

RESEARCH ARTICLE OPEN ACCESS

Culturally Responsive Surgical Care for Older People and Family Carers: A Dyadic Analysis

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Received: 6 April 2025 | **Revised:** 16 September 2025 | **Accepted:** 22 September 2025

Funding: This work was supported by Western Sydney University.

Keywords: carer | ethnicity | older adult | perioperative | surgery

ABSTRACT

The aim of this article is to explore the perspectives and experiences of ethnically diverse older patients and family carers when undergoing a surgical procedure. Exploratory qualitative research design. Semi-structured interviews with six patient-carer dyads and three individuals, totaling 15 participants. Data were analyzed using dyadic analysis. Three themes were identified: *age-based considerations*, *culturally based considerations*, and *dyad relationship dynamics*. Family carers frequently acted as translators, advocates, and emotional support while navigating the complexities of healthcare systems. Cultural and linguistic concordance between staff and dyads was crucial to building trust and ensuring effective communication. Gaps in interpreter services and culturally responsive care posed significant challenges. A multi-faceted approach to optimize care is needed. Combining clinician-led assessments with patient-led discussions fosters collaborative decision-making. Cultural and linguistic concordance between clinicians and patients, or effectively using family carers and in-person professional interpreters when concordance is not feasible, is crucial for culturally responsive care. Overall, the integration of patient- and family-centered care within culturally responsive care is proposed as a critical strategy toward equitable health outcomes.

1 | Introduction

With the aging population increasing both globally and within Australia, projections indicate a significant increase in the number of individuals aged 65 and older in the coming decades (Australian Institute of Health and Welfare (AIHW) 2021b; World Health Organization (WHO) 2022). Australia's aging population is increasingly culturally, ethnically, and linguistically diverse, presenting significant challenges for surgical care (Australian Institute of Health and Welfare (AIHW) 2021c). Despite national policies promoting patient-centered care, disparities persist in surgical experiences among ethnically diverse older people due to language barriers, limited access to

interpreter services, and misalignment between biomedical practices and cultural health beliefs (Betancourt et al. 2014; Khatri and Assefa 2022). While existing research primarily focuses on individual patient experiences, clinical outcomes, and broader system-level factors, limited attention has been given to the firsthand experiences of ethnically diverse older people and their family carers, who play a critical role in healthcare navigation and decision-making (Federation of Ethnic Communities' Councils of Australia (FECCA) 2015; Semere et al. 2019). This leaves a critical gap in understanding how ethnically diverse older people and their carers navigate perioperative decision-making together, limiting the development of culturally responsive healthcare strategies (Malley et al. 2018; Tran et al. 2023).

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Summary

- This study is the first to apply dyadic analysis in a surgical context for ethnically diverse older people, revealing how age-related priorities, cultural norms, and interdependent patient-carer roles jointly shape surgical experiences. Understanding converging and diverging dyadic perspectives enables practitioners to tailor communication, decision-making support, and care pathways that address perioperative needs of ethnically diverse older people and their family carers.
- Findings demonstrate that a preference-based approach to culturally responsive care is recommended to alleviate structural barriers, enhance trust, and improve perioperative experiences. This should involve prioritizing cultural and language concordance, family carer inclusion, and access to appropriate interpreter services.
- The integration of patient- and family-centered care within culturally responsive care is identified as a critical and underutilized strategy to address inequities for people from ethnically diverse population groups.

This study addresses this gap by employing a novel dyadic analysis approach, examining the perspectives of both patients and their family carers to uncover how cultural and linguistic factors shape their shared decision-making processes and perioperative experiences. Using the Theory of Dyadic Illness Management (TDIM) as a guiding framework, this study presents a unique emphasis on the interdependent nature of caregiving in ethnically diverse dyads (Lyons and Lee 2018). By exploring shared and contrasting perspectives, dyadic analysis captures the nuances of interdependent decision-making, communication, and emotional support (Eisikovits and Koren 2010; McCusker et al. 2020). By centring the dyadic dynamic and using the Australian setting as an example, this research provides a comprehensive understanding of the relational and contextual influences on perioperative care experiences, and offers insights that can inform more culturally responsive healthcare practices that have broader global relevance.

2 | Background

Aging populations in developed countries are becoming increasingly culturally, ethnically, and linguistically diverse, presenting shared challenges in delivering Culturally Responsive Care (CRC). Such demographic trends have been reported in Canada (Andruske and O'Connor 2020), New Zealand (Szabó and Goodin 2024), and across Europe (Jang et al. 2023). Recent demographic trends in Australia highlight the growing diversity within Australia's aging population, with increasing representation from communities of Vietnamese, Chinese, Indian, and Filipino descent (Australian Bureau of Statistics (ABS) 2022). This demographic shift is driving greater demand for surgical procedures such as joint replacements, cataract extractions, and gastrointestinal surgeries (Australian Institute of Health and Welfare (AIHW) 2016).

Undergoing surgery presents unique challenges for older people due to age-related physiological changes, increased risk of complications, and multimorbidity, including cardiovascular disease, diabetes, and cognitive impairment (Australian Institute of Health and Welfare (AIHW) 2021a). While these challenges apply broadly to all older people, those from ethnically diverse backgrounds encounter additional, culturally specific barriers that complicate their perioperative experiences (Bonus et al. 2022). Despite these demographic changes, healthcare systems continue to operate within frameworks that inadequately accommodate cultural and linguistic diversity, contributing to disparities in surgical care experiences (Bonevski et al. 2014).

Cultural beliefs significantly shape perceptions of health, illness, and surgery, influencing patient decision-making, communication with health professionals, and expectations of care (Betancourt and Tan-McGrory 2014; Lee et al. 2017; Semere et al. 2019). For example, culturally ingrained beliefs about pain management, family involvement in surgical decision-making, or religious considerations during surgery may conflict with standard medical practices, and cultural nuances play a major role in influencing patient and family interactions with perioperative staff across surgical settings (Bonus et al. 2025). When healthcare providers fail to account for these cultural differences, it can lead to misunderstandings, mistrust, dissatisfaction, and poorer health outcomes (Betancourt et al. 2014; Khatri and Assefa 2022).

Family carers are critical in supporting ethnically diverse older people throughout the perioperative period. They assist with navigating unfamiliar healthcare systems, translating medical information, facilitating decision-making, and providing post-operative care (Federation of Ethnic Communities' Councils of Australia (FECCA) 2015); (Semere et al. 2019; Wali and Renzaho 2018). Their role is particularly crucial when older people experience cognitive impairment or functional limitations that hinder their ability to manage surgical care independently (Kim et al. 2023). However, the contributions and challenges of family carers remain underrepresented in perioperative research, limiting the development of interventions that address their unique needs (Malley et al. 2018; Tran et al. 2023).

This study makes a unique contribution by applying dyadic analysis to examine the relational dynamics between patients and carers as interdependent, rather than independent, and exploring their shared and divergent experiences (Collaço et al. 2021; Eisikovits and Koren 2010; McCusker et al. 2020). This study offers a theoretical contribution by extending the TDIM to a perioperative, multicultural context and adds to the existing literature by capturing the perspectives of both parties, to gain new insights into how caregiving roles, cultural values, and aging-related needs converge during surgical care. Findings will contribute to global efforts to improve health equity and optimize culturally responsive perioperative care models in a way that is both theoretically significant and practically actionable.

By examining the patient-carer dyad and considering the cultural context in which this relationship occurs, this study aims to explore the perspectives and experiences of ethnically diverse

older patients and family carers when undergoing a surgical procedure.

Presenting qualitative interview findings using dyadic analysis as outlined by Collaço et al. (2021) will allow for the following two research questions to be answered:

1. What are the shared and contrasting experiences of ethnically diverse older patients and their family carers during the perioperative journey?
2. How does undergoing surgery impact the lives of ethnically diverse older patients and family carers on an individual and dyadic level?

