



D5.3c

**DISSEMINATION REPORT-3** 

WP5 – Management, Dissemination & Exploitation T5.3 - Dissemination





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# Glossary

Acronym	Meaning
CORD	Chronic obstructive respiratory disease
AAV	Automatic Advertising Value





## **EXECUTIVE SUMMARY**

This document is deliverable D5.3c from Personal Health Empowerment (PHE), "Dissemination". This report updates the communication plan, including changes in the dissemination strategy (section 2), list the activities carried out so far and presents the activities done during 2020 (section 3).

We recall that the global aim of PHE dissemination and communication is to effectively transmit information of the activities and its outcomes to multiple stakeholders and audiences, in order to support and maximize the impact of PHE.

The specific aims of the dissemination and communication plan are the following:

- To promote through communication and dissemination the PHE results and technologies.
- To contribute to the widespread use and awareness raising of the developed technologies in order to increase PHE success.
- To identify the main stakeholder types/categories with emphasis to identify and prioritize dissemination tools.
- To specify important exploitation and marketing activities which will take place in order to attract potential customers for the PHE technologies.

This previous deliverable D5.3a) DISSEMINATION REPORT-1 outlined the channels through which results and key messages will be communicated to the stakeholders and audiences that have been identified to benefit from them, such as employees, employers, CORD patients, healthcare providers, healthcare payers, among others. An updated was presented in the deliverable D5.3b) DISSEMINATION REPORT-2 regarding the events and actions done in 2019. This deliverable D5.3c) DISSEMINATION REPORT-3 complete the previous regarding the year of 2020.

The execution of the plan is being measured through quantitative and qualitative measures for the sake of accountability and improvement of the project.





## 1 Introduction

The Personal Health Empowerment project aims to achieve significant cost reductions for preventive solutions to help the person adopt a healthy lifestyle and providing the person with tools to actively participate in the treatment when diseases do arise by empowering people to monitor and improve their health using personal data and digital coaching. As a result, these will be causing to reduce the number of patients and decrease the burden on care personnel.

These project innovations have great potential to have a large impact on healthcare provision in the future, providing both evidence and means to realise people-centric and preventive health care, and allow for cost-saving solutions with increased patient involvement. But, to have the expected impact, an effective dissemination strategy and communication plan involving all project partners was needed.

That strategy was defined in the previous deliverables D5.3a) DISSEMINATION REPORT-1 and D5.3b) DISSEMINATION REPORT-2. The current document updates and complete the previous one, regarding the events and actions done in 2020 and the extension of the project for 2021, with the partners from Belgian (KU Leuven and IDEWE) and Portugal (MEDIDA, GECAD and CINTESIS), due to the continuity of their national projects.





## 2 Updated Communication Plan

No relevant changes have been introduced in the defined dissemination strategy. No new material, nor types of activities were identified, in addition to the already described in the previous deliverable and presented in Table 1. Please notice that some of the communication activities will be developed with specific target groups of the project (Technological and Technical-scientific Communities, Potential Costumers and General Public, which include the decision makers).

Nevertheless, the pandemic situation that began in March 2020 and still active has resulted in a relevant delay in some of the PHE activities, with effect in the dissemination. Also, activities involving the reunion of many people, such as dissemination actions in the community need to be cancelled or delayed.

By the end of 2020 some partners will conclude their participation on the PHE project. Given the difference on the begin of the national projects, reflecting in the times of participation of the partners of the different countries, in 2021 the project will still active. Thus, a plan for dissemination was established and included in this document.

Changes in the evaluation times and monitoring effectiveness measures are presented in the Section 4 Monitoring the effectiveness of dissemination.

### 2.1 Updated dissemination Partners

Facilitating partners, which will collaborate in the dissemination of the ITEA results and products will be identified during all project, according to the opportunities. Candidates to this role include previously established collaborations of the consortium participants, other ongoing projects involving consortium participants and other ITEA projects teams. Up to the moment were identified 5 dissemination partners, listed below:

- INSPIRERS team Part of the PHE researchers from Portuguese consortium are also lead
  or participate in projects INSPIRERS regarding adherence to medication in CORD, both
  in Portugal and Spain. INSPIRERS Team include almost 100 medical specialists related to
  CORD.
- Project TagUBig (Taming your Big Data) This project is led by a PHE researcher aims to contribute to improving transparency, privacy and usability of applications.
- **Union of Turkish Bar Associations** or Türkiye Barolar Birliği (TBB) is an organisation for Turkish lawyers, uniting over 60,000 lawyers in 78 Turkish bar associations.
- Platform of technologies for active and independent Health and living (eVIA) Different news and press releases through this platform news and press releases
  generated by the project will be redistributed to increase their impact on an audience
  related to innovation in health.
- **Planetic** Spanish technological platform for the adoption and dissemination of electronic, information and communication technologies. Different news and press releases will also be distributed through this platform whose audience is more related to communication technologies experts.





