



HAL
open science

Diversity in Health Informatics: mentoring and leadership

Anne Moen, Catherine Chronaki, Eva Turk, Elena Petelos, Despina Voulgaraki,
Rosy Tsopra, Aurélie Névéol

► **To cite this version:**

Anne Moen, Catherine Chronaki, Eva Turk, Elena Petelos, Despina Voulgaraki, et al.. Diversity in Health Informatics: mentoring and leadership. International Congress of the European Federation for Medical Informatics, Apr 2020, Genève, Switzerland. <hal-03023527>

HAL Id: hal-03023527

<https://hal.science/hal-03023527v1>

Submitted on 3 Dec 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



HAL Authorization

Diversity in Health Informatics: mentoring and leadership

Anne Moen^{a,b}, Catherine Chronaki^c, Eva Turk^d, Elena Petelos^{e,f}, Despina Voulgaraki^g,
Rosy Tsopra^h, Aurélie Névéolⁱ

^a *Institute for health and society, University of Oslo, Oslo, Norway*

^b *Norwegian Center for eHealth Research, Tromsø, Norway*

^c *HL7 International Foundation Europe, Brussels, Belgium*

^d *Vitensenteret, University of South east Norway, Drammen, Norway*

^e *Clinic of Social and Family Medicine, School of Medicine, University of Crete, Greece*

^f *Department of Health Services Research, CAPHRI Care and Public Health Research Institute, Maastricht University, Netherlands*

^g *Metronic Inc. London, United Kingdom*

^h *Université Paris 13, SMBH, Bobigny, France*

ⁱ *LIMSI-CNRS, Université Paris-Sud, Orsay, France*

Abstract: Diversity and interdisciplinary collaboration are drivers for healthcare innovation and adoption of new, technology-mediated services. The importance of diversity has been highlighted by the United Nations (UN) in Sustainable Development Goal 5 (SDG5) “Achieve gender equality and empower all women and girls”, their active engagement and contribution to the adoption of social and digital innovation has been highlighted. Women play an instrumental role in health care and are in position to bring about significant changes to support ongoing digitalization and transformation. At the same time women are underrepresented in Science, Technology, Engineering and Mathematics (STEM). To some extent, the same holds for health care informatics. This panel will debate strategies for peer mentoring to ensure diversity in health informatics to build sustainable, intergenerational communities, to improve digital health literacy and build capacity in digital health without losing the human touch.

Keywords: Diversity, peer mentoring, Gender, Digital Health Literacy, SDGs,

Introduction.

Diversity is a strength and important source for innovation in any field, and requires different expertise and, oftentimes, different values. In interdisciplinary environments the differences among professionals of various disciplines can become pervasive. Inclusion should transcend unconscious bias and stereotypes, in efforts to build inclusive collaborative environments capable to address societal challenges [1]. Ensuring diversity and interdisciplinarity comes with tremendous potential to mobilize the talented human capital for improvement in health and care for all through innovation [2].

Around the globe, women play important, instrumental roles in health care changes, but their presence in Science, Technology, Engineering and Mathematics (STEM) remains low [3], as shown in the graph below.

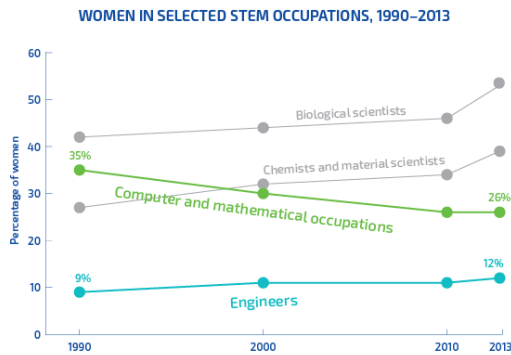


Figure 1: Women in Science, Technology, Engineering, and Mathematics (STEM) [3].

In health care, women make up the majority in the health care workforce using digital health information systems. They are still significantly underrepresented in top leading positions and, at the same time, very receptive in using health information systems [1]. Although more participation in professional meetings and increasingly more female presenters, as shown in the table below.