3 | Materials and Methods

3.1 | Design

This study employed an exploratory qualitative approach using semi-structured interviews to examine the experiences of ethnically diverse older patients and their family carers undergoing surgery. Grounded in Constructivism (Crotty 1998), this study adopted social constructionism as its theoretical perspective, recognizing that knowledge and experiences are co-constructed within social contexts. This approach was chosen to ensure that the firsthand experiences of patient-carer dyads were captured in a manner that reflected their shared and individual realities.

3.2 | Data Collection

Participants were recruited using purposive and snowball sampling (Polit and Beck 2022), commonly used for engaging underrepresented populations (Valerio et al. 2016). The study inclusion criteria were older people (65 years and older) from culturally and linguistically diverse backgrounds and their family carers, as per NSW Health (2019) and AIHW (2024) definitions. The patients needed to have undergone surgery in Australia. Six patient-carer dyads ($n = 12$) and three individual participants ($n = 3$) were interviewed (for those whose corresponding dyad partner could not be interviewed), reaching theoretical saturation (Braun and Clarke 2021; Francis et al. 2010).

Ethics approval was granted by the University Ethics Committee (H14813). Following ethical approval, a flyer about the research, recruiting and requesting participation was posted in community venues, religious centers and online (social media pages). A link for people to provide their contact details to participate was published on the flyers. Recruitment also involved engaging with organizations such as state and national ethnic community councils, aging research institutes, Non-Government Organizations (NGOs) for carers, health consumers, and networks for older persons, multicultural health, and migrant health.

Given that 18% of older Australians speak a language other than English at home (Australian Institute of Health and Welfare (AIHW) 2021c), study materials were translated

into Mandarin, Arabic, Vietnamese, Cantonese, and Punjabi (Australian Bureau of Statistics (ABS) 2022). Interpreters were offered for participant interviews as needed, with no English proficiency requirement for participation. No prior relationships existed between the researchers and participants before recruitment or data collection. Participants provided informed consent, and pseudonyms were assigned for confidentiality. No participants withdrew, and recruitment continued until data saturation was achieved (Braun and Clarke 2021; Francis et al. 2010).

Semi-structured interviews were conducted via video conferencing by the first author, who was a doctoral candidate researcher, lasting 30–45 min. A topic guide, developed based on prior research (Bonus et al. 2022) and clinical expertise, was used to facilitate discussions. Stakeholder consultation was integral to refining the interview questions. Health district leaders, multicultural health professionals, and health consumer representatives reviewed the interview guide to ensure cultural relevance and alignment with perioperative care challenges. This process strengthened the validity of the data collection approach and ensured that key aspects of experiences were adequately explored (Polit and Beck 2022). The transcribed interviews were supplemented with field notes capturing additional context and nonverbal cues.

Participants were asked ‘Has a Doctor advised you/your relative to have surgery before?’. Following this question, the participants were asked to expand on their answers with probing questions. Interview questions about the experience of either having surgery (patient perspective) or caring for their relative who has undergone surgery (family carer perspective) were also asked broadly using such following questions as ‘Thinking back to while you were in hospital, tell me about the interactions you had with hospital staff involved with the surgery. This could be doctors, nurses, other staff in the hospital.’, and ‘Tell me what is important to you about this whole process of having surgery’.

3.3 | Analysis

Dyadic analysis was employed to capture shared and contrasting perspectives within patient-carer dyads. Traditional qualitative methods often analyze participants individually, which may overlook the relational and interdependent aspects of dyads (Eisikovits and Koren 2010). This approach enhances research trustworthiness by synthesizing two narratives into a holistic understanding of perioperative experiences.

The study followed the seven stages of dyadic analysis framework as used by Collaço et al. (2021), adapting it to enhance transparency and depth. An additional “researcher coding notes” column was introduced to track initial coding interpretations, facilitating the transition from individual accounts to dyadic themes. Excerpts were color-coded to visualize patterns and relationships between participants’ experiences. Dyads were analyzed as units where both members were interviewed; individual participants were analyzed separately (Collaço et al. 2021). Data organization was guided by framework matrices (spreadsheet). Examples of stages 4 and 6 are available in Tables 1 and 2 respectively.

TABLE 1 | Example from stage 4 of dyadic analysis.

Stage 4—data summarized and quotes added					
Initial theme/grouping 2: Decision making, Information sources					
Dyad number	Subthemes	Patient	Family carer	Dyadic code/summary (Stage 5)	Researcher Coding Notes (Stage 3)
6	Implications of English language proficiency	Initially, when I received the letter from the (Suburb) hospital regarding the colonoscopy procedure spots availability, I could not understand what the letter was saying and I even didn't know that it was the letter that was sent from the (Suburb) hospital regarding the colonoscopy procedure. And so I had to either give the letter to my daughter or my son to translate back to me and let me know what that letter was about. If my son and daughter are not available for translating for me or interpreting for me, I will use the apps. The dictionary apps from my mobile phone, just to scan the letter and then translate back to Cantonese, despite not being 100% accurate, but at least 70 to 80% of the translation. Not 100% accurate, but at least more than 50% of, you know, accurate translation.	The letter from the Government is in English. He didn't understand, so he had to give the letter to my brother, I think. He didn't show that to me. He took a picture of the letter and showed me, and I didn't have the time to look at it because sometimes my brother goes back to his house and just sleeps overnight, just stays there, depending on his work schedule as well. So my brother had a look at the letter for him and translated it back to him. A lot of cases that they receive a letter, either let's say from Medicare, or from the bank, or let's say from MyGov service, or even Taxation Office. All English. They wouldn't understand, and then they have to either wait until I go back there to visit them to show me the letter to translate for them. Or if they feel it's immediate action, it needs immediate attention for it, then they would take a picture on their phone and then send it to me, and then ask me to translate back to them, see what it is. And their mobile phone, my mum and dad's mobile phone has the apps, like dictionary translator apps. So, some of the apps, you can, using the camera, let's say facing on a piece of letter; automatically translate it back to their language, Chinese. But then, with such dictionary apps or translator apps, sometimes the translating is not as fluent as how we translate. When we booked the appointment and confirmed the appointment with the colonoscopy procedure, we specifically requested the information package, the information pamphlets. We specifically requested, can we have Chinese, so that my dad can go through the procedure, the pre-procedure preparation and the process of the procedure, and the things that he has to pay attention to or be careful about, or precautions after the procedure, what he needs to do after the procedure. We specifically requested Chinese translated information for him. So he got that. He went through it.	The challenges faced by individuals with limited English proficiency when dealing with official government correspondence emphasize the reliance on family members or technology to bridge the communication gap. The family carer's (daughter's) proactive efforts in seeking translated materials for surgical procedures to ensure the patient's (her father's) understanding and compliance. The importance of receiving information in Chinese is highlighted, as seen in the family carer's (daughter's) specific request for Chinese-translated information pamphlets when confirming the colonoscopy appointment for their father (the pt).	The pt. (father) discusses challenges related to language barriers, particularly in dealing with letters and documents in English. The pt. (father) experiences difficulty understanding a letter from the hospital about his colonoscopy procedure availability. He (the pt., father) relies on his adult children or translation apps to understand the content. The pt. (father) acknowledges the limitations of translation apps, which may provide around 70 to 80% accuracy but not 100%. The family carer (daughter) expands on the issue of English-language letters, mentioning letters from various governmental entities such as Medicare, banks, MyGov, and the Taxation Office. The family carer's (daughter's) parents, neither of whom are proficient in English, face difficulties understanding these letters. They either wait for their adult children to visit and translate or use translation apps, which, while helpful, may not be as fluent as human translation. Crossover w/Theme (cultural)

Note: Excerpts were color-coded to visualize patterns and relationships between participants' experiences.

