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The post-screening service vacuum: discontinuity barriers in cognitive impairment care for older adults: a qualitative study

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Abstract

Objectives: To address the rising burden of dementia, China has prioritized the integration of cognitive care frameworks within primary care (PC). However, a functional gap persists: while screening has expanded, subsequent clinical management remains fragmented. This study investigates the structural and behavioral discontinuity contributing to the post-screening care gap in community-based geriatric care.

Methods: Adopting a qualitative exploratory design, this study was conducted across PC facilities in Guangdong, China, between February and August 2022. Through purposive sampling, 104 key stakeholders – including frontline clinicians (n=55), program coordinators (n=21), and health administrators (n=28) – were recruited. Data collected via semi-structured interviews and focus groups underwent rigorous thematic synthesis to map systemic bottlenecks in the care pathway.

Results: Theme analysis revealed a tripartite architecture of service discontinuity. First, individuals' behavioral choices during screening process, characterized by

procedural fragmentation, disrupt the transition from initial detection to definitive diagnosis. Second, multiple institutional governance dilemmas – stemming from chronic resource scarcity and governance constraints – undermine the delivery of sustained interventions. Finally, cultural resistance creates a stalemate where deep – seated stigma fuels family avoidance and provider reluctance. Collectively, these forces fracture the management loop, preventing the realization of a continuum of care.

Conclusions: Closing these gaps requires more than expanding screening coverage. To bridge these multi-layered gaps, policy interventions must foster intersectoral synergy, transforming isolated diagnostic encounters into unified, longitudinal care pathways.

Keywords: cognitive impairment; screening; integrated care; primary healthcare; qualitative study; discontinuity

Introduction

The global burden of dementia continues to rise, from 57.4 million in 2019 to a staggering 152 million by 2050 [1], with China accounts for nearly a quarter of this total burden [2]. By the end of 2024, China's aging demographic is projected to reach 310 million, with dementia and mild cognitive impairment (MCI) affecting approximately 6 % and 15.5 % of this population. The total number of affected individuals is estimated to be around 53 million, accounting for nearly one-fifth of the elderly population [3]. Research indicates that around 10–15 % of mild cognitive impairment (MCI) patients annually progress to dementia [4], thus timely identification is a public health imperative [5].

Standardized screening, coupled with targeted interventions, could forestall 40 % of dementia cases globally while significantly tempering mortality and disease severity [3, 6, 7]. Within this framework, cognitive impairment screening based on primary care serves as the strategic cornerstone for early-intervention strategy [8–11]. International benchmarks, such as South Korea's dementia screening program (DSP), demonstrate that integrating primary assessments with specialized support centers can elevate national diagnosis rates by over 20 % within a five-year

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span [12]. This program not only diagnosed previously undetected patients but also enhanced the utilisation of health-care services for dementia diagnosis [13].

In response to these mounting pressures, China inaugurated the “Pilot Demonstration Project for Specialized Alzheimer’s Disease Prevention and Care Services” in 2020. This initiative mandates cognitive screening for community-dwelling seniors aged 65 and above, to identify the potential early changes in cognitive status [14], primarily utilizing the Eight-item Informant Interview to Differentiate Aging and Dementia (AD8) due to its diagnostic sensitivity and clinical efficiency [15–17]. National guidelines explicitly advocate for a seamless transition from these initial screenings to comprehensive, longitudinal management [18]. While PC-based initiatives have expanded initial assessments, the bridge to formal diagnosis and sustained care remains weak [19]. Current evidence reveals a striking attrition gap, despite widespread screening, fewer than 30 % of at-risk individuals in cities like Changsha or regions like Taiwan successfully navigate the referral pathway [20–22]. In many jurisdictions, this post-screening follow-up rate languishes below 20 % [23, 24].

This persistent referral deficit cannot be fully explained by patient-level variables – such as age, education, or health literacy – alone [20, 25–27]. While prior research has scrutinized the mechanics of diagnostic testing, there remains a significant gap in understanding the continuity of the care journey from a stakeholder perspective [26, 27]. Our previous quantitative inquiries identified factors influencing screening outcomes and practitioner performance; yet the underlying drivers of the systemic break in the management loop remain elusive [28, 29].

