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Towards an international framework for recommendations of core competencies in nursing and inter-professional informatics: the TIGER competency synthesis project

Ursula HÜBNER^a, Toria SHAW^b, Johannes THYE^a, Nicole EGBERT^a, Heimar MARIN^c, Marion BALL^d

a Health Informatics Research Group, University AS, Osnabrück, Germany

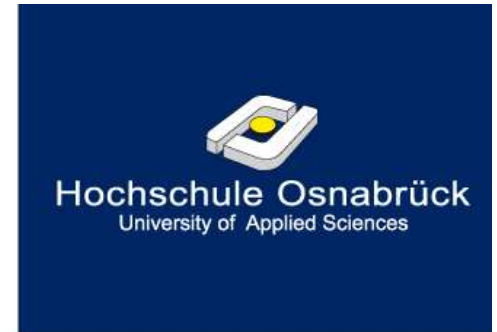
b HIMSS North America, Chicago, USA

c Federal University of Sao Paulo, Brazil

d IBM Research, USA



Why informatics recommendations on a global scale?



- Technological developments have a global impact – also in healthcare.
- Health IT industry is increasingly marketing their products worldwide.
- EU seeks to increase the workforce mobility by harmonising skills.
- The EU and the USA signed a Memorandum of Understanding on further developing the health IT skills to fully utilise the potential of digital technology.
- Global recommendations help countries to learn from each other and to get a new perspective on the field.

TIGER – Technologie Informatics Guiding Education Reform



TIGER advances the integration of health informatics to transform education and practice by:

- Enabling the clinical workforce to use informatics and technology to improve patient care
- TIGER began as a US-based grassroots initiative in 2006 and launched an International TIGER Committee in 2012. Effective September 22, 2014, TIGER transitioned to HIMSS: <http://www.himss.org/tiger>
- More information at Ball MJ, Douglas JV, Hinton Walker P, DuLong D, Gugerty B, Hannah KJ, Kiel J, Newbold SK, Sensmeier J, Skiba DJ, Troseth M (eds.) Nursing Informatics: Where Caring and Technology Meet. 4th edition. London, New York, Springer, 2011.



TIGER

Competency Synthesis Project



Comprises several components:

- Compilation of **international case studies**
- **Survey** on 24 core competencies to be rated for 5 roles: clinical nursing, quality management, nursing management, inter-professional coordination of care, IT management in nursing. 43 experts from 21 countries responded.
- Cooperation with the **German project KeGL** funded by bmbf.
- **Workshop** with more than 30 participants from 13 countries to discuss the survey results at NI2016 in Geneva
- **EU – US cooperation project** under the framework of Horizon2020 – starting on 1st Sept. 2016



Top 6 Informatics core competencies



Role/domain	Top 1	Top 2	Top 3	Top 4	Top 5	Top 6
→ Clinical nursing [n=41]	<i>Nursing documentation</i> (94.4%)	Information knowledge management (82.2%)	Principles of nursing informatics (80.5%)	Data protection and security (80.0%)	Ethics and IT (79.5%)	Information communication systems (75.1%)
→ Quality management [n=41]	<i>Quality management</i> (96.1%)	Process management (86.5%)	Nursing documentation (84.4%)	Information knowledge management (83.2%)	Information communication systems (82.0%)	Principles of nursing informatics (80.2%)
Inter-professional coordination [n=41]	<i>Data protection and security</i> (85.9%)	<i>Information knowledge management</i> (85.4%)	Nursing documentation (83.4%)	Process management (83.2%)	Information communication systems (81.5%)	Ethics and IT (78.8%)
Nursing management [n=43]	<i>Nursing documentation</i> (92.1%)	Principles of management (87.9%)	Strategic management and leadership (86.7%)	Quality management (85.1%)	Human resource management (84.4%)	Change management stakeholder management (84.2%)
IT management [n=41]	<i>Information communication systems</i> (89.5%)	<i>Principles of nursing informatics</i> (89.5%)	<i>Data protection and security</i> (89.0%)	IT risk management (86.8%)	Project-management (86.8%)	Process management AND Information knowledge management (86.1%)