		•	Target grou	ps
Material / Activity	Goal	General public	Technological and Technical-scientific	Potential Costumers
•	Defining project branding (logo,			
Project branding	colours, templates) in order to have a homogeneous project identity.	•	•	•
Project Webpage	Working as centralized information source, hosting the public information, such as partners, public deliverables and list of scientific outputs, with regular update.	•	•	•
Press releases	Informing stakeholders about key achievements and events.	•		•
Physical/digital promotional materials	Informing the general public of the basic information on the project or specific features aiming population subgroups	•		•
	Informing the general public of the			
Social Media	basic information on the project or		•	•
dissemination	specific features aiming population subgroups			
Information events in the community with specific sub targets	Participation in more general scope events in the community	•		•
Workshop organization	Informing stakeholders directly		•	•
Participation in events of technical / scientific dissemination	Promotion of the innovative contributions and results		•	•
Scientific papers	Technical / scientific dissemination of the innovative contributions and results		•	
PhD and master thesis	Technical / scientific dissemination of the innovative contributions and results, which constitute relevant part of the research work of the students which belong to the research team		•	
Project deliverables	Documents with access level defined as public which can be technical scientific dissemination channel		•	

Table 1 Activities and Materials for dissemination, with target groups





# 2.2 Updated proposed calendar and monitoring of the effectiveness of dissemination

The project PHE will continue in 2021 reduced to the partners from Belgian (KU Leuven and IDEWE) and Portugal (MEDIDA, GECAD and CINTESIS). Planned actions for 2021 are presented in this section.

## 2.2.1 Actions planned for 2021

Any dissemination action planned for 2020 which was not accomplish will be completed in the last year of the project.

Due to constraints related to the pandemic situation several dissemination actions planned by Use Case CORD Management were reformulated and postponed. This affected in particular the participation in business fairs and scientific meetings.

Also, the workshop was delayed and reorganized as a fully online event, in a joint organization with the mINSPIRER project form INSPIRERS team and the The Winter School 2021 of Faculty of Medicine of the University of Porto.

The first sessions will take place on 29<sup>th</sup> January 2021 and will include the invited seminars:

"Intelligent Environments in Healthcare" with Professor Peter Mikulecky from Univerzita Hradec Králové, Czech Republic

"Feature selection applied to medical problems" with Professor Veronica Bolon-Canedo from University of A Coruña, Spain

On 5<sup>th</sup> de February of 2021 more sessions were planned as part of the The Winter School 2021, a one-week continuing education event organised by MEDCIDS – Department of Community Medicine, Health Information and Decision. In this framework will take place workshop session

"mHealth patient-centred technologies – the future is now"

including an interventions from MEDIDA, GECAD and CINTESIS and the invited seminars

"Mobile Sensors & Technologies for Healthcare" with Professor Juan Corchado, Universidad de Salamanca, Spain

"Smartphone-based sensors for non-invasive physiological monitoring" with Professor Ki Chon from University of Connecticut, USA

We are still working in the intent to have someone from Belgian consortium, PHE leader from January 2021, to present the project. Otherwise, it will be presented by GECAD.









# AIRDOC project

5 de fevereiro | 14:00 -18:00

Figure 1 AIRDOC workshop session announcement

For 2021 are also planned to present the innovative technologies and the results of the pilot studies (also delayed due to pandemics) in at least two scientific meetings and two technical-scientific papers.

In particular, the project was not able to achieve an efficient communication thought social media, and that needs to be improved. Promotional materials to publicize the PHE and the national project AIRDOC and its results will be developed in Portuguese. These materials should be made available at webpage and further disseminated using Social Media. Attending to the delay of the project, the press release regarding the CORD use case will be produced latter.





The Belgian Use Case plans to have at least two academic contributions in the form of scientific articles in 2021. One will describe a dashboard designed for health coaches and its evaluation results from the perspective of Human-Computer Interactions. Another paper will focus on the impact of an online intervention on absenteeism due to musculoskeletal pain.

An update of D1.2 is also planned for 2021 for the Belgian Consortium: D1.2c Market Analysis & business plan specification.





# 3 Activities carried out up to now

The list of the activities carried out up from the onset of the project up to December 2020 are presented in Table 2,3 and 4.

