

Why do patients bypass primary care? Trust, resource concentration, and risk in China's tiered healthcare system: A comparative policy perspective

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Abstract: China's tiered healthcare system seeks to direct patients to clinically appropriate levels of care, and yet many patients continue to seek care directly at higher-level hospitals. This Policy Forum proposes a conceptual explanation linking resource and capability concentration, perceived institutional trust differentials, risk-avoidant choice of providers, and the amplification of reputation through family and social networks. Illustrative comparisons with the United Kingdom, the United States, Japan, and South Korea reveal related but non-equivalent forms of alternative healthcare access under different arrangements. The framework does not treat bypassing a tier as inherently irrational or claim that the proposed pathways have been causally established. Instead, it suggests that credible primary care, reliable referral benefits, continuity of care, risk-sensitive rules on access, aligned financial incentives, and trustworthy quality information must be developed together. The proposed framework is intended to guide empirical testing and policy evaluation rather than to rank healthcare systems or estimate the prevalence with which care is bypassed.

Keywords: healthcare utilization, choice of providers, institutional confidence, referral pathways, access policy, decision-making in the face of uncertainty

1. Introduction

China's tiered healthcare system is intended to direct routine, preventive, and chronic care toward primary-care facilities while reserving higher-level hospitals for patients who require specialized services (1). Its effectiveness therefore depends not only on the formal design of referral pathways but also on whether patients regard primary care as a credible, convenient, and clinically safe first point of contact. Reviews of China's primary healthcare system have identified persistent issues with workforce capability, incentives, integration, and measurement of quality (2).

When patients bypass primary care, tertiary-care hospitals may face avoidable congestion while community-based services remain underused. A national longitudinal study also reported a decline in the stated preference for primary healthcare between 2012 and 2018, although preference is not equivalent to observed utilization (3). Such choices should not automatically be characterized as irrational or noncompliant. In the face

of diagnostic uncertainty, a patient may select the facility perceived to offer the lowest risk of misdiagnosis, delay, or failed referral, even when that decision is less efficient from a system perspective. Recent qualitative work likewise suggests that habitual preferences and reflective risk assessment can interact in the bypassing of primary care (4).

This Policy Forum develops a mechanism-based explanation for the bypassing of primary care in China and it uses selected international examples to clarify how institutional access arrangements shape related care-seeking behaviors. Its principal contribution is a proposed pathway in which structural disparities influence perceived capability and trust, risk-avoidant reasoning translates those perceptions into choice of providers, and mechanisms of social reputation amplify the process.

2. Comparative context and analytical approach

A patient bypassing care should be distinguished

from other deviations from anticipated care pathways, including nonurgent emergency department use, specialist self-referral, urgent-care substitution, and preferring a hospital over a community provider. Choice of providers is shaped by patient, provider, and contextual factors, and the meaning of a particular choice depends on associated gatekeeping, insurance, payment, and referral arrangements (5).

This article uses a narrative and illustrative comparison based on selected policy documents and representative studies. The United Kingdom, the United States, Japan, and South Korea were chosen because they illustrate contrasting combinations of gatekeeping, direct-access options, financial guidance, and choice of providers. The comparison is neither a systematic review nor a ranking of national performance; differences in terminology, populations, and data sources preclude direct estimates of comparative prevalence.

Within the United Kingdom's National Health Service, access to specialists in hospitals generally requires referral from a general practitioner, subject to specified exceptions (6). In the United States, nonurgent emergency department use has been associated with convenience, barriers to access, and negative perceptions of alternatives, although definitions vary substantially across studies (7). Japan generally preserves direct access while applying additional charges at specified hospitals for some patients without a referral (8). South Korean evidence reveals the existence of a hospital preference among patients whose conditions may be manageable in primary care amidst a relatively broad choice of providers (9).

Table 1 summarizes the institutional access arrangements and the principal forms of bypassing care across the five settings. As shown in Table 1, these behaviors are related but not directly equivalent. The United Kingdom illustrates formal specialist-referral requirements, the United States illustrates nonurgent emergency-department use shaped partly by convenience and barriers to access, Japan illustrates direct hospital access moderated by additional charges, and South Korea illustrates a preference for hospitals amidst a relatively broad choice of providers. China's challenge therefore should be interpreted within its own tiered-care reforms rather than inferred from a single cross-national mechanism.

