

Older rural women's pre-visit planning and involvement in South Australian general practices: A candidacy theory perspective

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ABSTRACT

Objective: To explain older rural women's participation in clinical decision-making with GPs and explore factors associated with their pre-visit planning and involvement in treatment processes.

Methods: A sequential, theory-driven mixed-method study was conducted. Women aged 65 years or above who had visited a GP three months prior were recruited from five rural towns in South Australia through the local Rotary Club. Data collection utilised an 18-item scale and a semi-structured interview guide. Quantitative data were analysed using chi-square tests and multinomial logit models, whereas qualitative data were coded into themes. As applied in the discussion, the candidacy theory provided a framework for further adding meaning to the results.

Results: Seventy-one older rural women completed surveys. Across the domains, including health knowledge, GP visit preparation, participation in discussion, and attitudes towards shared decision-making, most items indicated a moderate level of women's health knowledge and involvement in GP treatments. Multivariate analysis revealed having less than a basic education, not speaking English at home, and being in the youngest-old age group (65–74 years) were positively associated with low levels of pre-visit planning and involvement in GP treatments. Analysis of interviews with 21 women identified three themes: capacity for health planning and preparedness, communication styles and preferences, and accessibility and continuity of care.

Conclusion: The findings of this study underscore the urgent need for redesigning GP services. By considering the intersection between behavioural and clinical aspects of older rural women's pre-visit planning and involvement in GP treatment processes in rural South Australia, we can inspire positive change in healthcare delivery.

Practice Implications: Practice Implications: our study provides actionable insights on how and where to intervene to enhance older rural women's capacity to engage in pre-visit planning for successful GP consultations. This knowledge can empower healthcare professionals and policymakers to implement effective strategies.

1. Introduction

In the fiscal year 2022–23, 95 % of older Australians (≥ 65 years) saw a general practitioner (GP) at least once, and the frequency of GP visits rises with age (i.e., young-old age (65–75 years): 93.5 %; middle-old age (75–84 year): 96.6 %; and oldest-old age (≥ 85 years): 96.1 %) [1]. About 10 % of older Australians consulted with a GP for urgent medical

care, and seeing an after-hours GP was 4 % of them [2]. These statistics indicate the importance of GP consultations for older Australians; ensuring quality and safety relies on GPs' and patients' knowledge, self-efficacy, and input [3,4]. GPs often serve as the primary point of contact, providing essential information, preventive care measures, guidance for self-management of health conditions, and referrals for further health services [5]. However, patient involvement in GP

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treatment processes is often lacking, with GPs making treatment decisions and patients taking a passive role [6].

The concepts of ‘pre-visit planning’ and ‘involvement with treatments’ are important healthcare issues nationally. It is well recognised that older people in Australia who live alone, have lower levels of education, or are non-English speakers are likely to have a lack of access to health information, poor health communication skills, and inadequate healthcare and service navigation skills [7,8]. These factors may influence why and how they engage with GP services. The Royal Australian College of General Practitioners confirms that about 20 % of patients seeking GP services are for reasons unrelated to clinical issues [9]. Inappropriate or poor engagement with GPs is associated with low levels of adherence to clinical advice, preventive care, and medication management, leading to issues such as overweight, increased hospital admissions, and mortality [10–14]. Furthermore, the Australian Commission on Safety and Quality in Health Care (ACSQHC) reports limitations in how patients plan, approach and engage health. Medical services contribute approximately 3–5 % to annual healthcare expenditures [15]. Older Australians often exhibit poor health status. Coupled with comorbidities and low socio-economic status, these factors limit their ability to plan pre-visit and participate in clinical decision-making [16–18].

Older rural Australians’ involvement in treatment processes, especially within the context of GP services, can be problematic for various reasons [8,17]. For example, in rural Australia, there is a high prevalence of chronic conditions among older adults, a shortage of GPs, and a scarcity of resources [16]. Consequently, consultation time is limited, and doctors must collect patient details to determine appropriate diagnostic tests and immediate treatments [19]. Inadequate consultation time leads to some challenges. For example, fewer doctor questions about patient symptoms, insufficient clinical examination, and a lack of discussion about post-visit care plans [20]. Limited consultation time also restricts patients from asking questions and participating in clinical decisions [8]. Given the common lack of health knowledge among older rural Australians, and about 25 % were born overseas (i.e., culturally and linguistically diverse people) who speak a language other than English at home, communication between older rural adults and GPs becomes asymmetrical [17,21]. Complaints reported by older Australians are as follows: GPs did not listen to them (17.14 %) and showed a lack of respect (17.15 %) [2]. This is particularly true for older rural women who were found to be less satisfied with clinical visits than their counterparts, possibly due to a lack of preparation for clinical visits and treatment decisions based on inadequate information [22].

Several tools have been developed to improve patient pre-visit planning and shared decision-making across healthcare settings. Examples include the American Medical Association’s (2015) ‘10 steps to pre-visit planning’ [23]; O’Malley et al.’s ‘previsit patient activation card’ [24]; Jacks et al.’s ‘Patient Guide for Doctor’s Visit’ [5]; Lowery et al.’s ‘web-based tool of for shared decision making’ [25]; Daraiseh et al.’s ‘iBDecide’ [26]; Nunes et al.’s ‘digital shared decision-making tool’ [27]; and more. Studies evaluating the tools reported greater patient activation and satisfaction with care, but no differences were found in medication adherence, shared decision-making, and patients’ trust [5, 19]. These tools have been developed to help doctors avoid irregularities during doctor-patient consultations. Older rural patients’ empowerment through pre-visit planning and participation in consultations in a goal-oriented way and taking an active role in decision-making remain largely ignored [28].

Studies in Australia exploring patient activation are primarily conducted in metropolitan and regional healthcare settings [29–33]. The Government of South Australia advocates for patient partnerships in healthcare settings. Still, gaps remain in understanding the pre-visit planning and involvement of older rural adults, particularly women, in GP services. We aim to explain older rural women’s participation in clinical decision-making with GPs and explore factors associated with their pre-visit planning and involvement in treatment processes.

2. Material and methods

2.1. Study design

A mixed-methods study was conducted, applying sequential theory-driven integration of quantitative and qualitative data. Candidacy theory was used to discuss the study results and frame theoretical and practical explanations of older rural women’s journeys in engaging with GP treatment processes.

2.2. Study settings, participants, and sampling

Our research was carried out in five rural towns in South Australia from January 2021 to April 2022. Data were collected from older rural women aged 65 years and above who had visited a GP within three months prior to the commencement of the study. A survey questionnaire containing the Participation Information Sheet was administered using SurveyGizmo software. An email request was forwarded to the local Rotary Club to disseminate the online survey, and printed copies were made available by the Club for women who preferred them. The local Rotary Club was chosen for its diverse membership, acknowledging that migration patterns, urban growth, and ethnic and religious diversity have challenged the traditional cultural authority of Rotary Clubs in Australia [34,35]. This club operates in a diverse community, with approximately 22 % of the population born overseas and 13.6 % speaking a language other than English at home. It is important to note that the Rotary Club contacted other community organisations to promote the study and distribute materials among potential participants. Participants consented to participate in the survey by completing and returning the questionnaire to the investigators. Those expressing interest in further participation were contacted by the investigators separately for either face-to-face or telephone interviews (Supplementary File 1 – Interview Guide). Verbal consent was obtained from participants at the beginning of audio-recorded interviews (Fig. 1).

