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Health information and resources in hospital outpatient waiting areas may not meet the needs of older adults from culturally and linguistically diverse backgrounds: A cross-cultural qualitative study

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Abstract

Background: Health information and resources are often provided in hospital outpatient waiting areas but may not meet the cultural and health literacy needs of older adults from culturally and linguistically diverse (CALD) backgrounds.

Objectives: To explore the perspectives and experiences of Cantonese- and Vietnamese-speaking patients and carers in this setting.

Methods: This qualitative interview-based study was conducted from December 2019 to March 2020 at a single outpatient rehabilitation service located at a tertiary public hospital. Four adult consumers (two older adult patients, two caregivers) from CALD backgrounds participated in semi-structured interviews with bilingual researchers. Data were transcribed, translated and analysed using reflexive thematic analysis.

Results: Five themes were developed which highlighted that older adults' language profiles shaped their health information needs and ability to access resources in waiting areas. Cultural factors such as filial responsibility may also influence health information preferences.

Discussion: Older consumers from CALD backgrounds did not have equitable access to health information and resources in the waiting area compared with English-literate older adults.

Conclusion: Health information and resources in waiting areas warrant improving to better meet the needs of older patients from CALD backgrounds and their caregivers.

KEYWORDS

Australia, health disparities, health information needs, health literacy, older people, patient education, research qualitative

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BACKGROUND

Australia is a multi-cultural nation. People from culturally and linguistically diverse (CALD) backgrounds account for up to 50% of Australia's population (Federation of Ethnic Communities' Council of Australia, 2020). Increasing cultural diversity in metropolitan areas in Australia echoes international trends (e.g., U.S. Census Bureau, 2016). Accordingly, metropolitan hospitals and health services are routinely and frequently providing care to multi-cultural communities. Concerningly, CALD consumers experience disparities in health outcomes and access to healthcare (Harrison et al., 2020). These disparities in outcomes are caused by challenges faced by CALD consumers such as language barriers, lack of culturally informed health care, difficulty navigating an unfamiliar health service, and broader social determinants of health (Rao et al., 2006). Efforts to drive improvements in healthcare access and outcomes for CALD consumers are imperative, including offering accessible health information, resources and supports.

Accessible and culturally-informed health information and resources should be available for CALD consumers across health service settings and health conditions. Tailored and culturally-informed health information is vital because an individual's cultural background influences their health experiences (Saltapidas & Ponsford, 2008), attitudes and beliefs about health (Walker et al., 2005), and knowledge of medical terminology and concepts (Stead et al., 2005). Health information and care delivered according to dominant cultural norms, without consideration of local community information needs, can conflict with CALD consumers' own cultural values. It can also result in a sense of cultural knowledge being devalued, fuel existing misconceptions, fail to reach the intended audience, or fail to support understanding and adoption of information (Benza & Liamputtong, 2014; Higginbottom et al., 2013; Wild et al., 2021). In addition to these cultural considerations, language can also present barriers to effective communication in health contexts (Schwei et al., 2016). Further research is needed to clarify what constitutes ‘effective’ health information, resources and supports in different health settings and contexts for consumers from CALD backgrounds, including in hospital outpatient waiting areas.

The concept of health literacy can be defined as how people access, understand, appraise, remember and use information about health and care (World Health Organization, 2022). As this definition implies, health literacy is a multi-dimensional and dynamic concept (Batterham et al., 2016). Health literacy can influence health outcomes by affecting a person's ability to: 1) access healthcare, 2) interact with health service providers, 3) care for their own health (and the health of others) and 4) participate in health decision-making (Batterham et al., 2016). Therefore, health information, resources and supports designed to improve or bolster a person's health literacy can facilitate improved health outcomes.

A small number of studies have shown that health literacy-related interventions in outpatient waiting areas may improve the health knowledge and outcomes of CALD consumers. A systematic review identified two studies that found that culturally-sensitive print and video materials in community settings increased CALD consumers' health knowledge and improved clinical outcomes (Henderson et al., 2011). Recent studies implementing multi-lingual educational applications on a tablet device and an educational multi-media program in 19 languages respectively in waiting areas, found improvements in health knowledge and clinical outcomes (Ha et al., 2019; Khan et al., 2011). These studies suggest that offering culturally tailored health information in accessible and appropriate formats in health service waiting areas for older adults may support health literacy and contribute to positive health outcomes.

A previous grounded theory study conducted across two hospital outpatient services found that consumers (with a preferred language of English) perceived opportunities to build health literacy in the waiting area (McDonald et al., 2022). A recent scoping review of the literature found that there is no published research investigating whether CALD consumers want or need health information, resources and supports in hospital outpatient waiting areas or how to effectively share health information and resources with CALD consumers in these settings (McDonald et al., 2023).

Key Messages

- Older adults from CALD backgrounds have nuanced language profiles, which influence access to health information and resources in waiting areas.
- People responsible for information resources in health service waiting areas need to consider the cultural needs of patients and caregivers.
- Health services that serve multi-cultural and multi-lingual communities may need to deliver resources via a range of modes.
- Involving people who identify as having a CALD background and their caregivers in the process of developing health information in waiting areas will help to ensure that the resources are appropriate, acceptable and accessible.

This study represents an important first step in exploring these issues.

OBJECTIVES

The aims of this study were to:

1. Explore the perspectives and experiences of Cantonese- and Vietnamese-speaking older adult (≥65 years of age) patients and their caregivers in relation to accessing and engaging with health information, resources and supports, including in the waiting area.
2. Identify health information, resources and supports available in languages other than English for consumers in a hospital outpatient rehabilitation waiting area.

KEY TERMS AND CONCEPTS

The terms health information, resources and supports have been defined and described in detail elsewhere (McDonald et al., 2021). In brief, health information is defined as information about illness, symptoms, treatment, health services or healthcare more broadly (Ramsey et al., 2017). Resources refer to information sources or tools which consumers can draw on to learn about or participate in their care (Ramsey et al., 2017). Examples of health information resources and platforms commonly used by consumers are interpersonal sources (e.g., family, friends and co-workers), television, the internet, and printed materials (Ramsey et al., 2017). Supports include social, emotional or informational supports which may assist consumers to access care or make health-related decisions or participate in their care (Lee et al., 2004). Health literacy was defined according to the World Health Organisation as “people's knowledge, confidence and comfort … to access, understand, appraise, remember and use information about health and health care” (pg. 7, World Health Organization, 2022). Older adults are defined according to an age designation of 65 years and over (National Institutes of Health, 2022). The term ‘culturally and linguistically diverse’ is commonly used in Australian literature and represents the “non-Indigenous cultural and linguistic groups who identify as having cultural or linguistic connections with their place of birth, ancestry or ethnic origin, religion, preferred language or language spoken at home” (pg. 3, NSW Health, 2019). A range of alternative terms are used in international contexts to represent sub-groups within CALD populations including ‘migrants’, ‘asylum seekers’, ‘refugees’ and ‘ethnic minority’.