			Use ca	ses
Date	Action	Global project	Healthy Workplaces	CORD Management
July 2018	Master thesis #1			•
August 2018	Project Identity Logo	•		
October 2018	Deliverable Templates	•	•	•
November 2018	D1.2a Preliminary Market Analysis & Business Plan Specification Document	•	•	•
Several occasions during 2018	Meetings with Manpower		•	
January 2019	First PHE Facebook post	•		
February 2019	Poster presentation at the 6th ENBENG 2019  – IEEE EMBS Portugal Chapter			•
February 2019	D3.1_System Requirements Specification  Document	•	•	•
February 2019	D3.2_User Profile definition Document	•	•	•
February 2019	D5.3a_Dissemination Report-1	•	•	•
March 2019	Presence at the Portugal eHealth Summit 2019 with CINTESIS	•		
April 2019	Webpage fully functional	•	•	•
April 2019	Presence with CINTESIS at MOSTRA UP	•		
April 2019	Scientific paper published at 2019 IEEE 6th Portuguese Meeting on Bioengineering (ENBENG) Conference Proceedings DOI: 10.1109/ENBENG.2019.8692452			•
June 2019	Presence at Clinical Village of the EAACI	•		
June 2019	Master thesis #2			•
June 2019	Presentation at the ICIMTH (International Conference on Informatics, Management, and Technology in Healthcare)			•
June 2019	Scientific paper published at Studies in Health Technology and Informatics DOI: 10.3233/SHTI190002			•

Table 2 List of dissemination and communication activities for 2018 and the first semester 2019





		Use cas	es
Action	Global project	Healthy Workplaces	CORD Management
Presentation at the 18th International			
Conference on Informatics, Management and Technology in Healthcare			•
Social Media posts on the PHE partners workshop: Architecture of the system	•	•	•
PhD Thesis #1			•
Scientific paper published at Progress in Artificial Intelligence. EPIA 2019. Lecture Notes in Computer Science DOI: 10.1007/978-3-030-30244-3_5			•
Presentation at the 19 <sup>th</sup> EPIA Conference on Artificial Intelligence			•
PhD Thesis #2			•
MEDICON Special Session organization with two scientific presentations			•
Two scientific papers published at MEDICON 2019 Conference Proceedings DOI: 10.1007/978-3-030-31635-8_168 DOI: 10.1007/978-3-030-31635-8_170			•
PHE State of the art update document	•	•	•
Updated Canvas CORD use case (annex to D1.2)			•
Scientific paper accepted at WorldCist'20 - 8th World Conference on Information Systems and Technologies			•
Scientific paper accepted at Artificial Intelligence Review Journal			•
Meetings with Manpower Occupational Health Department		•	
	Presentation at the 18 <sup>th</sup> International Conference on Informatics, Management and Technology in Healthcare  Social Media posts on the PHE partners workshop: Architecture of the system PhD Thesis #1  Scientific paper published at Progress in Artificial Intelligence. EPIA 2019. Lecture Notes in Computer Science DOI: 10.1007/978-3-030-30244-3_5 Presentation at the 19 <sup>th</sup> EPIA Conference on Artificial Intelligence PhD Thesis #2  MEDICON Special Session organization with two scientific presentations Two scientific papers published at MEDICON 2019 Conference Proceedings DOI: 10.1007/978-3-030-31635-8_168 DOI: 10.1007/978-3-030-31635-8_170 PHE State of the art update document Updated Canvas CORD use case (annex to D1.2)  Scientific paper accepted at WorldCist'20 - 8th World Conference on Information Systems and Technologies  Scientific paper accepted at Artificial Intelligence Review Journal Meetings with Manpower Occupational	Presentation at the 18 <sup>th</sup> International Conference on Informatics, Management and Technology in Healthcare Social Media posts on the PHE partners workshop: Architecture of the system PhD Thesis #1 Scientific paper published at Progress in Artificial Intelligence. EPIA 2019. Lecture Notes in Computer Science DOI: 10.1007/978-3-030-30244-3_5 Presentation at the 19 <sup>th</sup> EPIA Conference on Artificial Intelligence PhD Thesis #2 MEDICON Special Session organization with two scientific presentations Two scientific papers published at MEDICON 2019 Conference Proceedings DOI: 10.1007/978-3-030-31635-8_168 DOI: 10.1007/978-3-030-31635-8_170 PHE State of the art update document Updated Canvas CORD use case (annex to D1.2) Scientific paper accepted at WorldCist'20 - 8th World Conference on Information Systems and Technologies Scientific paper accepted at Artificial Intelligence Review Journal Meetings with Manpower Occupational	Action  Presentation at the 18th International Conference on Informatics, Management and Technology in Healthcare  Social Media posts on the PHE partners workshop: Architecture of the system PhD Thesis #1  Scientific paper published at Progress in Artificial Intelligence. EPIA 2019. Lecture Notes in Computer Science DOI: 10.1007/978-3-030-30244-3_5 Presentation at the 19th EPIA Conference on Artificial Intelligence PhD Thesis #2  MEDICON Special Session organization with two scientific presentations Two scientific papers published at MEDICON 2019 Conference Proceedings DOI: 10.1007/978-3-030-31635-8_168 DOI: 10.1007/978-3-030-31635-8_170 PHE State of the art update document Updated Canvas CORD use case (annex to D1.2) Scientific paper accepted at WorldCist'20 - 8th World Conference on Information Systems and Technologies Scientific paper accepted at Artificial Intelligence Review Journal Meetings with Manpower Occupational