TABLE 2 | Example from stage 6 of dyadic analysis.

Stage 5 (for Stage 6) – placing dyadic summaries into framework matrices relevant to the themes (new themes as per Stage 6)

Theme 2: Cultural-based considerations

Dyadic code (sub theme) (a) Language and cultural nuances in healthcare delivery

Dyad number	Dyadic summary	Dyadic Quotes (Patient)	Dyadic Quotes (Carer)
6	<p>The challenges faced by individuals with limited English proficiency when dealing with official Government correspondence emphasize the reliance on family members or technology to bridge the communication gap.</p> <p>The family carer's (daughter's) proactive efforts in seeking translated materials for surgical procedures to ensure the patient's (her father's) understanding and compliance.</p> <p>The importance of receiving information in Chinese is highlighted, as seen in the family carer's (daughter's) specific request for Chinese-translated information pamphlets when confirming the colonoscopy appointment for their father (the pt).</p>	<p>Initially, when I received the letter from the (Suburb) hospital regarding the colonoscopy procedure spots availability, I could not understand what the letter was saying and I even didn't know that it was the letter that was sent from the (Suburb) hospital regarding the colonoscopy procedure. And so I had to either give the letter to my daughter or my son to translate back to me and let me know what that letter was about. If my son and daughter are not available for translating for me or interpreting for me, I will use the apps. The dictionary apps from my mobile phone, just to scan the letter and then translate back to Cantonese, despite not being 100% accurate, but at least 70 to 80% of the translation. Not being 100% accurate, but at least more than 50% of, you know, accurate translation.</p>	<p>The letter from the Government is in English. He didn't understand, so he had to give the letter to my brother, I think. He didn't show that to me. He took a picture of the letter and showed me, and I didn't have the time to look at it because sometimes my brother goes back to his house and just sleeps overnight, just stays there, depending on his work schedule as well. So my brother had a look at the letter for him and translated back to him. A lot of cases that they receive a letter, either let's say from Medicare, or from the bank, or let's say from MyGov service, or even Taxation Office. All English. They wouldn't understand, and then they have to either wait until I go back there to visit them, to show me the letter to translate for them. Or if they feel it's immediate action, it needs immediate attention for it, then they would take a picture on their phone and then send it to me, and then ask me to translate back to them, see what it is. And their mobile phone, my mum and dad's mobile phone has the apps, like dictionary translator apps. So, some of the apps, you can, using the camera, let's say facing on a piece of letter, it will automatically translate back to their language, Chinese. But then, with such dictionary apps or translator apps, sometimes the translating is not as fluent as how we translate. When we booked the appointment and confirmed the appointment with the colonoscopy procedure, we specifically requested the information package, the information pamphlets, we specifically requested, can we have Chinese, so that my dad can go through the procedure, the pre-procedure preparation and the process of the procedure, and the things that he has to pay attention to or be careful, or precautions after the procedure, what he needs to do after the procedure. We specifically requested Chinese translated information for him. So he got that. He went through it.</p>

The first and last authors independently verified coding alignment and thematic consistency, meeting regularly to reach consensus. The second author, a research supervisor with qualitative research methods expertise, reviewed the coding framework, subthemes, and themes to ensure methodological rigor and trustworthiness throughout the analytical process.

In Stage 7, the analytical framework based on the six dyadic analyses was applied to subsequent singular participant data, integrating analysis for both complete dyads and individual respondents. This approach allowed for a broader exploration of dyadic relationships and enriched the research findings.

3.4 | Trustworthiness and Reflexivity

This study followed the Lincoln and Guba (1985) criteria for trustworthiness by addressing credibility, dependability, transferability, and confirmability. Credibility was supported through prolonged engagement, with the first author's dual background as a mixed-ethnicity migrant to Australia and perioperative nurse facilitating rapport with participants and an understanding of the clinical context. Data source triangulation through drawing from participants across diverse ethnic, cultural, and linguistic backgrounds further enriched the findings. Dependability was enhanced through method triangulation, combining semi-structured interviews and field notes to provide a comprehensive view of participant experiences. The first author maintained a reflexive journal throughout the research process to bracket any personal assumptions, document decisions, and potential biases during data collection and analysis, supporting transparency and reliability. Transferability was addressed through rich description of the perioperative care context and the firsthand experiences of participants. Purposive sampling ensured relevance and richness of data, offering insight into the cultural, aging, and relational nuances. Confirmability was achieved through collaborative data analysis involving multiple authors, with regular discussion between the first and last authors to minimize individual bias and ensure analytic rigor.

4 | Results

Three major themes were identified from the analysis. These three themes and their sub-themes are expanded further below and summarized in Table 3.

TABLE 3 | Summary table of thematic findings and respective sub-themes.

1. Age-based considerations
2. Cultural-based considerations
a. Language and cultural nuances in healthcare delivery
b. Role of faith perspectives
3. Dyad relationship dynamics
a. Dyad emotional dynamics
b. Role adjustments and shifting dynamics

Participants represented diverse linguistic and cultural groups, ensuring a broad perspective on perioperative care experiences. The demographic detail of the participants is depicted in the summary table below (Table 4):

4.1 | Theme 1: Age-Based Considerations

Age-related factors, including health screenings, quality of life priorities, and communication preferences, shape perioperative experiences for older people and their family carers from ethnically diverse backgrounds. A dyadic analysis approach reveals both alignment and divergence in how patients and carers interpret surgical decisions and experiences, highlighting interdependent roles in navigating the perioperative process.

In Dyad 6 (Table 5), MR, an older patient, emphasizes accessible communication with his general practitioner and specialist in Cantonese, which supported his surgical decision-making. However, ML, his daughter and carer, offers a more detailed account of navigating the healthcare system. While MR sees the process as straightforward, ML highlights the added cognitive and logistical burdens on carers supporting aging parents through complex referrals. This contrast reveals how older people may trust familiar procedures when language concordance exists, without recognizing the barriers carers must overcome. As individuals age, reliance on screening increases, yet managing them becomes a shared effort.

The significance of age-related stressors is further demonstrated in Dyad 3 (Table 6), where LS, the wife and carer, highlights the stress reduction from receiving medical explanations in her native language, emphasizing the need for culturally-concordant communication. In contrast, RS, the patient and husband, accepts surgery with minimal concern about language. This contrast reveals a dyadic gap. That older patients may be more accepting of medical authority, while carers, especially those supporting an aging spouse, experience greater anxiety due to communication challenges. The generational and relational dynamic shows how older patients may prioritize simplicity, while carers assume an advocacy role to ensure understanding.

Decision-making priorities in later life often center around maintaining independence and familial roles, as seen in Dyad 5 (Table 7). AC, the patient, views surgery as a means to preserve her role within the family, emphasizing quality of life and autonomy. JC, her husband and carer, focuses on surgical risks and complications. This contrast shows how aging patients seek continuity, while carers emphasize safety, underscoring how life stage perspectives shape health decisions through dyadic roles.

4.2 | Theme 2: Cultural-Based Considerations

Cultural norms and values shape perioperative experiences, influencing how patients and carers communicate with health professionals, interpret surgical decisions, and engage in support systems. Dyadic perspectives provide insight into how cultural expectations impact caregiving roles and patient agency, highlighting areas of congruence and divergence between patients and their carers.

TABLE 4 | List of dyad participant demographic details. (Shaded cells indicate cases where only one member of the patient-carer dyad participated in the interview, as the corresponding dyad partner was unavailable).

