IMIA Accreditation Process
Design

A. Hasman, University of Amsterdam
Quality of education

• Due to the growing internationalization of education the quality of a higher education program affects its international status and therefore its attractiveness for students
  – Need for external quality assessment

• Quality can be defined as fitness for purpose
  – Is the curriculum an adequate realization of the intended end qualifications?
External quality review procedures

- **Accreditation**
  - Does program meet a certain minimum standard?
  - All aspects of a program are assessed

- **Assessment**
  - More graded assessment of program’s output

- **Audit**
  - Emphasis on quality procedures
Accreditation Procedure

- Program writes a self assessment report
- Site visit
- Site visit committee writes the Accreditation report
- IMIA’s Accreditation Committee monitors the procedure
Self Assessment report answers the following questions:

- What is the intended purpose of the institute?
- With which programs offered?
- With which staff?
- With what facilities?
- Does the institute guarantee the quality of the program?
- Are the goals routinely reached?
Site visit

• Three experts (the panel) visit the institution during two or three days
• Judgement guided by the self-assessment report
• Panel consults textbooks and other learning material used by the program
• Panel consults with management, staff, students, employers and alumni
• Panel visits the teaching facilities
Judgement -1

• Each subject (related to a question) comprises a number of facets that should be judged
• Each facet is judged on a scale ranging from insufficient via sufficient and good to excellent
• Each subject is judged sufficient or insufficient by weighing the judgments of the individual facets.
• Total evaluation is sufficient if all subjects are judged as sufficient, otherwise insufficient
# Checklist for site visit committee members

<table>
<thead>
<tr>
<th>Subject 1: Goals of the program</th>
<th>Score facet</th>
<th>Score subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facet 1: Domain specific requirements</td>
<td>E/G/S/IS</td>
<td>S/IS</td>
</tr>
<tr>
<td><strong>Subject 2: Educational program</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facet 2: Academic requirements</td>
<td>E/G/S/IS</td>
<td></td>
</tr>
<tr>
<td>Facet 3: Relation between goal and content</td>
<td>E/G/S/IS</td>
<td></td>
</tr>
<tr>
<td>Facet 4: Rapport between form and content</td>
<td>E/G/S/IS</td>
<td></td>
</tr>
<tr>
<td>Facet 5: Study load</td>
<td>E/G/S/IS</td>
<td></td>
</tr>
<tr>
<td>Facet 6: Relation between intake and program</td>
<td>E/G/S/IS</td>
<td></td>
</tr>
<tr>
<td>Facet 7: Legal requirements</td>
<td>E/G/S/IS</td>
<td></td>
</tr>
<tr>
<td>Facet 8: Judgement and examinations</td>
<td>E/G/S/IS</td>
<td></td>
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</tbody>
</table>
Judgement-2

- If decision is positive, program can use: ‘Accredited by the International Medical Informatics Association’
- Institution can appeal against a negative decision
- Duration of accreditation: five years
Decisions made by IMIA’s General Assembly

• In 2011: Trial with 3 to 5 programs to check the accreditation protocol
• The accreditation protocol and results are evaluated by an independent committee of the IMIA Board
• In 2013: Decision to continue with IMIA accreditation
Thank you
The AMIA-CAHIIM Partnership

John H. Holmes, PhD
Board Member, AMIA and CAHIIM
Commissioner, CAHIIM
What is CAHIIM?
Commission on Accreditation of Health Informatics and Information Management Education

CAHIIM accredits Associate and Baccalaureate degree programs in health information management, and Masters’ degree programs in the health informatics and health information management professions in the United States and Puerto Rico.
What is AMIA?

• Premier informatics professional society in the United States
• AMIA's program and services are centered around core purposes to:
  – advance the science of informatics
  – promote the education of informatics
  – assure that health information technology is used most effectively to promote health and health care
  – advance the profession of informatics
  – provide services for our members such as networking and opportunities for professional development.
Informatics graduate programs accreditation: Some history

• Prior to 2008: CAHIM
  – Focused only on Information Management
  – An arm of the American Health Information Management Association (AHIMA)
• 2008: CAHIIM
  – Initiative to develop accreditation standards for Master’s programs in health informatics
  – Informatics experts from the AMIA community consulted for content
• 2009-2010
  – Draft accreditation standards released for public comment and revision
  – Final standards and process documents accepted by CAHIIM Board
• 2011: Independence
  – CAHIIM becomes an independent organization, separate from AHIMA
• 2012: Recognition and exploration of partnership with AMIA
  – Formal recognition by the US Council on Higher Education Accreditation
  – Joint AMIA-CAHIIM Task Force created and approved by both Boards
CAHIIM Accreditation System - Process Flow Chart

Apply for Candidacy

Accepted into Candidacy and Self Assessment Phase (SA)

Complete and submit Self-Assessment (SA)