2.3. Theoretical framework

We used domains and mechanisms of the Candidacy theory to provide theoretical underpinnings for this study’s findings [36,37]. This framework, rooted in a doctor-patient relationship-focused philosophy, describes the complexities of patient involvement in health services, including self-efficacy and relationship dynamics [36]. It comprises seven stages: identification of candidacy, navigation of services, permeability of services, appearance at services, adjudication by professionals, use or resistance to services, and local operating conditions. Each domain indicates how patient involvement manifests in health services (see Table 1) [36,37]. We applied this framework in the discussion section of this study to explain and unpack the structures of older rural women’s preparation for and involvement in GP consultations.

2.4. Study variables

The survey has two sections: demographics and involvement in GP treatments: the demographics section covers age, education, and language spoken at home. The 18-item patient involvement scale was developed through a scoping review of the literature and consultations with local GPs and academics [38]. There were four sub-scales within the scale: health knowledge (3 items), GP visit preparation (4 items), participation in discussion (7 items), and attitudes towards shared decision-making (4 items). All items were rated on a 5-point Likert scale (1 = “strongly disagree” to 5 = “strongly agree”).

The variables were categorised as follows:

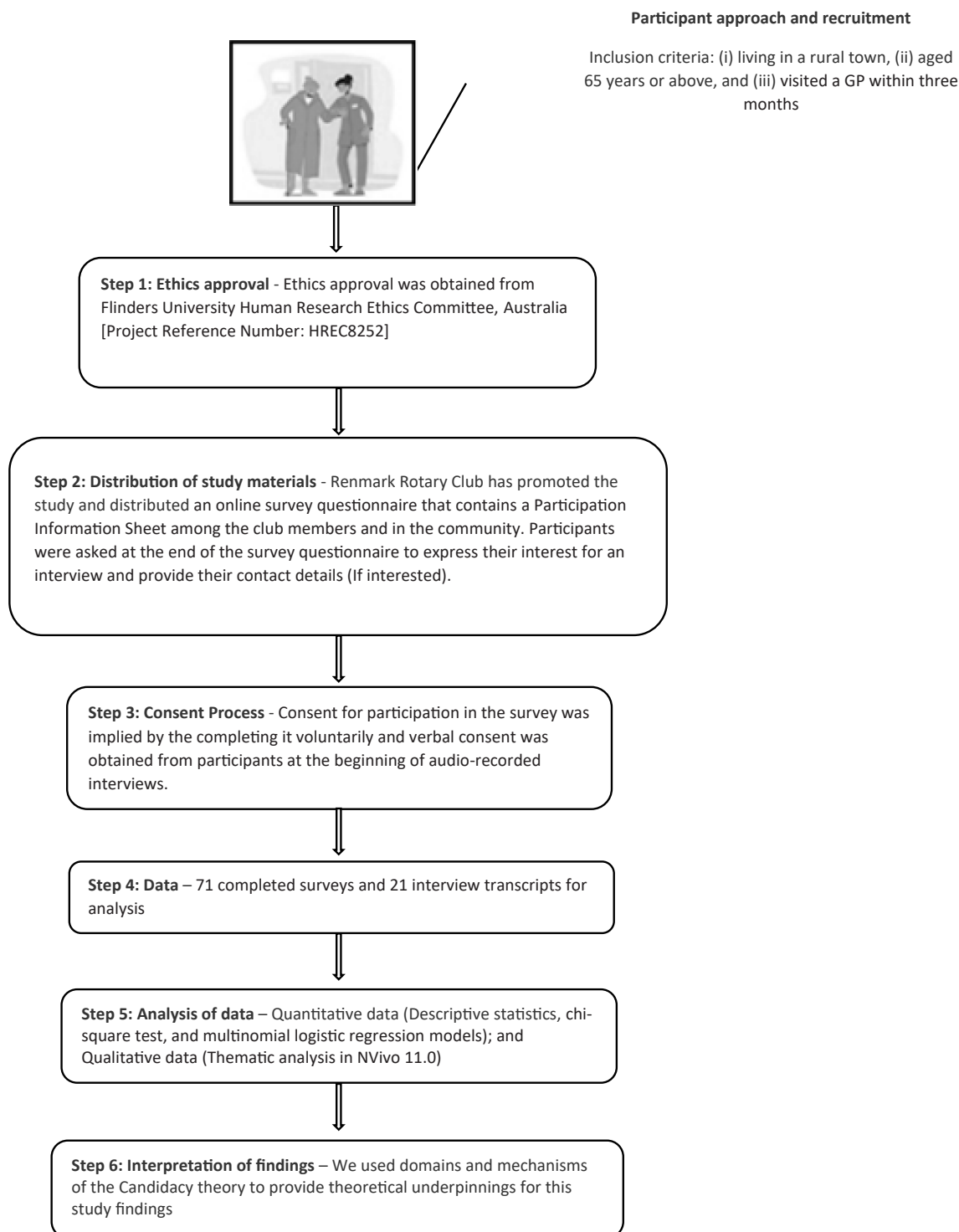


Fig. 1. illustrates the methodological steps taken in this study.

- Age category: Lee et al.'s categories were used, including youngest-old (65–74 years), middle-old (75–84 years), and oldest-old (85 years or over) [39].
- Level of education: The International Standard Classification of Education (ISCED) was employed, categorising education levels as less than basic or basic (no formal education or primary schooling); intermediate (secondary and post-secondary non-tertiary); and advanced (tertiary education) [40].
- Language: Participants were categorised as either speaking or not speaking English at home.
- For bivariate and multivariate analysis of survey data, Bloom's cutoff was applied across the sub-scales (health knowledge, visit preparation, participation in discussion, and attitudes towards shared decision-making), including high (80–100 %), moderate (60–79 %), and low levels (less than 60 %) [41].

In interviews, older rural women were asked to describe their

Table 1
Stages of older rural women's involvement in GP clinics.

Stages	Description	Elements
Identification of candidacy	Self-awareness of needing a service	Education, health literacy, etc.
Navigation of services	Knowledge of availability and accessibility of services.	Knowledge of barriers to accessing services, e.g. transportation and appointment times.
Permeability of services	Use of health services. Includes levels of gatekeeping within a service.	Complexity in the appointment and referral process and cultural alignment of services.
Appearance at services	Ability to assert their candidacy by presenting at services.	Capacity to describe health problems and articulate care needs.
Adjudication by professionals	Candidacy is judged by clinicians, subsequently influencing the person's progression through services and access to care.	Adjudication may disadvantage certain people by perceiving them as either 'deserving' or 'undeserving'.
Use or resistance to services	A person may refuse offers at multiple stages in their journey to treatment.	Resisting offers for appointments, referrals, and treatment.
Local operating conditions	Societal and macro-level factors that influence candidacy.	Availability of local resources.

preparation for and engagement in clinical consultations with GPs and discuss facilitators and barriers to patient participation in decision-making.

