

Folder eCC\_00016885 is in stage Annual\_Report\_Review

Name of the University, Hospital, Research Institute, Academy or Ministry

Universitat Oberta de Catalunya (UOC)

Name of the Division, Department, Unit, Section or Area

Faculty of Health Sciences

City Barcelona Reference Number SPA-50

Title WHO Collaborating Centre in eHealth

**Report Year** 04-2020 to 04-2021

### 1. Annual report on the agreed workplan

Describe progress made on the agreed workplan. For each activity, detail (1) the actions taken, (2) the outputs delivered, as well as (3) any difficulties that may have been encountered. Three responses are expected. [maximum 200 words per activity]. Indicate, if an activity has been completed previously, has not yet started or has been placed on hold.

### Activity 1

Title: Development of training courses in Telemedicine

Description: In collaboration with the PAHO Telemedicine Program, the UOC will develop 1 virtual course on the implementation of Telemedicine projects, free of charge for WHO and directed exclusively to external participants selected and contributed by PAHO/WHO. To this end, the UOC will use the PAHO document "Marco de Implementación de un Servicio de Telemedicina" ("Framework for the Implementation of a Telemedicine Service") (Novillo-Ortiz, David [ed.], 2016) in order to enhance its use throughout the Region of the Americas. The UOC will adapt the reference material to useful learning units for the course (seven didactic units, one per chapter of the reference document) and will contribute its teaching methodology and the UOC virtual campus to the students proposed by PAHO (a total of 20 per group). The WHO name and emblem will not be used on certificates of attendance, diplomas or similar awards to participants in training or other courses, organized as part of this activity.

Status: ongoing

On June 1st, the PAHO's Department of Evidence and Health Action Intelligence in collaboration with the IDB's Health and Social Protection Division and Latin American networks launched the Share-Listen-Act webinar series, 'COVID-19: The Potential of Digital Health and Health Information Systems in the Fight Against the Pandemic', where our WHO Collaborating Centre (CC) presented the Seminar "COVID-19 and Telemedicine: Ready, steady, click". [https://www.paho.org/ish/index.php/en/eih-webinars]

Our WHO CC actively participated in the development of the following technical notes that the PAHO undertook to help Latin American countries to overcome the pandemic through the appropriate use of ICTs: "Digital Health: A Strategy to Maintain Health Care for People Living with Noncommunicable Diseases during COVID-19", "COVID-19 Information Systems and Digital Health: After-Action Review of the First 100 Days in Quarantine", "Webinar Series, Share-Listen-Act, COVID-19: The Potential of Digital Health and Information Systems for Health (IS4H) in the Fight against the Pandemic", "COVID-19 and the role of information systems and technologies at the first level of care", "COVID-19 and the importance of strengthening Information Systems".

The proposal "Education, prevention and health care for vulnerable communities with telehealth support" was submitted to the call for projects of the Japan International Cooperation Agency (JICA) for Latin America.

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#### **Activity 2**

Title: Promote the use of eHealth in the countries of the region of the Americas

Description: In collaboration with the PAHO Digital Health Strategy in the Region of the Americas, the UOC will design and validate a shared health model (Sharing Health) and study how it could contribute in reducing social inequalities in health.

In addition, the UOC will collaborate with PAHO on regional eHealth reports and contribute to the analysis, results and conclusions of PAHO's First Regional Report on eHealth during the designation period. To this end, PAHO will provide the UOC with access to the necessary database(s) so that the UOC can proceed with the corresponding analysis. The WHO name and emblem will not be used on certificates of attendance, diplomas or similar awards to participants in training or other courses, organized as part of this activity.

Status: ongoing

The developed model of Sharing Health [see 2n Annual Report SPA-50 WHO CC] has been published in an IF journal [https://doi.org/10.3390/ijerph18084270].

The second study about the main motivations of people and their trust in robotics and artificial intelligence devices in healthcare [see 2n Annual Report SPA-50 WHO CC] is ready to be published.

Our WHO CC actively participated both in the development of the tool for assessing the maturity level of health institutions to implement telemedicine services created by the PAHO and the IDB to help with that task [https://www3.paho.org/ish/index.php/en/telemedicine]; and the development of the guide "8 Principles for Digital Transformation of Public Health", aimed at guiding the countries of the Region of the Americas in the processes of digital health transformation [https://iris.paho.org/handle/10665.2/54256].

A project titled "Study on International Telemedicine in Latin America: Motivations, Uses, Outcomes, Strategies, and Policies" has been developed at the request of the IDB. The results of this project (available in Spanish in https://lnkd.in/gwXJbU8q) detail what challenges the region must face in order to succeed in exporting cross-border services through telemedicine services.