Table 3 List of dissemination and communication activities for the second semester 2019





		Global project	e Wealthy Workplaces	CORD Management
Date	Action	oject	kplaces	gement
October 2019 to January 2020	Internship at CINTESIS of four students from the Computer Sciences graduation (Faculty of Science of the University of Porto)	•		•
February 2020	D5.3a_Dissemination Report-2	•	•	•
May 2020	Scientific paper published at Trends and Innovations in Information Systems and Technologies. WorldCIST 2020. Advances in Intelligent Systems and Computing, vol 1161. Springer, Cham. https://doi.org/10.1007/978-3- 030-45697-9_6	•		•
May 2020	Scientific paper published at Human Computer Interaction and Emerging Technologies: Workshop Proceedings from the INTERACT 2019 Workshops https://doi.org/10.18573/book3.t	•	•	
June 2020	Two Scientific paper accepted for publication at IADIS International Conference e-Health 2020 (part of MCCSIS 2020) proceedings	•		•
June 2020	Cycle of Events - Dynamics for Innovation – Health	•		•
Several moments in 2020	Promotional materials from Belgian Consortium	•	•	

Table 4 List of dissemination and communication activities for the first semester 2020





			Use cas	es
Date	Action	Global project	Healthy Workplaces	CORD Management
July 2020	Online presentation at Stanford	_	•	
July 2020	University, School of Medicine			
July 2020	Online presentation at HAVELSAN	•	•	
July 2020	Presentations at 12th International Conference on e-Health	•		•
July to September 2020	Internship at CINTESIS of a student from the Integrated Master in Biomedical Engineering and Biophysics (Faculty of Sciences of the University of Lisbon)	•		•
August 2020	Online presentation at FONET and BILBEST	•	•	
September 2020	Started an MSc thesis at University of Porto			•
October/November 2020	3 General PaCeIT meetings	•		•
October 2020	Started a PhD thesis KU Leuven	•	•	
October 2020	Started an MSc thesis at KU Leuven		•	
October 2020	Started an MSc thesis at University of Porto			•
November 2020	Scientific paper published EMBEC 2020. IFMBE Proceedings, vol 80. Springer, Cham. https://doi.org/10.1007/978-3-030- 64610-3_90	•		•
November 2020	Started an MSc thesis at University of Porto			•
December 2020	Being Started a MSc thesis in Turkey			
Several moments	Facebook project page update	•	•	•
Several moments in 2020	Meetings with Manpower Occupational  Health Department  dissemination and communication activities for the		•	

Table 5 List of dissemination and communication activities for the second semester 2020





## 3.1 Project deliverables with public access

During the first trimester of 2020 were concluded and made available the following deliverables relative to 2019

D5.2b-Standarisation Report-V2

D5.3.-Dissemination Report-2

The public deliverables planned for 2020, were all already finished or under finalization to be submitted before the end of 2020:

D1.2b.- Final Market Analysis & Business Plan Specification

D3.1b- System Requirements Specification

D3.2b- User Profile definition

D5.2c-Standarisation Report-V3

D5.3c.-Dissemination Report-3 (this report)

## 3.2 Facebook Page and project webpage updates

The webpage of the project at <a href="http://projectphe.com/">http://projectphe.com/</a> was updated in order to reflect the project advances.

The Facebook page <a href="https://www.facebook.com/projectPHE/">https://www.facebook.com/projectPHE/</a> (findable by @projectPHE) continues to be used to further disseminate action of PHE. Currently the Page has 24 followers and posts reached over 400 persons. The international project and/or the related national projects appear in social media (by posting or sharing from others) less than 10 times.

#### 3.3 Scientific papers

Three peer reviewed scientific papers regarding PHE results were published during 2020.