As the gatekeepers of community health, PC facilities often fail to facilitate a closed-loop trajectory for cognitive health, leading to a profound service vacuum. When screening functions in isolation from subsequent management, it not only delays optimal clinical intervention but also risks rendering the entire screening infrastructure a futile exercise.

Therefore, using a qualitative approach, this study explores key barriers – from the perspective of primary care stakeholders – to achieving continuity of care for older adults after cognitive impairment screening in Chinese community settings.

Methods

Study design

This study employed an exploratory qualitative design, utilizing in-depth interviews and focus groups to examine the implementation process of continuity cognitive impairment management and identify challenges across operational stages. Data collection occurred from February to August 2022 in consultation rooms in PC. To ensure depth and relevance of findings, participants were selected through purposive sampling among PCPs involved in comprehensive management program of cognitive impairment. Sample size was determined by data saturation principles, interviews ceased after at least 10 sessions when three consecutive interviews yielded no new information [30]. Reporting followed the COREQ checklist to ensure methodological rigor [31] (Supplementary Material 1).

Participants

This study adopted a service provider perspective, specifically focusing on professional and administrative stakeholders within the PC system. Participants comprised stakeholders in comprehensive cognitive impairment management within primary care, including: practitioners (general practitioners and nurses in PC); program administrators (department heads, head nurses, and dementia screening program leaders in PC); program coordinators (social workers in PC). The inclusion criteria were (1) possession of relevant professional and occupational certificates (2) provision or participation in cognitive impairment services; and (3) informed consent and voluntary participation in this study. The exclusion criteria were (1) those on leave for professional development or vacation (2) those unable to provide informed consent.

We adopted a service provider perspective to uncover the systemic and structural barriers underlying service discontinuities in cognitive impairment screening and management. While the experiences of patients and their families are vital for evaluating service effectiveness, the provider perspective is indispensable for identifying the operational, organizational, and policy-level factors that affect the operation of the system. These factors are often

opaque to service users, so in this research stage, patients and families were not included as study participants.

Data collection

Maximum variation purposive sampling was employed to maximize informational diversity by selecting participants across different ages, educational backgrounds, and professional experience levels. The main researcher contacted 30 PC program administrators in the study area via WeChat to recruit study participants. Ultimately, 16 administrators agreed to participate. With their assistance, researchers invited 124 stakeholders through face-to-face or online channels, of whom 20 declined due to scheduling conflicts or disinterest.

Semi-structured interview guides (Supplementary Material 2) were used for both individual interviews and focus groups. Preliminary guides were formulated through literature review, refined through two rounds of expert consultation with implementation science and qualitative research specialists, and pilot-tested with three stakeholders. Focus group size followed standard methodology [32]. A total of three focus groups were completed, with each group comprising ten participants. Individual interviews lasted 18–65 min, with an average duration of 36 min. Focus groups interviews lasted for 70 min. All sessions (including pilots) were audio-recorded with verbal consent and transcribed verbatim.

Data analyse

All interviews were anonymized, transcribed verbatim, and imported into NVivo software (NVivo Version 12 plus). Initially, the transcribed texts were summarised, condensed and coded. Data analysis followed Braun and Clarke's thematic analysis framework [33], implemented through six iterative phases: (1) familiarization with data through repeated reading interview records, (2) generating initial codes through line-by-line coding, (3) development of preliminary themes addressing research questions, (4) theme refinement to ensure internal coherence and data consistency, (5) theme definition and nomenclature, (6) report production featuring verbatim extracts illustrating thematic interpretations.

Primary analysis was conducted by lead researchers (XYH, YD). Coding discrepancies were resolved through consultation with a third researcher (YHZ) to ensure intercoder reliability. Preliminary themes were discussed with two additional researchers (NG, LJ) to incorporate independent perspectives and maintain reflexivity during subsequent analysis. Any discrepancies have been thoroughly discussed

and resolved before consensus is reached on the themes, sub-themes and representative articles. Regular team meetings refined theme development, with analytical interpretations validated through feedback from patient and public involvement (PPI) groups.