Candidacy Review determines requirements unmet or needs clarification (CR)

Submit response to CAHIIM Review (CR)

Accepted into Candidacy/Application Denied

Program must Reapply

Review Panel assessment (RP)

Self-Assessment - incomplete

Program submits corrected information before Review Panel assessment (RP)

Moves to RP or is Rejected

Site Visit conducted/Site Visit Report prepared

(Response to RP)

(Response to SV)

Site Visit Post postponed

(Board) Determines Accreditation (may include a Progress Report)
Health informatics programs currently accredited by CAHIIM

• Oregon Health and Science University

• University of Illinois at Chicago

• Marshall University
Rationale for the AMIA-CAHIIM Partnership

• Recognition that Master’s programs in informatics are rapidly growing in number, in response to growing need for informaticians

• “Informatics” is a term used broadly, and sometimes inaccurately

• There should be an independent body to accredit Master’s programs in informatics, BUT...
  – This body should be more solidly grounded in the informatics profession as represented by AMIA, and particularly the AMIA Academic Forum
  – The accreditation process would be strengthened by AMIA’s participation
Current status of the AMIA-CAHIIM Partnership

• Memorandum of Agreement drafted to establish a CAHIIM Commission on Biomedical and Health Informatics
  – AMIA would become the second member of CAHIIM
  – A separate health informatics commission would be established
  – Cost-benefit analysis underway

• Plan
  – Present to AMIA and CAHIIM Boards, September 2013
  – Present to AMIA membership at the 2013cAMIA Annual Symposium
  – Develop new accreditation criteria by end of 2014
  – Implement new criteria by beginning of 2015
Questions and Comment
A SWOT Analysis of the IMIA Educational Accreditation Process

John Mantas
University of Athens, Greece
Past President EFMI, IMIA VP
Sites visits

• **Finland**, University of Eastern Finland, Master’s in Health Informatics

• **Chile**, DuoC, Diploma (Vocational program) implemented in 3 cities (Santiago, Valparaiso, Concepcion)

• **Germany**, University of Göttingen, Bachelor and Master’s Programs in Medical Informatics

• Planned visits in Taiwan, S. Arabia, Egypt
SWOT ANALYSIS

Primary factors

S - Strengths

W - Weaknesses

O - Opportunities

T - Threats
Strengths

• IMIA has the highest **reputation** in the scientific field of biomedical informatics.

• IMIA’s **Medinfo** Conferences gathers the highest quality of papers and participants in biomedical informatics.

• The IMIA **Educational Recommendations** are a document that has been used on all continents to improve existing courses and to assist in establishing new programs.

• There are **adequate academic personnel** within IMIA and its member organizations that have huge experience in national and international educational accreditation processes
Weaknesses

• Shortage of *logistical and secretarial support* for the site visit committees.

• IMIA’s *internal procedure* led to delays in taking up the final decisions.

• *Transparency is required* at all phases including the necessary financial coverage of the expenses of the site visit committees.
Opportunities

• There is a large number of institutions and universities across the world looking for an IMIA accreditation.

• There are countries where the culture of national evaluation is rather weak or still developing, providing an opportunity for international organizations such as IMIA to play an important role.

• Policy in healthcare systems requires well organized programs in biomedical informatics that will provide, at an appropriate level that is recognized internationally, education for their healthcare professionals.
Threats

• The accreditation process, now approved by IMIA’s General Assembly, now needs to be implemented and institutionalized as quickly as possible following a rigorous business process and avoiding the trap of internal bureaucracy.

• IMIA as an international organization has moved first to provide a formal biomedical informatics accreditation process. There is always the danger, however, that if the program is not supported from within the IMIA community, there will be space for other organizations to fill the gap.
Conclusions -1

• IMIA has a long and successful tradition in Education with its successful meetings of the WG1 (Health and Medical Informatics Education)

• IMIA developed and updated Educational Recommendations well accepted by the International Community. The document can be downloaded from IMIA website and it is freely available.
Conclusions - 2

- IMIA initiated an Accreditation process that will be equally successful and accepted by the Academic Community, if IMIA develops an appropriate business plan for implementation in the coming years following the trial period that finishes at the end of 2013.
Thank you very much for your attention!
International Perspectives on Program Accreditation for Professional Education in Informatics, Medinfo 2013

Health and Human Services Informatics
Master's degree programme

Kaija Saranto, Professor, PhD, RN, FACMI
Sirpa Kuusisto-Niemi, Ms.Soc.Sc.,Lecturer
Department of Health and Social Management

Accredited Health & Biomedical Informatics Program

UNIVERSITY OF EASTERN FINLAND
Contents

• Health and Human Services Informatics master’s degree programme
• Experiences of the accreditation process
• Impact of the accreditation on education, research and society
Health and Human Services Informatics education in Finland

• Only Master's programme of its kind in Finland
• Established in 2000 as major; permanent programme since 2005
• The aim is to produce professionals and researchers in information management for the needs of health and social care
• Based on IMIA Recommendations on Education in Health and Medical Informatics from the very beginning
• Master´s degree program 2007, 120 ECTS points
  – BA degree or corresponding studies as a background
  – Supplementary studies max 60 ECTS points
  – Personal study plan for each student
  – Multifaceted teaching with web studies, email
  – Assessment and feedback system
Definition

Health and Human Services Informatics (HHSI) is understood as the **management of information resources** of an entity, e.g. an organisation, covering the activities, actors and methods in the production of health and welfare services for the public and private sectors and organisations.