METHODS

Study design

A qualitative interview-based study was conducted from December 2019 to March 2020.

Ethical procedures

The research team prioritised cultural sensitivity in the design, conduct and reporting of this study (Liamputtong, 2008). For example, the research team took time to discuss and learn from one another about the key values, cultural preferences for communication and social considerations important in Chinese and Vietnamese cultures, especially those which may be relevant to this research question and study procedures. The team made notes on communication styles, behaviours and processes, which may enhance cultural sensitivity and applied these during participant recruitment, data collection and data analysis. Methodological and ethical considerations unique to cross-cultural qualitative research, informed by the available literature, were also carefully considered and incorporated into the design, conduct and reports. Ethical approval was obtained for this study (Royal Melbourne Hospital Human Research Ethics Committee, Approval number: HREC/43635/MH-2018). Participants provided informed consent prior to participation via written consent or via audio-recorded verbal consent in their preferred language.

Study setting

The setting for this study was the waiting area of an outpatient rehabilitation service located at a tertiary public hospital in the multi-cultural city of Melbourne, Australia. The outpatient rehabilitation service offers goal-based multi-disciplinary therapy to consumers for a range of medical conditions and injuries. The rehabilitation service provides care for adults. The majority of consumers accessing care via this hospital outpatient setting are 65 years and older. Each episode of outpatient care usually involves the consumer attending multiple appointments with one or more clinicians from the multi-disciplinary team to achieve their rehabilitation goals. The multi-disciplinary team consists of physiotherapists, occupational therapists, nurses, dietitians, social workers, exercise physiologists, speech pathologists, clinical psychologists, neuropsychologists, medical doctors and allied health assistants. The length of an episode of care is determined by the consumer's presenting condition and short-term rehabilitation goals. For each appointment at the service, the consumer arrives for their appointment and waits in a designated waiting area for the treating clinician to call them into the therapy area. Each appointment at the outpatient service typically involves a period of waiting and exposure to available health information, resources and supports in the waiting area environment. A detailed description of the available health information, resources, supports and waiting area environment is published elsewhere (McDonald et al., 2021).

There are seven commonly spoken languages in the local community: Cantonese and Vietnamese are two of these seven languages. The most frequently spoken language is English.

Study paradigm, research team, reflexivity and trustworthiness

Study paradigm and research team

The research paradigm informing this study was constructivism, which assumes that there are multiple realities, and that understanding is co-created by the participants and researchers (Denzin & Lincoln, 2017). Constructivism positions the meanings of individuals as central to interpretation (Bleiker et al., 2019). Aspects of social constructionism informed data analysis whereby the researcher also considered the roles participants represented and the broader socio-cultural contexts that may have shaped these roles and their representation in the interviews (Bleiker et al., 2019; Braun & Clarke, 2006). A description of the research team and bilingual researcher roles is available in Appendix S1.

Reflexivity and trustworthiness

Reflexivity was practiced by all members of the research team who contributed to data collection and analysis. Other processes for methodological rigour and trustworthiness incorporated in this study included: peer debriefing, investigator triangulation, methodological triangulation, thick descriptions and an audit trail of key decisions and analytical processes.

Study participants and recruitment procedures

Recruitment of participants was guided by purposive sampling. Consumers with preferred languages of Cantonese or Vietnamese who were attending outpatient rehabilitation (as a patient or caregiver) were approached face-to-face and invited to participate. Caregivers commonly accompany patients to outpatient rehabilitation appointments and assist with participating in care as well as accessing health information and resources at the hospital which was the setting for this study. Therefore, including the caregiver perspective was considered important in this study. The principles of 'information power' were used to evaluate the sufficiency of data and inform cessation of participant recruitment and data collection (Malterud et al., 2016). Researchers (CM, JL, TT) met with participants on two to three occasions prior to their interviews to build rapport, explain their roles and respond to questions about what participating in the study would involve.

Data collection

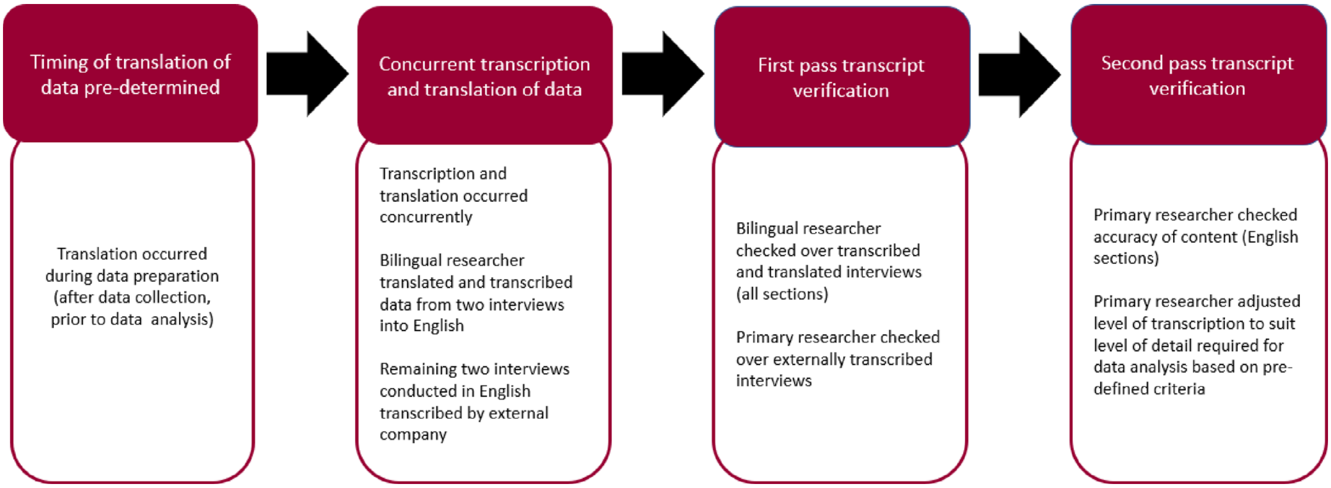
Participant observation

Demographic information, participant observation and semi-structured interview data were collected. Participant observation occurred for the duration of the waiting time prior to a scheduled appointment, which lasted on average 20 min. Observations were recorded by lead researcher CM on an observation guide.

