# In the Name of God

# Islamic Republic of Iran Ministry of Health and Medical Education Deputy for Education

# **Heath Information Management**

### **Degree: Doctor of Philosophy (PhD)**

#### **Total Course Credits**

- Core credits: 20
- Noncore credits: 8
- Dissertation: 20

#### **Program Description**

Health information management was initially introduced in the United States in 1990s. Gradually, various universities started to admit students to their PhD programs when many other academic courses and curriculums were being created. Health information management is in close relationship with health information technology (HIT), and many universities in England, Australia, and Canada are admitting students to their PhD programs. In Iran, this program was initially approved by the relevant authorities in 1998 when a number of universities started to admit students to their program.

#### Definition

Health information management is a profession with many university graduates who are able to identify different parts of a health system, collect and analyze health data, make high quality information accessible using electronic methods, and manage health information while they strictly observe patient rights and the confidentiality of patient information.

#### Aim

a) Improving performance and quality of health information management in the country

b) Administering health information management scientifically and systematically using information and communication technologies

#### **Admission Requirements**

\*Important note: It is essential to indicate that the general conditions below do not necessarily rule out the specific conditions that might be considered by each particular institute or university. The relevant universities may specify their own specific conditions including exams, interview, CV, recommendations, etc.

- Applicants should be eligible to enter the course according to the PhD educational rules and regulations of the Islamic Republic of Iran (Ministry of Health and Medical Education) Iranian applicants should be accepted through a national exam held by the Ministry of Health and Medical Education. This exam has two parts: a multi-choice exam and an interview. The interview includes an oral examination and a review of the applicants' CV. Accepting in the multi-choice exam is a pre-requisite for the interview. The total score will be the sum of scores from the written exam (70%) and oral interview (30%)
- Applicants should possess a valid certification for their English language proficiency
- Applicants should hold a master degree (MSc) in one of the fields of medical records, education of medical records, rehabilitation management, social welfare, medical librarianship, health services management, health information technology, medical informatics, and health technology

assessment OR a general doctorate in one of the fields of medicine, pharmacy or dentistry awarded by one the home or foreign universities approved by the Ministry of Health and Medical Education.

#### **Expected Competencies at the End of the Program**

#### **General Competencies\***

#### **Specific Competencies and Skills**

The course will promote students' expertise in an attempt to develop all essential skills necessary in various areas of the health care system; the course will also carry out education and research in the field of health. The curriculum has been built to support professional development in areas related to management, education and research, in the field of health information management and health information systems.

#### A) Managerial and Professional Roles

This curriculum will support the students to be able to:

- analyze and implement health information policies at the regional and national levels of their home country
- develop and implement policy and procedures related to any aspects of health information management
- implement and monitor any standards related to quality of health care in terms of health information management
- develop participatory activities and take part in such activities to develop national health information standards in terms of information content and structure at the national level of their home country
- develop and implement policies and guidelines to facilitate health information exchange between health information systems in their home country
- facilitate health information usage for any authorized health information users
- manage accreditation programs of health care organizations in terms of health information management
- analyze health information for a variety of usages
- develop and manage any program for improving the quality of health information
- lead and manage health information systems as well as related people and processes at the organizational, regional and national levels **B**) **Teaching Roles** This curriculum will educate and train the students to be able to:
- teach any subjects related to health information management to health care managers, providers and HIM candidates
- teach students in the fields of health information technology and health information management

#### C) Research Roles

This curriculum will support the students to be able to:

- independently develop, conduct and evaluate research projects related to health information management and technology

- take a participatory role in developing, conducting and evaluating research projects related to health information management and technology at the national level of the home country - conduct re-engineering projects for health information management

### **Educational Strategies, Methods and Techniques\***

# **Student Assessment (Methods and Types)**

Students will be evaluated through a variety of methods. Generally, the evaluations will be based on:

- 1- Final exam (written)
- 2- Comprehensive exam (written and Oral examinations) after completing the courses 3-Completion of a scholarly dissertation

#### **Ethical Considerations\***

\*Note: The related document(s) can be found at http://hcmep.behdasht.gov.ir/.

