P1752 Working Group Meeting

Sponsored by IEEE Engineering in Medicine & Biology (EMB) Standards Committee

- 28 August 2018

- Teleconference

Attendance

- This document shows attendance from previous calls **https://tinyurl.com/yc3oxg6q** (link in the chat window of join.me). **If you attended the call, please verify that your name is listed**
  - If not, email simona@openmhealth.org
- **Put your name and affiliation in the chat window for attendance today.**
  - If your name is not listed, or if you are joining only via phone, please email simona@openmhealth.org with "P1752 WG call" as subject

- Attendance is important for determining voting rights, so please remember to "check in"

- Voting rights are granted according to the P&P after attending two consecutive calls and by explicit request to the Secretary

IEEE Patent Policy

Participants have a duty to inform the IEEE

- **Participants <u>shall</u> inform the IEEE (or cause the IEEE to be informed) of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents**

- **Participants <u>should</u> inform the IEEE (or cause the IEEE to be informed) of the identity of any other holders of potential Essential Patent Claims**

Early identification of holders of potential Essential Patent Claims is encouraged

<u>Slide #1</u>

Ways to inform IEEE

- **Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); or**

- **Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or**

- **Speak up now and respond to this Call for Potentially Essential Patents**

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair

Slide #2

Other guidelines for IEEE WG meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
  - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
  - **Don't discuss specific license rates, terms, or conditions.**
    - Relative costs of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.
      - **Technical considerations remain the primary focus**
  - **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
  - **Don't discuss the status or substance of ongoing or threatened litigation.**
  - **Don't be silent if inappropriate topics are discussed … do formally object.**

For more details, see *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and
***Antitrust and Competition Policy: What You Need to Know* at http://standards.ieee.org/develop/policies/antitrust.pdf**

Slide #3

Patent-related information

The patent policy and the procedures used to execute that policy are documented in the:

- *IEEE-SA Standards Board Bylaws* (http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6)
- *IEEE-SA Standards Board Operations Manual* (http://standards.ieee.org/develop/policies/opman/sect6.html#6.3)

Material about the patent policy is available at
http://standards.ieee.org/about/sasb/patcom/materials.html

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org

Determination of Quorum

https://tinyurl.com/yc3oxg6q

Approval of Agenda

1. Attendance
2. Call for Patents
3. Approval of agenda and prior minutes (if quorum present)
4. Updates from subgroups
5. Discussion: upcoming activities
6. Other business

Approval of Prior Minutes

(May 22, June 5)

Update:
Physical Activity and Mobility (PA&M) Schema Subgroup

Physical Activity & Mobility (PAM) Sub-group

1. Attendance (4 to 7 members)
   - We hope that more members join our subgroup
   - A core group of members meet once every two weeks
2. We are making progress on the following tasks
   - Task 1: Common Devices and Apps (Norm leading)
     - We reviewed documents created by sleep sub-group
     - Created a google document for updating devices
     - Defined basic and estimated measures
   - Task 2: Important PAM attributes (Shiv, Simona, and others)
     - Created a Google document for the literature about clinical
     - Discussed technology-derived endpoints for use in clinical trials
3. Next Steps
   1. Review common PAM attributes from existing devices & apps;
   2. Define initial use cases to focus on important PAM attributes
4. Next Meeting: Thursday Sep 06, 2018 (11am to 11:30am Eastern Time)