Other studies carried out in Latin America: DOI 10.17081/innosa.104

#### **Activity 3**

Title: Study on the adoption and use of mobile health (mHealth) between and with the countries of Latin America and the Caribbean

Description: To contribute to the work of PAHO / WHO in the implementation of health policies in the Region of the Americas, the UOC is committed to working on the identification of the main variables related to the development of mobile health (mHealth) in Latin America and the Caribbean, with special emphasis on health problems that can be addressed through the use of mobile technology, and the factors that either drive and weaken its progress.

Additionally, in order to strengthen this regional collaboration, two virtual debates will be developed, led by the UOC on the PAHO ICT4Health Community platform. Participants will be selected by PAHO and will include members contributed by PAHO itself, as well as those members of health governments, experts and health professionals who are interested in the adoption and use of mHealth in the Region of the Americas. The WHO name and emblem will not be used on certificates of attendance, diplomas or similar awards to participants in training or other courses, organized as part of this activity.

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Status: ongoing

To contribute to the PAHOs work in the implementation of health policies related to mobile health, on April 23rd, our WHO CC was requested to develop two tools to be part of the IS4H toolkit for the region developed by the PAHO: a first tool to assess the maturity of mobile health applications under development, aimed at guiding the healthcare organizations of the Region of the Americas in their development processes. And a second tool to assess the suitability of a mobile health application. This latter tool should assess the degree of reliability of the mobile health application according to the criteria established for its ideal development.

In the framework of the RITMOS network, during 29-30 June, the "2° FORO Internacional de Telemedicina Montevideo 2020: La telemedicina después del coronavirus" took place in Uruguay, an event led by the RITMOS Network together with La Sociedad Uruguaya de Telemedicina.

On February 9th and 16th, our WHO CC actively participated in the "Information Systems for Health (IS4H) Conference, From the evolution of Information Systems for Health to the Digital Transformation of the Health Sector" [https://iris.paho.org/handle/10665.2/53364].

#### 2. Annual report on other activities requested

Should WHO have requested activities in addition to the agreed workplan, please describe related actions taken by your institution [maximum 200 words]. Please do not include in this report any activity done by your institution thatwas not requested by and agreed with WHO.

On April 14th, a report with a comprehensive overview for the application of data and digital solutions to support surveillance strategies and draw implications for surveillance in the context of the COVID-19 pandemic and beyond was requested by the WHO Regional Office for Europe. This report was developed together with the University of Utah School of Medicine and the University College London. This study is ready to be published.

On August 19th, a study of the requirements to improve routine health information systems (RHISs) for the management of health systems, including the identification of best practices, opportunities, and challenges in the 53 countries and territories of the WHO European region was requested by the WHO Regional Office for Europe. The results of this study have been published in an IF journal [https://doi.org/10.3390/ijerph18094622].

#### 3. Resources

Indicate staff time spent on the implementation of activities agreed with WHO (i.e. those mentioned in questions no. 1 and no. 2 above). Do not include any data related to other activities done by your institution without the agreement of WHO. Please indicate staff time using the number of "full-day equivalents" – a day of work comprising 8 hours (e.g. 4 hours work per day for 7 days should be recorded as 3.5 full-day equivalents).

Number of staff involved (either partially or fully)

Senior staff	Mid-career staff	Junior staff, PhD students
4	3	3

### Number of full-day equivalents, total for all staff involved

Senior staff	Mid-career staff	Junior staff, PhD students
45	25	52

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Implementation of the agreed workplan activities (i.e. those mentioned in questions no. 1 and no. 2 above) normally require resources beyond staff-time, such as the use of laboratory facilities, purchasing of materials, travel, etc. Please estimate the costs of these other resources as a percentage of the total costs incurred (e.g. if you incurred costs of USD 100 and the value of your staff time was USD 50 which makes the total of USD 150, please report 33.3% and 66.7%).

	Percentage of costs associated with other resources	Total
85.00	15.00	100.00

### 4. Networking

Describe any interactions or collaboration with other WHO Collaborating Centres in the context of the implementation of the agreed activities If you are part of a network of WHO Collaborating Centres, please also mention the name of the network and describe your involvement in that network [maximum 200 words].

During the preparation of the different technical notes (see Activity 1), we have interacted and collaborated with the PAHO/WHO Collaborating center for Information Systems and Digital Health (Hospital Italiano de Buenos Aires, Department of Medical Informatics) and with the PAHO/WHO Collaborating center for Information Systems and Digital Health (Center for Health Informatics, University of Illinois USA).

The development of both tools, the one aimed at guiding the evaluation in the development processes of mobile health applications, and the one aimed at assessing the suitability of the same, have been carried out in collaboration with the PAHO/WHO CC for Information Systems and Digital Health (Hospital Italiano de Buenos Aires, Department of Medical Informatics).

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