# **Tables of the Courses**

| Code of the | Title of the Course                                 | Number of<br>Credits |           |        | Total number<br>of hours |           |       | Prerequ<br>isite or       |
|-------------|---|----------------------|-----------|--------|--------------------------|-----------|-------|---------------------------|
| Course      |   | Theoretic<br>al      | Practical | Total  | Theoretic<br>al          | Practical | Total | concurr<br>ent<br>courses |
| 01          | Health Information Systems*                         | 0.5                  | 0.5       | 1      | 9                        | 17        | 26    |                           |
| 02          | Health Information Management                       | 2                    | -         | 2      | 34                       | -         | 34    |                           |
| 03          | Special English Language                            | 2                    | -         | 2      | 34                       | -         | 34    |                           |
| 04          | Analysis of Management Theories                     | 2                    | -         | 2      | 34                       | -         | 34    |                           |
| 05          | Data Structure and Programming                      | 3                    | -         | 3      | 51                       | -         | 51    |                           |
| 06          | Nomenclature and classification Systems of Diseases | 2                    | -         | 2      | 34                       | -         | 34    |                           |
| 07          | Health Economy                                      | 2                    | -         | 2      | 34                       | -         | 34    |                           |
| 08          | Operational Research                                | 3                    | -         | 3      | 51                       | -         | 51    |                           |
|             | Total   | 16.5                 | 0.5       | 1<br>7 | -                        | -         | -     |                           |

Table A: Compensatory Courses in Health Information Management, PhD

\* Completion of this course is mandatory for those who have not passed it before. Students should earn at most 10 compensatory course credits (Table A) as specified by the Department and approved by the Postgraduate Education Council.

Table B: Core Courses in Health Information Management, PhD

| Code of<br>the | Title of the Course  |           | Number of<br>Credits |       |           | l num<br>hours | Prerequ<br>isite or |                           |
|----------------|--|-----------|----------------------|-------|-----------|----------------|---------------------|---------------------------|
| Course         |  | Theoretic | Practical            | Total | Theoretic | Practical      | Total               | concurr<br>ent<br>courses |
| 09             | Designing and Developing Health<br>Information Systems I     | 1         | 1                    | 2     | 17        | 34             | 51                  |                           |
| 10             | Designing and Developing Health<br>Information Systems II    | 1         | 1                    | 2     | 17        | 34             | 51                  | 09                        |
| 11             | Data Mining and Knowledge-based Systems                      | 2         | -                    | 2     | 34        | -              | 34                  |                           |
| 12             | Health Information Systems Management                        | 2         | -                    | 2     | 34        | -              | 34                  |                           |
| 13             | Methods for intelligent Health Information<br>Systems        | 2         | 1                    | 3     | 34        | 34             | 68                  |                           |
| 14             | Electronic Health Record                                     | 3         | -                    | 3     | 51        | -              | 51                  |                           |
| 15             | Methods of Improvement and Management of information quality | 3         | -                    | 3     | 51        | -              | 51                  |                           |
| 16             | Research Seminar   | 3         | -                    | 3     | 51        | -              | 51                  |                           |
| 17             | Thesis   | 20        | -                    | 20    | -         | -              | -                   |                           |
|                | Total  |           |                      | 40    |           |                |                     |                           |

 Table C: Non-Core Courses in Health Information Management, PhD

| Code of<br>the | Title of the Course                                     | Numb            | er of C   | redits | Total number of<br>hours |           |       | Prerequ<br>isite or |
|----------------|---|-----------------|-----------|--------|--------------------------|-----------|-------|---------------------|
| Course         |   |                 |           |        |                          |           |       | concurr             |
|                |   | Theoretic<br>al | Practical | Total  | Theoretic<br>al          | Practical | Total | ent<br>courses      |
| 18             | Health Informatics                                      | 3               | -         | 3      | 51                       | -         | 51    |                     |
| 19             | Communication Networks in Health<br>Systems             | 3               | -         | 3      | 51                       | -         | 51    |                     |
| 20             | Health Information Economy                              | 2               | -         | 2      | 34                       | -         | 34    |                     |
| 21             | Project Management in Health<br>Information Systems     | 2               | -         | 2      | 34                       | -         | 34    |                     |
| 22             | Modern Technologies in Health<br>Information Management | 2               | -         | 2      | 34                       | -         | 34    |                     |
| 23             | Clinical Governance Information System                  | 2               | -         | 2      | 34                       | -         | 34    |                     |
| 24             | Advanced Statistical Methods in Data<br>Analysis        | 1               | 1         | 2      | 17                       | 3<br>4    | 51    |                     |
| 25             | Monitoring system of Health                             | 2               | -         | 2      | 34                       | -         | 34    |                     |
|                | Total   |                 |           | 18     |                          |           |       |                     |

\* Students should pass 8 credits from those in Table C, based on their thesis domain and supervisor approval.

Seyed Mansour Razavi MD Jamshid Hajati PhD Secretariat of the Council for Education of Health and Basic Secretary of the Supreme Council for Medical Sciences Planning **Medical Sciences (Undergraduate** and Postgraguate) 4) mazavi Just Larijani MD Bagher Depaty for Education Ministry of Mealth and Medical Education 6