Common Physical Activity Attributes from Existing Devices and Apps

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fx | Device Details

	Device Details				Application Details				Movement Measurements			
	Device Name	Device Version	Vendor	Format	Mobile Application	App Category	iOS App?	Android App?	Distance	Velocity	Acceleration	L
3	iPhone	5	Apple	Phone	Apple Health	Health and Fitness	Yes	No	Yes	Yes		Y
4	iPhone	6	Apple	Phone	Apple Health	Health and Fitness	Yes	No	Yes	Yes		Y
5	iPhone	8	Apple	Phone	Apple Health	Health and Fitness	Yes	No	Yes	Yes		Y
6	iPhone	X	Apple	Phone	Apple Health	Health and Fitness	Yes	No	Yes	Yes		Y
7	Apple Watch	1	Apple	Watch	Apple Health	Health and Fitness	Yes	?	Yes	Yes		
8	Apple Watch	2	Apple	Watch	Apple Health	Health and Fitness	Yes	?	Yes	Yes		
9	Apple Watch	3	Apple	Watch	Apple Health	Health and Fitness	Yes	?	Yes	Yes		
10	Apple Watch	4	Apple	Watch	Apple Health	Health and Fitness	Yes	?	Yes	Yes		
11	Ace		Fitbit	Watch	Fitbit	Health and Fitness	Yes	Yes	Yes	Yes		
12	Alta		Fitbit	Watch	Fitbit	Health and Fitness	Yes	Yes	Yes	Yes		
13	Alta HR		Fitbit	Watch	Fitbit	Health and Fitness	Yes	Yes	Yes	Yes		
14	Aria 2		Fitbit	Scale	Fitbit	Health and Fitness	Yes	Yes	Yes	Yes		
15	Charge 2		Fitbit	Watch	Fitbit	Health and Fitness	Yes	Yes	Yes	Yes		
16	Flex 2		Fitbit	Watch	Fitbit	Health and Fitness	Yes	Yes	Yes	Yes		
17	Ionic		Fitbit	Watch	Fitbit	Health and Fitness	Yes	Yes	Yes	Yes		

Devices   Movement Definitions   Elite Device Measurements   Articles

Literature Clinical Attributes Physical Activity & Mobility

File   Edit   View   Insert   Format   Data   Tools   Add-ons   Help   Last edit was made on August 9 by anonymous

fx | Physical Activity Guidelines for Americans provides science-based guidance to help Americans aged 6 and older improve their health through appropriate physical activity.

	Authors(s), Title, Journal	Year Published	Purpose	Clinical Attribute	Clinical Recommendation
5	WHO Global recommendation on physical activity	2010	The focus of the Global Recommendations on Physical Activity for Health is primary prevention of NCDs throught physical activity at population level and the primary target audience for these recommendation are policy-makers at national level.	Recommendation of PA based on age group	
6					
7	2018 Physical Activity Guidelines Advisory Committee	2018	The report summarizes the scientific evidence on physical activity and health, and will be used by the government to develop the second edition of the Physical Activity Guidelines for Americans		Bouts, or episodes, of moderate-to-vigorous physical activity of inthe daily accumulated total volume of physical activity.
8	Use of Mobile Devices to Measure Outcomes in Clinical Research, 2010–2016: A Systematic Literature Review	2018			Table 3 shows list of PA-related outcomes assesses in review
9	Multiple Wearable Sensors in Parkinson and Huntington Disease Individuals: A Pilot Study in Clinic and at Home	2017		Proportion of the day participants spent lying down, sitting, standing, and walking	
10	Evaluation of Commercial Self-Monitoring Devices for Clinical Purposes: Results from the Future Patient Trial, Phase I by Soren Leth , John Hansen , Olav W. Nielsen and Birthe Dinesen	2017	The purpose of this study was to evaluate five commercially available self-monitoring devices for further testing in clinical applications	Evalaution based on step count and heart rate validity	
	A global clinical measure of fitness				

Sheet1

Explore

Update:
Sleep Schema Subgroup

Sleep Schema Subgroup Update (pg.1)

➢**All the task groups have completed stage1 work as planned**

Thanks to Antoni, Josh and Ray, and their teams

➢**Here are the output of the stage1 work:**

(1) Clinically important sleep attributes

(2) Common sleep attributes from mobile devices and apps

(3) Sleep attributes related standard comparisons

These generated documents could be found in the relevant subfolders of this link:

https://ieee-sa.imeetcentral.com/omh/folder/WzIwLDEwMjY4MDY1XQ

Sleep Schema Subgroup Update (pg.2)