**Resources** are understood as data warehouses, programs, devices, communications arrangements and people as sources and utilizers of information.
Health Informatics and related fields

Context: health and social sciences

Mod. Mantas 2011
Students

The students represent the whole country:
Eastern Finland 40%
Metropolitan area (Southern Finland) 30%
Middle Finland 10%
Western Finland 10%
Northern Finland 10%

Graduated 119 (8/2013)
THE PARADIGM FOR HEALTH AND HUMAN SERVICES INFORMATICS

Main concepts:

• **Actors** mean users or producers of social and health services
• **Data** is the hierarchical continuum from data to knowledge
• **Intervention** means the planning, implementation, evaluation or use of services
• **Technology** means social and technical procedures used in processing, analysing, storing or retrieving data related to actions
THE PARADIGM FOR HEALTH AND HUMAN SERVICES INFORMATICS

Main concepts and research focus

Body of Knowledge in Informatics

Steering and organizing of information management in work processes

Data

Data models, structures

Actors

Knowledge management and informatics competences

Intervention

Use of ICT

Technology

Conext: Health and Social Care
# Knowledge and skills areas in HHSI 2013-2014

<table>
<thead>
<tr>
<th>Core knowledge and skills</th>
<th>Health and human services, service organisation</th>
<th>Methodological competencies</th>
<th>Informatics/computer science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Health and Human Services Informatics, 5 ECTS</td>
<td>Basics of management in social and health care, 6 ECTS</td>
<td>Introduction to Academic Studies, 1 ECTS</td>
<td>Basic Studies of Computer Science (Minor Studies), 25 ECTS</td>
</tr>
<tr>
<td>Data Protection and Data Security, 5 ECTS</td>
<td>Contextual changes and organizational reforms in social and health services, 7 ECTS</td>
<td>Information skills in social and health care management, 1 ECTS</td>
<td></td>
</tr>
<tr>
<td>Theory Building in Health and Human Services Informatics, 6 ECTS</td>
<td>Cost accounting and budgeting in public organisations, 6 ECTS</td>
<td>Research Methods in Health and Human Services Informatics, 6 ECTS</td>
<td></td>
</tr>
<tr>
<td>Knowledge Management in Health and Human Services Informatics, 6 ECTS</td>
<td>Research and Development of Health and Human Services Informatics, 6 ECTS</td>
<td>Modelling, 3 ECTS</td>
<td></td>
</tr>
<tr>
<td>M Sc Thesis 30 ECTS</td>
<td>Practical Training in Health and Human Services Informatics, 6 ECTS</td>
<td>Advanced course in statistical methods, 5 ECTS</td>
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</tr>
<tr>
<td>One of following as obligatory: Leading and Managing Change, 6 ECTS</td>
<td>Evidence Based Social and Health Care, 6 ECTS</td>
<td></td>
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</tr>
<tr>
<td>Small Business Finance, 6 ECTS</td>
<td></td>
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<tr>
<td>Management Control Systems, 6 ECTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jurisprudence in Health and Human Services, 3 ECTS</td>
<td>Evaluation research, 6 ECTS</td>
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</tr>
</tbody>
</table>

\[ \sum 40 \quad \sum 28 \quad \sum 25 \]
IMIA GA, Beijing 23.10.2012
Experiences

• The evaluation process itself was familiar due to various evaluations at the university
• The focus on informatics was very rewarding
• The expertise of the panel members was high quality
• Instructions for self-assessment were clear and guided the analysis of the programme in a comprehensive way
• The data collection was challenging due to fragmented databases
• The timeframe of the process was optimal for us
• The site-visit was highly valued by the university staff
Impact of the accreditation

Education & Research:

The guidance to improve both structure and content of the curricula was very rewarding and it helped us:

• To focus on student’s optimum time to graduate
• To improve procedures in integrating teaching and research more intensively
• To stress the importance of quantitative research methods
• To focus more thoroughly on outcomes of the education, especially on significance of students’ thesis
Impact of the accreditation

Society:

• The programme is now an established brand
• Contacts with alumnis have been intensified eg. annual seminars
• Number of applicants was slightly higher this spring
• Co-operation with research units having convergent research interests has increased
Thank you!