In cooperation with

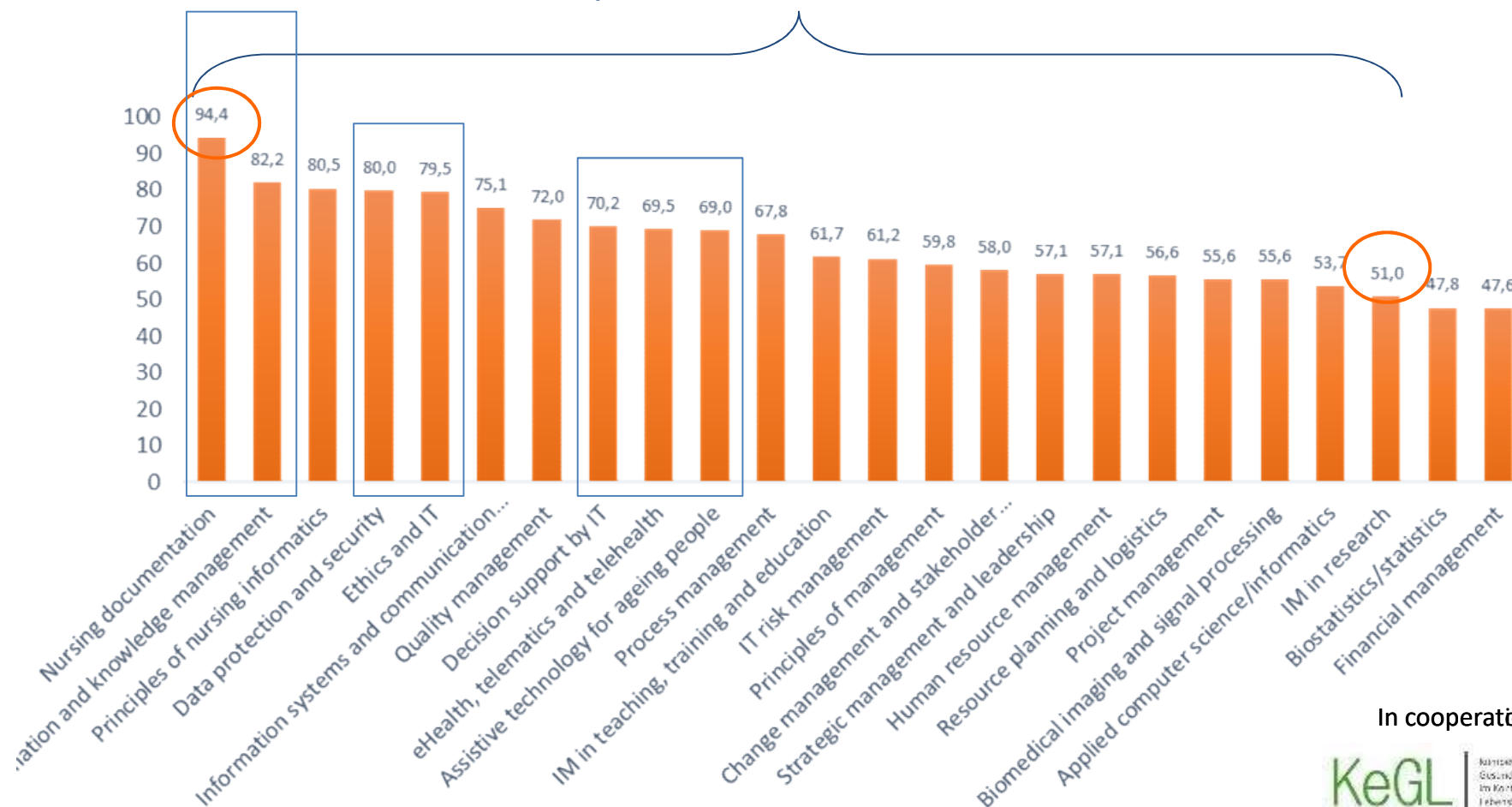




Informatics core competencies: clinical nursing



Most of the competencies were rated as at least 50% relevant.



