come to hospital so they didn't want to come to outpatients, and then we also stopped patients from coming to outpatients, …limited the number …to telehealth and that platform was pretty hopeless…it just kept cutting out, people would lose connection… really hard for a lot of families to suddenly learn how to do this (15)

… we're [clinicians] trying to put some education … to remind them it's okay to do things with telehealth… it's a bit clunky the system, where I lost my number or I had to get on …I forget how to do and … to text the patient. It's not as easy (P8)

3.6 | Theme 4: Telehealth delivery during COVID-19 for consumers

While the organizational directive was to use telehealth where possible and avoid face-to-face contact with consumers, clinicians acknowledge that this was positively received by some consumers, but there were others who either could not or did not want, to use telehealth when receiving care. For some consumers, telehealth appointments were more convenient and efficient as they did not need to travel to the hospital, whereas, for those lacking technological skills, the quality of appointments was impacted by not being able to

connect or lines dropping out. These preferences need to be considered by clinical teams when scheduling appointments and interacting with consumers.

> … I think there were patients who couldn't use telehealth. You know from a, technologically they weren't able… (P7)

> …There were some elderly peoples who were quite anxious on the phone and would have preferred to come in… (P8)

> … patients that we want to see pre-anaesthetic, …often old… and they're hard to understand on the phone… hearing issues. … it makes it harder for sure (P23)

> …with antenatal clinic especially, we started doing a lot more sort of telehealth, so just doing, booking in visits over the phone rather than face-to-face. And I think we found that quite effective and found that …were going to be seeing their GP … some advice, … quite reasonable, that worked quite nicely (P6)

> …like the convenience of being able to just be at home and talk to someone. … they seemed more empowered,…Sometimes they come, there's almost an expectation that they should behave in a certain way because they're at the hospital, at the doctor. Whereas a lot of us noticed that their behaviour and their answers were probably different in a way. They were probably more truthful, that they were open, they seem more relaxed. They didn't have to wait (P8)

3.7 | Theme 5: Consumer engagement with health services

Clinicians recognized that consumers engaged differently with the hospital during the COVID-19 pandemic. The community, in general, appeared well informed of the public health risks associated with COVID-19 and thus were more reluctant to present to the hospital. That said, when they did present to the hospital for appointments or admissions, they tended to recognize the impact of the pandemic on busy hospital services and thus were understanding of delays. This was reassuring when clinicians were only able to offer short appointments, their treatment was postponed, or the consumer was unable to see their regular clinician. What did appear problematic, however, were the barriers that PPE created when building rapport with consumers.

> … a reluctance to come into the hospitals or engage with medical, like even for tests that were routine. So sometimes people would not turn up having been recommended for a test … because either the clinic was closed or they were discouraged from attending… (P10)

> … the majority of patients presenting can see how difficult, busy and kind of complex the environment has become… most people in the community now have, if not first hand experience, at least second hand experience about what that is and what that entails… a growing appreciation for the fact that the emergency department is a busy place … COVID responsiveness of hospitals is an added element of, … complexity and acuity (P11)

> Most of the gynae patients you saw when you say 'I'm really sorry, I've got to try and see you quickly' and they're like 'no it's fine'. Like the community as a whole was very understanding (P2)

> Paediatrics … relies on having engagement with our patients… start …assessment as soon as we walk in the room, …how that patient is looking us in the eye, … really hard to do with a mask on or a shield… (P5)

4 | DISCUSSION

While the COVID-19 pandemic substantially disrupted the way in which healthcare was provided throughout the world (Cho et al., 2020), it was encouraging to see in the interview data that despite this, clinicians continued to prioritize core patient care. Clinicians did need to modify their practices (Haier et al., 2022b), but the interview data indicated that clinicians were aware of this disruption and considered the necessity of tests and treatments as a means of reducing infection risk. Even during a significant event, such as the COVID-19 pandemic, it appeared in the interview data that decision making amongst clinicians aligned with the ethos of Choosing Wisely to reduce tests, treatments and procedures of limited value (Yu et al., 2019). In effect, the mandate to reduce the risk of COVID-19 transmission forced clinicians to consider the evidence to support a clinical recommendation. Our clinicians were mindful of necessary care and worked to ensure that core care was not compromised during the first wave of the pandemic.

Clinicians reported uncertainty resulting from frequently changing protocols. For example, it was difficult to keep all members of large, multidisciplinary teams up-to-date with aerosol-generating procedures in theatre. This is consistent with findings in other studies where it has been reported that constantly changing protocols created ambiguity in how care was expected to be delivered (Chemali et al., 2020), and studies which highlighted challenges associated with incorporating multiple, new items of information into making decisions (Haier et al., 2022a). It is recognized that specialized the COVID-19 knowledge and experience was evolving during the first wave of the pandemic (Chemali et al., 2020; Lavoie, Bourque, Côté, et al., 2022), and thus it is important that clinicians recognize that decisions could only be based on the information available at the time (Lavoie, Bourque, Côté, et al., 2022). The ability to be forgiving of inconsistent policy decisions and empathetic towards uncertainty in clinical practice in such a complex and changing environment should be valued.