Older participant pseudonym	Older participant gender	Older participant age	Family carer pseudonym	Family carer gender	Family carer age	Surgical procedure underwent	Ethnic background
MP (Husband) [Dyad 1]	M	77	LP (Wife)	F	72	Orthopedic	Filipino
SG (Wife) [Dyad 2]	F	69	NG (Husband)	M	75	Podiatric	Filipino
RS (Husband) [Dyad 3]	M	68	LS (Wife)	F	65	Cardiac	Filipino
AJ (Wife) [Dyad 4]	F	74	RJ (Husband)	M	75	Orthopedic	Filipino
AC (Wife) [Dyad 5]	F	66	JC (Husband)	M	69	Orofaciomaxillary oncological	Maltese
MR (Father) [Dyad 6]	M	69	ML (Daughter)	F	39	Gastrointestinal	Chinese
MD	F	68				Orthopedic	Former Yugoslavian
			ME (Daughter)	F	40	Gynecological	Egyptian
SN	F	75				Cardiac	Chinese

TABLE 5 | Participant quotes from members of Dyad 6 (Chinese).

Family carer (Daughter)	Patient (Father)
<p>ML: “When you’re over 50 or 60, the Government sends you a sample package for collecting feces. He did it, sent it back, and the result suggested seeing his GP because they found some blood in his feces. The GP then referred him to a specialist. I had to book the appointment for him. He didn’t know where it is. I had to google the address, show him what the building looks like. I wasn’t able to go with him, because of my working schedule. I told him, when you get there, show your Medicare card.”</p>	<p>MR: “I got the bowel testing kits from the government, the result I received back was abnormal bleeding from the stool sample. The GP referred me to a specialist who advise me two options, to do the colonoscopy procedure with private health, or public health. I choose public health. My GP and specialist are able to speak and communicate with me in Cantonese.”</p>

TABLE 6 | Participant quotes from members of Dyad 3 (Filipino).

Patient (Husband)	Family carer (Wife)
<p>RS: “They just tell me and also they give me some pamphlets to read, this will be doing all this stuff. What I can understand is, it’s easy. It’s easy to understand that you just put this pacemaker and then there’s a wire that goes into your heart, that the beat of your heart, it will go with the pacemaker. From my wife also, and myself, our decision is really to have surgery because you need to have a surgery because what you are suffering. If the doctor said, “You need a stent,” or, “You need to be open,” then I am ready to do that. Because you want to be heal and to release the pain.”</p>	<p>LS: “Even though you want to comprehend, you could not because you’re anxious, stressed. Especially Baby Boomers coming from different countries, it’s better to have someone who will explain it to them in their own dialect. That was very helpful to me, like an assurance. Especially in our age. Someone there with your own culture, explaining it to you. If it’s in English, I might comprehend but not really – there is no relief.”</p>

TABLE 7 | Participant quotes from members of Dyad 5 (Maltese).

Patient (Wife)	Family carer (Husband)
<p>AC: "I'm a mother of a big family. To me, quality of life is being able to be around. I want to be around for my children, and my grandchildren. I'm not that old. To me, quality of life is having a presence within the family."</p>	<p>JC: "The biggest worry was that I would lose her, that something would happen with infection or she'd lose a lot of blood or something"</p>

4.2.1 | Sub-Theme a: Language and Cultural Nuances in Healthcare Delivery

For ethnically diverse older people, the ability to access health information in their preferred language is critical to informed decision-making. However, while some patients accept partial understanding, carers often recognize the risks of misinterpretation. In Dyad 6 (Table 8), MR, the patient, relies on translation apps, believing they provide adequate understanding. In contrast, ML, his daughter and carer, questions the reliability of technology and takes on the corrective role to ensure accuracy. This discrepancy reveals a dyadic misalignment where carers mediate language barriers, emphasizing the burden when professional interpreters are unavailable.

SN, a singular patient (Chinese), illustrates the personal impact of language barriers, describing how she remained silent during a painful procedure because she did not want to interrupt the surgical staff. Her experience underscores how cultural expectations of deference to health professionals can result in unspoken suffering.

SN: "I felt very pain. The doctor put the pacemaker over my chest. I didn't want to bother them because they were doing the procedure. I just tolerate the pain. I was in tears."

ME, a family carer (Egyptian), reinforces this perspective, explaining how she had to extract information from doctors because her mother could not ask questions. This contrast between SN's silent endurance and ME's proactive role highlights a common dyadic dynamic. That patients from ethnically diverse backgrounds may experience various cultural and linguistic barriers to self-advocacy, requiring carers to bridge communication or advocacy gaps.

ME: "My mum had vaginal bleeding. The doctor gave us papers about the procedure. I understood, but she didn't speak English. I had to translate everything. If I didn't understand medical terms, I Googled it. They asked if we needed a translator. I said no, since I could translate for her. I stayed with her at every stage, until they took her into the operating room. After she finished the operation they brought me back to her to translate everything to her. It was a positive experience for me because I wanted to be with her in every step."

She also reflects on how culture, language, and religious beliefs shaped surgical decisions. These efforts to balance multiple considerations introduce the influence of faith on perceptions of care, which will be explored in the next sub-theme.

ME: "We chose an Arabic-speaking doctor, so he explained everything in Arabic. The paperwork was in English, but he translated. I'm the youngest daughter for her. I have the eldest brother, who I had to ask for his permission first (for the surgery). We would have preferred a female doctor but we couldn't

TABLE 8 | Participant quotes from members of Dyad 6 (Chinese).

Family carer (Daughter)	Patient (Father)
<p>ML: The letter from the Government is in English. They have to wait until I visit them to translate for them. Or they would take a picture on their phone and then send it to me, and then ask me to translate back to them. Some of the apps, it will automatically translate to Chinese. But sometimes is not as fluent as how we translate. When we booked the appointment and confirmed the appointment with the colonoscopy procedure, we specifically request for Chinese translated information for him, so that my dad can go through the pre-procedure preparation and the process of the procedure, and the things that he has to pay attention or what he needs to do after the procedure. So he got that.”</p>	<p>MR: “When I received the letter from the hospital regarding the colonoscopy, I could not understand what the letter was saying. I had to give the letter to my daughter or my son to translate back to me. If my son and daughter are not available, I will use the dictionary apps from my mobile phone to scan the letter and translate back to Cantonese. Not 100% accurate, but at least more than 50% of accurate translation.”</p>

find one who speak in Arabic. My mother is veiled...
 In Islam, it's okay to reveal for surgery, but only then.
 After surgery, we asked for halal food.”

4.2.2 | Sub-Theme b: Role of Faith Perspectives

Faith perspectives were central to how some participants navigated the perioperative experience, framing not only their interpretations of surgical outcomes but also shaping culturally informed approaches to decision-making and caregiving. For dyads who shared religious beliefs, faith operated as both a source of emotional strength and a guiding framework for making sense of medical interventions.

In Dyad 4 (Table 9), both the patient and family carer viewed the surgical outcome as divinely influenced. Their shared belief in divine intervention provided a culturally meaningful explanation for the patient's recovery and reinforced mutual coping mechanisms.

Similarly, Dyad 5 (Table 10) reflects a deep integration of faith into the caregiving dynamic. Both the patient and carer attributed the surgical outcome to collective prayer and spiritual intercession, which not only supported emotional well-being but influenced expectations of hospital care.

These findings underscore that faith perspectives, when present, are not peripheral but central to how culturally diverse families make meaning of medical care, navigate decisions, and express caregiving roles. In contrast, some individual participants explicitly rejected religious interpretations. For MD and MR, recovery was grounded in scientific understanding or personal values, rather than faith.

MD: “It's nothing to do with spiritual or religious, it's about my body and it's about science.”

MR: “I don't have any religion, I am atheist. Definitely I have personal value and principle.”

While cultural values and language shaped how participants engaged with healthcare systems, these influences were often mediated through the relational dynamic between patient and carer. The following theme explores how these dyadic relationships impacted, and were impacted by, age and cultural considerations during the perioperative experience.