2.5. Data analysis

Survey data was exported from SurveyGizmo to SPSS VERSION 27 for analysis. Descriptive statistics such as frequencies, percentages, median, and standard deviation were used to describe explanatory and outcome variables. The chi-square test determined the association of demographic variables with health knowledge, GP visit preparation, participation in discussion, and attitudes towards shared decision-making. Multinomial logistic regression used odds ratios (OR) with 95 % confidence intervals (CIs) and $p < 0.05$ to identify risk factors for involvement in GP treatments. A goodness-of-fit test was conducted to check model fitness (Deviance) = 0.142. NVivo 11.0 was used by two investigators (MH and HG) to sort qualitative data independently. Coding was undertaken iteratively, using an inductive approach that involved multiple readings of each transcript, allowing codes to emerge from the data [42]. Codes were compared, and discrepancies were resolved through reflection and discussion to ensure coding consistency. Data saturation was achieved when no new codes emerged, upon which interview recruitment ceased. Codes were then independently sorted into themes and compared, with a discussion between coders (MH and HG) to compare and resolve discrepancies.

2.6. Ethics

Ethics approval was obtained from Flinders University Human Research Ethics Committee, Australia [Project Reference Number: HREC8252]. Research procedures followed ethical guidelines, ensuring that voluntary participation and informed consent were obtained prior to commencing surveys and interviews. Audio recordings and transcripts of interviews were stored securely on password-protected servers and devices. Surveys and transcripts were anonymised to ensure confidentiality.

3. Results

3.1. Quantitative findings

Seventy-one older rural women completed surveys. The majority of women (71.8 %, $n = 51$) were within the age range of 65–74, with a mean age of 72.31 (SD: 5.9). Approximately 15.5 % of participants had less than basic education, while the majority (54.9 %, $n = 39$) had completed high school. Additionally, English was reported as a second language by 36.6 % ($n = 26$) of women (see Table 2).

Across the domains, including health knowledge, GP visit preparation, participation in discussion, and attitudes towards shared decision-making, most items indicated a moderate level of women's involvement with GP visits (see Table 3). However, five items received scores ranging from low to neutral, indicating a perceived lack of self-efficacy in clinical consultations. These items were: initiating a discussion about post-visit care plan (M: 2, IQR: 1); requesting a thorough examination of symptoms (M: 3, IQR: 2); having prior knowledge about the risk and side effects of proposed medications/treatments (M: 3, IQR: 2); reading online information/books/brochures about symptoms/diseases (M: 3, IQR: 1); and expressing dissatisfaction about treatment (M: 3, IQR: 2).

Chi-square tests revealed significant associations between involvement in clinical consultations with GPs and the women's age, education, and language (see Table 4). Specifically, health knowledge and preparation for GP visits exhibited significant associations with the women's educational attainment ($p < .001$) and primary language spoken at home ($p < .001$). In addition, participation in discussions and attitudes towards shared decision-making were found to be associated with their age ($p = .028$ and $p = .002$, respectively), level of education ($p < .001$), and language ($p < .001$).

Table 5 presents the polytomous logistic models explaining the associations between demographic factors and older rural women's involvement in clinical consultations with GPs. It is shown that if a woman is in the youngest-old group, the woman having moderate health knowledge relative to low is increased by 8.09 units, and a middle-old woman having moderate health knowledge relative to low is increased by 9.29 units than an oldest-old woman while considering all other predictor variables constant. The chance of having high health knowledge among the youngest-old women is increased by 1.15 units to the oldest-old woman. In relation to language, particularly speaking English at home, emerged as an influential factor, significantly enhancing the odds of possessing moderate-to-high health knowledge (OR = 11.77, 95 % CI: 2.59, 13.5; and OR: 8.27, 95 % CI: 2.51, 18.46, respectively) compared to those who do not speak English at home. For youngest-old women, the chance of preparing for GP visits is increased by 2.41 and 2.00 units compared to oldest-old women. In contrast, middle-old women have a 5.25 units higher chance of moderate preparation than oldest-old women. Older rural women with less than basic or basic education have a 2.85 and 6.25 units lower opportunity of preparation for

Table 2
Sample characteristics in this study.

Variables	Percentage (%)	Number (N = 71)
Age group (years)		
65–74	71.8	51
75–84	22.5	16
85 +	5.6	4
Educational qualifications		
No formal education	15.5	11
Primary school	21.1	15
High school	33.8	24
Bachelors	14.1	10
Masters and above	7.0	5
Others (certificate, diploma, etc.)	8.5	6
Language speaking at home		
Speaking English at home	63.4	45
Not speaking English at home	36.6	26

Table 3

Descriptive statistics of the indicators of Involvement in Clinical Communication Scale.

Domains and items	Median (IQR)	Range (Min-Max)
Health knowledge (3 items)		
I understood the explanation of my problems provided by the practitioner (HK1)	4.0 (2)	(1 – 5)
I was aware of a range of treatment options available to me (HK2)	4.0 (2)	(1 – 5)
I had prior knowledge about the risks and side effects of the proposed medications/treatment (HK3)	3.0 (2)	(2 – 5)
Visit Preparation (4 items)		
I read online information/books/brochures about my symptoms/diseases for the consultation (VP1)	3.0 (1)	(1 – 5)
I discussed with family members/friends for a better understanding of symptoms/diseases prior to consultation (VP2)	4.0 (1)	(2 – 5)
I scheduled an appointment with a practitioner well-known to me (VP3)	4.0 (1)	(2 – 5)
I took all necessary documents (VP4)	4.0 (1)	(2 – 4)
Participation in discussion (7 items)		
I was genuinely interested to discuss my problems (PD1)	4.0 (1)	(3 – 5)
I heard all the questions asked by the clinician (PD2)	4.0 (2)	(2 – 5)
I contributed to all treatment option discussions and decisions (PD3)	4.0 (2)	(1 – 5)
I told my needs and preferences (PD4)	4.0 (0)	(2 – 5)
I informed the practitioner about the effects of illness on my daily life (PD5)	4.0 (1)	(2 – 5)
I requested a thorough examination of my symptoms (PD6)	3.0 (2)	(1 – 4)
I initiated a discussion about a post-visit care plan (PD7)	2.0 (1)	(1 – 5)
Attitudes towards shared decision-making (4 items)		
I asked all the questions that I had in my mind (AC1)	4.0 (3)	(2 – 5)
I answered all the questions asked by the clinician (AC2)	4.0 (2)	(2 – 5)
I shared detailed information about my symptoms and diseases (AC3)	4.0 (2)	(2 – 5)
I expressed my opinion when I was dissatisfied with the treatment (AC4)	3.0 (2)	(2 – 5)

Notes: Max indicates Maximum; Min indicates Minimum; IQR indicates Inter-quartile Range.

GP visits than those with advanced education. Similarly, this chance of preparation for GP visits decreased by 1.46 units for women with intermediate education compared to those with advanced education. Furthermore, age, education, and language exert significant influence when participating in discussions with GPs. The youngest-old group shows a 2.68 unit decrease in active participation compared to the oldest-old group. For women with less than basic (or basic) or intermediate education, moderate participation in the discussion was 2.19 and 1.01 units lower, respectively, than those with advanced education. In addition, less than basic or basic education was 3.35 times more likely to impact the women's high participation in discussion than those with advanced education. Correspondingly, women speaking English at home are 4.73 times more likely to participate actively in discussions than those who do not speak English at home.