3. Mechanisms for the bypassing of primary care in China

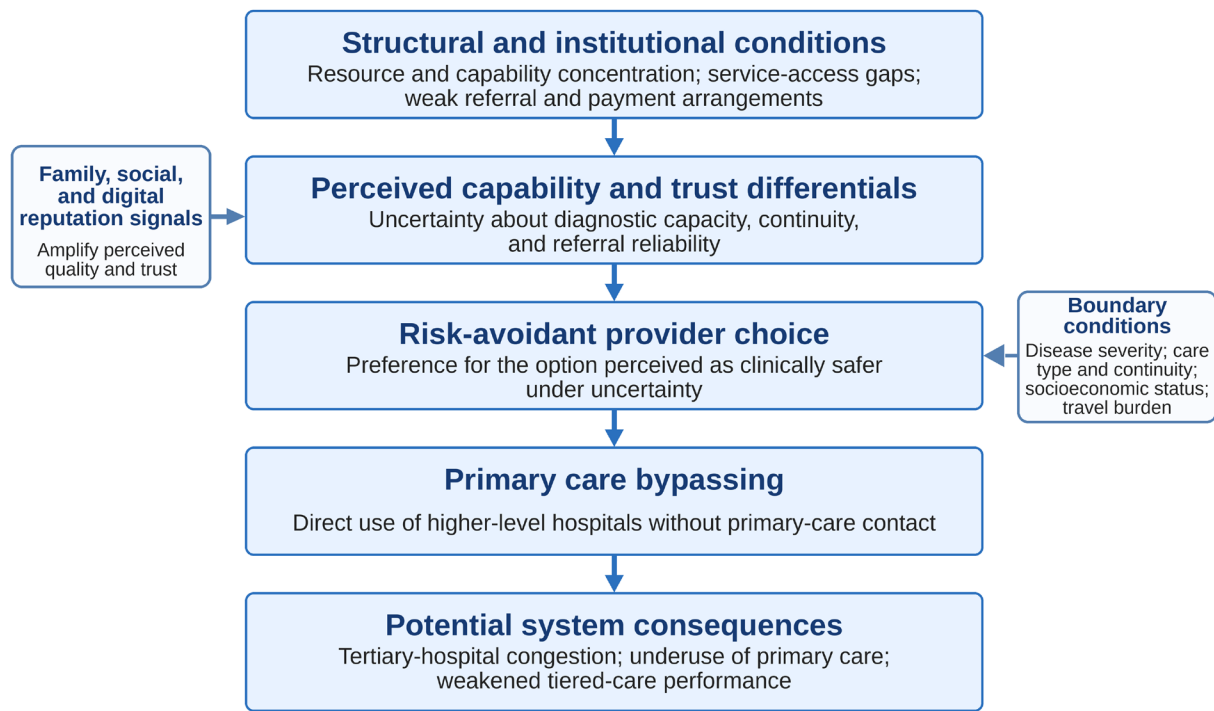
The proposed relationships are summarized in Figure 1. Resource concentration, service-access gaps, and limited referral or payment arrangements may contribute to perceived capability and trust differentials. In the face of uncertainty, these perceptions may encourage a risk-avoidant choice of providers, while family and social reputation signals may amplify perceived differences

Table 1. Conceptual comparison of healthcare-seeking behaviors related to bypassing care and access arrangements

Comparative dimension	China	United Kingdom	United States	Japan	South Korea
Formal primary care gatekeeping	Partial and regionally variable	General-practitioner referral is generally required for specialist care in a hospital	Arrangements vary by insurance plan, provider network, and service type	Relatively weak	Relatively weak
Direct access to hospitals	Generally permitted	Specified exceptions to the usual specialist-referral pathway exist	Emergency department access is possible; coverage and cost-sharing vary	Generally permitted; additional charges may apply at specified hospitals without a referral	Broad patient choice of provider
Main behavior related to bypassing care	Direct use of tertiary-care hospitals	Use of permitted alternative routes rather than direct specialist self-referral	Nonurgent emergency-department use associated with convenience, access barriers, and perceptions of alternatives	Direct use of specified large hospitals without a referral, subject in some cases to additional charges	Hospital rather than clinic use for conditions potentially manageable in primary care
Principal mechanisms considered	Perceived capability and trust gaps, resource concentration, few referrals, and risk avoidance	Gatekeeping, accessibility, and waiting time	Insurance design, affordability, continuity, convenience, and access	Choice of providers combined with referral incentives and additional charges	Choice of providers, reputation, and resource concentration
Interpretive relevance to China	Provision of a reference	Alternative entryways are accessed in the face of strong gatekeeping; not directly equivalent to bypassing care at the hospital level	Shows access- and payment-related substitution; definitions of nonurgent use vary	Limited financial guidance provided while substantial choice is retained	Hospital preference evident with broad choice but in a different institutional setting