Data trustworthiness

Methodological trustworthiness was ensured through adherence to qualitative reporting guidelines. To ensure rigor and credibility, two researchers participated in interviews process: one conducting in-depth interviews and focus groups, while the other observed and documented non-verbal behaviors. Continuous audit trails were maintained for all analytical memos, codebooks, meeting minutes, and field notes. Transferability was enhanced through comprehensive documentation of participants' cultural and contextual characteristics. Five external stakeholders (primarily implementers) independently validated findings. Reliability was demonstrated via audit trails of data collection and analytical processes. To ensure confirmability, the coding and results of some interviews were reviewed by three experienced qualitative researchers. Pre-existing relationships between researchers and participants were precluded to minimize potential bias.

Results

Study participants

A total of 104 participants were interviewed for this study, none of whom dropped out. The sample included 55 practitioners (52.9%), 21 program administrators (20.2%), and 28 program coordinators (26.9%). Among the practitioners, there were 23 males and 22 females, with an age range of 22–46 years and an average age of (30.55 ± 4.78) years. Their work experience varied from 2 to 20 years, with an average of (6.85 ± 4.42) years, the majority possessing a bachelor's degree. Within the administrators group, there were 10 males and 11 females, with ages ranging from 23 to 56 years and an average age of (36.95 ± 7.61) years. Their work experience varied from 1 to 28 years, averaging (10.38 ± 6.70) years, with most possessing a bachelor's degree. Within the coordinator group, there were 7 males and 21 females, with ages ranging from 22 to 36 years and an average age of (29.18 ± 4.02) years. Their years of experience spanned from 1 to 12 years, with an average of (3.79 ± 2.77) years, and the majority similarly held a bachelor's degree. The demographic characteristics are detailed in Table 1.

Table 1: Socio-demographic characteristics of participants.

Characteristic	Category	Practitioners (n=55, 53.0 %)	Program administrators (n=21, 22.1 %)	Program coordinators (n=28, 26.9 %)
Gender	Male	23	10	7
	Female	32	11	21
Age range, (mean±SD)		22–46, (30.55±4.78)	23–56, (36.95±7.61)	22–36 (29.18±4.02)
Occupation	General practitioner	40		
	Nurse	15		
	Community health officer		15	
	Community nurse managers		2	
	Project managers		4	
	Medical social worker			15
	Community social workers			13
Educational level	Associate degree	14	2	10
	Bachelor's degree	25	11	17
	Master's degree	16	8	1
Years of experience (range, mean±SD)		2–20, (6.85±4.42)	1–28, (10.38±6.70)	1–12, (3.79±2.77)

Key barriers of the disconnected cognitive impairment care

From the perspective of primary care providers, we identified three themes and eight sub-themes (Table 2) that together illustrate the persistent fragmentation in cognitive impairment care delivery.

Theme 1: Individuals' behavioral choices in screening process.

This theme describes how deficiencies in the screening phase on subsequent management processes. Distorted practices and subjective evaluations during screening implementation – such as arbitrary scoring due to workload pressures or mismatches between assessment items and the individual's actual context – directly raise patients' doubts about the authenticity of the evaluation results. More importantly, practitioners' vague understanding of subsequent referral and treatment pathways undermines their capacity to serve as reliable guides, thereby eroding patients' trust in the entire healthcare system.

Table 2: Theme results.

Themes	Sub-themes
Individuals' behavioral choices in screening process	Flawed scoring mechanisms in screening The elderly's lack of trust in screening results Confusion over health management pathways
Multiple institutional governance dilemmas	Limited internal resources Insufficient external linkage and coordination Feeble policies support and funding subsidies
Cultural resistance to comprehensive management	Disease denial and rights transfer among the elderly Disease neglect and absence of involvement among family members Trust maintenance challenges for PCPs

Theme 1.1: flawed scoring mechanisms in screening.