3.2. Qualitative findings

Three themes emerged throughout the analysis of semi-structured interviews with 21 older rural women: capacity for health planning and preparedness, communication styles and preferences, and accessibility and continuity of care.

Theme 1: Capacity for health planning and preparedness.

This theme uncovered steps older rural women took to prepare for GP visits and the barriers they encountered due to varying levels of health literacy. While many relied on their experiences, a few women's stories exposed efforts to equip themselves with relevant health

information and questions before consultations. For example, one woman said, "you don't need nothing to prepare yourself for the doctor" (Interview 9). In contrast, "I make sure to take notes in and make sure I write things down prior to my appointment", shared one woman (Interview 17), which was reinforced by another woman: "I write things down exactly what I want to ask [the doctor]" (Interview 6).

Most women expressed satisfaction when their GP provided them with more support to improve their understanding of their health issues. For example, one woman shared, "[I had] my eyes checked with the eye specialist, and he explained everything to me and also gave me about four pages [of relevant information about the condition] to read through" (Interview 11). Another woman appreciated being asked if they had any follow-up questions for clarification during their appointment: "I've been asked supplementary questions about my concerns regarding [my] skin lesions, [my] thinking about that has been changed ... within minutes" (Interview 1). Such guidance helped women's education and improved the trust and relationship between patients and their GPs.

Theme 2: Communication styles and preferences.

Several women voiced a strong desire for doctors who provided medical explanations and did so with empathy and patience. When asked, "What do you think a successful consultation looks like for you?" One woman shared, "A doctor who is willing to listen to what you have to say, and make an assessment about what your health needs are, and not to be worried about the whole consultation" (Interview 2). However, a few women reported instances where medical jargon was used without clarification or their involvement. For example, "[The doctor] stood back behind everybody ... most of his team there and they were talking ... Using terminology, I wasn't sure of ... [and I said] what is going on?", as one woman noted (Interview 15).

Due to limited appointment times, some women often felt they had to prioritise their concerns. This left them unasked and unanswered questions and a sense of being unheard. One woman stated, "[in one of my appointments] I spent 10 min. It was a really rushed consultation. [The doctor] wasn't really interested at all. The second [appointment] took a bit more interest, but mainly spoke about my heritage more than what my problems were" (Interview 9). Another woman stated, "They [the doctor] did not know what I was talking about [referring to the participant's medical history], and I said, look on my computer. Apparently ... she [the doctor] didn't have time" (Interview 6). This pressure undermined the thoroughness of healthcare discussions and unaddressed health issues. Conversely, positive experiences highlighted the value of active listening and engagement from doctors. One woman stated, "They listen to what I have to say, and I have got no problems" (Interview 14). Another woman highlighted the importance of their doctor listening and engaging with them by stating, "I actually think [the doctor] listens to me and makes eye contact and everything you want. They're listening... I feel comfortable enough to talk to him [the doctor]" (Interview 15).

Some women also expressed a keen interest in more visual and written aids to complement verbal explanations. One said, "[This] particular specialist I'm thinking of always draws a picture ... and says, 'This is what it's like, this is what it should be' ..." (Interview 9). This was reinforced by another participant who stated, "[The doctor] explained what was causing my reflux ... after my CT scan, and he explained it all to me and gave me a diagram of what it all means" (Interview 23). Furthermore, one woman said: "We have a lot of doctors who are from overseas. Some of them had really harsh accents. It can be difficult to understand what they say. Always ask him to repeat it. I don't understand that. They probably really don't understand at all. Well, they're using a word that just made me question, so I ask them to write it down" (Interview 1).

Theme 3: Accessibility and continuity of care.

The women described accessibility as their ability to see a preferred doctor in a timely manner. One woman lamented, "15 years ago, you could go to the same doctor ... now ... you just can't get appointments" (Interview 1). Another woman echoed the same concern by stating,

Table 4

Participants' characteristics and Involvement in communication scores across different sub-categories (N = 121).

Variables	Categories	Health Knowledge			Chi-square	df	p
		Low n (%)	Moderate n (%)	High n (%)			
Age	Youngest-old (65 –74 years)	18 (35.3 %)	14 (27.5 %)	19 (37.3 %)	7.484	4	.103
	Middle-old (75 –84 years)	8 (50.0 %)	6 (37.5 %)	2 (12.5 %)			
	Oldest-old (85 years and above)	0 (0.0 %)	3 (75.0 %)	1 (25.0 %)			
Level of education	Less than basic or basic (no formal education or primary schooling)	17 (65.4 %)	8 (30.8 %)	1 (3.8 %)	30.993	4	< .001
	Intermediate (Secondary and post-secondary non-tertiary)	8 (26.7 %)	13 (43.3 %)	9 (30.0 %)			
	Advanced (Tertiary education)	1 (6.7 %)	2 (13.3 %)	12 (80.0 %)			
Language speaking at home	Speaking English at home	6 (13.3 %)	18 (40.0 %)	21 (46.7 %)	30.142	2	< .001
	Not speaking English at home	20 (76.9 %)	5 (19.2 %)	1 (3.8 %)			
GP Visit Preparation		Low n (%)	Moderate n (%)	High n (%)			
Age	Youngest-old (65 –74 years)	5 (9.8 %)	29 (56.9 %)	17 (33.3 %)	.919	4	1.00
	Middle-old (75 –84 years)	1 (6.3 %)	9 (56.3 %)	6 (37.5 %)			
	Oldest-old (85 years and above)	0 (0.0 %)	3 (75.0 %)	1 (25.0 %)			
Level of education	Less than basic or basic (no formal education or primary schooling)	4 (15.4 %)	19 (73.1 %)	3 (11.5 %)	26.121	4	< .001
	Intermediate (Secondary and post-secondary non-tertiary)	2 (6.7 %)	20 (66.7 %)	8 (26.7 %)			
	Advanced (Tertiary education)	0 (0.0 %)	2 (13.3 %)	13 (86.7 %)			
Language speaking at home	Speaking English at home	2 (4.4 %)	20 (44.4 %)	23 (51.1 %)	16.990	2	< .001
	Not speaking English at home	4 (15.4 %)	21 (80.8 %)	1 (3.8 %)			
Participation in Discussion		Low n (%)	Moderate n (%)	High n (%)			
Age	Youngest-old (65 –74 years)	14 (27.5 %)	19 (37.3 %)	18 (35.3 %)	10.456	4	.028
	Middle-old (75 –84 years)	5 (31.3 %)	10 (62.5 %)	1 (6.3 %)			
	Oldest-old (85 years and above)	0 (0.0 %)	4 (100.0 %)	0 (0.0 %)			
Level of education	Less than basic or basic (no formal education or primary schooling)	14 (53.8 %)	11 (42.3 %)	1 (3.8 %)	24.2	4	< .001
	Intermediate (Secondary and post-secondary non-tertiary)	5 (16.7 %)	16 (53.3 %)	9 (30.0 %)			
	Advanced (Tertiary education)	0 (0.0 %)	6 (40.0 %)	9 (60.0 %)			
Language speaking at home	Speaking English at home	2 (4.4 %)	24 (53.3 %)	19 (42.2 %)	35.089	2	< .001
	Not speaking English at home	17 (65.4 %)	9 (34.6 %)	0 (0.0 %)			
Attitudes Towards Shared Decision-making		Negative n (%)	Neutral n (%)	Positive n (%)			
Age	Youngest-old (65 –74 years)	15 (29.4 %)	8 (15.7 %)	28 (54.9 %)	16.247	4	.002
	Middle-old (75 –84 years)	5 (31.3 %)	6 (37.5 %)	5 (31.3 %)			
	Oldest-old (85 years and above)	0 (0.0 %)	4 (100.0 %)	0 (0.0 %)			
Level of education	Less than basic or basic (no formal education or primary schooling)	14 (53.8 %)	8 (30.8 %)	4 (15.4 %)	30.532	4	< .001
	Intermediate (Secondary and post-secondary non-tertiary)	6 (20.0 %)	10 (33.3 %)	14 (46.7 %)			
	Advanced (Tertiary education)	0 (0.0 %)	0 (0.0 %)	15 (100.0 %)			
Language speaking at home	Speaking English at home	0 (0.0 %)	14 (31.1 %)	31 (68.9 %)	49.501	2	< .001
	Not speaking English at home	20 (76.9 %)	4 (15.4 %)	2 (7.7 %)			