Participant interviews

The interview guide was piloted on two occasions with people from Cantonese- and Vietnamese-speaking backgrounds to test for coherence, flow and to ascertain if rich data were elicited. Minor changes to the order and wording of interview questions were made based on the pilot process. Additional introductory questions were also added, to help build rapport and understand the context of each participant's experience of waiting for appointments during their current episode of care. Piloting also elucidated that a shared understanding as to which waiting area was being referred to during the interview needed to be clarified with all participants (the waiting area that was the focus of this study was located in the outpatient rehabilitation service, which is one of several waiting areas for different services at this hospital site). Therefore, the research team added in the step of physically walking through the hospital outpatient waiting area with participants and reminding them that this area was the focus of their upcoming interview.

Demographic information was collected prior to commencing participant interviews. Semi-structured interviews were conducted by CM and JL or TT in-person at home or at the health service depending on each participant's preference (Appendix S2). Interviews were conducted in the preferred language of participants and audio-recorded. Each interview was ~90 min in duration. Field notes and reflexivity memos were recorded after



Timing of translation of data pre-determined

Translation occurred during data preparation (after data collection, prior to data analysis)

Concurrent transcription and translation of data

Transcription and translation occurred concurrently

Bilingual researcher translated and transcribed data from two interviews into English

Remaining two interviews conducted in English transcribed by external company

First pass transcript verification

Bilingual researcher checked over transcribed and translated interviews (all sections)

Primary researcher checked over externally transcribed interviews

Second pass transcript verification

Primary researcher checked accuracy of content (English sections)

Primary researcher adjusted level of transcription to suit level of detail required for data analysis based on pre-defined criteria

FIGURE 1 Outline of the translation protocol used in this study.

each interview (~60 pages of typed notes and memos in total). One participant declined to have their interview audio-recorded, so the primary researcher took detailed handwritten notes instead (5 pages, A4).

Observational study—Available health information and resources

Further analysis of the data collected in an earlier observational study (McDonald et al., 2021) was conducted for this study. In brief, numerical counts and descriptions of available health information and resources in the waiting area were recorded via direct in-person observations and video recordings. To inform the current study, the researcher also recorded the language in which the materials were presented.

Transcription and translation

The transcription and translation process used for interview data in this study was adapted from Clark et al. (2017). Two data files in Cantonese and Vietnamese languages, respectively, were transcribed and translated by the bilingual researchers JL and TT. Data files in English were transcribed by an external provider and checked by CM. The transcription and translation processes were defined in advance (Figure 1) as recommended to improve the validity of translated data and for transparency regarding the contribution of bilingual researchers to this process (Arriaza et al., 2015; Clark et al., 2017).

Data analysis

Data analysis involved an inductive, recursive and iterative process throughout six stages of reflexive thematic analysis as described by Braun et al. (2019): familiarisation, generating codes, constructing themes, defining themes, revising themes and producing the report. A detailed description of the analytical process in each of the six stages is available in Table 1.

Reflexive thematic analysis is a type of thematic analysis, which requires intensive analytic work by the researcher(s) to iteratively interpret and code data and eventually conceptualise themes as patterns of meaning across the dataset (Braun et al., 2019). The method of reflexive thematic analysis was selected for this study as it: emphasises the active role of the researcher in co-constructing knowledge during data analysis which aligned with the study paradigm; can address aims relating to understanding people's views, experience and perceptions of a phenomena; and is flexible in terms of dataset size and composition which suited the smaller, information rich interview and observation dataset in this study (Braun et al., 2019, 2022). Data were managed and analysed in NVIVO 12 (QSR International Pty Ltd., 2020).

RESULTS

Waiting area resources in languages other than English

A total of 34 health information items and resources were available in the English language for consumers in the waiting area. Of these 34 items, just one item was available in multiple languages for consumers with preferred languages other than English that was designed to support consumer health literacy. This was a handout on 'advance care planning', which provided an explanation of the key steps involved in this process.

TABLE 1 Description of data analysis during the six stages of reflexive thematic analysis according to Braun et al. (2019).

Phase of analysis	Description
Familiarisation	Starting with 'familiarisation', observation data, transcripts and interview notes were read by CM. This included listening back to the translated sections of the interview recordings multiple times. Descriptive summary notes of early ideas and impressions of each individual participant's data and of the data set were recorded in memos.
Generating codes	'Generating codes' involved working systematically through the data line-by-line to apply semantic (i.e., 'surface, obvious, overt') and latent codes (i.e., 'implicit, underlying, hidden') (p. 5, Braun & Clarke, 2020). Similarities and differences across the data of a family (patient-caregiver) dyad were also explored. Coding generated hundreds of codes, which were recorded in NVIVO. Further memos were written noting any key ideas, initial impressions of patterns and negative cases.
Constructing themes	Next, 'constructing themes' involved the development of candidate themes by organising the numerous codes into key ideas and patterns. Mind maps were hand-drawn to visually link codes and conceptualise core concepts. Where there was considerable overlap or repetition amongst codes they were collated or collapsed. Where codes appeared distinct or to be a key idea, they were promoted. As per Braun and Clarke (2020), themes were conceptualised as patterns of meaning united around a core concept or idea. Dot points were drafted for each candidate theme to start to describe their scope, along with a 'working theme name'.
Defining themes	'Defining themes' involved describing their properties and revisiting interview data to either challenge or expand the properties of each theme and to define their scope. Theme names were reviewed, debated and edited multiple times until the research team agreed that they represented the core meaning of each theme.
Revising themes	'Revising themes' involved checking themes for conceptual overlap, relationships or connections and to ensure that they held when examined against the whole dataset. During the 'constructing', 'defining' and 'revising' phases, the themes were discussed and revised with the bilingual researchers (JL and TT) and a senior researcher (LR). The purpose of these discussions was to check that the themes were 1) culturally sensitive, and 2) resonated and fit with the subsets of data known to each team member. A written draft of the thematic findings was provided to the bilingual researchers at this stage who further interrogated the wording of each theme name and description. Feedback from the bilingual researchers was discussed, on occasions sections of the data were reviewed again as a team and multiple changes were incorporated into the draft results to enrich the interpretation.
Producing the report	In the final phase, 'producing the report', the themes were described in detail, final revisions were made, and further consideration was given to the order in which the themes were presented to 'best tell the story'. Literal quotations were selected to convey the essence of each theme. The decision to use literal quotations (with minimal or no editing) was adopted to convey the data without further interpretation or intervention from the researchers, other than what had already occurred during the process of translation.