- Martinho D., Vieira A., Carneiro J., Martins C., Almeida A., Marreiros G. (2020) A
  Definition of a Coaching Plan to Guide Patients with Chronic Obstructive Respiratory
  Diseases. In: Rocha Á., Adeli H., Reis L., Costanzo S., Orovic I., Moreira F. (eds) Trends
  and Innovations in Information Systems and Technologies. WorldCIST 2020. Advances
  in Intelligent Systems and Computing, vol 1161. Springer, Cham.
  <a href="https://doi.org/10.1007/978-3-030-45697-9">https://doi.org/10.1007/978-3-030-45697-9</a> 6
- De Croon, R., Gutiérrez, F., & Verbert K. 2020. Opportunities for recommended mental health strategies to reduce stress at work. In: Loizides, F et al (eds.), Human Computer Interaction and Emerging Technologies. Cardiff: Cardiff University Press. <a href="https://doi.org/10.18573/book3.t">https://doi.org/10.18573/book3.t</a>
- Ferreira A., Almeida R., Almeida R., Jácome C., Fonseca J.A., Vieira-Marques P. (2021) mHealth to Securely Coach Chronic Patients. In: Jarm T., Cvetkoska A., Mahnič-Kalamiza S., Miklavcic D. (eds) 8th European Medical and Biological Engineering Conference. EMBEC 2020. IFMBE Proceedings, vol 80. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-64610-3">https://doi.org/10.1007/978-3-030-64610-3</a> 90





Two other papers accepted for publication are currently in press:

- Rute Almeida, Cristina Jácome, Diogo Martinho, Pedro Vieira-Marques, Tiago Jacinto, Ana Ferreira, Ana Almeida, Constantino Martins, Mariana Pereira, Ana Pereira, José Valente, Rafael Almeida, Ana Vieira, Rita Amaral, Ana Sá-Sousa, Ivânia Gonçalves, Pedro Rodrigues, Magna Alves-Correia, Alberto Freitas, Goreti Marreiros, Susana Caldas Fonseca, Altamiro Costa Pereira and João Almeida Fonseca (2020) AIRDOC: smart mobile application for individualized support and monitoring of respiratory function and sounds of patients with chronic obstructive disease. IADIS International Conference e-Health 2020 (part of MCCSIS 2020) pp 78:88.in press
- Rute Almeida, Cristina Jácome, Pedro Vieira-Marques, Ana Pereira, Ana Sá-Sousa, Rita Amaral, José Valente and João Almeida Fonseca. Engagement and usage patterns of a mobile application to monitor disease and treatment adherence in patients with asthma; IADIS International Conference e-Health 2020 (part of MCCSIS 2020) in press

Additional publications are submitted to SCI publications waiting for final decision. Since the review process is long in prestigious journals, the decision results may not be determined until the project deadline.

 Behzad Naderalvojoud, Güven Köse, Fatih Mehmet Arslan, Kazım Sarıkaya. A Novel Event-based Data Monitoring and Analytics for Personalized Health Care Systems. Future Generation Computer Systems. (2021)

## 3.4 Presentations at 12th International Conference on e-Health

Two works related to the CORD use case was presented in virtual meeting 12th International Conference on e-Health, part of Multi Conference on Computer Science and Information Systems (MCCSIS 2020):

- AIRDOC Smart Mobile Application for Individualized support and monitoring of respiratory function and sound of patients with chronic obstructive disease
- Engagement and usage patterns of a mobile application to monitor disease and treatment adherence in patients with asthma

In the first work the Portuguese project corresponding to the CORD use case was explained, presenting the goals, strategies and current state. The second work reports measures for app use in potential final users of the App under development in PHE, CORD use case.

### 3.5 Cycle of Events - Dynamics for Innovation – Health

The Portuguese National Agency for innovation ANI - Agência Nacional de Inovação — has promoted a cycle of thematic events regarding dynamic for innovations. The CORD use case, in the framework of the national Project AIRDOC has been presented in the session dedicated to Health (https://www.ani.pt/pt/noticias/not%c3%adcias-ani/reportagem-ciclo-de-eventos-saude/), in which the PHE project has been referred, under the theme Trends and disruptive Technologies.





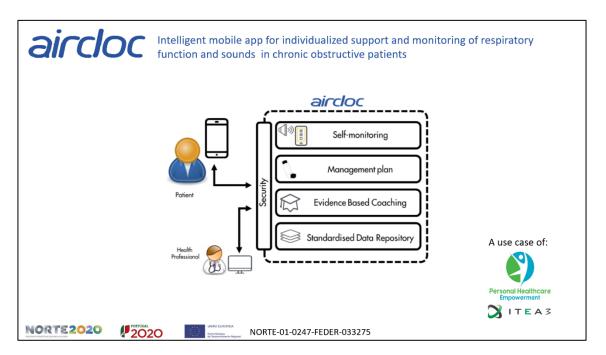


Figure 2 PHE at the Dynamics for Innovation – Health meeting

## 3.6 Seminars promoted by the Turkish partners

Between July and August, three online seminars were promoted by researchers in the Turkish partners aiming the dissemination of the project, in particular the Healthy Workplaces use case:

- presentation at Stanford University, School of Medicine, by Dr. Behzad Naderalvojoud
- presentation at HAVELSAN, Turkey's largest and leading technology firm owned and affiliated to the Turkish Armed Forces Foundation
- presentation at FONET and BILBEST, Turkish pioneers in the field of health information technology.

