

IEEE P1752.2 CardioRespiratory Measures Subgroup

Minutes of conference call held on March 31, 2022

Conference call started at 15:00 UTC (8:00 AM Pacific Time) on IEEE Webex

Attendance: 11 Attendees

Carole	Carey	IEEE EMB
Connor	McCraw	Wake Forest
Simona	Carini	UCSF / OmH
Josh	Schilling	Vibrent Health
Sakshi	Sardar	Critical Path Institute
Stephanie	Battista	Humanity Innovation Labs
M. Sabarimalai	Manikandan	Indian Institute of Technology Palakkad
Hamid	Mcheick	Université du Québec à Chicoutimi
Namita	Lokare	Valencell Inc.
Banu	Rekha	PSG College of Technology Coimbatore, India
Paul	Steiner	Dartmouth College

Agenda:

- Attendance and introductions, review of prior minutes
- P1752.2 Cardiorespiratory subgroup's scope and deliverables
- Topical presentation: "Overview of Clinical Monitoring of Cardiorespiratory Measures : Paradigms and Creation of Use Cases"
- Tasks - Discussion of next steps
- Other business
 - Repository of references, resources, drafts.
 - Discussion of regular monthly meeting time preferences
 - Other

A review and summary of the P1752.2 Cardiorespiratory Subgroup 's official scope, purpose, and duties (<https://sagroups.ieee.org/1752/cardio-respiratory-subgroup/>) was reviewed early in the meeting, attended by several new members. The subgroup's specific tasks and deliverables to the P1752.2 Main Work Group also briefly was reviewed.

An overview presentation entitled ""Overview of Clinical Monitoring of Cardiorespiratory Measures : Paradigms and Creation of Use Cases" by Paul Steiner, MD, FHRS (Geisel School of Medicine, Dartmouth College). This presentation expanded on considerations for overall cardiopulmonary data measures in the context of various organization paradigms for cardiopulmonary data sources, use cases, data "quality" (vis a vis data from consumer grade devices through data from gold-standard certified medical devices), and sensor measurement modalities. Within that context, discussion turned again towards the need for development of representative and relevant use cases. The process by which this can be accomplished effectively was reviewed, with specific guidance addressing this very issue cited from the Open mHealth web site.

Following additional discussion led by Dr. Manikandan, subgroup participants agreed on a plan for an accessible Google spreadsheet for individual participants to access, with entry of candidate use cases and associated cardiopulmonary data types (and proposed attributes). Dr. Manikandan will create this spreadsheet to serve this purpose. Two general use cases mentioned in the earlier presentation were "fitness / performance / athleticism" and "health / wellness" (the quantified self), which was deemed a good starting point for development, in which several participants expressed their interest and qualifications. In the meantime, use cases from the health care paradigm (chronic disease monitoring,

post-intervention recovery, *etc*) can be considered in the coming weeks, with members invited to propose specific use cases to the planned spreadsheet to be posted at the group's iMeet web site.

The P1752.2 Cardiorespiratory Subgroup prior meeting minutes and some shared presentation slides from prior meetings have been posted to the group's web page at <https://sagroups.ieee.org/1752/cardio-respiratory-subgroup/>.

Action Items:

- Preparation of use case presentation addressing "fitness / performance / athleticism"
- Preparation of use case presentation addressing "health / wellness" (the quantified self)
- Request for specific use case proposals fitting the Health Care paradigm
- Group communication through email & iMeet regarding to start to form small group focused on developing specific proposed use case types, along with preparation for presentation to the subgroup.

Next meeting: April 28, 2022 at 15:00 UTC (8:00 AM Pacific Time)
Minutes taken by Paul Steiner (Dartmouth)