PCPs serve as the implementers of cognitive impairment screenings. The screening results. Due to the potential time costs of interpreting the results and the subsequent workload, some assessors may assign scores that underreport abnormal findings. Consequently, some elderly older adults with cognitive impairment may be incorrectly classified as normal, and mistakenly believe their screening results are normal, thereby failing to enter subsequent diagnostic and treatment processes, then missed opportunities for early diagnosis and intervention.

If we strictly adhere to the scoring standard, we would not be able to handle the subsequent work and the follow-up would never be completed. Therefore, the scoring might be appropriately "lenient". (Practitioner 8)

The subsequent assessment work of the screening will take more time and energy. This is not such an easy thing either. Also, the treatment and care of patients with cognitive impairment is very time-consuming and seem endless (sigh). (Practitioner 10)

When I interviewed them (practitioners), I felt that they would be afraid of the subsequent work being very troublesome and thus tend to give an intermediate score for the assessment, so they wouldn't say it (screening result) was suspicious. (Program administrator 1)

Theme 1.2: the elderly's lack of trust in screening results.

Older adults' acceptance of screening results hinges largely on the evaluator's perceived professional authority. Practitioners are expected to have a thorough understanding of the screening process and assessment items. However, when they appear unfamiliar with the assessment questions or fail to answer the examiner's concerns, elderly participants may doubt the screening results. Even individuals with positive screening results tend to attribute these results to evaluative errors rather than genuine declines in cognitive function. This skepticism may lead some individuals with positive screening results to forgo the referral recommendations.

Some AD8 items are poorly worded, or we may not be able to answer her questions properly, which makes her doubt the validity of the results. Even if we tell her that she needs to go to a higher-level hospital for further checks, she may not believe us. (Practitioner 5)

Theme 1.3: confusion over health management pathways.

As key coordinators bridging screening and subsequent management, PCPs should be familiar with cognitive impairment care pathways. However, most respondents said that they had not received any training in this area, which has led to many practitioners facing practical difficulties when dealing with positive initial screening results: they can identify potential changes, but struggle to provide a systematic pathway for ongoing health management.

During the training, they only introduce how to use and evaluate the questionnaire, but did not cover subsequent rehabilitation or intervention about cognitive impairment. (Practitioner 13).

After our initial screening results (positive), we definitely need to provide guidance on where and which the patient should go for treatment. But now I'm rather confused because there is no guidance plan or referral process. For example, if medication is required, should it be obtained from primary care or the hospital? Who is responsible for adjusting the dosage? None of these questions have answers. (Program administrator 7)

Theme 2: multiple institutional governance dilemmas.

This theme describes structural challenges behind screening process that affect the continuity of cognitive care management.

Theme 2.1: limited internal resources.

By flexibly reallocating personnel and time, PC can fulfill the basic tasks of cognitive impairment screening. However, in terms of health management following the screening assessment, there is a widespread lack of professional qualifications and adequate resources required to perform this function. This means that, despite being positioned as the main location for the management of cognitive impairment, PC is struggle to effectively implement subsequent rehabilitation or intervention programs.

We don't have the same resources as specialist or general hospitals, in terms of hardware, equipment or doctors' qualifications. (Program administrator 6)

The facilities in our community health center are still insufficient. There is no way to set aside a dedicated consultation room for specialized assessment and separate consulting management. Nor are there professional treatment equipment and personnel to specifically intervene in those elderly people with dementia. These might also be one of the reasons. (Program administrator 1)

Our community health center doesn't have any equipment. We only have B-ultrasound and electrocardiogram. For cognition-related equipment like electroencephalogram, almost all community health centers don't have it. How can we ensure the accuracy of the assessment during subsequent follow-up visits? (Practitioner 12)

Theme 2.2: insufficient external linkage and coordination.