Notes on evidence sources: The comparison is illustrative rather than exhaustive. The behaviors shown are functionally related but not directly equivalent, and the table should not be interpreted as a ranking of healthcare-system performance. Country descriptions are substantiated by the sources cited in the corresponding cells and main text.

Proposed pathways to primary care bypassing



Arrows indicate hypothesized, context-dependent relationships.

Figure 1. Proposed conceptual framework for the bypassing of primary care in China. Resource concentration, service-access gaps, and limited referral and payment arrangements may contribute to perceived capability and trust differentials. These differentials may shape a risk-avoidant choice of providers while family, social, and digital reputation networks may amplify the process. Proposed consequences include tertiary-care hospital congestion, underuse of primary care, and diminished performance by the tiered healthcare system. Arrows indicate hypothesized rather than empirically established causal relationships.

(4,5). Together, these mechanisms may increase the bypassing of primary care and contribute to tertiary-care hospital congestion, underuse of primary care, and diminished tiered-care performance.

3.1. Structural and institutional conditions

Highly qualified clinicians, advanced diagnostic technologies, and specialist services remain concentrated in tertiary-care hospitals and major urban centers. A systematic review has identified perceived quality, provider capability, accessibility, and resource distribution as important correlates of the level of care chosen (10). Spatial analysis in Sichuan further demonstrated substantial geographic variation in access to primary healthcare (11). Qualitative evidence indicates that patients may associate higher-level facilities with greater diagnostic reliability and clinical safety (12).

These disparities can make hospital rank a practical signal of expected quality. Observational evidence among middle-aged and older adults reveals the bypassing of primary care facilities, although the

determinants vary by population and setting (13). A recent study comparing tertiary-care hospitals to community clinics likewise found that provider attributes, patient experience, and family-doctor-related factors were associated with choice (14). Evaluations of tiered-care reform also suggest that primary care capacity, institutional coordination, and functional referral arrangements must develop together (15). Structural inequality therefore creates the conditions for the bypassing of primary care but does not, by itself, establish why a particular patient chooses a tertiary-care hospital.

3.2. Trust, uncertainty, and risk-avoidant decision-making

Institutional trust is best treated as an intervening mechanism rather than an independent or fixed patient attribute. When patients are uncertain about diagnostic capacity, medicine availability, continuity, or the reliability of onward referral, they may place greater confidence in tertiary-care hospitals. Research in China has linked doctor-patient trust with choice of providers

(16), and a township-health-center study found that patient experience and trust were positively associated with willingness to seek care (17). Evidence from Shanghai and Shenzhen also suggests that perceived primary-care quality can change following reforms, although effects may differ by setting (18). Reviews of primary healthcare reform confirm that perceived service quality and organizational capacity remain central implementation concerns (19).

Limited knowledge and distrust may further narrow the range of options patients regard as safe (20). Hospital attributes such as level, physician reputation, equipment, and access can influence first-visit preferences, although stated preferences in discrete-choice experiments should not be treated as equivalent to observed utilization (21). A cross-sectional study based on rational choice theory found that survival, economic, and social considerations were all associated with the choice of primary-care facilities (22). In the face of uncertainty, willingness to use primary care first may also vary with perceived severity and expected consequences of delay (23). The proposed mechanism is therefore probabilistic: perceived capability gaps may shape trust, and trust may influence risk evaluation, but these relationships require longitudinal or experimental testing.

3.3. Social amplification and boundary conditions

Care-seeking decisions may be embedded in family discussion, recommendations from acquaintances, and socially conveyed impressions of hospitals and physicians (4,5). Online physician effort and reputation have also been associated with patient choice on a large Chinese platform, although platform-based physician selection is not equivalent to bypassing primary care (24). These channels can amplify reputation signals, but the available evidence does not justify treating them as decisive or culturally uniform determinants. Their influence is likely to depend on disease severity, prior experience, continuity with a clinician, health literacy, socioeconomic resources, rural or urban residence, and travel burden.