➢ **Developing use cases for sleep attribute(s) to support sleep schemas development**

(1) **Drafted most use cases for sleep attributes**

(2) **Invited a sleep expert to review the use cases and get feedbacks**

(3) **Modifying the use cases currently**

(4) **Plan to complete the use cases by the end of the month**

➢ **Understand the existing Open mHealth schema design principle**

(1) **Simona has provided overview and discussed with the subgroup**

➢ **Next Step ---- Sleep schema development**

Sleep Schema Subgroup Update (pg.3)

➢**Sleep Schema Meeting Slides/Minutes:**

http://sites.ieee.org/sagroups-1752/sleep-subgroup-meeting-materials/

➢**Next Subgroup Meeting: Sept 11, 2018 11:30am to 12:30 pm**

➢**Reminder:**

If you would like to join our subgroup, please send email to

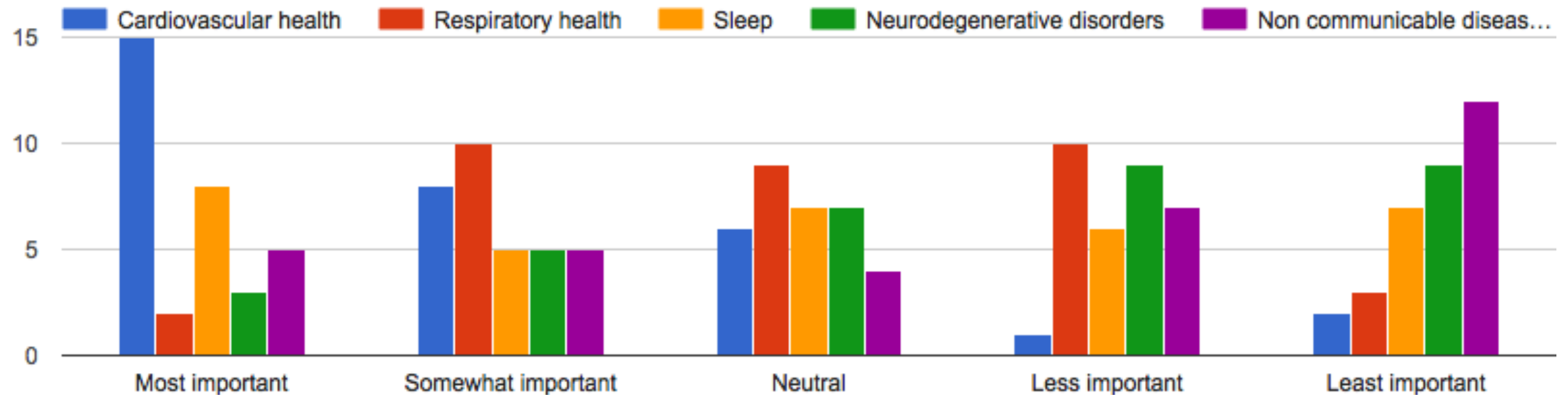simona@openmhealth.org **or**

charlotte.chen@philips.com

Discussion:
Cardiovascular subgroup
PROs/Mental Health
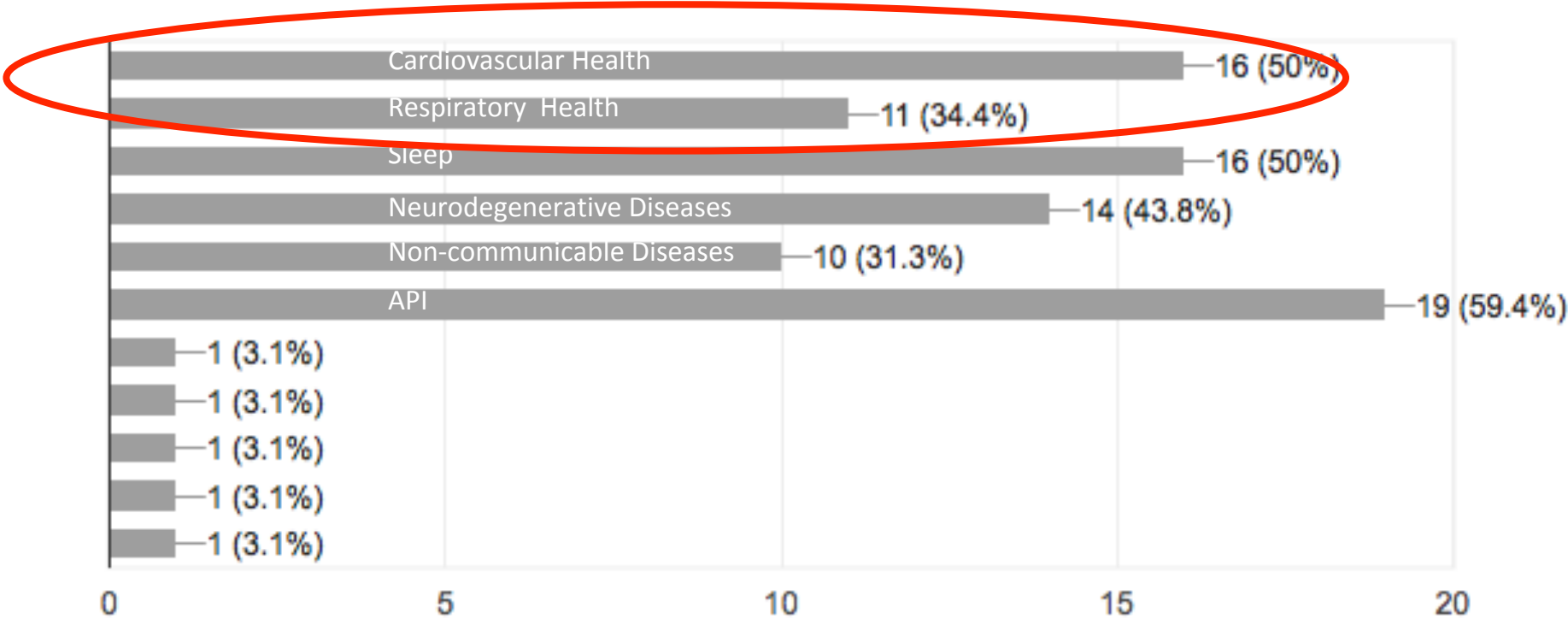
Subgroup Poll Results (from spring 2018)

Please rank the clinical topics in order of importance for P1752 to address first

Subgroup Poll Results