4.3 | Theme 3: Dyad Relationship Dynamics

The perioperative journey disrupts established relational roles, reshaping caregiving responsibilities, emotional support structures, and advocacy efforts. While patients primarily focus on their physical recovery, carers often assume unrecognized emotional and logistical burdens. The dynamics within the patient-carer relationship also serve as a key mechanism through which age-based and cultural considerations were navigated. Dyadic analysis highlights areas of alignment and divergence within dyads, revealing how role shifts influence both members' experiences and perceptions.

TABLE 9 | Participant quotes from members of Dyad 4 (Filipino).

Patient (Wife)	Family carer (Husband)
AJ: "I'm so blessed because I didn't even realize that I was walking. When my children came to visit me, I was so excited to see them and I said to them "I want to go to the toilet". I went without even knowing I didn't use my walking frame. Then one of my daughters said, "Mum, you're walking." I was surprised. No pain at all."	RJ: "I'm amazed because just after, she can walk. It's a miracle. During her operation I serve in a Church retreat. I offered my service for the recovery and successful surgery. Our family doctor said her operation was one of the most successful one that he ever saw. It's a blessing."

TABLE 10 | Participant quotes from members of Dyad 5 (Maltese).

Patient (Wife)	Family carer (Husband)
AC: I did have a lot of support. Prayer, I can't forget that, I had prayers from all over the world. I had Buddhists praying for me. And many Catholics, many Protestants. I could feel the graces coming from the prayers—the weight taken off me, by all this love. It's important for recovery, very important. I would have loved to have a priest visit me—at least bring me communion. I was in hospital for a full month, and I never had a priest or a chaplain come in to visit me. It was time when there were no visitors allowed in hospital, so I presume that was the main reason."	JC: "Before any surgery I remind her to have the anointing of the sick. We consider that to be essential. We're regular churchgoers, so obviously pray was a non-negotiable thing."

4.3.1 | Sub-Theme a: Dyad Emotional Dynamics

Carers frequently experience heightened emotional distress compared to patients, largely due to their advocacy roles and the sense of responsibility they assume in navigating the health system. In Dyad 1 (Table 11), MP, the patient, views a surgical delay as a minor inconvenience, while LP, his wife and carer, feels significant frustration from repeated delays and systemic barriers. Carers engage with the health system in ways patients do not, acting as intermediaries to ensure continuity of care. LP's heightened stress highlights the emotional labor of caregiving and the disproportionate impact of systemic inefficiencies on carers, underscoring the value of dyadic analysis.

In Dyad 5 (Table 12), AC, the patient, views restricted hospital visitation during COVID-19 as an unavoidable policy. In contrast, JC, her husband and carer, feels excluded from her care and unsupported by the system.

4.3.2 | Sub-Theme b: Role Adjustments and Shifting Dynamics

Surgical recovery often necessitates a redistribution of responsibilities, requiring carers to take on a change in duties. In Dyad 5 (Table 13), AC, the patient, emphasizes her role in researching treatment options, positioning herself as the decision-maker. JC, her husband and carer, acknowledges her autonomy but stresses his role in validating her choice through additional consultations. Their shared decision to proceed with surgery shows alignment but underscores the interdependent roles of patients and carers in balancing autonomy, reassurance, and risk.

In Dyad 5 (Table 14), AC, the patient, acknowledges reliance on community nursing services for post-operative care, viewing this support as sufficient. However, JC, her husband and carer, describes an expanded caregiving role. The contrast in their narratives reveals a discrepancy in how post-operative care demands are perceived. This misalignment underscores the importance of recognizing caregiving labor within perioperative care models.

In Dyad 6 (Table 15), MR, the patient, describes navigating the hospital independently, attributing challenges to the system, not his limitations. ML, his daughter and carer, recounts facilitating each step, ensuring appointments and translating *critical information*. *Dyadic analysis reveals this contrast that patients can underestimate the help they receive from carers working to ensure continuity of care.*

To address similarities and differences across dyads, and to demonstrate how the three themes were related, we present the following synthesis. This does not introduce a new theme but instead integrates the three themes described above. This synthesis highlights how age-based considerations, cultural factors, and dyad relationship dynamics interrelate, and how these patterns varied across carer roles and genders. Age-based considerations shaped how patients appraised surgical risks and benefits, while cultural considerations such as language and faith influenced communication, comprehension, and trust. These factors were enacted through dyad relationship dynamics, with carers often

TABLE 11 | Participant quotes from members of Dyad 1 (Filipino).

Patient (Husband)	Family carer (Wife)
MP: "They told me I could defer it. I said yes, because I wanted to attend an anniversary in the Philippines. But when I came back, they said they discharged me. So they put me again on the waiting list."	LP: He was told he could have his operation after our overseas trip. I was upset because after we went back to them, they had already discharged him! They said, "you will be in a waiting list". I was his spokeswoman then. I rang them up; I complained, "why so and so?" and they said, "Cannot do anything, there is so much on the waiting list". When we had pre-admission time, we went in there, and there was a small fungus under his toenail. The doctor said, "I have to report this one to my boss". The surgeon. "Maybe we have to cancel the operation". And I said, "You want to cancel the operation, and we'll have to wait another 3 years? He will be dead by then!" I was really fuming mad at that doctor.

TABLE 12 | Participant quotes from members of Dyad 5 (Maltese).

Patient (Wife)	Family carer (Husband)
<p>AC: "It's COVID time. They had no visitors policy. I said to my surgeon, "I've been here three weeks. Is there any way I can get some permission to have a visitor?" The ward manager came said, "The person who comes has to be double vaccinated, and has to come at a certain time, stay for 1 h, not go anywhere else." So, I was luckily able to ask one of my daughters to come and visit, which was nice."</p>	<p>JC: "I found it very demeaning and I don't think they respected the dignity of the patient or the partner. They stopped me at the door, they requested proof of vaccination. "No, I don't have." Even during the surgery I had to ring them, the nurses were not always available to talk. She was in ICU for 12 days. It was hard. I couldn't get in, I couldn't visit her for a whole month. The doctors stopped coming back to me after the first few days, which I found discouraging, because it was a major surgery. The communication, it reduces the anxiety."</p>

TABLE 13 | Participant quotes from members of Dyad 5 (Maltese).

Patient (Wife)	Family carer (Husband)
<p>AC: "I do research beforehand to know what's involved. JC went along with my decision because it was either surgery, or not having anything done. And obviously you're reducing your quality of life, and your lifespan I suppose."</p>	<p>JC: "My wife did quite a bit of research. Anything I found I forwarded to her. She also joined a Facebook group. She was getting opinions on different cases related to similar cancers to hers. That helped. I insisted that we get a second opinion. We found the cancer hospital the city. We saw the chief honcho there. That was comforting."</p>

TABLE 14 | Participant quotes from members of Dyad 5 (Maltese).

Patient (Wife)	Family carer (Husband)
<p>AC: “Recovery is when you become dependent. The fact that I had community nurse to come and do my dressing was very important, and the fact that I came home, and I had a supportive husband, and children, that was very important as well. I needed to have my leg wound dressed, and the hospital organized for the community nurse to come and visit me. There was a time when I had an infection, and they came every day. I did have a lot of support.”</p>	<p>JC: “Whenever one of us is in hospital, we usually go pick up the clipboard and look at all the things she’s receiving or I’m receiving, make sure the things are done. I basically act like a proofreader to the doctor, I just make sure that everything’s being done. The first couple of weeks after she came home I had to help her shower. I had to wipe her, I had to take her to the bathroom. Because she couldn’t walk properly. And also to cook for her. I was her fulltime carer for quite a number of weeks.”</p>

TABLE 15 | Participant quotes from members of Dyad 6 (Chinese).