Table 2: First authors of accepted podium presentation at the MedInfo, health informatics conferences [5].

MedInfo	2013	%	2015	%	2017	%	2019	%
female	68	36	73	41	88	35	120	42
male	114	62	103	57	137	55	150	53
uncertain	3	2	1	2	24	10	15	5
Total	N=185		N=178		N=247		N=285	

Data also suggests that women are under-represented in roles such as keynote speakers compared to the expected representation that is exhibited by first author distribution. Acknowledging diversity and actively engaging women and girls in projects, adoption and utilization of social and digital innovation will help strengthen the interdisciplinary community [2], whilst, at the same time, afford leaders stronger supporting structures as a base to push forth with innovative solutions.

1. Panel Description

Inclusion and gender diversity are necessary to bring out the untapped potential in health informatics, addressing diversity gaps in use of digital health technology is timely, if not overdue. Tapping the power, potential and energy embedded in diversity are key drivers to wider adoption of digital health innovations. Leadership and mentoring pathways can harness opportunities to connect with leaders in their field and across fields. When considering also the need for interprofessional training, the concept of peer mentoring when mentoring is considered as a bidirectional activity is a topic worthy of reflection.

We argue that diversity, equal opportunity and equality are important to tap the full potential of ongoing developments. For this panel, we aim to continue exploring constraints to advancement, point out divides between specialties in our fields, and discuss strategies to help overcome diversity challenges. We will also examine recent changes in policy and emerging initiatives for empowering women and girls in global health across disciplines. The discussion on diversity will suggest strategies to value professional contributions as important qualities that add to interdisciplinarity in Health Informatics, and we will suggest effective strategies to improve diversity in community.

2. Organization of the Panel

Anne Moen

Anne will moderate the panel and discuss mentorship and leadership to explore health informatics require a more sensitive approach to achieve diversity in health informatics.

Catherine Chronaki

Catherine will report case studies of diversity, leadership, and peer mentorship from HL7 and EFMI that exemplifies challenges or incentives for women's career advancement.

Eva Turk

Eva will take global initiatives for empowerment of girls and women, where addressing unconscious bias, and working conditions can shape advancement in health informatics.

Despina Voulgaraki

Despina will bring in the "med tech" Industry perspective on mentoring and leadership to ensure gender balance and diversity, and report on recent progress.

Elena Petelos

Elena will discuss systematic efforts to empower in order to boost capacity for digital health innovation, improve health literacy, and ensure evidence-informed policymaking.

Rosy Tsopra

Rosy will share experiences from teaching health informatics in medical school, and some observations that may change how we approach and introduce the topics.

Aurélie Névél

Aurélie will introduce mentoring arenas instrumental to explore diversity questions and concerns, while improving performance and offering support to tackle stereotypes.

3. References

- [1] The underlying causes of the digital gender gap and possible solutions for enhanced digital solutions of women and girls. *European Parliament. Policy Department for Citizens' Rights and Constitutional Affairs*. March 2018

- [2] Shannon, G., Jansen, M., Williams, K., Cáceres, C., Motta, A., Eleveld, A., & Mannell, J. (n.d). Gender equality in science, medicine, and global health: where are we at and why does it matter? *Lancet*, (393), 560–569.
- [3] American Association of University Women. Why So Few? Women in Science, Technology, Engineering, and Mathematics, <https://www.aauw.org/research/why-so-few/>
- [4] McMaster, C.N. (2017). Women are less likely to study STEM subjects - but disadvantaged women are even less so. <https://blogs.lse.ac.uk/impactofsocialsciences/2017/07/20/women-are-less-likely-to-study-stem-subjects-but-disadvantaged-women-are-even-less-so/>
- [5] Moen, A., Chronaki, C., Madsen, I., Petelos, E., Bakken, S. (2019)Women in Health Informatics: perspectives, leadership and mentoring for diversity. *Plenary Panel, MedInfo 2019*, Lyon, France.