Select which subgroup(s) you would be interested to participate in

32 responses

Cardiovascular Health	16 (50%)
Respiratory Health	11 (34.4%)
Sleep	16 (50%)
Neurodegenerative Diseases	14 (43.8%)
Non-communicable Diseases	10 (31.3%)
API	19 (59.4%)
	1 (3.1%)
	1 (3.1%)
	1 (3.1%)
	1 (3.1%)
	1 (3.1%)

Others: Behavior, human stress-related diseases, nutrition monitoring, privacy and systems, early cancer diagnosis, diabetes

Looking forward at other topics

- Major schema areas
  - Cardiorespiratory
  - Patient-reported outcomes (behavioral, symptoms)

- Provenance
  - Will work with subgroups to identify key/common provenance issues, discuss next steps at next meeting

- Any additional thoughts from the group about the topics covered in the last couple of calls, namely overall schema development and API

Future Work

Summary of Action Items

Future Meetings

Upcoming Meetings

- Main WG (please note changes from previous announcements)
  - September 18: 8 AM (Pacific)

- Sleep subgroup
  - September 11, 2018 8:30am to 9:30 am (Pacific)

- PA&M subgroup
  - September 4, 2018 11 to 11:30 am (Eastern)
  - September 18, 2018 11 to 11:30 am (Eastern)

Adjournment