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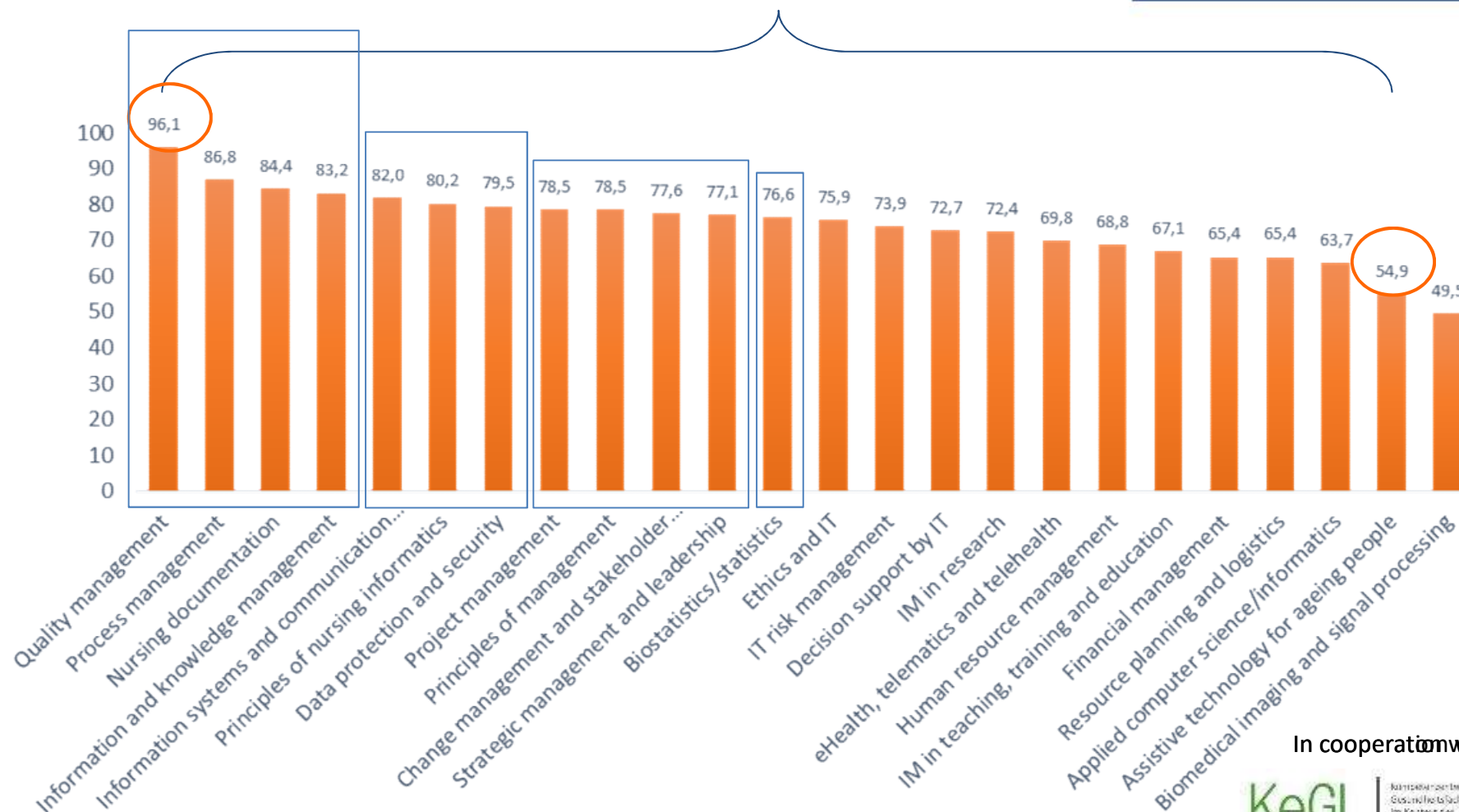


Informatics core competencies: quality management



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Most of the competencies were rated as at least 50% relevant.



In cooperation with

KeGL

Kompetenzentwicklung von
Gesundheitsfachpersonal
im Kontext der
Lebenslangen Lernens

TIGER Workshop at NI2016



Hochschule Osnabrück
University of Applied Sciences



NI2016, Geneva, Switzerland
Tuesday, June 28, 2016



Towards Implementing a Global Competency-Based Nursing and Clinical Informatics Curriculum: Applying the TIGER Initiative



Presented by Ursula Hübner, PhD, Marion Ball, Ed D, FHIMAA, FCHIME, FACMI, Christel Anderson, MA, Polun Chang, PhD, Marisa L Wilson, DNSc, RN; CPHIMS Heimar Marin, RN, PhD, FACMI.

Participation

28 experts
representing
13 countries

Clusters

- | | |
|-------------------------------------|-------------------------------------|
| 1) Data and information | 3) Information Exchange and Sharing |
| 2) Data protection security, ethics | 4) System life cycle |

Hübner U, Ball M, de Fátima Marin H, Chang P, Wilson M, Anderson C. Towards Implementing a Global Competency-Based Nursing and Clinical Informatics Curriculum: Applying the TIGER Initiative. Stud Health Technol Inform. 2016;225:762-4.

How to develop a framework out of this information (1)?