Institutional incentives also shape the cost of acting on these perceptions. When reimbursement differences are modest, referral benefits are uncertain, and direct hospital access remains feasible, the opportunity cost of bypassing care may be low. Insurance pooling and benefit design can alter healthcare-seeking behavior and expenditure, but their effects may differ across regions and population groups (25). These conditions interact with trust and perceived risk rather than operating as isolated mechanisms.

Table 2 synthesizes how the proposed mechanisms may operate in China, their hypothesized pathways, potential system consequences, and corresponding policy responses. The mechanisms should be interpreted as interacting and context-dependent rather than as

Table 2. Proposed mechanisms of the bypassing of primary care in China and policy responses

Mechanism	Manifestation in China	Hypothesized pathway	Potential consequences	Policy response
Resource and capability gaps	Specialist staff, technology, and prestige are concentrated in tertiary-care hospitals and large cities	Visible disparities may increase perceived quality differences	Concentrated patient flows and regional inequity	Strengthen primary care capacity and integrated networks; monitor capability and access
Referral, access, and payment conditions	Referral benefits and reimbursement differences may be insufficient or unreliable	Low opportunity cost of direct hospital use may diminish primary-care-first pathways	Poor coordination and avoidable tertiary use	Provide reserved referral access, record exchange, feedback, and equitable financial incentives
Perceived uncertainty and trust differentials	Patients may be uncertain about diagnostic capacity, medicine availability, and referral reliability	Uncertainty may shift trust toward higher-level institutions	Underuse of primary care and delayed relationship building	Publish validated capability information and strengthen continuity of care
Risk-avoidant decision-making	Patients may prioritize the provider perceived as safest when severity is uncertain	Perceived consequences of error or delay may outweigh cost or convenience	Use of higher-cost services for lower-risk conditions	Use risk-stratified pathways with explicit high-risk exceptions and safety monitoring
Family, social, and digital reputation amplification	Advice, online communities, rankings, and physician reputation shape perceived quality	Informal signals may amplify capability and trust differentials	Further concentration of demand at prestigious hospitals	Provide understandable risk-adjusted quality information and govern commercial rankings

Source: Proposed by the authors as a conceptual synthesis of the literature cited in the main text. The pathways are hypothesized and have not been causally established.

independent or empirically established causal effects.

4. Policy implications

Bypassing care can arise from interacting structural, informational, and behavioral mechanisms, so a single administrative restriction is unlikely to be sufficient. Policy design should make the preferred pathway clinically reliable and operationally valuable while ensuring timely access for patients with potentially serious conditions.

4.1. Make primary care capabilities and continuity evident

Primary-care facilities should publish standardized information on the scope of care, availability of medicines, diagnostic capacity, clinician qualifications, hours of operation, and the rate of referral. Capability reporting should use comparable definitions and external quality assurance rather than promotional claims. Family-doctor evaluation should place greater weight on continuity, chronic-disease follow-up, post-referral contact, and patient-reported trust than on enrollment alone. Higher continuity in general practice has been associated with fewer admissions for ambulatory-care-sensitive conditions, although the evidence is observational (26). Contracted family doctor services in China may also facilitate more equitable use of basic public health services, but service quality and continuity—and not enrollment alone—should remain the policy focus (27).

4.2. Align referral, access, and financial incentives with clinical risk

Referral should provide tangible benefits, such as appointments with specialists, priority diagnostics, interoperable records, mutual recognition of appropriate test results, and timely feedback to the referring clinician. A recent national policy emphasizes closer ties between first-contact and referral services and improved continuity of care (28). Implementation should be assessed using clearly defined denominators for referral completion, waiting time, feedback return, and post-referral follow-up.

A risk-stratified approach is preferable to an inflexible universal gatekeeping requirement. Primary-care-first pathways may be suitable for defined low-risk conditions, whereas suspected cancer, medical emergencies, rapidly progressive symptoms, and other high-risk situations require direct or expedited specialist access. Higher reimbursement and lower out-of-pocket costs for primary care may encourage appropriate use, but safeguards are needed for low-income populations, people with disabilities, rural residents, and patients whose clinical risk is uncertain.

