

Interview Checklist

Study Title: AI-Driven Innovations in the Prevention of Non-Communicable Diseases: Challenges and Solutions from the Perspective of Health System Experts in Iran

Study Type: Qualitative research using a conventional content analysis approach

Principal Investigator: Dr. Abdossaleh Jafari, Faculty Member, Shiraz University of Medical Sciences. TELL:09171458141

Ethics Code: IR.SUMS.REC.1404.073

⇒ Section 1: Introduction and Informed Consent to Participate in the Interview

Dear Participant,

You have been invited to take part in a research study as a health system expert. The purpose of this study is to explore your perspectives, experiences, and recommendations regarding the opportunities, challenges, and requirements related to the application of artificial intelligence in the prevention of non-communicable diseases in Iran's health system.

The interview is semi-structured and will take approximately 45 to 60 minutes. With your consent, the conversation will be audio-recorded. All information will be kept strictly confidential and used solely for academic and research purposes. Participation in this study is completely voluntary, and you may withdraw from the interview at any time without any consequences.

If you are willing to participate, please complete the following consent section:

I hereby confirm that I have been informed about the purpose of the study, the interview process, audio recording procedures, confidentiality of the data, and my rights as a participant. I voluntarily agree to participate in this research study.

Participant's Full Name:

Signature:

Date:

Section 2: Participant Demographic Information

Gender	Female <input type="checkbox"/> Male <input type="checkbox"/>
Age
Educational Degree	Professional Doctorate <input type="checkbox"/> Master's <input type="checkbox"/> PhD <input type="checkbox"/>
Field of Study
Professional Specialty
Position
Type of University	Type 1 <input type="checkbox"/> Type 2 <input type="checkbox"/> Type 3 <input type="checkbox"/>
Province of Practice
Years of Professional Experience
Previous Participation in AI or Digital Health Projects	Yes <input type="checkbox"/> No <input type="checkbox"/> (If yes, please specify:

Section 3: Interview Questions

1. To begin with, how familiar are you with the concepts and applications of artificial intelligence in the health system? Please elaborate.
2. In your opinion, what potential capacities and applications does AI have for the prevention of non-communicable diseases in Iran?
3. Have you had any experience using AI technologies in healthcare or prevention-related projects? If yes, please provide an example.
4. How do you think AI can contribute to strengthening primary care, early identification of high-risk individuals, or delivering personalized preventive interventions?
5. What impact can AI have in terms of optimizing resources, improving health system efficiency, or promoting equity in access to care?
6. What infrastructure, technical, or data-related barriers do you see in implementing AI for NCD prevention in Iran?
7. Do you think the Iranian health system is adequately prepared in terms of human resources (training, skills, technological literacy) to use AI? What are the main gaps?
8. What organizational or cultural resistances do you observe that might hinder the acceptance and adoption of intelligent technologies?
9. What concerns exist regarding data privacy, security, and ethical issues related to the use of AI in healthcare?

10. Do you believe there is a risk of bias or discrimination in AI-based decision-making within Iran's health system? Why?
11. In the event of an error made by an AI system, who do you believe should bear legal and professional responsibility?
12. What key requirements must be considered to ensure the safe and effective implementation of AI in NCD prevention?
13. What recommendations would you offer to policymakers, academic institutions, or health system managers to support the development and deployment of AI in preventive care?