“Making the appointment is the most difficult thing because it’s very difficult to get an appointment with a GP of your choice in the clinic” (Interview 4). These statements encapsulated the frustration and fatigue of accessing continuity of care with the same doctor. A long-term relationship with a doctor was not just about familiarity; it allowed for a nuanced understanding of a patient’s health history, preferences, and social context, leading to more personalised and effective care. The conflict between time versus choice of doctor is reflected in this representative example: “Many people would rather have a doctor that they always go to, but then they’ve got to wait some weeks before they can get in to see that doctor” (Interview 14). The anxiety around overlooked health details speaks to the potential clinical risks associated with discontinuous care.

Some women also desired a healthcare system that recognises and adapts to the unique challenges of rural health services delivery. For example, one woman said, “I think if you want to stay fit and healthy, you need to be able to access GP and allied health benefits. Particularly as you get older, this becomes more important” (Interview 1). Another woman said: “... the last appointment didn’t involve medications; it just involved further consultation with the mental health team. But other than that, I made all my own appointments and I had to argue with him

for an Aboriginal mental health worker because he was just going to send me to where they usually send. Yeah, he didn’t take my cultural considerations into effect at all” (Interview 18).

Feeling heard and understood by one’s doctor contributed to women’s sense of security and trust in their healthcare journey, as expressed in this example: “I see him [the same general practitioner] every month. Yep, like us. So yeah, yeah. So, I think it’s quite good the relationship is very good. I don’t like the idea of him moving and leaving” (Interview 17). Another participant shared, “The most important thing to me is having contact with a GP of my choice ... a doctor that I’m familiar with and who’s familiar with me ... I can probably make an appointment to see somebody else. But what’s the point in that?” (Interview 4). These sentiments underscored the holistic nature of healthcare, where emotional well-being was intertwined with clinical care.

4. Discussion and conclusion

This study’s mixed-method approach revealed some intriguing findings and new insights relating to older rural women’s pre-visit planning and involvement in the GP treatment process in South

Table 5

Multinomial logistic regression models explaining the association between health knowledge, visit participation, involvement in discussion, and attitudes in discussion.

Variables	Category	Health Knowledge		GP Visit Preparation		Participation in Discussion		Attitudes Towards Shared Decision-making	
		Moderate OR (95 % CI)	High OR (95 % CI)	Moderate OR (95 % CI)	High OR (95 % CI)	Moderate OR (95 % CI)	High OR (95 % CI)	Neutral OR (95 % CI)	Positive OR (95 % CI)
Age (Years)	Youngest-old	8.09 (2.13, 3.07)	1.15 (1.34, 9.87)	2.41 (7.07, 8.22)	2.00 (1.30, 3.08)	2.68 (4.48, 1.60)	1.00	1.00	.55 (.031, 9.74)
	Middle-old	9.29 (1.99, 4.34)	4.04 (4.03, 4.04)	5.25 (3.33, 8.27)	1.35 (1.35, 1.34)	6.02 (6.01, 6.01)	1.00	1.00	1.09 (1.09, 1.09)
	Oldest-old	-	-	-	-	-	-	-	-
Education	Less than basic or basic	1.47 (.14, 5.67)	.048 (.00, .766)	2.85 (3.24, 2.51)	6.25 (8.39, 4.66)	2.19 (2.50, 1.93)	3.35 (5.39, 2.08,)	1.00	1.00
	Intermediate	4.57 (.44, 7.94)	.66 (.08, 5.18)	1.46 (8.77, 2.43)	1.19 (1.19, 1.18,)	1.01 (4.57, 2.45)	7.44 (7.44, 7.44)	1.00	1.00
Language	Advanced	-	-	-	-	-	-	-	-
	Speaking English at home	11.77 (2.59, 13.50)	8.27 (2.51, 18.46)	1.31 (.19, 8.95)	14.23 (.86, 236.47)	4.73 (2.46, 8.22)	1.00	1.00	1.00
	Not speaking English at home.	-	-	-	-	-	-	-	-

*The reference category is low or negative

* Coefficients in boldface are statistically significant at $p < 0.05$

*System missing is 1.00

Australia. The application of Candidacy Theory allowed for a nuanced understanding of how demographic, social, and behavioural factors influenced older rural women's healthcare experiences, underscoring the importance of this research in shaping healthcare policies and practices.

4.1. Quantitative insights on the associated factors

Our quantitative findings indicated that age, educational attainment, and language speaking at home significantly influenced older rural women's involvement in GP treatment processes. Younger old age participants (65–74 years) demonstrated higher health knowledge and proactive engagement in the GP treatments. This trend may reflect individual factors such as generational differences in education levels, health information access, or healthcare system comfort. Younger participants might also possess better physical mobility and cognitive abilities, enhancing their ability to seek and manage healthcare independently. This aligns with the 'Identification of Candidacy' domain, suggesting that recognising one's health needs and knowing when and how to seek care can vary significantly across different age groups [36, 37].

With no exception, older rural women with higher educational levels were more likely to participate actively in their healthcare. This could be due to better health literacy, which empowers individuals to understand health information, navigate complex healthcare systems, communicate effectively with healthcare providers, and enhance their capacity to assert their candidacy. Education equips them with the knowledge and confidence required to make informed decisions about their health. Our findings are broadly aligned with other Australian studies showing associations between poor health access and low educational attainment and between higher educational attainment and health expectancies [43,44].

Language proficiency, particularly in English, strongly influenced the healthcare engagement of older rural women in our study. Comfort in interactions was likely due to the fewer communication barriers, in general, and the capacity to understand health-related information [7, 8]. This finding was critical in rural towns with few multilingual healthcare services; professional and family interpreters may be scarce. For example, a prior Australian study showed that poor health literacy is often mirrored among family members, with family interpreters tending to advocate as opposed to undertaking direct translation [45]. Patients, families, or professional interpreters' ability to communicate effectively

is essential for navigating healthcare services, as posited in the 'Navigation of Services' domain of Candidacy [36].

