Appendix 1. Detailed information on the setting and participants

This policy brief, based on a qualitative study conducted from 2022 to 2024 as part of a doctoral thesis, outlines the general principles for enhancing transparency in Iran's health system. The study involved in-depth interviews with 35 Iranian experts, purposefully selected to represent various levels of the health system, and analyzed using thematic analysis. Three expert panels were then convened to critique the initial findings, leading to key revisions. Finally, the Delphi method was employed to finalize the principles, achieving consensus through multiple rounds of questionnaires. Detailed information on the setting and participants is provided below.

In-depth Interviews

Interviews with Iranian experts were conducted to gather state and principles of transparency in Iran's health system. Interviewees were selected purposefully and in clusters with maximum diversity to collect comprehensive opinions from various levels of the health system. Interviewees were chosen based on the six building blocks of the health system framework, representing different functions and levels of decision-making (macro, meso, and micro) and having professional experience in transparency or health management and policy. The semi-structured interviews were conducted using an interview guide approved by the project supervisor, both online and face-to-face, with the participant's consent, and by the first author. Questions were tailored to the participant's expertise and experience, with deeper questions asked as needed during the interviews. Interviews continued until data saturation was reached, resulting in a total of 35 in-depth interviews. Data analysis began concurrently with the interviews. The voice recordings were transcribed, and field notes were added. Data were transferred to the qualitative analysis software MAXQDA and analyzed and categorized using thematic analysis, extracting dimensions relevant to the research objective. Two researchers analyzed the data, with two others overseeing the process. The COREQ checklist was used to ensure study quality.

The study conducted 35 interviews from August to December 2023, lasting 30-120 minutes (average 60 minutes). The interviewees ranged from 29 to 67 years old (average 48 years), with 5-40 years of work experience (average 20 years). The study interviewed 20 experts online and 15 in-person at their offices. The experts came from Tehran, Yazd, Mashhad, Mazandaran, and one from England, and many had worked in other Iranian cities. Regarding their education, one had a bachelor's degree, seven had a master's degree or equivalent, and 27 had a specialized PhD degree or equivalent. In terms of their fields, 16 were in management, economics and policy-making, nine in general and specialized medicine, five in public health and epidemiology, three in information technology management, two in pharmacy, two in nursing, two in paramedical, and one in dentistry. In terms of their occupation, 19 were university faculty members; 18 had experience at the macro level of government, including parliament, universities of medical sciences, and various deputies of the MoH and other ministries, nine had experience in think-tanks and four had experience in social insurances.

Expert Panels

Following the previous phase, initial findings subjected to critique in three independent expert panels. These sessions, each attended by 5 to 6 health system experts, were held with a total of 16

experts. Each expert panel lasted about two hours, with one session held in person at the Administrative and Recruitment Organization and two sessions held virtually. Panel members were selected from prominent and recognized health system experts, including experienced faculty members in health management, economics, and policy, as well as current and former healthcare managers and policymakers or related fields of transparency and public management. The sessions were audio-recorded, transcribed, and supplemented with field notes.

Out of the 16 panel participants, all held a PhD except for one who was a general practitioner. Eleven of them had doctorates in management and policy fields. The other four had doctorates in anthropology, sociology, social medicine, and medical education. Among those with doctorates, four were also general practitioners or dentists. Fourteen of the panel members held managerial positions in the public health sector, and nine were university faculty members.

Delphi Method

Finally, the modified Delphi method was used to finalize the principles. This method employed an electronic questionnaire with closed-ended questions using a Likert scale. Open-ended questions were also included to allow participants to introduce new components and provide reasons to clarify their opinions. A consensus threshold of 75% agreement was set. In the first round, questions with 75% or more agreement were approved, while those with less than 50% agreement were discarded. In the second round, questions with 50-75% agreement were sent back with reasons for their acceptance or rejection. Components that were neither approved nor rejected moved to the third round, where those achieving 75% agreement were approved, and the rest were discarded.

The selection of participants was purpose-based and included experts with a scientific or executive background in the field of health system, especially in connection with health policy and management. In the first stage, 70 people with appropriate scientific or executive competence related to the field participated in Delphi. In terms of education, 31 had a specialized doctorate, 16 had a master's degree, 12 were physicians, 10 were pharmacists, and four were bachelors. 37 participants had studied in the fields of management, economics, and policy, 10 of them were faculty members, and 11 had managerial experience. In the second round, 36 individuals participated, and in the third round, 23 of them participated.

Reflexivity

As a reflexivity statement, three faculty members in health management and policy served as supervisors and advisors, holding executive positions in the Ministry of Health, medical universities, and other governmental institutions. The first author is a doctoral student in health policy with social and think tank experience in health system transparency.