Family carer (Daughter)	Patient (Father)
<p>MR: “Without any family member who speak English and Cantonese able to company me, the only thing I could do is go to the hospital, leave home earlier so that I have enough time for me to locate the place at the hospital. I would show the staff the letter regarding the colonoscopy procedure, and the Medicare card. I will use my body language to finger point at the letter.”</p>	<p>ML: “When you look for a specific area, it can be quite difficult. I took my dad there and asked quite a few people, “where can I get to this area to see this nurse?” Because we were in COVID, I had to register my dad and myself on my phone for the check-in. My dad even said, “Oh my goodness, if you didn’t come with me, I wouldn’t have a clue where to go.”</p>

advocating or experiencing emotional labor when barriers arose. For example, LP in Dyad 1 challenging clinicians over waitlist risks, or LS in Dyad 3 preferring language-concordant explanations. Patterns also differed across carer roles: adult children (e.g., ML in Dyad 6) acted as language brokers and system navigators, whereas spouse carers provided emotional vigilance and advocacy. Within spousal dyads, wives as carers (LP in Dyad 1, LS in Dyad 3) more often engaged in assertive advocacy, while husbands as carers (JC in Dyad 5, RJ in Dyad 2) emphasized reassurance or faith-framed support. Among patients, wives (e.g., AC in Dyad 5) linked surgical choices to family roles and quality of life, whereas husbands (e.g., RS in Dyad 3) more often deferred to medical authority. Together, these findings demonstrate that age, culture, and relational dynamics are intertwined, with the family carer role and gender also influencing how concerns were negotiated and enacted within these dyads.

5 | Discussion

This study explored the perspectives of ethnically diverse older patients and their family carers undergoing surgical procedures, using dyadic analysis. Findings revealed that these dyads experience complex interactions and decision-making patterns influenced by cultural, caregiving, and age-related factors. In this way, themes identified in this study do not operate in isolation. Rather, the relational dynamics between patient and carer shape how age-based concerns and cultural expectations are understood, negotiated, and acted upon.

This study highlights conceptual and practice gaps in how CRC is implemented for ethnically diverse communities. Terms such as ‘cultural competence’, ‘cultural responsiveness’, and ‘cultural sensitivity’ are often used interchangeably, despite having distinct meanings; creating ambiguity and inconsistent application (Markey 2021). Cultural sensitivity refers to awareness of, and respect for, cultural difference, but does not necessarily extend to addressing the structural or relational contexts that shape health care interactions (Curtis et al. 2019). As Curtis et al. (2019) cautions, approaches based only on cultural competence or sensitivity risk remaining superficial if they focus on “learning about the other” while leaving systemic power imbalances and inequities unexamined. By contrast, CRC is the provision of high-quality, patient-centered care that respects cultural and linguistic preferences, and involves an active and ongoing adaptation of care processes in partnership with patients (Babacan and Gill 2012; Curtis et al. 2019; Markey 2021). Markey (2021) emphasizes that such responsiveness requires moral reasoning and practical action; that health providers and systems must move beyond recognizing cultural needs to actively transforming practice. For example, by ensuring appropriate interpreter service access, enabling language-concordant communication with staff, or facilitating faith-aligned supports. Our findings illustrate this distinction. While sensitivity was often evident in respectful recognition of cultural and age-related concerns, it was only when care was responsive; adapted in tailored and appropriate ways to the needs of individual patients and carers, that dyads reported improved trust, comprehension, and shared advocacy. Importantly, existing CRC frameworks can neglect the specific inclusion of families as partners in patient care, despite its central role in many cultures. Integrating patient- and

family-centered care (PFCC) within CRC represents a crucial, yet underdeveloped, strategy for delivering more inclusive, equitable and contextually appropriate care.

The findings of this study align with those reported by Nguyen et al. (2025), who explored the support networks and care needs of older Vietnam-born Australians managing chronic disease. Nguyen et al. (2025) found that patient self-management among older people from this cultural background occurs within collectivist contexts shaped by family and ethnic social networks. Similar to their findings, this current study confirms that familial, ethnic, and religious networks are vital support structures. Together, these studies underscore the need for culturally responsive, family-centered care models that recognize the collectivist contexts in which many older people manage both acute and chronic health challenges.

Integrating PFCC within CRC would not only align services with the lived realities of ethnically diverse patients, but also offer a model adaptable to comparable health systems in Canada, New Zealand, and parts of Europe (Andruske and O'Connor 2020; Jang et al. 2023; Szabó and Goodin 2024). As one of the world's most multicultural countries, Australia is uniquely positioned to lead in this integration. Unless Western health systems accommodate non-Western views of health, illness, and care relationships, they will continue to generate structural inequities rather than eliminate them (Markey 2021).

Using the TDIM as a guiding framework, this study emphasizes the interdependent nature of caregiving in ethnically diverse dyads (Lyons and Lee 2018). TDIM aims to optimize the health of both members of the dyad and posits that illness management is a collaborative process, where patients and carers function as a team, navigating healthcare decisions, treatments, and coping strategies together (Lyons and Lee 2018). The following sections will address clinical implications and how integrating TDIM and CRC frameworks (inclusive of PFCC) can optimize outcomes for these population groups.

5.1 | The Interdependent Nature of Perioperative Decision-Making

Findings highlight that perioperative experiences for older people and their family carers are relational, shaped by interdependent roles, varying perspectives on aging, and differing health priorities. TDIM frames this interdependence as central to how dyads make healthcare decisions (Lyons and Lee 2018). In this study, family carers supported decision-making through emotional and practical assistance within complex medical systems. For ethnically diverse older people, these discussions commonly occur in familial contexts, reflecting cultural expectations of collective decision-making (Wali and Renzaho 2018).

Clinicians must engage both dyad members during surgical discussions, particularly in ethnically diverse populations where cultural and familial expectations may differ (Khatri and Assefa 2022). Many older patients may not realize they can actively participate in decision-making (Elliott et al. 2016). Effective communication that respects cultural and generational differences is key to building trust and ensuring decisions align

with medical expertise and personal priorities (Bonus et al. 2022; Elliott et al. 2016). TDIM emphasizes aligning care with both patient wishes and carer expectations, improving health outcomes for both the patient and carer when decisions are collaborative and culturally responsive (Lyons and Lee 2018). Incorporating these insights into clinical practice requires comprehensive preoperative assessments, tailored communication strategies, and an inclusive environment that addresses both surgical and cultural needs.

5.2 | A Preference System as a Strategy for Achieving Culturally Responsive Care

This study contributes new practice-oriented evidence by demonstrating that ethnically diverse older patients and their carers have a preference for culturally and linguistically concordant care. This concordance fosters safety, trust, and effective communication (Yehekel and Rawal 2019). White et al. (2018) and Hsueh et al. (2021) highlight the benefits of preferring trained and certified, language-concordant clinicians in enhancing patient engagement. Yehekel and Rawal (2019) reported that patients with limited English proficiency preferred language-concordant clinicians and that appropriate interpretation services significantly improved patient satisfaction. When such care is unavailable, family carers bridge the gap, which can raise concerns about privacy, accuracy, and conflict of interest (Paradise et al. 2019; White et al. 2018). TDIM suggests that such additional burdens can lead to emotional strain, which affects the carer's ability to provide optimal support (Lyons and Lee 2018).

Both language concordant care and family carer presence are linked to higher patient satisfaction, as family carers not only provide linguistic support but also bring an understanding of their relative's cultural context, which is vital for making informed healthcare decisions (Rayan-Gharra et al. 2018). Along with family carer presence and involvement, in-person professional interpreters are essential for effective communication. Paradise et al. (2019) found that patients preferred in-person interpreters over telephone interpreters due to the ability to consider body language and non-verbal cues. Finally, even in the absence of interpreters, all clinicians must be able to provide CRC (White et al. 2018).