4.3. Provide quality information and evaluate implementation

Unvalidated rankings and physician-reputation signals should not substitute for credible quality information. Authorities and healthcare organizations should provide understandable, risk-adjusted indicators while explaining their limitations. A systematic review of public performance reporting found variable effects operating through patient selection and changing providers, underscoring the importance of careful design and evaluation (29). Evaluation should examine whether patients use formal information, whether potentially manageable tertiary-care hospital visits decline without increasing diagnostic delay, and whether effects differ by income, age, residence, and disease risk. Interrupted time-series, controlled before-and-after, or pragmatic implementation designs would provide stronger evidence than simple post-policy utilization counts.

5. Limitations and conclusions

This Policy Forum is conceptual and has several limitations. The literature was selected narratively rather than through a systematic search; the country examples are illustrative and use non-equivalent definitions; and national-level descriptions obscure regional and population heterogeneity. The proposed sequence among structural conditions, trust, perceived risk, and choice of providers has not been causally established. A Chinese scale-development study offers one starting point for measuring willingness to use primary care, but broader validation is still needed (30). Future studies should prespecify definitions of bypassing care, measure the proposed constructs with validated instruments, distinguish stated preferences from observed utilization, and test mediation and effect modification using longitudinal, quasi-experimental, or mixed-methods designs.

In conclusion, the bypassing of primary care in China may reflect a combination of resource and capability disparities, uncertainty about primary care and referral reliability, risk-avoidant decision-making, and reputation amplification. The comparative examples showed that related patterns may emerge under different access arrangements, but they do not substantiate a universal causal explanation. Reform should therefore focus on making primary care reliable, referrals valuable, financial incentives equitable, and quality information trustworthy. The framework offered here is a set of testable propositions for policy evaluation rather than a definitive account of patient behavior.