While the clinicians focused on delivering quality, core care in a changing clinical environment, the interviews suggest that non-clinical challenges also impacted their decision making. From an organization perspective, participants reported that human resource directives appeared to hinder efficient patient care by requiring at-risk staff cohorts to avoid direct patient contact. The COVID-19 pandemic created a unique situation in which clinicians of all departments needed to balance patient care with their own safety and that of their colleagues (Lavoie, Bourque, Côté, et al., 2022). Such directives provided little opportunity for autonomy in how clinical teams implemented these decisions 'on the floor' and resulted in challenges such as under-staffed services. The need for healthcare providers and clinicians to work collaboratively to enable systems that efficiently and effectively deliver patient care was highlighted during the first wave of the pandemic and is expected to remain vital beyond the pandemic (Gonzalez et al., 2022).

Incorporating telehealth into nursing care was increasing prior to the COVID-19 pandemic (Barken et al., 2017) and is a particularly important tool for patient care in regional areas of Australia where vast distances are often needed to be travelled to attend healthcare appointments (Harper et al., 2021). Notwithstanding this, the first wave of COVID-19 forced whole teams to pivot to telehealth (Manzi et al., 2022), and for many clinicians, this was their first experience utilizing a telehealth platform (Taylor et al., 2021). It appears that there were both positive and negative aspects of the pivot to telehealth for consumer interactions during the first wave, and this highlighted the importance of incorporating consumer preferences into decision making from the outset in terms of preferred mode of interaction (Lindner, 2018). The perspectives shared during this study suggest that clinicians were aware of the telehealth-related challenges that some consumers experienced, particularly if they lacked the technological skills and were empathetic towards these. It was acknowledged that this made some consultations more difficult and possibly less thorough. The perseverance shared by participants is important as it is recognized that internet coverage in regional areas of Australia can be limited (Harper et al., 2021). Conversely, it was encouraging to see the benefits of telehealth uptake, such as more efficient appointments and that some consumers appeared more relaxed and candid in the online forum. As the world moves beyond the COVID-19 pandemic and the risk of infection reduces, it will be important to continue to offer this choice to consumers and thus allow them to choose wisely for time and economic efficiency (Cho et al., 2020; Manzi et al., 2022). It was evident that the clinicians interviewed considered the consumer perspective when making clinical decisions. They were aware that there was reluctance amongst consumers to present to hospitals due to the risk of contracting COVID-19 and thus persevered with telehealth despite the platform's shortcomings.

Finally, establishing rapport is a key part of enabling consumers to participate in shared decision making so that the care they receive that is consistent with their values and goals (Allen et al., 2019). Participants reported that PPE presented a barrier when establishing rapport with patients, and this builds on earlier research which highlighted challenges associated with PPE when communicating with, and receiving messages effectively from colleagues (Alarfaj et al., 2021; Chemali et al., 2020). The current study suggests that these difficulties extend to interactions with patients. Moving forward, these findings therefore point towards opportunities to redesign PPE which encourages, rather than discourages, shared decision making in line with the principles of Choosing Wisely.

4.1 | Limitations

The findings are limited to first wave of the COVID-19 pandemic in Australia and unknown perspectives otherwise not captured. Given the nature of clinical duties during the pandemic response and time restraints for clinicians, it is acknowledged that the interviews represent a sub-set of clinicians' perspectives and future research could explore these more broadly.

5 | CONCLUSIONS

Despite the disruption caused by COVID-19, regional Australian clinicians were mindful of necessary care and worked to ensure that core care was not compromised during the first wave of the COVID-19 pandemic. It is promising to see that the principles of Choosing Wisely, which are to reduce low-value care and involve patients in decisions about their care, were considered during this time of high uncertainty and despite organizational barriers. The desire to involve patients in shared decision making was highlighted through a willingness of clinicians to engage with telehealth despite platform limitations and to minimize any rapport-building barriers that PPE created. The need for clinicians to protect both their own safety and that of their colleagues arose as an additional factor which influenced clinicians' decision-making process during the COVID-19 pandemic.

AUTHOR CONTRIBUTIONS

Study design: Megan Giles, Morne Terblanche, Chiung-Jung (Jo) Wu. Data analysis: Megan Giles, Chiung-Jung (Jo) Wu, Liang Wang. Manuscript drafts: Megan Giles, Chiung-Jung (Jo) Wu, Liang Wang, Morne Terblanche. Appraisal and editing of all revisions equally: Megan Giles, Morne Terblanche, Chiung-Jung (Jo) Wu, Liang Wang, Shashivadan P. Hirani. Final approval: Megan Giles, Morne Terblanche, Chiung-Jung (Jo) Wu, Liang Wang, Shashivadan P. Hirani.

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CONFLICT OF INTEREST STATEMENT

The authors declare no competing interests.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ETHICS STATEMENT

The study was approved by the participating hospital Human Research Ethics Committee (Reference numbers: anonymized for review). The study was conducted in accordance with the Declaration of Helsinki, and participating site policies and procedures.

PATIENT CONSENT STATEMENT

Informed consent was obtained from all individuals.

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