Implementing a preference system for CRC by prioritizing cultural or language-concordant care, involving family carers, and providing accessible interpreter services can help alleviate patient and carer burdens. This strategy fosters an inclusive and equitable environment for ethnically diverse older people, optimizing their perioperative experiences.

Future research and interventions should focus on developing comprehensive support strategies that address the interdependent nature of patient and carer experiences within the contexts of aging and cultural diversity. Co-design methodologies may provide a valuable framework for involving patients, carers, and healthcare providers in developing such CRC pathways (Bonus et al. 2024). These collaborative approaches ensure that care interventions align with the real-world needs of ethnically diverse populations.

Study limitations must be acknowledged. Firstly, the use of separately conducted dyadic interviews may have introduced biases or limitations in data collection and analysis. While these interviews capture perspectives from both older people and their family carers, conducting them separately may have restricted our understanding of the dyadic relationship's dynamics. Future research could benefit from joint or simultaneous dyadic interviews to provide a more comprehensive view of shared perspectives, disagreements, and negotiation strategies within the dyad (Eisikovits and Koren 2010).

6 | Conclusion

This study makes a unique contribution to the literature on culturally responsive surgical care by presenting insights into the complexities faced by ethnically diverse older people and their carers through a dyadic lens. Insights provide healthcare systems with tangible, equity-focused approaches to embed cultural responsiveness into perioperative practice. Dyadic analysis reveals interaction patterns and decision-making influenced by age and cultural factors. Beyond language barriers, challenges include cultural expectations, faith perspectives, and caregiving roles, intersecting with age-related health issues. This necessitates PFCC being an embedded strategy within CRC. Addressing these unique needs can enhance surgical experiences and outcomes. This research urges clinicians and policymakers to prioritize culturally and linguistically concordant care, appropriate and accessible language services, and PFCC within CRC, for equitable experiences for diverse older people and their family carers.

7 | Relevance for Clinical Practice

Culturally responsive perioperative care ensures equitable surgical experiences for ethnically diverse patient-carer dyads. Research findings add new insights into how these dyads interpret and respond to perioperative challenges. This study offers a practical contribution by identifying these relational, communication, and cultural needs that can be addressed through more equitable, inclusive care models. Implementing study insights involves embedding PFCC, prioritizing cultural or language-concordance, and providing appropriate and accessible interpreter services; all within CRC. Although this study was conducted in Australia, these findings have broader international relevance to the body of knowledge on CRC, particularly for countries with similar trends in increasing diversity of ethnicities, culture or languages in their aging populations who are faced with challenges in navigating complex health systems.

Author Contributions

Charmaine Bonus: conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Visualization, Writing – original draft.

Deborah Hatcher: supervision, Validation, Writing – review and editing.

Jed Montayre: conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Visualization, Writing – review and editing.

Acknowledgments

This research was achieved with the aid of University candidature support funds. Open access publishing facilitated by Western Sydney University, as part of the Wiley - Western Sydney University agreement via the Council of Australian University Librarians.

Ethics Statement

This study received ethics approval from the Western Sydney University Human Research and Ethics Committee (approval number H14813). All participants provided written informed consent prior to enrollment in the study.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

- Andruske, C. L., and D. O'Connor. 2020. "Family Care Across Diverse Cultures: Re-Envisioning Using a Transnational Lens." *Journal of Aging Studies* 55: 100892. <https://doi.org/10.1016/j.jaging.2020.100892>.
- Australian Bureau of Statistics (ABS). 2022. Cultural Diversity of Australia. <https://www.abs.gov.au/articles/cultural-diversity-australia>.
- Australian Institute of Health and Welfare (AIHW). 2016. Health Care use by Older Australians. <https://www.aihw.gov.au/getmedia/0b26353f-94fb-4349-b950-7948ace76960/ah16-6-17-health-care-use-older-australians.pdf.aspx>.
- Australian Institute of Health and Welfare (AIHW). 2021a. Chronic Condition Multimorbidity. <https://www.aihw.gov.au/reports/chronic-disease/chronic-condition-multimorbidity/contents/what-is-multi-morbidity-and-how-common-is-it>.
- Australian Institute of Health and Welfare (AIHW). 2021b. Older Australians. <https://www.aihw.gov.au/reports/older-people/older-australians/contents/demographic-profile>.
- Australian Institute of Health and Welfare (AIHW). 2021c. Older Australians – Culturally and Linguistically Diverse Older People. <https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance/contents/demographics-of-older-australians/culturally-linguistically-diverse-people>.
- Australian Institute of Health and Welfare (AIHW). 2024. *Older Australians*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/reports/older-people/older-australians/contents/about>.
- Babacan, H., and G. K. Gill. 2012. "Developing a Cultural Responsiveness Framework in Healthcare Systems: An Australian Example." *Diversity and Equality in Health and Care* 9, no. 1: 45–55.
- Betancourt, J. R., J. Corbett, and M. R. Bondaryk. 2014. "Addressing Disparities and Achieving Equity: Cultural Competence, Ethics, and Health-Care Transformation." *Chest* 145, no. 1: 143–148. <https://doi.org/10.1378/chest.13-0634>.
- Betancourt, J. R., and A. Tan-McGrory. 2014. "Creating a Safe, High-Quality Healthcare System for All: Meeting the Needs of Limited English Proficient Populations; Comment on Patient Safety and Healthcare Quality: The Case for Language Access." *International Journal of Health Policy and Management* 2, no. 2: 91–94. <https://doi.org/10.15171/ijhpm.2014.21>.
- Bonevski, B., M. Randell, C. Paul, et al. 2014. "Reaching the Hard-To-Reach: A Systematic Review of Strategies for Improving Health

and Medical Research With Socially Disadvantaged Groups." *BMC Medical Research Methodology* 14, no. 1: 42. <https://doi.org/10.1186/1471-2288-14-42>.

Bonus, C. G., D. Hatcher, T. Northall, and J. Montayre. 2024. "Using a Co-Design Methodological Approach to Optimize Perioperative Nursing Care for Older Adult Patients From Ethnically Diverse Backgrounds: A Study Protocol." *International Journal of Qualitative Studies on Health and Well-Being* 19, no. 1: 2349438. <https://doi.org/10.1080/17482631.2024.2349438>.

Bonus, C. G., D. Hatcher, T. Northall, and J. Montayre. 2025. "Enhancing Culturally Responsive Care in Perioperative Settings for Older Adult Patients: A Qualitative Interview Study." *International Journal of Nursing Studies* 161: 104925. <https://doi.org/10.1016/j.ijnurstu.2024.104925>.

Bonus, C. G., T. Northall, D. Hatcher, and J. Montayre. 2022. "Experiences of Perioperative Care Among Ethnically Diverse Older Adult Patients: An Integrative Review." *Collegian: Journal of the Royal College of Nursing, Australia* 29, no. 6: 911–923. <https://doi.org/10.1016/j.colegn.2022.07.006>.

Braun, V., and V. Clarke. 2021. "To Saturate or Not to Saturate? Questioning Data Saturation as a Useful Concept for Thematic Analysis and Sample-Size Rationales." *Qualitative Research in Sport, Exercise and Health* 13, no. 2: 201–216. <https://doi.org/10.1080/2159676x.2019.1704846>.

Collaço, N., R. Wagland, O. Alexis, A. Gavin, A. Glaser, and E. K. Watson. 2021. "Using the Framework Method for the Analysis of Qualitative Dyadic Data in Health Research." *Qualitative Health Research* 31, no. 8: 1555–1564. <https://doi.org/10.1177/10497323211011599>.

Crotty, M. 1998. *The Foundations of Social Research*. Allen & Unwin Pty Ltd.