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References

- General Office of the State Council. Guiding opinions of the General Office of the State Council on promoting the creation of a tiered diagnosis and treatment system. https://www.gov.cn/zhengce/content/2015-09/11/content_10158.htm (accessed September 4, 2026). (in Chinese)
- Li X, Lu J, Hu S, Cheng KK, De Maeseneer J, Meng Q, Mossialos E, Xu DR, Yip W, Zhang H, Krumholz HM, Jiang L, Hu S. The primary health-care system in China. *Lancet*. 2017; 390:2584-2594.
- Wan G, Wei X, Yin H, Qian Z, Wang T, Wang L. The trend in primary health care preference in China: A cohort study of 12,508 residents from 2012 to 2018. *BMC Health Serv Res*. 2021; 21:768.
- Li B. From habit to justification: A dual process theory approach to primary care bypassing in China. *Health Care Anal*. 2025. doi: 10.1007/s10728-025-00548-9. Epub ahead of print.
- Victoor A, Delnoij DMJ, Friele RD, Rademakers JJJM. Determinants of patient choice of healthcare providers: A scoping review. *BMC Health Serv Res*. 2012; 12:272.
- National Health Service. Referrals for specialist care. <https://www.nhs.uk/nhs-services/hospitals/referrals-for-specialist-care/> (accessed September 4, 2026).
- Uscher-Pines L, Pines J, Kellermann A, Gillen E, Mehrotra A. Emergency department visits for nonurgent conditions: Systematic literature review. *Am J Manag Care*. 2013; 19:47-59.
- Ministry of Health, Labour and Welfare, Japan. Revision of the "special charges" for patients visiting specified hospitals without a referral letter. https://www.mhlw.go.jp/stf/newpage_26666.html (accessed September 4, 2026). (in Japanese)
- Kim AM, Cho S, Kim HJ, Jung H, Jo MW, Lee JY, Eun SJ. Primary care patients' preference for hospitals over clinics in Korea. *Int J Environ Res Public Health*. 2018; 15:1119.
- Liu Y, Kong Q, Yuan S, van de Klundert J. Factors influencing choice of health system access level in China: A systematic review. *PLoS One*. 2018; 13:e0201887.
- Wang X, Yang H, Duan Z, Pan J. Spatial accessibility of primary health care in China: A case study in Sichuan Province. *Soc Sci Med*. 2018; 209:14-24.
- Liu Y, Zhong L, Yuan S, van de Klundert J. Why patients prefer high-level healthcare facilities: A qualitative study using focus groups in rural and urban China. *BMJ Glob Health*. 2018; 3:e000854.
- Li C, Chen Z, Khan MM. Bypassing primary care facilities: Health-seeking behavior of middle age and older adults in China. *BMC Health Serv Res*. 2021; 21:895.
- Wu S, Lei Z, Liu T, Chen L, Qin Y. The analysis of factors influencing patient choice of healthcare providers between tertiary hospitals and community clinics. *Front Public Health*. 2025; 13:1510311.
- Zhou S, Xu J, Ma X, Yuan B, Liu X, Fang H, Meng Q. How can one strengthen a tiered healthcare system through health system reform? Lessons learnt from Beijing, China. *Int J Environ Res Public Health*. 2020; 17:8040.
- Yan WH, Lei ZW, Hu WN, Xi N, Xiao JC. Research on the influence of doctor-patient trust level on the choice of medical treatment. *J Shandong First Med Uni & Shandong Acad Med Sci*. 2024; 45:296-301. (in Chinese)
- Zhao Z, Zhang Z, Yang C, Li Q, Chen Z, Yin W. The influence of patient experience and patient trust on willingness to see a doctor based on SOR theory. *BMC Health Serv Res*. 2024; 24:1278.
- Wei X, Li H, Yang N, Wong SYS, Chong MCS, Shi L, Wong MCS, Xu J, Zhang D, Tang J, Li DKT, Meng Q, Griffiths SM. Changes in the perceived quality of primary care in Shanghai and Shenzhen, China: A difference-in-difference analysis. *Bull World Health Organ*. 2015; 93:407-416.
- Cai C, Xiong S, Millett C, Xu J, Tian M, Hone T. Health and health system impacts of China's comprehensive primary healthcare reforms: A systematic review. *Health Policy Plan*. 2023; 38:1064-1078.
- Ruan Y, Zhuang C, Chen W, Xie J, Zhao Y, Zhang L, Lin H. Limited knowledge and distrust are important social factors of out-patient's 'inappropriate diagnosed seeking behaviour': A qualitative research in Shanghai. *Int J Health Plann Manage*. 2021; 36:847-865.
- Liu Y, Kong Q, Wang S, Zhong L, van de Klundert J. The impact of hospital attributes on patient choice for first visit: Evidence from a discrete choice experiment in Shanghai, China. *Health Policy Plan*. 2020; 35:267-278.
- Li J, Zhao N, Gu M, Li D, Yang J. A study of patients' choice of medical treatment based on rational choice theory: A cross-sectional survey from China. *Fam Pract*. 2024; 41:745-754.
- Song F, Wei R, Wang C, Zhang Y. Residents' willingness towards first-contact with primary health care under uncertainty in healthcare: A cross-sectional study in rural China. *BMJ Open*. 2024; 14:e077618.
- Deng Z, Hong Z, Zhang W, Evans R, Chen Y. The effect of online effort and reputation of physicians on patients' choice: 3-wave data analysis of China's Good Doctor website. *J Med Internet Res*. 2019; 21:e10170.
- Xie M, Yang J, Yang Y. Provincial overall planning of basic medical insurance for urban and rural residents, healthcare-seeking behavior and medical expense growth. *Chin J Health Policy*. 2024; 17:10-18. (in Chinese)
- Barker I, Steventon A, Deeny SR. Association between continuity of care in general practice and hospital admissions for ambulatory care sensitive conditions: Cross sectional study of routinely collected, person level data. *BMJ*. 2017; 356:j84.
- Lai S, Huang Y, Zhang X, Wang Z, Feng J, Zhou Z, Shen C, Lu L. Promoting equality in utilization of basic public health services in China: The role of the family doctor contract service. *J Med Econ*. 2024; 27:1444-1455.
- National Health Commission of the People's Republic of China. Notice on enhancing first-contact and referral services and improving the continuity of medical care. <https://www.nhc.gov.cn/yzygj/c100068/202411/d85d3ba36c43460fa67deb333f52203b.shtml> (accessed September

- 4, 2026). (in Chinese)
29. Prang KH, Maritz R, Sabanovic H, Dunt D, Kelaher M. Mechanisms and impact of public reporting on physicians and hospitals' performance: A systematic review (2000-2020). PLoS One. 2021; 16:e0247297.
30. Li Z, Ma Z. Construction and scale development of willingness to utilize primary care services: A study from China. Risk Manag Healthc Policy. 2023; 16:2171-2185.

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