This handout was available in seven languages including Cantonese and Vietnamese. No audio–visual materials were available for consumers with limited literacy in languages other than English.

Participants and sociodemographic characteristics

Four participants took part in this study: two patients and two caregivers. Two people declined to participate citing lack of time. Patient participants were currently attending outpatient rehabilitation appointments for any health condition or illness. Caregiver participants were providing informal care to patients at home with day-to-day activities and supporting their participation in outpatient rehabilitation at the health service. Participant sociodemographic characteristics are summarised in Table 2 and described in detail in Appendix S3. Participants were assigned a label as 'patient' or 'caregiver' to indicate their position.

Themes

Four themes were developed in this study, which are described below. Participant quotes are included to support each theme. In addition to the thematic findings, a range of constraints on accessing health information in the waiting area environment were synthesised and are presented as a minor theme in Appendix S4.

TABLE 2 Summary of participant sociodemographic characteristics.

	Patient 1	Caregiver 1	Patient 2	Caregiver 2
Age	88	50	70	60
Gender	Male	Male	Male	Female
Country of birth	China (mainland)	China (mainland)	Vietnam	China (mainland)
Preferred language	Cantonese (uses language interpreter for appointments)	Cantonese and English	Vietnamese and Cantonese (Uses Vietnamese interpreter for appointments). Conversational Mandarin. Limited English.	Cantonese and English
Highest level of education completed	Primary school	Bachelor's degree	Primary school	Professional diploma
Occupation	Retired	Full time carer for father	Retired	Full time carer for mother
Social situation	Lives with wife, adult son primary carer (Caregiver 1)	Lives with wife	Lives alone	Lives with mother (for whom she is primary carer)
Presenting condition or reason for attending rehabilitation	Stroke (causing physical and cognitive impairments)	Attending as carer for Patient 1	Fractured femur	Attending as carer for mother (mother's reason for attending rehabilitation is falls prevention and balance retraining)

Theme 1: Language and literacy: Instruments of access or exclusion

The limited availability of health information in languages other than English in the waiting area determined who could access and who was excluded from accessing these resources. Participants who spoke more than one language had the option of accessing health information in each language. In this way, their language and literacy skills were instruments of access to health information in the waiting area. The predominance of the English language in Australia's health care system meant that sometimes participants did not have a choice: if information was only available in English they would read/engage/use this if they had some literacy skills in English.

Participants with preferred languages other than English were excluded from accessing most health information in the waiting area—given that the majority of information was available in English language only. This issue was amplified because the single translated health resource ($n = 1$) was available in text only. Participants who preferred other sources such as audio–visual information did not have access to their preferred sources.

> 'I like watching TV. I hate reading [health information]. I don't like reading'.
>
> (Patient 2)

Caregivers also noted that the lack of translated information limited their ability to share health information with their parents (the reasons for this are explored in the subsequent theme 'trusting and integrating sources of health information'). Caregivers noted that they could access information for themselves; however, they were aware that their parents did not have the same opportunities to engage with health information or resources in the waiting area.

> 'There is very limited information available in the [written] Chinese. That's first'.
>
> (Caregiver 1)
>
> Written information in Chinese for the Chinese community, 'especially the elderly population', is important.
>
> (Researcher notes, Caregiver 2)

In summary, this theme indicates that the available health information in the waiting area did not cater to the language needs of CALD patients and their caregivers. Available information may inadvertently include or exclude consumers from accessing health information based on language and literacy. Consumers may also be excluded from accessing supports in the waiting area due to language barriers.

Theme 2: Language profiles are nuanced and shape health information needs

This theme was developed from explicit descriptions and examples provided by participants of their changing information needs. The term 'language profile' is used in this theme to represent the self-reported language history, perceived competence, and self-described use of one or more languages in health contexts by participants. Participants' information needs depended on 1) the participant's literacy level (in one or more languages), and 2) the context and complexity of the health information. Participants described how literacy skills and verbal fluency shaped the type, detail, format and source of health information they felt able to engage with and that this shifted across situations and contexts.

Audio–visual information with sub-titles offered via online sources, which could be paused at any time, was considered accessible and preferable. This option offers the viewer the autonomy to stop or re-watch sections that were missed or not understood.

> '… Sometimes, with the video, it's very hard to follow. It can be difficult … I turn on the iPad. I [watch] on the internet then; if I am not following, I can stop here. When watching things on iPad, I can stop it if I am unable to follow information'.
>
> (Patient 2)

Typically, complex or detailed health information was preferred in whichever language the participant had higher reading fluency. Caregiver 2's description of her own literacy and language profile and that of her mother who she cares for illustrates these nuances in Box 1.

Box 1 Example of the impact of a language and literacy profile on health information needs.

Caregiver 2 described herself as a caregiver for her elderly mother. She spoke both Cantonese (preferred language) and English (other language) and could read and write in English and Chinese* (simplified and traditional). Her mother spoke Cantonese and could read and write in Chinese*. Caregiver 2's mother independently accessed health information from the Chinese newspaper or Chinese TV shows where possible. When her mother required health information not available from these two sources, Caregiver 2 sourced health information on her mother's behalf and translated it for her mother. Caregiver 2 accompanied her mother to health appointments and discussed health information verbally in English with health professionals (she participated in this interview in English). However, she felt that her own English literacy skills were limited to basic health information. When reading complex health information in English, she felt very slow and that this was difficult, so she preferred to source information translated into Cantonese (audio-visual) or Chinese (written texts).

*Note that Cantonese is a spoken language. Cantonese speakers read and write in Chinese (simplified and/or traditional).