4.2. Qualitative insights on the lived experience

The qualitative narratives are instrumental in understanding the applications and limitations of the Candidacy Theory in rural healthcare settings, particularly highlighting the domains of "Adjudication by Professionals" and "Use of Services" [36]. Many participants shared detailed accounts of their proactive measures to prepare for GP visits. This included researching their symptoms, preparing lists of questions, and gathering medical records, which align with the "Appearance at Services" stage of Candidacy Theory [36,37]. These actions indicate a high level of engagement and a deliberate effort to maximise the utility of their healthcare interactions. However, despite such preparation, several women reported feeling that healthcare providers did not adequately acknowledge their efforts, which points to potential shortcomings in the "Adjudication by Professionals" domain [36]. This discrepancy suggests that while patients may present themselves as informed and active participants, healthcare systems and providers may not always be equipped or willing to reciprocate this engagement effectively [46].

Participants frequently highlighted communication as a facilitator and a barrier to adequate healthcare. For those who felt heard and understood by their GPs, there was a notable increase in satisfaction and perceived quality of care, consistent with healthcare research reported internationally [47,48]. Conversely, instances where medical jargon was used without adequate explanation or where consultations felt rushed and impersonal led to feelings of frustration and disengagement. This aspect underscored the importance of effective communication in healthcare, resonating with the "Use of Services" domain, where the quality of interaction can significantly impact the patient's experience and outcomes [36].

The narratives also touched on systemic barriers that affected their ability to access and utilise healthcare services. Issues such as long waiting times for appointments, limited availability of specialists, and geographic isolation exacerbated the challenges faced by these women, influencing their "Navigation of Services" [36,37]. Despite showing high levels of individual agency and effort, the structural limitations within the healthcare system often hinder their ability to achieve optimal care. Structural barriers to healthcare have consistently and universally been identified as an unresolved issue in health access and provision that

diminishes healthcare participation and equity, particularly among rural and ethnic minority populations [49,50]. This conflict highlights a critical area of focus for healthcare providers and policymakers: to enhance the permeability of services and ensure that the healthcare system is responsive to the needs of all members of rural populations.

4.3. Conclusions

Our study has offered profound insights into the factors influencing the participation of older rural women in the GP treatment process in South Australia. The study highlights the pivotal roles of patient capacity to understand health information to formulate questions in preparation for GP visits, their communication preferences, and the levels of healthcare accessibility experienced. These factors shape healthcare experiences, with person-centred care emerging as a significant enhancer of patient engagement and satisfaction. This approach improves the quality of interactions between patients and providers and aligns healthcare delivery with patients' actual needs and preferences, promoting better health outcomes.

This study has limitations. The study was conducted in a local rural area in Australia, and the sample size is small, which precludes its generalisability to other samples of rural older women in the region and across Australia. Also, using an English-language survey and interview questions for data collection could have impacted participation rates and the responses from the women who participated. Despite these limitations, the findings highlight potential benefits associated with targeted interventions to enhance older women's access to health-related information and participation in their health care. This may be achieved by optimising health information delivery, increasing the availability of healthcare providers in rural settings, and ensuring effective patient-provider communication.

4.4. Practice implications

Our study findings underscore the complexity of healthcare engagement and the need for healthcare systems to address measurable demographic factors and patients' subjective experiences. They highlight the importance of recognising older patients' candidacy based on demographic predictors and responding to their needs and experiences within healthcare interactions. Addressing these discrepancies is crucial for developing more responsive, equitable, and effective healthcare services for older rural women.

The literature documents the influence of demographic factors such as age, gender, education, and language proficiency on healthcare engagement. For instance, several studies validate our findings by demonstrating how these factors significantly affect health literacy and access among older adults, especially in rural settings [51–54]. This aligns with our quantitative data showing that younger age groups, individuals with higher educational attainment, and English speakers are more proactive in their healthcare management. These broader studies also note this pattern [8,55]. This study deepens our understanding of the ways older women approach this matter, highlighting the importance of considering gender in developing health promotion programs. The role of education in enhancing health literacy and healthcare engagement and providing these older patients with resources are crucial to addressing discrimination in this cohort. Several studies emphasise the transformative role of education in empowering individuals to navigate complex healthcare systems more effectively [56–58]. This literature supports our observation that higher educational levels correlate with a greater likelihood of engaging in pre-visit planning and active participation in healthcare interactions. Furthermore, few studies discuss the significant impact of language barriers on patient-provider interactions and health outcomes [57,58]. Their findings corroborated our observations that language proficiency, particularly in English, enhanced comfort and effectiveness in healthcare interactions within rural South Australia [59,60]. This study provides

additional context to our results, highlighting the broader implications of language barriers in healthcare settings.

While our study provides a comprehensive overview of the factors affecting healthcare engagement among older rural women in South Australia, the literature also presents some alternative perspectives that could enrich our understanding. Several studies explored the systemic barriers, such as geographic isolation and limited healthcare resources, which resonate with our qualitative findings about the challenges faced by these women [61,62]. Their study offers a deeper insight into the structural impediments that might hinder effective healthcare delivery in rural areas from a logistical perspective. Several studies also suggested differing strategies to improve healthcare delivery by focusing on patient-centred care to understand and respond to the unique needs of rural populations [63,64]. Their recommendations could inform future interventions to enhance the healthcare experiences of older rural women, proposing a more tailored approach to addressing the specific challenges identified in our study. They reinforce the validity of our quantitative and qualitative observations and provide a broader context for understanding the dynamics of healthcare engagement in rural settings. These insights appreciate the complexity of the factors influencing healthcare access and quality for older rural women. This may pave the way towards more inclusive, effective, and responsive healthcare policies and practices.

Ethics Approval

The study received ethics approval from Flinders University Human Research Ethics Committee, Australia [Project Number: HREC8252].

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CRediT authorship contribution statement

Professor Noore Alam Siddiquee: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Mohammad Hamiduzzaman:** Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Professor Helen McLaren:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Resources, Methodology, Investigation, Conceptualization. **Dr Harry James Gaffney:** Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Methodology, Investigation, Formal analysis, Conceptualization. **Professor Jennene Greenhill:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.pec.2024.108602](https://doi.org/10.1016/j.pec.2024.108602).