### 3.7 PaCeIT meetings

PaCeIT – Patient Centered Innovation and Technologies, is a research group of CINTESIS formed by 28 researchers with diversified profile of researchers' experience (health professionals, engineers, computer programmers and scientist, and data scientists), including researchers from the PHE Portuguese consortium. The group is specially interested in the design, validation, assessment and implementation of easy-to-use technologies and personalized services, addressed to patients, for diagnosis, classification and management of chronic diseases and its risk factors. The main motivation of the group is to train the patients and their family in an active participation and decision-making shared with a team of interdisciplinary caregivers, contributing to the improvement of the quality of life and health efficiency.

A set of online meetings dedicated to present planned and ongoing projects involving researchers from PaCeIT occurred in October and November. Naturally the PHE was included the presented projects, allowing to disseminate it to this Technological and Technical-scientific community.





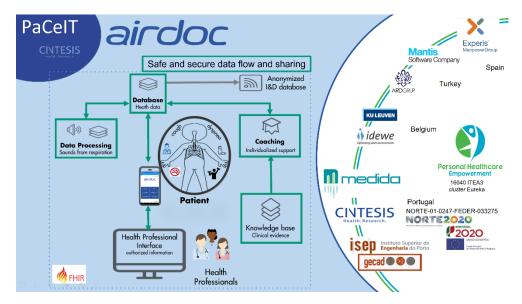


Figure 3 PHE at the PaCeIT meetings

### 3.8 Human resources enhancement

Four students from the Computer Sciences graduation (Sciences Faculty of University of Porto) October 2019 to January 2020, and two students from the Informatics graduation (Polytechnic of Porto), February to June 2020, made their curricular internships at CINTESIS in the framework of the national project AIRDOC. They collaborated in the implementation of the server and mobile app for the CORD use case.

From July to September 2020 a student from the Integrated Master in Biomedical Engineering and Biophysics (Faculty of Sciences of the University of Lisbon) made her internship at CINTESIS. The work was in teleworking regime and consisted in updating previously existent methods for the analysis of expiratory forced manoeuvre, as part of the work in the CORD use case.

In 2020 five students started their MSc thesis, in relation with PHE:

- Henrique Ferreira Cardoso from the Integrated Master in Medicine of the Faculty of Medicine University of Porto, started his MSc thesis in Pulmonary Auscultation using Mobile Devices (Feasibility Study in Respiratory Diseases), on the framework of the CORD use case (September 2020)
- André Gouveia from the Master in Mathematical Engineering of the Faculty of Sciences, University of Porto, started his MSc thesis in respiratory sounds analysis, on the framework of the CORD use case (October 2020)
- Márcia Pereira from the Integrated Master in Medicine of the Abel Salazar Institute for Biomedical Science of University of Porto started his MSc thesis in a Proof-of-concept study on the use of a mobile application to acquire coughing sounds in children with acute or chronic respiratory diseases, on the framework of the CORD use case (November 2020)
- Samridhi from the Master of Computer Science started an MSc thesis at KU Leuven on visualising mHealth variables, and their co-occurrence in a mobile context. (October 2020)





 Caner Bozkurt started a MSc thesis entitled "Cancer Detection by Deep Learning Models using Feature Fusion and Decision Fusion" (December 2020)

Also, in October 2020 at KU Leuven Maxwell Szymanski started a PhD thesis that related with the national Belgian PHE project. His thesis will explore recommendations centred around health-related activities and information, as well as investigate the effect of contextual and personalized recommendations on user retention in mHealth apps.

## 3.9 Brochures, press release and newsletters

The Belgium consortium (IDEWE & KU Leuven) has published several promotional materials including brochures and newsletters in the local language.