Managing older adults with cognitive impairment requires technical support and guidance from neurology specialists, including specialized neurological assessments, the development of intervention plans, and subsequent community rehabilitation and care. However, participants reported that a standardized management system has yet to be established. Specifically, there is a lack of effective mechanisms and ensure the elderly return to the PC smoothly after a diagnosis or exclusion of cognitive impairment, and it is difficult to obtain the treatment plans formulated in specialized hospitals. Consequently, PC often lack the necessary knowledge and involvement in the subsequent rehabilitation and care of patients.

Cognitive impairment management is a long-term process that requires them (higher-level hospitals) to coordinate with us to provide follow-up services for patients, but this has not yet been implemented. (Program coordinator 2)

The comprehensive management of elderly with cognitive impairment requires the technical support and guidance of neurology experts in terms of professional treatment methods to delay the progression of dementia, as well as how to manage these patients and control their condition, or how to further assess their condition when it deteriorates. (Practitioner 6)

Furthermore, participants stated that the specific characteristics of cognitive impairment diseases (such as progressive cognitive decline and behavioral psychiatric symptoms) means that subsequent health management cannot simply be based on the same principles as other chronic diseases. If existing social networks (such as neighborhood committees and elderly associations) could be leveraged, it is anticipated that awareness and participation in comprehensive management of cognitive health among the elderly population would improve. But current service model lacks a standardised collaboration between PC and other community organisations, resulting in the underutilization of these potential social support resources. Therefore, PC can only rely on their limited internal resources for patient long-term follow-up and continuous health needs management.

It is not effective for the community health centre to do the program alone, it will be effective when community health centers work together. The community has a residents' online contact group, and information can be sent to them. After the assessment is complete, the program coordinator can see which elderly people have participated and which not have. The results can be statistically analysed in the background. (Program coordinator 7)

For ordinary chronic diseases such as hypertension and diabetes, elderly patients can come to the community health centre to get their medication. However, if it is cognitive impairment, follow-up intervention far more complex and often requires family involvement, as their self-care ability and cognitive ability may be impaired. They may forget or be unable to answer questions, so I believe that managing cognitive impairment without external help is difficult. (Practitioner 16)

Theme 2.3: feeble policies support and funding subsidies.

Despite national policies clearly outlining the importance of managing cognitive function in the elderly, participants have reported that there is a lack of specific budgets and unclear service standards in the local implementation of cognitive impairment management. This has led to a significant increase in the pressure on those responsible for carrying out cognitive impairment screening tasks, and a lack of incentives to take on the comprehensive management of continuous care services after screening.

The government documents emphasize the importance of addressing Alzheimer's disease, but when it comes to the implementation level, there is neither a special budget nor guidelines and standards. It all depends on the institutions themselves to come up with solutions. (Program administrator 3)

To set up this project, funds for the project are required. Funding follows workload. If you offer a small subsidy, social workers in the community will be willing to do it, because the institution has taken on such a project. As long as there are relevant project subsidies, there will be no problem. (Program coordinator 8)

Theme 3: cultural resistance to comprehensive management.

This theme examines how sociocultural context shapes stakeholders behaviour in comprehensive cognitive impairment management in China.

Theme 3.1: disease denial and rights transfer among the elderly.

Participants observed that, under the influence of traditional Chinese values, many elderly people are reluctant to discuss cognitive health issues or do not consider them to be diseases requiring intervention. And it is believed that only bad living habits can bring about this disease. Some respondents intentionally avoid the topic or outright refuse further medical treatment, citing concerns about bothering their children.

Many elderly people in China experience cognitive impairment in old age, but many are reluctant to seek medical help. They also view forgetfulness as a normal part of aging, not a disease. (Practitioner 15)

Cognitive impairment screening can be done casually, and the elderly may think it's acceptable because it is arranged in the physical examination. However, if the result is a suspicious positive, we recommend that he go to a higher-level hospital for another check-up. But he will say it's unnecessary or that their children are not available to take him there. (Practitioner 19)

An elderly person once told me: 'Only those who stay home all day develop this condition (cognitive impairment). Those of us who get out and socialize every day won't get it (Practitioner 20)

Theme 3.2: disease neglect and absence of involvement among family members.