Language profiles were also shaped by each participant's physical condition. For example, some participants described recent health episodes which resulted in fatigue and reduced concentration, in turn, affecting reading abilities.

> 'His ability to read or understanding or memorise after the stroke was totally different with before he had the stroke'.
>
> (Caregiver 1)

As a result of physical changes, Patient 1 and Caregiver 2 (when sourcing information for her mother) no longer preferred text-based information and instead preferred audio–visual sources as these were easier to concentrate on and understand. This suggests that language profiles are not fixed, may change over time, and are impacted by participants' health conditions.

In summary, this theme indicates that the bilingual (or multi-lingual) proficiency of consumers is nuanced and dynamic. CALD consumers seek health information and resources that suit their literacy skill level, preferred mode of delivery, and physical capacity.

Theme 3: Culture of inter-generational expectations and shared responsibility for health

Participants functioned within a culture of shared responsibility for health. This culture of shared responsibility extended across a range of health-related situations such as: seeking health information, engaging with health resources, navigating health services, planning health appointments, considering broader health needs (i.e., physical, emotional and spiritual), enacting health decisions, and managing health care. Due to the range of health situations in which participants described sharing responsibility, this theme is named as shared responsibility for 'health' rather than specifying any one aspect of healthcare.

Sharing responsibility for health carried over into the outpatient waiting area. For example, an adult caregiver actively sought health information in English and monitored available resources in the waiting area at each appointment. Whereas, their parent did not look for or notice available health resources as they 'relied' on their caregiver for such tasks. This appeared to be reinforced by the observation data which indicated that patients were not looking at or engaging with available health information or resources. In conjunction with the patient's preference to allow their caregiver to seek information on their behalf, the patient participant may have also realised that information was not available in their preferred language and this may have contributed to their observed behaviour in the waiting area. Three sub-themes further illustrate the complexities of this notion of 'shared responsibility'.

Sub-theme: Socio-cultural and intergenerational expectations

According to the participants, this culture of shared responsibility was strongly informed by socio-cultural and intergenerational expectations. Both caregivers recounted that there were strong expectations within their families that as adult children they would care for their 'elders'. One caregiver elaborated that in their opinion, this was influenced by reduced access to support services for older adults in their birth countries, necessitating increased filial responsibility. Both caregivers also identified the notion of reciprocity as feeding into this expectation: parents cared for their young children, and then adult children returned the care for their parents later in life.

> 'So it is pretty fair in my culture too. I think it is good because that is a way how you repay your parents when they get old. When you were little, when you fall they pick you up. So when they getting old, that is our responsibility to look after them'.
>
> (Caregiver 1)

One caregiver shared that they perceived that increased support services were available for older adults in Australia; however, these intergenerational expectations and practices have continued within their family. Sharing responsibility between older parents (in this study—patients) and adult children (in this study—caregivers) involved a process of handing over aspects of responsibility by the older generation and taking on of this responsibility by the younger generation.

Sub-theme: Health-related need to handover responsibility

Caregiver participants highlighted that the physical health and well-being of their parents influenced this 'culture of shared responsibility'. The caregiver participants described how since their parents' health had deteriorated due to a new health condition (for which they were attending outpatient rehabilitation), their ability to participate in their own healthcare had been affected. For example, mild cognitive impairment or increased fatigue had affected their parent's ability to read information in their preferred language and their motivation to manage their health needs.

> 'I think that is also because he is aging and also his ability to read or understanding or memorize after the stroke was totally different with before he had the stroke'.
>
> (Caregiver 1)

This 'new' health condition resulted in the recent handover of additional tasks to the caregiver participants.

Theme 4: Trusting and integrating sources of health information

This theme was predicated on participants' cultural association/history/beliefs/knowledge with traditional healing and medicines. When discussing the process of seeking health information to inform their health decisions, participants expressed tension between trust and distrust of different health information sources and integrating traditional Chinese medicine and Western medicine sources of information. Perceptions of some sources as more trustworthy than others were described as key to whether participants would engage with the information and consider applying it to their health decisions.

The sources of health information that participants perceived to be trustworthy varied. Adult caregivers noted that their parents were apprehensive about some health advice interpreted or translated by them. In these situations, the parents preferred to learn health information directly from health professionals via a formal language interpreter or directly from translated texts in their preferred language. This perspective was corroborated by Patient 1, who also expressed a preference for health information translated by a health professional. Although, he also noted that his adult caregiver was trusted with many other aspects of his health and care.

Adult caregivers perceived health information in the waiting area as trustworthy, as they assumed it had been vetted or approved by health professionals. Caregivers acknowledged that given their parents' reduced trust in health information translated by them, the waiting area could be improved by offering translated health information for their parents to engage with directly. Caregivers felt this may increase their parents' trust and willingness to use or apply the health information in waiting areas.

> 'Sometimes that also not only help me, it also help them as well. Because if there was only English they might thought, oh maybe you translated wrong or you tried to tell me some wrong information to force me to do something, but if they already translate into Chinese, they can read Chinese. So it is more proof to say well, this is what the paper say to you'.
>
> (Caregiver 1)

Participants integrated health information from traditional Chinese medicine with health advice or information from sources of Western medicine. There were contrasting perspectives on the degree of trust placed on information from traditional Chinese medicine and Western medicine sources. For example, Patient 2 expressed scepticism about Chinese medicine products being sold by someone who stood to gain financially. However, they acknowledged that their own general practitioner sometimes recommended Chinese medicines (as an adjunct to or instead of prescription medications) and they would be more likely to trust and follow their general practitioner's recommendation. This contrasted with Caregiver 2 who highly valued health information drawn from traditional Chinese medicine as a starting point for all health decisions and used the Chinese medicine approach as 'first-line' treatment for any health issue.

DISCUSSION

This single-site, qualitative interview-based study identified that the health information, resources and supports currently available in the hospital outpatient waiting area of a large metropolitan health service may not be responsive to the health literacy needs of Cantonese- and Vietnamese-speaking consumers living in the local community. Complex factors that shaped participants' health information needs were identified, such as intergenerational expectations, perceived trust in the information source, and a preference to integrate health information from traditional Chinese medicine and Western medicine. The findings indicate that broader socio-cultural factors may influence how patients with preferred languages of Cantonese and Vietnamese perceive, experience and possibly engage with health information and resources shared by outpatient hospital services. A range of resources were available for consumers in the predominant language of English. Problematically, only one resource that might contribute to health literacy was available in the other commonly spoken languages of the local community (which includes Cantonese and Vietnamese) in the waiting area.