The newsletters and press release published in Dutch are available in the following URLs:

- https://mailchi.mp/idewe/weekvdpijn
- https://www.hln.be/binnenland/1-op-de-10-werknemers-neemtpijnmedicatie~aecce8db
- https://www.idewe.be/health-empower

Brochures and posters are as follows:

- Poster for employers
- Two 4-pages brochures for employers





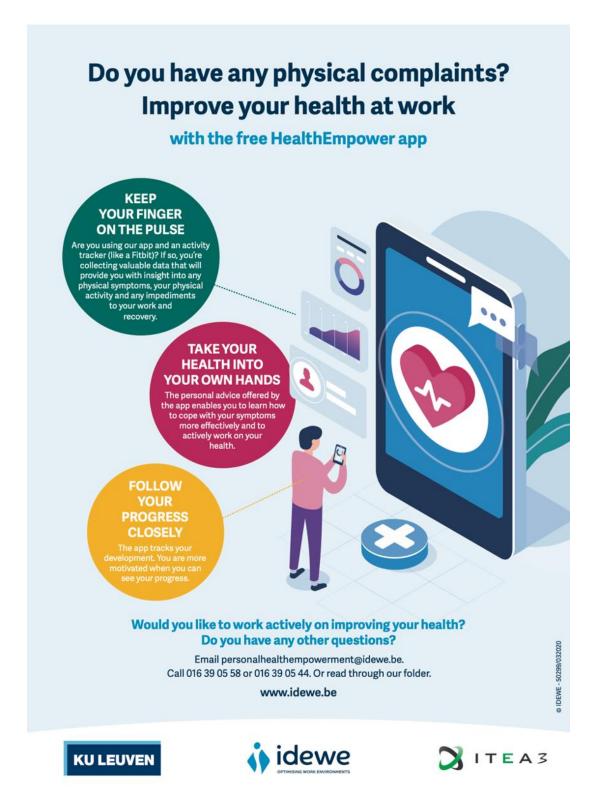


Figure 4 Poster for employers





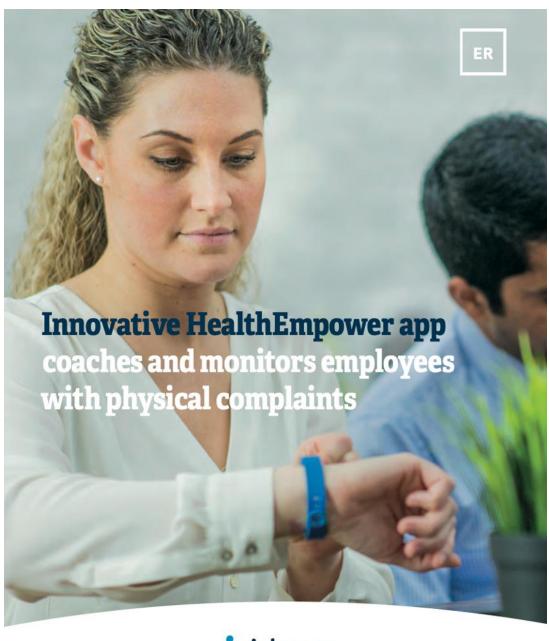










Figure 5 Brochures 1 for employers (page 1)







# Prevent absenteeism with the HealthEmpower app

Many employees struggle with **muscular or joint pain**. If this pain is experienced on a regular basis, it may cause long-term absenteeism.

Thanks to the innovative **HealthEmpower app**, you can offer your employees personalised coaching. By giving your employees the chance to monitor their own health, you encourage them to take it into their own hands and improve their health, enabling you to prevent long-term absenteeism in the process.



# A wearable device, questionnaires and a daily journal

Using a wearable device, questionnaires and a daily journal, the HealthEmpower app collects information from those suffering from physical pain.

What results can you expect from monitoring and personalised coaching?

- Your employees receive constructive, personalised advice for achieving an active lifestyle.
- They learn how to cope well with physical complaints at work.
- They give their physical and mental well-being a boost.

And all this is completely free of charge.



Figure 6 Brochures 1 for employers (page 2)







## Contribute to better prevention

If you offer your employees the option to use our app, you will be providing them with the **best possible support** for their complaints and allow them to take their health into their own hands. You will also take your prevention policy to the next level. Our experts will help you to appoint an **internal ambassador** and inform your employees about the app.

Thanks to the innovative HealthEmpower app, you can offer your employees personalised coaching and prevent long-term absenteeism.





## Working on health, free of charge

- ✓ You and your employees may use the HealthEmpower app for free for as long as the study lasts (until 2022 at the latest).
- Your employees will find out how to gain more control over their health.
- ✓ You gain insight into the changes among your employees.
- ✓ You can purchase a Fitbit Inspire for your employees for just €35 instead of €70.

The HealthEmpower app is part of a scientific study researching how innovative technologies (such as artificial intelligence and visual technologies) and a personalised coaching app can prevent long-term absenteeism in employees suffering from complaints. Your feedback will serve to further improve the app.

Figure 7 Brochure 1 for employers (page 3)





## How can you take part?

This study is available starting autumn 2019. You may subscribe until spring 2020. If you are interested or have any questions, please e-mail personalhealthempowerment@idewe.be or call +32 (0)16 39 05 58 or +32 (0)16 39 05 44.