As the core unit of Chinese society, families often collaboratively deliberate on treatment decisions in an effort to reach a consensus. However, the traditional advantages of collective decision-making may hinder timely interventions for elderly individuals experiencing cognitive impairment. Some family members are concerned that a diagnosis of cognitive impairment would affect the family's reputation, and they may discourage elderly relatives who screen positive from undergoing further evaluation. Additionally, in everyday life, familial neglect and permissiveness inadvertently lead to missed opportunities for professional treatment for the elderly.

Some family members may withhold support, viewing an older relative with dementia as a potential "burden". (Practitioner 10)

Family members with cognitive dysfunction will not seek our help, and if they are unable to take care of themselves, they will not turn to doctors for assistance either. They may think that there is no need to find a doctor or take medication for cognitive problems. (Program coordinator 8)

Furthermore, cognitively impaired elderly individuals already have below-normal levels of ability to manage their health independently. Without the family members' involvement, it is difficult for them to seek treatment independently, which ultimately results in the process of managing cognitive impairment stopping at the screening stage.

If follow-up is needed, a family member must accompany the patient – but the patient may forget to ask, due to memory impairment. (Practitioner 4)

Theme 3.3: trust maintenance challenges for PCPs.

Research indicates that the social stigma associated with cognitive impairment necessitates that PCPs balance their professional judgment with the maintenance of social relationships during the management of cognitive impairment practices. For instance, when initial screening results differ from those of higher-tier hospitals, professionals may be questioned about their authority and expertise. This damages both the provider's credibility and the institution's reputation, hindering other work. Thus, some PCPs may become more cautious when informing patients of screening results as a result of this situation, which in turn diminishes their motivation to engage in subsequent management.

You told him that you might have cognitive problems and suggested him go to a higher-level hospital for further examination. However, he came back with a negative re-examination result and questioned, "You said I had a problem when I didn't." It's very difficult for us to explain. He will assume that we made a misdiagnosis. This misunderstanding will affect the implementation of all our subsequent health management work. (Practitioner 8)

We are mainly general practitioners here and we cannot be proficient in every specialty. However, when residents see that we have carried out the cognitive impairment comprehensive management program, they will naturally expect us to be able to answer related questions. (They will think) 'It's can't be just anyone who can do this, right?' But if the diagnosis result of the superior hospital is different from yours, how will they view our community doctors in our then? (Program administer 3)

As illustrated in Figure 1 the three themes do not operate as independent silos but form a self-reinforcing feedback loop that collectively sustains the post-screening service vacuum. Three principal interaction pathways can be identified. First, institutional governance dilemmas and individual behavioral choices are mutually reinforcing. Chronic resource scarcity and the absence of clear referral protocols leave PCPs ill-equipped to manage positive screens, generating workload anxiety that motivates lenient scoring. The consequent under-reporting of positive cases further

