



# ISPOR DIGITAL HEALTH SPECIAL INTEREST GROUP: CATEGORIZATION AND DEFINITIONS OF DIGITAL HEALTH INTERVENTIONS

Tuesday, 5 November 2019; 7:00 – 8:15 AM CET

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## Speakers

- **Moderator:**
  - Carl V. Asche, PhD, Professor of Medicine, Director, Center for Outcomes Research, University of Illinois College of Medicine at Peoria, Peoria, IL, USA
- **Panelists:**
  - Katarzyna Kolasa, PhD, Professor of Health Economics, Head of Department, Health Economics and Healthcare Management, Kozminski University, Warsaw, Poland
  - Ken Redekop, PhD, Associate Professor, Erasmus School of Health Policy & Management, Erasmus University Rotterdam, Rotterdam, Netherlands
  - Anita Burrell, MA MBA, Principal, Anita Burrell Consulting LLC, Flemington, NJ, USA

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introduction to the  
opportunity and challenges on  
the digitalization of healthcare

Katarzyna Kolasa, PhD

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## ISPOR BOOK OF TERMS 2020 – DIGITAL HEALTH SECTION

### ISPOR BOOK OF TERMS – DIGITAL HEALTH SECTION TEAM

- **Team Members/Authors:**
  - Carl Asche
  - Joanna Entwistle
  - Brian Seal
  - Leslie Wilson
  - Vlad Zah (Section editor)
  - Jagadeswara Rao Earla (Section editor and team lead)

## Approved Five (5) Terms for Digital Health SIG

- Among the 23 terms suggested by SIG, five (5) terms were approved by Chief Science Office (CSO)
- Team members' interests to work on each term were sought on the scale of 1 to 5 and assigned terms accordingly

Term	Authors
<b>Digital Health</b>	Vlad Zah, Brian Seal
<b>Digital Health Intervention</b>	Brian Seal, Leslie Wilson
<b>Big Data</b>	Carl Asche, Jagadeswara Rao Earla
<b>Health Management Information System (HMIS)</b>	Jo Entwistle, Jagadeswara Rao Earla
<b>Interoperability</b>	Carl Asche, Jo Entwistle

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## Book of Terms 2020 - Digital Health: Suggested Timeline

Milestone	Due Date	Progress/Completed date*
<i>First draft of terms by authors</i>	September 23	October 4
<i>Review by section editors &amp; SIG</i>	October 28	In progress
<i>Presenting draft definitions at ISPOR EUROPE 2019 and seek comments</i>	November 2-4	-
<i>Revision by authors</i>	November 26	-
<i>Final review by section editors</i>	December 17	-

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\*Timeline was updated as on 10/23/2019

## Digital Health

- Digital Health is an overarching term that refers to the use of mobile and information technology to promote health and wellbeing through individual behavior change or improvements in medical decision making. Digital Health encompasses a heterogeneous body of health and medical information captured by various digital products, ranging from smartphone applications to medical robotics. The definition of the term “Digital Health” is expected to change and evolve in the future as a reflection of the dynamic and accelerated technological development.

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## Digital Health Intervention (DHI)

- Digital Health Interventions are the tools, devices and programs of digital technology used to provide digital health care. These digital tools are used to prevent, track, manage or treat a medical disorder or disease and to promote health and well-being through enhancements to access to quality care, individual behavior change or improvements in medical decision making.

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## Big Data

- Big data refers to the large, diverse sets of information that grow at ever-increasing rates. It encompasses the **volume** of information, the **velocity** or speed at which it is created and collected, and the **variety** or scope of the data points being covered which are known as the 3V's of big data. In recent past, 3 more Vs – value (relevance), variability (multiple sources), and veracity (quality) – were also being used as attributes to big data. Big data often comes from multiple sources and arrives in multiple formats.

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## Health Management Information System

- Health Management Information System (HMIS) is a type of information system specially designed to assist healthcare organization(s) in streamlining the delivery of different healthcare services and in managing healthcare information [generally known as 'healthcare data'] generated while providing those healthcare services. It is often used interchangeably with Health Information System (HIS).

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## Interoperability

- Interoperability is the property that allows for the unrestricted sharing of resources between different systems. This can refer to the ability to share data between different components or machines, both via software and hardware, or it can be defined as the exchange of information and resources between different computers through local area networks (LANs) or wide area networks (WANs). Broadly speaking, interoperability is the ability of two or more components or systems to exchange information and to use the information that has been exchanged.

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## Key Project Overview

## Co-chairs



Ken Redekop, PhD  
Associate Professor  
Erasmus University Rotterdam



Anita Burrell, Principal,  
Anita Burrell Consulting LLC

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## Objectives

- Inventory of different definitions used in literature and in practice in digital health
  - E-health
  - mHealth
  - Telehealth / medicine
- Analysis of the context in which each definition exists e.g. public health organization, supplier organization
- Identify definitions which are aligned with the ISPOR mission of outcomes research vs other

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## Proposed Method

- Literature search on specific terms
  - Definition
  - Digital Health / eHealth / mHealth (or mobile health) and telemedicine/health
- Databases to be searched
  - Embase
  - PubMed
  - Medline
  - Web of Science
  - Cochrane Library
  - Google Scholar
- Undertaking a scoping exercise by December to number of hits from the current list of search terms

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## Timing of Key Project

Scoping Review Timeline	Date
Key Project initiated	September 2019
Refine and develop detail outline on project	October 2019
Spreadsheet and search terms identified	October 2019
Members solicited to work project	November 2019
Terms searched	January 2020
Definitions identified	February 2020
Draft sections of first manuscript	March 2020
Review of findings presented at ISPOR Orlando	May 2020
Manuscript revised	June 2020
Manuscript finalized	August 2020
Manuscript submitted	September 2020

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## Call for Volunteers!

- Do you want to be part of this amazing project?
- We want you!
- Committee of 8-10 to steer project and publications
- Full text load expected to be 20-30 per person
- Abstract review volunteers also needed
- See Ken or Anita at the end of the session



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## Questions and Answers

## Q&A



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ISPOR Digital Health SIG

Carl Asche, PhD



# How to JOIN our Special Interest Group



- Sign up now
  - Sign up sheet
  - Provide a business card
- Go to the Website
  - Members groups
  - Special Interest Groups
  - Click on Join A Special Interest Group



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## THANK YOU

- Please come to the front to leave your business card and/or use the sign-up sheet to provide your information if you are interested in joining and/or participating in our SIG!
- **Questions?** Please email [digitalhealthsig@ispor.org](mailto:digitalhealthsig@ispor.org)

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