Creating culturally informed, translated, multi-modal health information and resources

Creating effective and accessible translated health information and resources is not as simple as translating written materials from one language to another (Michael et al., 2013). It cannot be assumed that direct, literal translations of health information originally in the dominant language (in this study—English language) will convey meaning accurately in another language (Michael et al., 2013). Literal translations may fail to convey information in a culturally relevant manner if translating Western constructs of health and healthcare (Andrulis & Brach, 2007). Add to this complexity, the findings of this study suggest that the intersection of language proficiency and information complexity appear to shape consumers' language preferences for health information. The theme 'language profiles are nuanced' highlights consumers' self-described variation in language proficiencies and literacy (in one or more languages). Therefore, when creating written health information for consumers, we recommend that health providers do not assume a simple dichotomy of needs as either 1) requires translated written health materials or 2) can read written health materials in the local, dominant language(s). This study indicated that consumers could have a 'spectrum' of language preferences that change depending on their language proficiency, literacy skills, the complexity of the health information, their available support network, and their health condition. Michael et al. (2013) developed the 'Translation Standard' to develop high-quality translations that cater to the health literacy levels of the intended audience. The Translation Standard has multiple components but critically includes CALD consumers (from the target audience) in the process of developing and testing translations of health materials. The Translation Standard could be used to develop quality, translated, culturally appropriate health information for CALD consumers in waiting areas. To evaluate existing patient education materials, the comprehensive set of 24 criteria developed from a recent scoping review by Ahmadzadeh et al. (2023)

could be used. These comprehensive criteria could be applied by health librarians to assess materials (against criteria such as readability, quality, suitability, comprehensibility and understandability) and then select appropriate materials for waiting areas.

The context, content and complexity of health information also seem to impact the preferred mode of delivery or resource type. In this study, consumers valued multi-modal health information—not just written texts. Participants suggested that ideally, multi-lingual health information should be available in a variety of media. Research from other health contexts has also suggested that multi-modal health information (i.e., leaflets, newspapers, radio and audio–visual) improves accessibility for CALD consumers and may have positive effects on health behaviours (Wild et al., 2021). This suggests that waiting areas catering to CALD communities may need to offer a range of media and resources. Indeed, combined information formats (written and oral) have long been recommended for older adults in health settings (Cawthra, 1999). Further, participants in this study pointed to a range of constraints on their ability to learn new or complex health information in the waiting area (minor theme presented in Data S1). These constraints suggest that in their present state the health information, resources, supports and environment within the waiting area may not be responsive to the health literacy needs of Cantonese- and Vietnamese-speaking consumers.

Patient participants highlighted how their health condition, for which they were seeking rehabilitation, impacted their language ability and preferences (as described in theme 2). It is interesting to consider this finding within the context of the outpatient rehabilitation in which this study was set. The hospital outpatient rehabilitation service provides rehabilitation to people recovering from a range of health conditions, including severe injury, illness and major surgeries as well as complex progressive or chronic conditions (as described previously, the service is situated within a major, metropolitan, trauma-tertiary hospital). This finding may be less pertinent within other outpatient rehabilitation services (for example, those that provide care for less acute or severe health conditions) and indeed in other hospital outpatient waiting areas. An implication of this finding is that the acuity, severity and stability of patients' presenting conditions may warrant careful consideration when assessing their language and information needs to inform waiting area resources.

Information seeking or scanning in waiting areas

Participant descriptions of opportunistically looking at available items in the waiting area suggests that their behaviours may have been more akin to ‘health information scanning than information seeking’. This finding could usefully inform the selection and application of extant theory in future research relating to health information acquisition in health service waiting areas. ‘Health information scanning’ is defined as gathering information incidentally from sources in the environment (e.g., through browsing or routine exposure) (Niederdeppe et al., 2007). ‘Health information scanning’ is considered a less active behaviour compared with ‘health information seeking’, which is defined as a conscious knowledge-gathering process in response to a health query or need (Niederdeppe et al., 2007). Ruppel (2016) proposed that the comprehensive model of information seeking could be extended and may be well suited to research focused on understanding ‘health information scanning’. The comprehensive model of information seeking theorises that health-related factors and information-carrier factors influence the acquisition of health information (Johnson & Meischke, 1993). Applying the comprehensive model of information seeking to future research stemming from this study may help with: 1) identifying preferred information sources in waiting areas, 2) understanding health information scanning behaviours in this setting, and 3) leveraging health information scanning behaviours to improve health knowledge and outcomes.

Finding cost-effective solutions

Creating accessible, high-quality and multi-modal resources is likely to require a significant amount of time and investment by health services. This may not be feasible or could result in duplication and waste if all health services were to produce similar resources (i.e., for common health conditions). An efficient solution could be to draw on existing, high-quality translated health materials created by trusted sources. For example, in Australia, there is a range of free, regularly updated and vetted mixed-media health materials for CALD consumers available online (managed by the Centre for Culture, Ethnicity and Health, funded by the Victorian State Government) (Health Translations, 2021). Health services could consider supplying URL links to these existing resources in their waiting areas. Using pre-existing online resources presents a cost-effective solution for health services. An additional benefit is that this approach directs CALD consumers to high-quality, locally produced health information that they can access from anywhere, not just in the waiting area. Although promising, linking consumers with quality online information will not universally solve this issue. Some participants in this study expressed limited digital literacy and a lack of access to technology and the internet. Retaining some hard copy resources may be essential for ensuring access to health information in the waiting area—especially for older CALD consumers.