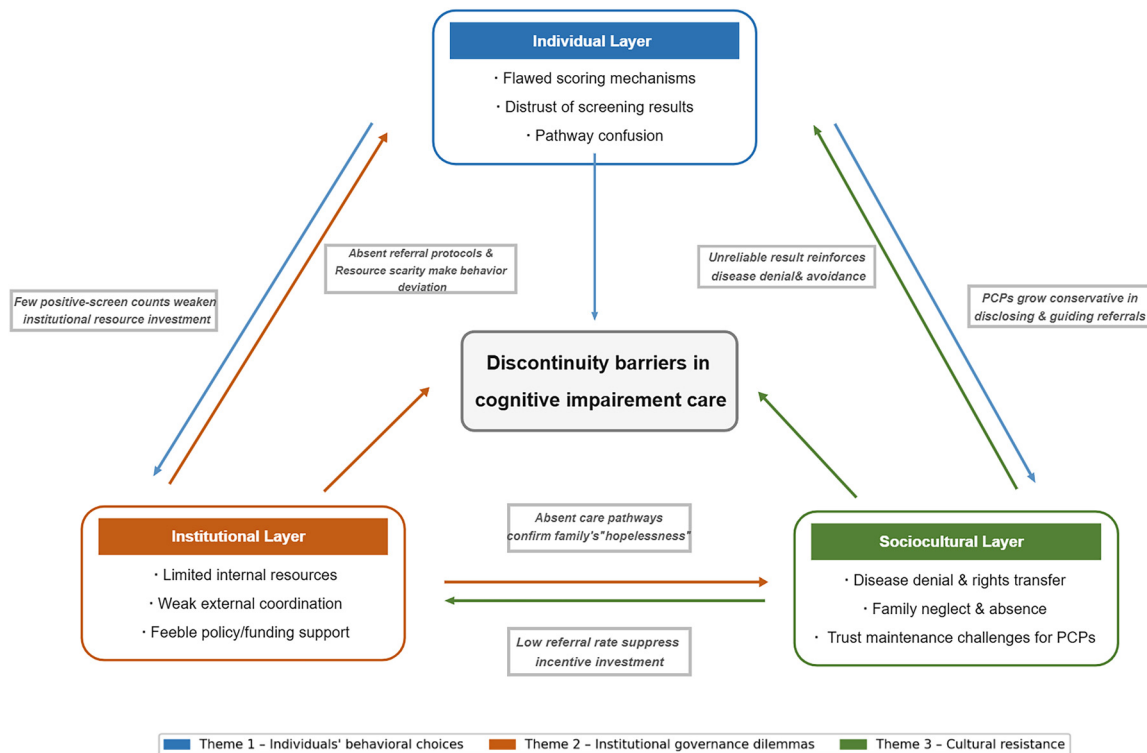


Figure 1: Tripartite architecture of service disconnectivity: mutually reinforcing feedback loops and the post-screening service vacuum.

reduces institutional demand for post-screening infrastructure, thereby deepening the governance gap. Second, compromised screening encounters exacerbate cultural resistance. When assessors appear uncertain or when community screening results later diverge from specialist findings, older adults and their families interpret this as evidence that screening is unreliable, reinforcing pre-existing disease denial and avoidance behaviours. Third, cultural resistance in turn amplifies institutional paralysis. Persistent family refusal of referrals, coupled with providers' efforts to maintain trust, discourage investing in inter-agency coordination, as low uptake signals negligible demand. Critically, these three loops are not merely additive; they create a stable equilibrium in which individually rational decisions by each actor collectively perpetuate systematic inaction and service discontinuity.

Discussion

This study explores key barriers to continuity of cognitive impairment care for older adults in primary care settings. The research results reveal a complex framework of multi-level service disconnection, consisting of individual behavioral choices, institutional governance dilemmas, and cultural resistance to comprehensive management. These factors intersect and disrupt the entire care pathway from initial screening, clinical diagnosis to continuous intervention and long-term follow-up, resulting in a profound post-screening service vacuum phenomenon. Although China has made significant progress in expanding the coverage of cognitive impairment screening for the elderly, this study confirms that simply increasing the coverage rate cannot automatically solve the core problem of care continuity. The poor continuity of cognitive impairment management goes beyond individual behavioral factors and involves deep-seated systemic structures and social cultural constraints. This aligns with the global consensus that dementia care requires continuous, comprehensive services – not isolated diagnostic encounters [34, 35].

Our findings indicate that comprehensive cognitive impairment management is constrained by the challenges general practitioners face in coordinating care. The cognitive impairment care process requires neuropsychological assessment and behavioral intervention, which generally exceeds the current ability of general practitioners. Therefore, this may prompt primary healthcare providers to reduce the number of positive reports at the screening stage. The AD8's brevity enables large-scale screening, but its reliance on informant reports and limited specificity entail inherent trade-offs. Inadequately explained positive results

may be seen as definitive or as "false alarms" when specialist evaluations differ, eroding trust and putting providers in difficult positions. These tool limitations amplify the post-screening discontinuity. Additionally, patients with cognitive impairment, compared to those with hypertension or other common chronic diseases, require more family support and integration of community resources [36, 37]. However, the existing management and training models relatively neglect the cultivation of this capability. Drawing on the WHO's Integrated Care for Older People (ICOPE) framework, effective brain health services should establish networks that integrate specialized and primary care, rather than conducting it in isolation [38]. In recent years, although the accessibility of primary healthcare services in China has improved [39], the problem of insufficient internal integration within health information systems remains prominent [40], and an effective multi-level collaboration network has not yet been established [41]. More concerning are project-based funding cycles, which hinder sustained participation [42].