Curtis, E., R. Jones, D. Tipene-Leach, et al. 2019. "Why Cultural Safety Rather Than Cultural Competency Is Required to Achieve Health Equity: A Literature Review and Recommended Definition." *International Journal for Equity in Health* 18, no. 1: 174. <https://doi.org/10.1186/s12939-019-1082-3>.

Eisikovits, Z., and C. Koren. 2010. "Approaches to and Outcomes of Dyadic Interview Analysis." *Qualitative Health Research* 20, no. 12: 1642–1655. <https://doi.org/10.1177/1049732310376520>.

Elliott, J., H. McNeil, J. Ashbourne, K. Huson, V. Boscart, and P. Stolee. 2016. "Engaging Older Adults in Health Care Decision-Making: A Realist Synthesis." *Patient – Patient-Centered Outcomes Research* 9, no. 5: 383–393. <https://doi.org/10.1007/s40271-016-0168-x>.

Federation of Ethnic Communities' Councils of Australia (FECCA). 2015. Review of Australian Research on Older People from Culturally and Linguistically Diverse Backgrounds. <https://doi.org/10.4225/55/59dee30b8a176>.

Francis, J. J., M. Johnston, C. Robertson, et al. 2010. "What Is an Adequate Sample Size? Operationalising Data Saturation for Theory-Based Interview Studies." *Psychology & Health* 25, no. 10: 1229–1245. <https://doi.org/10.1080/08870440903194015>.

Hsueh, L., A. T. Hirsh, G. Maupomé, and J. C. Stewart. 2021. "Patient-Provider Language Concordance and Health Outcomes: A Systematic Review, Evidence Map, and Research Agenda." *Medical Care Research and Review* 78, no. 1: 3–23. <https://doi.org/10.1177/1077558719860708>.

Jang, S. Y., A. Oksuzyan, M. Myrskylä, F. J. van Lenthe, and S. Loi. 2023. "Healthy Immigrants, Unhealthy Ageing? Analysis of Health Decline Among Older Migrants and Natives Across European Countries." *SSM – Population Health* 23: 101478. <https://doi.org/10.1016/j.ssmph.2023.101478>.

Khatri, R. B., and Y. Assefa. 2022. "Access to Health Services Among Culturally and Linguistically Diverse Populations in the Australian Universal Health Care System: Issues and Challenges." *BMC Public Health* 22, no. 1: 880. <https://doi.org/10.1186/s12889-022-13256-z>.

- Kim, B., A. Wister, E. O'Dea, B. A. Mitchell, L. Li, and L. Kadowaki. 2023. "Roles and Experiences of Informal Caregivers of Older Adults in Community and Healthcare System Navigation: A Scoping Review." *BMJ Open* 13, no. 12: e077641. <https://doi.org/10.1136/bmjopen-2023-077641>.
- Lee, J. S., E. J. Pérez-Stable, S. E. Gregorich, et al. 2017. "Increased Access to Professional Interpreters in the Hospital Improves Informed Consent for Patients With Limited English Proficiency." *Journal of General Internal Medicine* 32, no. 8: 863–870. <https://doi.org/10.1007/s11606-017-3983-4>.
- Lincoln, Y. S., and E. G. Guba. 1985. "Naturalistic Inquiry." *International Journal of Intercultural Relations* 9: 438–439.
- Lyons, K. S., and C. S. Lee. 2018. "The Theory of Dyadic Illness Management." *Journal of Family Nursing* 24, no. 1: 8–28. <https://doi.org/10.1177/1074840717745669>.
- Malley, A. M., M. Bourbonniere, and M. Naylor. 2018. "A Qualitative Study of Older Adults' and Family Caregivers' Perspectives Regarding Their Preoperative Care Transitions." *Journal of Clinical Nursing* 27, no. 15–16: 2953–2962. <https://doi.org/10.1111/jocn.14377>.
- Markey, K. 2021. "Moral Reasoning as a Catalyst for Cultural Competence and Culturally Responsive Care." *Nursing Philosophy* 22, no. 1: e12337. <https://doi.org/10.1111/nup.12337>.
- McCusker, J., M. Yaffe, S. D. Lambert, et al. 2020. "Unmet Needs of Family Caregivers of Hospitalized Older Adults Preparing for Discharge Home." *Chronic Illness* 16, no. 2: 131–145. <https://doi.org/10.1177/1742395318789467>.
- Nguyen, T. N. M., R. Saunders, G. Dermody, and L. Whitehead. 2025. "Support Networks and Care Needs: Insights From Older Vietnam-Born Australians Living With Chronic Disease." *Nursing and Health Sciences* 27, no. 2: 1–11. <https://doi.org/10.1111/nhs.70158>.
- NSW Health. 2019. NSW Plan for Healthy Culturally and Linguistically Diverse Communities: 2019–2023. https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2019_018.pdf.
- Paradise, R. K., M. Hatch, A. Quessa, F. Gargano, M. Khaliif, and V. Costa. 2019. "Reducing the Use of Ad Hoc Interpreters at a Safety-Net Health Care System." *Joint Commission Journal on Quality and Patient Safety* 45, no. 6: 397–405. <https://doi.org/10.1016/j.jcjq.2019.01.004>.
- Polit, D. F., and C. T. Beck. 2022. *Essentials of Nursing Research: Appraising Evidence for Nursing Practice*. 10th ed. Wolters Kluwer.
- Rayan-Gharra, N., B. Tadmor, R. D. Balicer, and E. Shadmi. 2018. "Multicultural Transitions: Caregiver Presence and Language-Concordance at Discharge." *International Journal of Integrated Care* 18, no. 3: 9. <https://doi.org/10.5334/ijic.3965>.
- Semere, W., A. M. Nápoles, S. Gregorich, J. Livaudais-Toman, and L. Karliner. 2019. "Caregiving for Older Adults With Limited English Proficiency: Transitioning From Hospital to Home." *Journal of General Internal Medicine* 34, no. 9: 1744–1750. <https://doi.org/10.1007/s11606-019-05119-y>.
- Szabó, Á., and R. E. Goodin. 2024. "Comparing the Health Status of Immigrant and New Zealand-Born Older Adults in Aotearoa New Zealand: The Role of Socioeconomic Position." *Journal of Aging and Health*: 8982643241276268. <https://doi.org/10.1177/08982643241276268>.
- Tran, J. T., B. Theng, H. Serag, et al. 2023. "Cultural Diversity Impacts Caregiving Experiences: A Comprehensive Exploration of Differences in Caregiver Burdens, Needs, and Outcomes." *Cureus* 15, no. 10: 1–13. <https://doi.org/10.7759/cureus.46537>.
- Valerio, M. A., N. Rodriguez, P. Winkler, et al. 2016. "Comparing Two Sampling Methods to Engage Hard-To-Reach Communities in Research Priority Setting." *BMC Medical Research Methodology* 16, no. 1: 146. <https://doi.org/10.1186/s12874-016-0242-z>.
- Wali, N., and A. M. N. Renzaho. 2018. "Our Riches Are Our Family, the Changing Family Dynamics & Social Capital for New Migrant Families in Australia." *PLoS One* 13, no. 12: e0209421. <https://doi.org/10.1371/journal.pone.0209421>.
- White, J., T. Plompen, C. Osadnik, L. Tao, E. Micallef, and T. Haines. 2018. "The Experience of Interpreter Access and Language Discordant Clinical Encounters in Australian Health Care: A Mixed Methods Exploration." *International Journal for Equity in Health* 17, no. 1: 151. <https://doi.org/10.1186/s12939-018-0865-2>.
- World Health Organization (WHO). 2022. Ageing and health. <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.
- Yehekel, A., and S. Rawal. 2019. "Exploring the 'Patient Experience' of Individuals With Limited English Proficiency: A Scoping Review." *Journal of Immigrant and Minority Health* 21, no. 4: 853–878. <https://doi.org/10.1007/s10903-018-0816-4>.