Partnering with health library information services

Another solution could be to strengthen partnerships with health library information services. Effective partnerships between health services and library information services have been known to improve services for consumers and support health professionals (Childs & Dobbins, 2004; O'Connor, 2008). Specifically, health librarians could be engaged to create, review and/or collate resources for waiting areas. Alternatively, waiting areas could be used to advertise and direct consumers to local health library and information services. Increasingly, library services in the National Health Service in England have assumed an active role in supporting patient and public information (Carlyle et al., 2022). Similarly, in New Zealand, hospitals with in-house libraries commonly provide direct support to admitted patients (Oliver & Bidwell, 2008). Consumers could also be directed to online websites and resources curated by library services which enable asynchronous, virtual access (Hopkins et al., 2011). Where health services lack an in-house library or information service (e.g., in smaller regional or rural health services), partnering with public libraries may enable consumers access to health resources perceived to be of good quality as well as librarian support for sourcing required health information (Ingham, 2014). A multi-disciplinary and collaborative effort is likely required to identify, develop and implement high quality resources for consumers from CALD backgrounds: key stakeholders may include health science librarians, clinical staff (e.g., health professionals and clinical assistants), professional language interpreters, cultural or community leaders and workers, health service managers and organisations or government entities responsible for patient safety and quality care (Table 3).

Including caregivers in the target audience

When designing health information and resources in waiting areas, the needs of both patients and their caregivers should be considered. The theme of 'culture of shared responsibility' highlighted the importance of family in health information gathering and decision-making for participants in this study. Proxy seeking of online health information by informal caregivers is common (El et al., 2022); caregivers use online health information to provide emotional and material support (Kinnane & Milne, 2010), better understand illnesses (Tonsaker et al., 2017) and to inform discussions with healthcare providers (Dolce, 2011). The phenomenon of proxy health information seeking in waiting areas was highlighted by the two caregiver participants, who sought health information on behalf of their elderly parents whilst waiting. Both participants described how their proxy health information seeking was linked to cultural beliefs about caring for their elders. The notion of intergenerational expectations and reciprocal relationships between adult children and elderly parents is described in the literature as 'filial responsibility' or 'filial piety' (Chan et al., 2012). Filial responsibility has deep cultural roots in Chinese and East Asian societies (Chan et al., 2012). These socio-cultural factors suggest that caregivers may be seeking health information to support and inform the care of their family members. Therefore, caregivers may also need to be considered as the 'target audience' for health information and resources in hospital outpatient waiting areas that serve diverse communities. Further exploration is warranted to ascertain whether a culture of shared responsibility for gathering health information extends to other CALD groups, considering each CALD community may have differing notions and expectations of filial responsibility.

Excluding CALD consumers risks perpetuating health inequalities

Health service environments that lack accessible health information and resources for CALD consumers but offer these for consumers proficient in a dominant language (e.g., English language in this study) risk inadvertently perpetuating systemic issues contributing to health inequalities. Waiting areas have the potential to contribute to consumer health knowledge and health literacy by offering health information, resources and supports across a wide range of health topics and issues (Gignon et al., 2012; McDonald et al., 2023). Our study indicated that older CALD consumers may not have these same learning opportunities: consumers with limited English proficiency were excluded as most health information was only available in the predominant language of English. Failure to offer culturally-informed health information and resources in a range of commonly spoken languages at health services caring for multi-cultural communities reinforces systemic marginalisation based

TABLE 3 Summary of multi-disciplinary stakeholders in improving health information for consumers from CALD backgrounds.

Stakeholder	Brief explanation	Example with link to supporting online information
Health librarians	Health librarians may include librarians and information professionals working in hospitals, regional health services, community organisations and parts of public library services focussed on health.	Knowledge and Library Services (NHS Health Education England, 2022)
Clinical staff	Health professionals may include medical, nursing and allied health professionals. Other clinical assistants may include Nursing Associates or Allied Health Assistants.	Health professionals (Better Health Channel, 2015) Nursing Associates (NMC, 2023) Allied Health Assistants (AHANA, 2023)
Professional language interpreters	Professional language interpreters refer to service providers with a certification or qualification, which enables them to take on interpreting assignments through government or health providers.	Translating and Interpreting Service (TIS) National (Department of Home Affairs, 2023)
Cultural or community leaders and workers	Cultural workers may include people employed to use their multi-lingual language skills and cultural knowledge to negotiate and communicate between communities and other agencies. Community leaders may include elders or leaders who are nominated or elected or health in high regard and represent their community.	Bilingual and cultural workers (FECCA, 2017) Community leaders (Department of Communities and Justice, 2018)
Healthcare managers and leaders	Healthcare managers are responsible for the strategic and operational management of health services.	Healthcare managers (ACHSM, 2023)
Organisations or government entities responsible for patient safety and quality care	This may include organisations who develop or influence policy, guidelines and/or resources for health services.	Australian Commission on Safety and Quality in Healthcare (ACSQHC, 2023)

on language and culture. Health services providing care to multi-cultural communities have an ethical responsibility to get to know their community's cultural and linguistic needs and to share health information inclusively.

Involving bilingual research staff

Bilingual researchers contributed to each stage of the study, as language assistants and cultural brokers. Bilingual researchers were health professionals employed at the study site. They were selected based on their personal attributes, research experience, as well as their shared cultural and language backgrounds with the study population. Bilingual research staff had the support of their manager to be involved in the project alongside their usual clinical duties. Prior to commencing the study, the scope of the bilingual researcher role was defined and negotiated, to ensure that the role was feasible and that there was agreement amongst all team members. Throughout the course of the study, bilingual researchers contributed by: recommending adaptations to study procedures to optimise cultural sensitivity, recommending adaptations to the interview guides according to language and cultural considerations, assisting with recruiting participants and collecting data in participants' preferred language, assisting with data transcription and translation, contributing to qualitative data analysis, engaging in reflexive discussions and reviewing the research report prior to dissemination. Their contribution was essential to cultural sensitivity and safety at every stage, and as this description indicates, their involvement was far more extensive than if professional interpreters were used to simply interpret during participant interviews. Therefore, the process for collaborating with bilingual researchers in this study has some feasibility considerations. Involving bilingual researchers required considerable planning prior to study commencement. In-kind support (agreed to by managers at the participating study site) was required for the bilingual researchers to contribute to the project alongside their usual clinical duties. Additionally, it was fortunate that appropriately skilled bilingual staff were interested and available to assist. Other health services looking to undertake research inclusive of people from CALD backgrounds will need to consider the financial and practical considerations of involving bilingual researchers during the early stages of study planning.

Study strengths

The study design was informed by the scarcity of research demonstrating how to share culturally appropriate, accessible and useful health information and resources with CALD consumers in hospital outpatient settings, including waiting areas. The benefit of the small number of participants who contributed rich data through their interviews was that nuanced insights into their experiences were gleaned, and these can inform future directions for research. Some of the strengths of this study include collaboration with clinicians as bilingual researchers, and careful design of culturally sensitive study methods informed by local community needs and cross-cultural qualitative methods literature.