Furthermore, this care fragmentation persists and is tolerated because it is effectively rationalized by socio-cultural factors. Disease stigmatization, family members' avoidance, and misunderstandings of cognitive aging provide psychological comfort and explanations for service disruptions [43]. The hesitation or refusal of patients and their families, seemingly the main cause of the chain break, is actually a manifestation of this. A referral pathway fraught with uncertainty reinforces families' perception that the process is "troublesome and futile". For primary healthcare providers in community medical settings, if they are unable to provide reliable follow-up support or if there is a deviation between community screening results and the diagnosis of specialized hospitals, it not only damages the professional credibility of the healthcare providers but also affects the overall trust relationship between primary healthcare institutions and community residents. Disclosure carries professional and interpersonal risks, prompting primary care providers to adopt conservative diagnostic practices [44]. Thus, individual-level risk avoidance, institutional-level responsibility diffusion, and cultural-level stigma interweave with each other, forming a stable equilibrium state: all parties make "reasonable" choices within the existing constraints, but together they lead to the normalization of systematic inaction and service vacuum. When primary care institutions consistently record few positive screens and subsequent management cases, demand for post-screening care remains suppressed, thereby weakening the incentive for institutions and policy-makers to invest in cognitive care resources and training.

To address this tripartite architecture of disconnectivity, we propose a coordinated set of interventions targeting each reinforcing component. Screening training should incorporate culturally sensitive communication strategies – extending beyond tool administration to result disclosure, referral pathway navigation, and expectation management, equipping PCPs with clear referral scripts and a directory of social support resources to reduce lenient scoring and pathway confusion. Beyond adapting communication to existing cultural frameworks, healthcare systems may also consider longer-term strategies to gradually shape public understanding of cognitive health through community-based education and awareness initiatives. To counter institutional governance deficits, we recommend a mandatory information feedback loop between primary care and specialist hospitals should be established, complemented by embedding a “cognitive management” module in health information systems, and screening-linked subsidies would address funding deficits, transforming cognitive care from a project-based activity into a sustainable core function.

This study has several limitations. First, this study was conducted only in Guangdong Province, a region in southern China with a developed economy and a relatively well-established primary medical system. The research results may not be fully applicable to regions with less primary medical resources. Second, the study adopted a service provider perspective and only included primary medical institution stakeholders, without covering key groups such as elderly patients with cognitive impairments, family caregivers, and community organization staff, who all play important roles in the cognitive care pathway. Third, the study did not explore the impact of macro factors such as medical insurance policies, economic development levels, and regional medical system characteristics on the continuity of cognitive care after screening. These factors may interact with the obstacles identified in this study and jointly affect the care effect. Future research should further improve from these aspects.

Conclusions

This study shows that older adults face substantial barriers to accessing comprehensive cognitive impairment management. Although initial screening programs can be conveniently implemented through routine health examinations, the lack of subsequent diagnostic and treatment pathways, as well as collaboration, diminishes the initiative of PCPs in conducting such work. Furthermore, due to an inability to recognize the core value of health management, older adults

often lack the motivation to actively seek further assistance. Additionally, the absence of involvement from family members complicates the assessment of interventions, ultimately resulting in screening outcomes being limited to data collection and failing to translate into tangible health benefits. To close the post-screening gap, we recommend formalizing referral pathways for screen-positive patients and establishing structured feedback loops between primary care and specialist services.

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Informed consent: Informed consent was obtained from all individuals included in this study.

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