References

- [1] Australian Bureau of Statistics. Patient experiences, 2022–23 financial year. Australian Bureau of Statistics 2023. (<https://www.abs.gov.au/statistics/health/health-services/patient-experiences/latest-release#footnotes>).
- [2] Australian Bureau of Statistics. Patient experiences: contains data on access and barriers to, and experiences of, healthcare services including GPs, specialists, dental professionals, hospitals and EDs. Australian Bureau of Statistics 2023. (<https://www.abs.gov.au/statistics/health/health-services/patient-experiences-australia-summary-findings/latest-release#msclcid=cad01248b94411ecac6cbedef6b6f08d#experience-with-health-professionals>).
- [3] Rubio-Valera M, Pons-Vigués M, Martínez-Andrés M, Moreno-Peral P, Berenguer A, Fernández A. Barriers and facilitators for the implementation of primary prevention and health promotion activities in primary care: a synthesis through meta-ethnography. *PLOS One* 2014;9:e89554.
- [4] Street Jr RL, Gordon HS, Ward MM, Krupat E, Kravitz RL. Patient participation in medical consultations: why some patients are more involved than others. *Med Care* 2005;43:960–9.
- [5] Jaks R, Guggiari E, De Gani SM, Nicca D. Patients' Perspectives on the Use of a Newly Developed "Patients' Guide for Doctor's Visit": DocVISITguide. *Int J Environ Res Public Health* 2023;20:6414.
- [6] Muscat DM, Shepherd HL, Hay L, Shivarav A, Patel B, McKinn S, McKinn S, Bonner C, McCaffery K, Jansen J. Discussions about evidence and preferences in real-life general practice consultations with older patients. *Patient Educ Couns* 2019;102:879–87.
- [7] Fry JM, Antoniadou J, Temple JB, Osborne RH, Cheng C, Hwang K, Brijnath B. Health literacy and older adults: findings from a national population-based survey. *Health Promot J Austr* 2024;35: 487–03.
- [8] Hamiduzzaman M, Siddiquee N, Gaffney HJ, Rahman MA, Greenhill J. The quality of older adults' involvement in clinical communication with general practitioners: evidence from rural towns in Australia. *Glob Health* 2023;7:186–93.
- [9] Foss, K. Building health literacy in older Australians. Partyline. National Rural Health Alliance 2023. <https://www.ruralhealth.org.au/partyline/article/building-health-literacy-older-australians>.
- [10] Choudhry FR, Ming LC, Munawar K, Zaidi STR, Patel RP, Khan TM, Elmer S. Health literacy studies conducted in Australia: a scoping review. *Int J Environ Res Public Health* 2019;16:1112.
- [11] Doggett J. Why Australia needs to improve in health literacy. Croakey Health Media 2016. (<https://www.croakey.org/why-australia-needs-to-improve-in-health-literacy/>).
- [12] Jayasinghe UW, Harris MF, Parker SM, Litt J, Van Driel M, Mazza D, Del Mar C, Lloyd J, Smith J, Zwar N. Preventive Evidence into Practice (PEP) Partnership Group. The impact of health literacy and life style risk factors on health-related quality of life of Australian patients. *Health Qual Life Outcomes* 2016;14:1–13.
- [13] Australian Commission on Safety and Quality in Health Care. Health Literacy: taking action to improve safety and quality. Australian Commission on Safety and Quality in Health Care 2014. Sydney. (<https://www.safetyandquality.gov.au/sites/default/files/migrated/Health-Literacy-Takingaction-to-improve-safety-and-quality.pdf>).
- [14] Cimasi RJ, Sharamitaro AP, Seiler RL. The association between health literacy and preventable hospitalizations in Missouri: implications in an era of reform. *J Health Care Finan* 2013;40:1–16.
- [15] Australian Commission on Safety and Quality in Health Care. National Statement on Health Literacy. Australian Commission on Safety and Quality in Health Care 2014. Sydney. (<https://www.safetyandquality.gov.au/sites/default/files/migrated/Health-Literacy-NationalStatement.pdf>).
- [16] Zheng LX, Walsh EI, Sutarsa IN. Provision of health services for elderly populations in rural and remote areas in Australia: a systematic scoping review. *Aust J Rural Health* 2023;31:805–25.
- [17] George M, Smith A, Ranmuthugala G, Sabesan S. Barriers to accessing, commencing and completing cancer treatment among geriatric patients in rural Australia: a qualitative perspective. *Int J Gen Med* 2022;1583–94.
- [18] Garad, R., & Waycott L. The role of health literacy in reducing health disparities in rural CALD communities. National Rural Health Alliance 2015. Deakin. http://www.ruralhealth.org.au/13nrhc/images/paper_Garad%20C%20RhondaWaycott%20C%20Lauren.pdf.
- [19] Eaton-Hart JH, Gillies JC, Mercer SW. How do the working lives of general practitioners in rural areas compare with elsewhere in Scotland? cross-sectional analysis of the Scottish School of Primary Care Survey. *Rural Remote Health* 2023;23:8100.
- [20] Tsiga E, Panagopoulou E, Sevdalis N, Montgomery A, Benos A. The influence of time pressure on adherence to guidelines in primary care: an experimental study. *BMJ Open* 2013;3:e002700.
- [21] Australian Institute of Health and Welfare. Culturally and linguistically diverse older people. Australian Institute of Health and Welfare 2023. Canberra. (<https://www.aihw.gov.au/reports/older-people/older-australians/contents/population-groups-of-interest/culturally-linguistically-diverse-people>).
- [22] Islam MI, O'Neill C, Kolar H, Bagnulo S, Colbran R, Martiniuk A. Patient-reported experiences and satisfaction with rural outreach clinics in New South Wales, Australia: a cross-sectional study. *Healthcare* 2022;10:1391.
- [23] American Medical Association. 10 steps to pre-visit planning. American Medical Association 2015. USA. (<https://www.ama-assn.org/practice-management/sustainability/10-steps-pre-visit-planning-can-produce-big-savings>).
- [24] O'Malley PG, Jackson JL, Becher D, Hanson J, Lee JK, Grace KA. Tool to improve patient-provider interactions in adult primary care: randomized controlled pilot study. *Can Fam Physician* 2022;68:e49–8.
- [25] Lowery J, Fagerlin A, Larkin AR, Wiener RS, Skurla SE, Caverly TJ. Implementation of a web-based tool for shared decision-making in lung cancer screening: mixed methods quality improvement evaluation. *JMIR Hum Factors* 2022;9:e32399.
- [26] Daraiseh NM, Black A, Minar P, Meisman A, Saxe M, Lipstein EA. iBDecide: a web-based tool to promote engagement in shared decision-making among adolescents with ulcerative colitis. *Patient Educ Couns* 2022;105:1628–33.
- [27] Nunes JC, Baykaner T, Pundi K, DeSutter K, True Hills M, Mahaffey KW, Sears SF, Morin DP, Lin B, Wang PJ, Stafford RS. Design and development of a digital shared decision-making tool for stroke prevention in atrial fibrillation. *JAMIA Open* 2023;6: ooad003.
- [28] Elwyn G, Froesch D, Thomson R, Joseph-Williams N, Lloyd A, Kinnersley P, Cording E, Tomson D, Dodd C, Rollnick S, Barry M. Shared decision making: a model for clinical practice. *J Gen Intern Med* 2012;27:1361–7.
- [29] Gillespie R, Mullan J, Harrison L. Factors which influence the deprescribing decisions of community-living older adults and GPs in Australia. *Health Soc Care Community* 2022;30:e6206–16.
- [30] Sawan MJ, Jeon YH, Hilmer SN, Chen TF. Perspectives of residents on shared decision making in medication management: a qualitative study. *Int Psychogeriatr* 2022;34(10):929–39.
- [31] Tracy MC, Muscat DM, Shepherd HL, Trevena LJ. Doctors' attitudes to patient question asking, patient-generated question lists, and question prompt lists: a qualitative study. *Med Decis Mak* 2022;42:283–92.
- [32] Allen J, King R, Goergen SK, Melder A, Neeman N, Hadley A, Hutchinson AM. Semistructured interviews regarding patients' perceptions of Choosing Wisely and shared decision-making: an Australian study. *BMJ Open* 2019;9:e031831.
- [33] Ehrlich C, Dannapfel P. Shared decision making: people with severe mental illness experiences of involvement in the care of their physical health. *Ment Health Prev* 2017;5:21–6.
- [34] Radford D. Responding to rural and regional multicultural. In: Nipperess S, editor. *Critical Multicultural Practice in Social Work*. Routledge; 2020. p. 223–39.
- [35] Saulo MCG. Reconfigured Hmong womanhood through work and social inclusion in Australian society. In: Liamputtong InP, editor. *Handbook of Social Inclusion: Research and practices in health and social sciences*. Springer; 2022. p. 2045–68.
- [36] Dixon-Woods M, Cavers D, Agarwal S, Annandale E, Arthur A, Harvey J, Hsu R, Katbamna S, Olsen R, Smith L, Sutton AJ. Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Med Res Method* 2006;6:1–13.
- [37] Dixon-Woods M, Kirk MD, Agarwal MS, Annandale E, Arthur T, Harvey J, Hsu R, Katbamna S, Olsen R, Smith L, Sutton AJ. Vulnerable groups and access to health care: a critical interpretive review. *Natl Coord Cent NHS Serv Deliv Organ RD* 2005;27:2012.
- [38] Biebert C, Müller KG, Nicolai J, Hartmann M, Eich W. How does your doctor talk with you? preliminary validation of a brief patient self-report questionnaire on the quality of physician–patient interaction. *J Clin Psychol Med Settings* 2010;17: 125–36.
- [39] Lee SB, Oh JH, Park JH, Choi SP, Wee JH. Differences in youngest-old, middle-old, and oldest-old patients who visit the emergency department. *Clin Exp Emerg Med* 2018;5:249.
- [40] Sawiński Z. The International Standard Classification of Education ISCED: the standard from Sevrès or Satan's trick? *EDUKACJA* 2013;125:115–34.
- [41] Bloom BS. Learning for Mastery. Instruction and curriculum. Regional Education Laboratory for the Carolinas and Virginia, Topical Papers and Reprints. Eval Comment 1968;1(2).
- [42] Braun V, Clarke V. One size fits all? what counts as quality practice in (reflexive) thematic analysis? *Qual Res Psychol* 2021;18:328–52.
- [43] Hambisa MT, Tawiah R, Jagger C, Kiely KM. Gender, education, and cohort differences in healthy working life expectancy at age 50 years in Australia: a longitudinal analysis. *Lancet Public Health* 2023;8:e610–7.
- [44] Page J, Comino E, Burgess M, Cullen J, Harris E. Participation in Hospital in the Home for patients in inner metropolitan Sydney: implications for access and equity. *Aust Health Rev* 2018;42:557–62.
- [45] Liu Y, Zhang W. Unity in diversity: mapping healthcare interpreting studies (2007–2017). *Med Educ Online* 2019;24:1579559.
- [46] Dell'Olio M, Whybrow P, Reeve J. Examining the knowledge work of person-centred care: towards epistemic reciprocity. *Patient Educ Couns* 2023;107:107575.
- [47] Barker ME, Leach KT, Levett-Jones T. Patient's views of empathic and compassionate healthcare interactions: a scoping review. *Nurse Educ Today* 2023;105957.
- [48] Derksen F, Hartman TCO, van Dijk A, Plouvier A, Bensing J, Lagro-Janssen A. Consequences of the presence and absence of empathy during consultations in primary care: a focus group study with patients. *Patient Educ Couns* 2017;100: 987–93.
- [49] Carroll C, Sworn K, Booth A, Tsuchiya A, Maden M, Rosenberg M. Equity in healthcare access and service coverage for older people: a scoping review of the conceptual literature. *Integr Health J* 2022;4:e000092.
- [50] Kervin LM, Riadi I, Chamberlain SA, Teo K, Churchill R, Beleno R, Hung L, Cosco TD. Barriers in health and social care access and systems navigation among