Reflexivity

All members of the research team who contributed to data collection and analysis participated in reflexivity throughout the study to reflect on our personal and professional positions, subjectivities, language and cultural experiences (Hennink, 2008). Reflexivity is considered important for improving the rigour of interpretive qualitative research in order to strive for transparency regarding the language, communication and socio-cultural interpretations inherent in qualitative research processes (Hennink, 2008). Cross-cultural qualitative research has additional layers of language, communication and cultural complexity (Hennink, 2008). Therefore, it is recommended that all members of the research team who contribute to generating data (during interview) and interpreting, translating and reporting data (during analysis) should contribute to reflexivity (Hennink, 2008). Reflexivity was largely practised through conversations during team meetings. Reflexive debriefs were also scheduled immediately after each participant interview and key reflections were recorded (Appendix S1).

Trustworthiness

The quality criteria for qualitative research described by Nowell et al. (2017) (based on the original definitions by Lincoln and Guba (1985)) were incorporated into the study methods to enhance trustworthiness: peer debriefing (credibility); thick descriptions of study setting and participants (transferability); logical and traceable research process (dependability); clear descriptions of methodological and analytical procedures as well as evidence of interpretations being derived from data through inclusion of participant quotes (confirmability); and documentation of an audit trial and all team members practiced reflexivity. Key methodological decisions (e.g., relating to participant recruitment and ceasing data collection) were documented in the audit trail so that they could be transparently reported. Transparent reporting of methodological decisions enhances the dependability of the report and therefore the trustworthiness of the study (Nowell et al., 2017). Two approaches to triangulation were used (Varpio et al., 2017): 1) Investigator triangulation was incorporated by three researchers contributing to data analysis and 2) methodological triangulation was incorporated through prior completion of an observational study which used a different theoretical approach in this same setting.

Study limitations

There were several limitations of this study. The study captured a cross-section of experiences and did not track if participants' experiences changed across the course of their outpatient rehabilitation. Patient-participants in this study were older adults over 70 years of age; therefore, further research is warranted to explore the health information and resource needs of CALD patients across other age groups attending hospital outpatient waiting areas. Only two CALD groups were included due to available resources and access to bilingual researchers; therefore, the cultural and health information needs of other CALD groups accessing hospital outpatient waiting areas remain unknown. Back-translation was unable to be incorporated due to the cost of external translation services. Due to the COVID-19 restrictions, the study was ceased in March 2020 and was unable to be resumed in 2020 or 2021 due to ongoing pandemic-related restrictions on research at the study site in Melbourne, Australia.

Pragmatic and methodological considerations informed the sample size in this study. A potential maximum sample size of eight participants was pragmatically pre-determined by the resources available to support this project. Recruitment ceased with a sample size of four participants due to the COVID-19 pandemic and the requirement to cease research at the hospital. As such, the research team evaluated the available rich data at the commencement of the pandemic-related restrictions according to the principles of 'information power': the data set was deemed sufficient given the narrow aim, specific participant characteristics required for the study aim, quality of dialogue and analysis strategy (Malterud et al., 2016). Data collected from patient and caregiver participants indicated commonalities in terms of the influence of language and literacy on information needs, shared (filial) responsibility and trust/integration in health information. Additionally, a shared sense of commensalism from patient and caregiver perspectives was interpreted in relation to health information scanning behaviours in waiting areas (whereby commensalism in this context refers to a patient benefitting from support received from a caregiver, without this being of detriment to the caregiver). These commonalities in patient-caregiver perspectives meant that data collected from a sample of four participants was assessed as having sufficient information power. Potentially, patient-caregiver dyadic perspectives could vary (or even be dissonant) in other contexts or settings.

Implications for practice

Implications for practice are limited at this stage. The findings of this study indicate multiple future directions for research. First, the findings suggest that future interventions in hospitals may need to make more multilingual resources available and deliver these via a range of modes in waiting areas serving multi-cultural communities. Second, this study indicates that involving people from CALD backgrounds in the process of developing and improving health information, resources and supports offered by hospitals, including in the waiting area, is critical for future interventions. Involving both patients and caregivers in the process of identifying and selecting appropriate resources may help to ensure that available items are appropriate in terms of culture, language proficiency and health information needs. Involving consumers in co-producing health information and resources for waiting areas may assist with identifying tacit cultural assumptions held by health professionals, which if not adequately considered and addressed, can lead to the development of unsuitable tools (Forsythe, 1996). Third, this study highlights that further exploration of proxy health information scanning and seeking behaviours by caregivers would also helpfully inform who constitutes the target audience for hospital outpatient waiting area materials. Finally, future research should evaluate whether tailoring such items improves their accessibility as well as the impact on consumer health literacy and health outcomes. Other outcomes of interest may include the impact of these items on patient experience and the cost-effectiveness of interventions where health information, resources and supports are developed or curated for CALD consumers.

CONCLUSIONS

The findings of this qualitative interview-based study indicate that older Cantonese- and Vietnamese-speaking consumers (patients and caregivers) attending hospital outpatient rehabilitation can have nuanced language profiles, experience a tension between trusting and distrusting different sources of health information, and integrate information from Chinese and Western medicine sources. In hospital outpatient waiting areas, limited health information and resources were available in the preferred languages and modes of delivery which excluded some consumers from accessing available items. For hospitals serving multi-cultural communities, the lack of suitable health information, resources and supports for CALD consumers risks perpetuating health inequities. This study highlights that multimodal health information, which caters to varying levels of language proficiency and is culturally appropriate may be preferred and sought by patients and caregivers from CALD backgrounds as they wait for outpatient appointments. Further research is warranted to create culturally informed health information, resources and supports that are responsive to and inclusive of the needs of CALD consumers in waiting areas and to evaluate their effect on health literacy and related outcomes.

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CONFLICT OF INTEREST STATEMENT

The Authors declare that there is no conflict of interest.

DATA AVAILABILITY STATEMENT

Due to the nature of this case study, to protect participant confidentiality supporting data is not publicly available.

ETHICS STATEMENT

The Royal Melbourne Hospital Human Research Ethics Committee, Approval number: HREC/43635/MH-2018.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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