

Questionnaire 2: Hospital Practitioner Questionnaire

Title: Survey on Current Application Status and Demands of AI in Medical Quality Assessment and Hospital Accreditation

Dear Respondent,

This questionnaire investigates the real-world deployment, practical barriers and ethical risk perceptions of AI technologies in medical quality assessment and hospital accreditation, to establish an AI implementation framework adaptable to China's national conditions and international standards. All responses are anonymous; all institutional data will be strictly confidential and only used for academic research. Please answer truthfully based on your hospital's actual practice (approximately 3 minutes required). Thank you for your participation!

Section 1: Basic Hospital Information

1) Hospital tier [Single choice]

- ☐ Tertiary hospital
- ☐ Secondary hospital
- ☐ Other: _____

2) Hospital ownership [Single choice]

- ☐ Public hospital
- ☐ Private hospital

3) Hospital location [Single choice]

- ☐ Chinese mainland
- ☐ Hong Kong, China
- ☐ Macao, China
- ☐ Other (please specify): _____

4) Hospital accreditation status [Single choice]

- ☐ Already accredited (name: _____)
- ☐ Undergoing accreditation application (name: _____)
- ☐ No international accreditation pursued

5) Has your hospital adopted AI technologies for medical quality assessment or hospital accreditation? [Single choice]

- ☐ Yes
- ☐ No

6) Years of AI deployment for quality & accreditation work (Only for respondents selecting "Yes" in Q5) [Single choice]

- ☐ Less than 1 year
- ☐ 1–3 years

- Over 3 years

Section 2: Current AI Deployment & Practical Outcomes

7) Primary AI application scenarios adopted by your hospital (Multiple choice, Only for respondents selecting "Yes" in Q5)

- ☐ Real-time collection and analysis of medical quality indicators
- ☐ Intelligent sorting and review of hospital accreditation documents
- ☐ Early warning and prediction of quality risks (e.g., adverse events)
- ☐ Dynamic matching and compliance evaluation against accreditation standards
- ☐ Intelligent generation of self-assessment reports for accreditation
- ☐ Fusion processing of multi-source data (EMR, quality control systems, etc.)
- ☐ Others (please specify): _____

8) Types of adopted AI tools (Multiple choice, Only for respondents selecting "Yes" in Q5)

- ☐ Independently self-developed
- ☐ Purchased from third-party technology vendors
- ☐ Co-developed with external institutions
- ☐ Others (please specify): _____

9) Perceived improvements brought by AI deployment (1 = Negligible; 2 = Slight; 3 = Moderate; 4 = Obvious; 5 = Extremely prominent) [Matrix scale, Only for respondents selecting "Yes" in Q5]

Item	Negligible	Slight	Moderate	Obvious	Extremely prominent
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Improved efficiency of quality indicator monitoring	☐	☐	☐	☐	☐
Shortened preparation cycle for accreditation materials	☐	☐	☐	☐	☐
Higher accuracy of medical quality evaluation results	☐	☐	☐	☐	☐
Improved efficiency in identifying accreditation compliance gaps	☐	☐	☐	☐	☐
Reduced human resource costs for quality management	☐	☐	☐	☐	☐

Section 3: Practical Pain Points & Technical Barriers

10) Key challenges of conventional medical quality assessment and hospital accreditation (Multiple choice)

- ☐ Low efficiency and heavy workload of manual review
- ☐ Fragmented data with poor cross-system integration
- ☐ Inconsistent interpretation of evaluation standards leading to subjective bias
- ☐ Cumbersome preparation of accreditation documents with frequent omissions
- ☐ Delayed early warning of quality risks
- ☐ Poor adaptability to international accreditation standards
- ☐ Others (please specify): _____

11) Core technical barriers to existing AI deployment (Multiple choice, Only for respondents selecting "Yes" in Q5)

- ☐ Inconsistent data formats across systems with poor interoperability

- ☐ Insufficient explainability of AI algorithm outputs
- ☐ Delayed model adaptation amid frequent updates of accreditation standards
- ☐ Complex technical operations imposing high learning costs on clinical staff
- ☐ Unstable system performance with frequent malfunctions
- ☐ Others (please specify): _____

12) Main reasons for non-adoption of AI technologies (Multiple choice, Only for respondents selecting "No" in Q5)

- ☐ Lack of mature AI tools matching practical demands
- ☐ Excessively high procurement or R&D costs
- ☐ Concerns over data security and ethical risks
- ☐ Insufficient internal technical capacity
- ☐ Doubts regarding the practical value of AI
- ☐ Others (please specify): _____

Section 4: Perception of Ethical Risks

13) Level of concern over potential ethical risks of AI in quality assessment and accreditation (1 = No concern at all; 2 = Slightly concerned; 3 = Moderately concerned; 4 = Highly concerned; 5 = Extremely concerned) [Matrix scale]

Item	No concern at all	Slightly concerned	Moderately concerned	Highly concerned	Extremely concerned
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Privacy leakage of patient and hospital data	☐	☐	☐	☐	☐
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Unfair evaluation outcomes caused by algorithmic bias	☐	☐	☐	☐	☐
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Unclear accountability for adverse outcomes induced by AI decisions	☐	☐	☐	☐	☐
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Degradation of professional judgment from over-reliance on AI	☐	☐	☐	☐	☐
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Monopolization or uncontrolled usage scope of data by technology vendors or platforms	☐	☐	☐	☐	☐
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Section 5: Practical Demands & Suggestions

14) Most urgently required AI functional modules (Multiple choice)

- ☐ Intelligent interpretation and matching of international accreditation standards
- ☐ Automatic integration and cleaning of multi-source data
- ☐ Real-time quality risk early warning with intervention recommendations
- ☐ One-click generation and optimization of accreditation reports
- ☐ Visualized presentation of algorithm results
- ☐ Automatic screening of ethical risks
- ☐ Others (please specify): _____

15) Required supportive conditions for AI deployment (Multiple choice)

- ☐ Unified cross-system data interoperability standards
- ☐ Low-cost mature AI tools
- ☐ Professional technical training and on-site guidance
- ☐ Clear ethical norms and policy guidelines

- ☐ Data security guarantee technologies
- ☐ Others (please specify): _____

16) Additional suggestions on AI application in international hospital accreditation
[Open-ended]