- older adults without advocates: a scoping literature review and framework synthesis. *J Popul Ageing* 2023;1–36.
- [51] Lindberg J, Bhatt R, Fern A. Older people and rural eHealth: perceptions of caring relations and their effects on engagement in digital primary health care. *Scand J Caring Sci* 2021;35:1322–31.
- [52] Pandey M, Maina RG, Amoyaw J, Li Y, Kamrul R, Michaels CR, Maroof R. Impacts of English language proficiency on healthcare access, use, and outcomes among immigrants: a qualitative study. *BMC Health Serv Res* 2021;21:1–13.
- [53] Protheroe J, Nutbeam D, Rowlands G. Health literacy: a necessity for increasing participation in health care. *Br J Gen Pr* 2009;59:721–3.
- [54] Clarke MA, Fruhling AL, Sitorius M, Windle TA, Bernard TL, Windle JR. Impact of age on patients' communication and technology preferences in the era of meaningful use: mixed methods study. *J Med Internet Res* 2020;22:e13470.
- [55] Gaffney HJ, Hamiduzzaman M. Factors that influence older patients' participation in clinical communication within developed country hospitals and GP clinics: a systematic review of current literature. *PloS One* 2022;17:e0269840.
- [56] Bravo P, Edwards A, Barr PJ, Scholl I, Elwyn G, McAllister M. Conceptualising patient empowerment: a mixed methods study. *BMC Health Serv Res* 2015;15:1–14.
- [57] Busch IM, Rimondini M. Empowering patients and supporting health care providers—new avenues for high quality care and safety. *Int J Environ Res Public Health* 2021;18:9438.
- [58] Marinello D, Di Gianni F, Del Bianco A, Mattioli I, Sota J, Cantarini L, Emmi G, Leccese P, Lopalco G, Mosca M, Talarico R. Empowering patients in the therapeutic decision-making process: a glance into Behçet's syndrome. *Front Med* 2021;8:769870.
- [59] De Moissac D, Bowen S. Impact of language barriers on quality of care and patient safety for official language minority Francophones in Canada. *J Patient Exp* 2019;6:24–32.
- [60] Mustafa R, Mahboob U, Khan RA, Anjum A. Impact of language barriers in doctor–patient relationship: a qualitative study. *Pak J Med Sci* 2023;39:41.
- [61] Goins RT, Spencer SM, Goli S, Rogers JC. Assistive technology use of older American Indians in a southeastern tribe: the native elder care study. *J Am Geriatr Soc* 2010;58:2185–90.
- [62] Henderson JW, Taylor BA. Rural isolation and the availability of hospital services. *J Rural Stud* 2003;19:363–72.
- [63] Charlesworth JM, McManus E. Delivering patient-centred care in rural family practice: using the patient's concept of health to guide treatment. *Case Rep* 2017; bcr:2016216618.
- [64] Westfall JM, Zittleman L, Ringel M, Sutter C, McCaffrey K, Gale S, Dickinson P. How do rural patients benefit from the patient-centred medical home? a card study in the High Plains Research Network. *Lond J Prim Care* 2014;6:136–48.