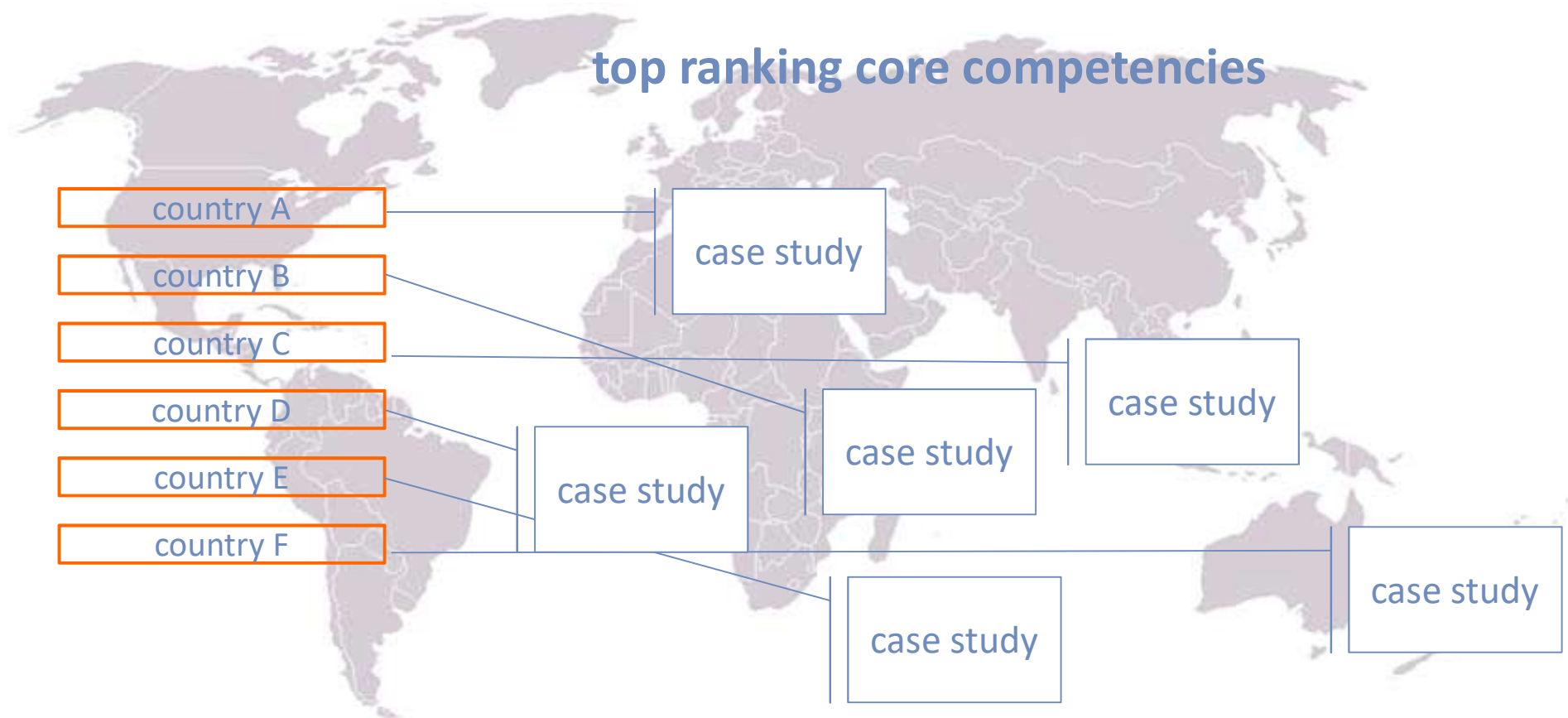


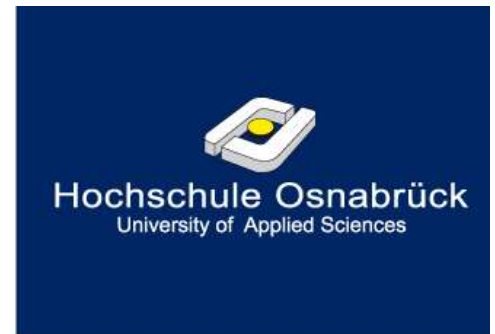
Core Topics for Competencies

Top ranking competencies	Prerequisite knowledge and skills	Fundamental knowledge	Procedural knowledge and skills
1			
2			
3			
4			
5			
6			
7			
8			

Kulikowski CA et al. AMIA Board white paper: definition of biomedical informatics and specification of core competencies for graduate education in the discipline. J Am Med Inform Assoc. 2012 Nov-Dec;19(6):931-8. doi: 10.1136/amiajnl-2012-001053. Epub 2012 Jun 8.

How to develop a framework out of this information (2)?





Thank you for listening

Prof. Dr. Ursula Hübner

Tel.: +49 541 969-2012

u.huebner@hs-osnabrueck.de

<https://www.hs-osnabrueck.de/de/forschungsgruppe-informatik-im-gesundheitswesen/>



Health Informatics Research Group

University of Applied Sciences Osnabrück

Dep. of Business Management and Social Sciences

P.O. Box 1940

D-49009 Osnabrück, Germany