

# TIGER's Teachers Initiative: Case Studies for Health Informatics Education

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**Abstract.** Teachers in health informatics have a broad variety of international and national educational recommendations to rely on when designing programmes, curricula, courses and educational material. However, in addition they often need very specific information for their setting, blue-prints, hands-on experience and encouragement to try something new. This workshop presents three case studies from European universities who have implemented inter-professional, technology enabled health informatics courses in undergraduate, postgraduate and open university settings. These approaches will be put into the context of the TIGER recommendation framework that includes priority ratings of health informatics competencies and case studies to illustrate them. The workshop attendees will have ample opportunity to exchange ideas with the presenters and start a mutual learning process for health informatics teachers.

**Keywords.** Education, health informatics, digital learning, case studies, curriculum

## 1. Topic

While health informatics recommendations on competencies and education serve as highly valuable corridors for designing curricula and courses, they cannot show how the content should be situated in a specific and local context due to their generic nature. For this purpose, case studies are a more suitable format. Case studies usually describe a complex phenomenon from multiple perspectives within the unit or environment where the study takes place. The case study tells the story of this unit with regard to key questions about this phenomenon and illustrates it so that it becomes clearer, more tangible and better understandable [1-3]. Case studies also lend themselves as a stimulation for discussions and an ideal material to learn from.

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## 2. Rational

The Technology Informatics Guiding Education Reform (TIGER) Initiative has been addressing educational issues for more than 10 years worldwide [4,5]. TIGER has brought many stakeholders together, in the early days with a focus on nursing, today with a wide scope integrating all different health professional groups. The results of TIGER activities have been published as various recommendations on health informatics education [6]. Most recently, the international TIGER recommendation framework has been presented that combines global expert votings about core competency areas with local case studies [7]. Furthermore, TIGER could integrate case study findings from the Horizon2020 EU\*US eHealth\_work project and from experiences made in the context of the open university project KeGL to advance health professionals. The compilation of case studies is an ongoing activity within TIGER. It is, therefore, the aim of this workshop to present selected educational case studies and embed them into the TIGER Recommendation Framework. Based on this input it is the goal to engage the workshop attendees to comment on these case studies and report on their experiences as teachers.

## 3. Outcome

This workshop aims at learning from each other, i.e. from different countries, settings, target groups, teaching methods and other areas.

The major outcome of this workshop therefore will be

- To obtain an overview of educational practice in health informatics education
- To identify urgent issues and potential solutions
- To identify commonalities and differences between different countries

Workshop attendees will be invited to describe their experiences as case studies.

## 4. Programme

Introduction to the **TIGER Initiative**: Marion Ball

**TIGER International Recommendation Framework**: Ursula Hübner

### Case Study 1: Paula Procter, England, UK

This case study will provide an overview of the provision of a large scale interprofessional informatics education course delivered entirely on-line for undergraduate nursing and allied health care students [8] following the principles of the TIGER and HITcomp competencies [9]. The Department of Nursing and Midwifery at Sheffield Hallam University is one of largest in the UK offering undergraduate, post graduate and continuing professional education for nurses (adult, child, mental health and learning disability) and midwives with over 120 nursing and midwifery faculty members.

### Case Study 2: Werner Hackl, Austria

This case study will give insights into the conceptional and instructional design of a new, completely online based master program in health informatics management at UMIT. Target audience for this program are health professionals as nurses, physicians or therapists as well as people with a technical or medical informatics background. The

design is based on available recommendations on health informatics education and involves predominantly collaborative elements, as it focusses on building competencies among the students.

**Case Study 3:** Nicole Egbert, Germany

This case study will provide insights into the inter-professional pilot module “eHealth und continuity of information” in the open university project KeGL (competence development of health professionals in the context of lifelong learning). The teaching concept consisted of a blended learning approach with four days classroom training and online phases supported by the learning platform Moodle. Principles of nursing informatics and eHealth, electronic transfer documents, problem-oriented patient transfer and telemedicine were covered by the continuing education course.

**Discussion and Lessons Learnt:** All workshop attendees, discussion chaired by Ursula Hübner and Marion Ball

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