## Who are we?

The IDEWE Group focuses on smart tools and prevention in all areas at work. We are always looking for high-value, reliable and scientifically supported solutions in close collaboration with our clients. Doing so allows us to create a successful, sustainable prevention policy together.

## **IDEWE Group regional offices**

## Please get in touch - we will be happy to help you!

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Figure 8 Brochure 1 for employers (page 4)





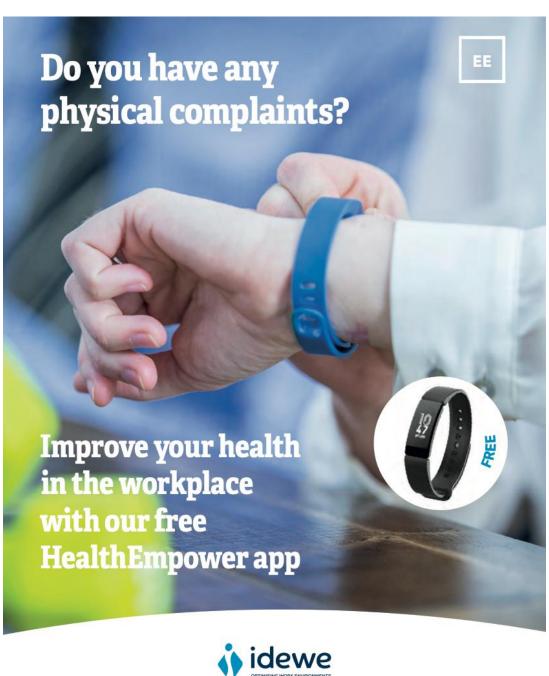










Figure 9 Brochure 2 for employers (page 1)





The innovative **HealthEmpower app** lets you take your physical symptoms and health at work into your own hands and offers you personal coaching.

This enables you to identify any impediments to your work and recovery.





## Learn to cope with physical complaints

The HealthEmpower app uses **questionnaires** and a **journal** to assess your pain symptoms, allowing you to collect relevant information about your health. And the result?

- You learn to cope properly with physical complaints at work.
- The app offers you personal advice on how to lead an active lifestyle.
- You give your physical and mental well-being a boost.

And all this is completely free of charge.



Figure 10 Brochure 2 for employers (page 2)







# More well-being for you and your colleagues

Everybody has aches and pains from time to time. This app offers you advice and insight into your health and physical development. It can help you avoid physical complaints, tackle barriers to work and recovery and lead a more active lifestyle. In doing so, you help the IDEWE Group gain a better understanding of physical discomfort at work and resulting absences.

Are you making use of the HealthEmpower app for a longer period? If so, you are automatically contributing to a better app. You are also helping to **improve well-being at work.** 



# Your health only stands to benefit

- Use of the HealthEmpower app is completely free of charge.
- ✓ You get more control over your health in an interactive way.
- ✓ Your employer will provide you with a Fitbit Inspire.





## Want to participate?

The HealthEmpower app is available now.

Would you like to work actively on improving your health? Do you have any other questions?

Email us at personalhealthempowerment@idewe.be or call 016 39 05 58 or 016 39 05 44.

The HealthEmpower app is part of a study being conducted by the IDEWE Group, KU Leuven and Agentschap Innoveren & Ondernemen (an agency for innovation and enterprise).

Figure 11 Brochure 2 for employers (page 3)





# Who are we?

The IDEWE Group develops smart tools that keep you safe and in good health at work. We, along with your employer, seek out quality, science-based solutions, enabling us to ensure that you are able to work in the best possible environment, every day.

## **IDEWE Group regional offices**

Please get in touch - we will be happy to help you!

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Figure 12 Brochure 2 for employers (page 4)





## 4 Monitoring the effectiveness of dissemination

The monitoring effectiveness measures should be evaluated at the months (M) 18, 24, 30 and 36 of the project, as described in the Table 5, in which the already accomplished actions are marked in green. To cope with the continuity of the project for 2021 new measures were added to M48.

Regarding the public deliverables, with this document the project achieved 11 out of 11 expected public deliverables concluded.

Our strategy for social media visibility seems not be working, as the activity in Facebook during 2020 was minimal. One of the reasons can be the language differences, since national projects seem to prefer to communicate to their potential final users in the local language. Proposals to mitigate this are under discussion by the partners that will continue in 2021.

The pandemic situation and the resultant delay lead as to change the plans regarding dissemination. The pilot studies in Portugal, the workshop any other events on the community were cancelled or delayed to 2021. The respective promotional materials will only be produced in 2021. A press release was produced by the Belgium consortium regarding their national project and use case, but others were also delayed.

Using online events as mitigation plan, it was possible to participate in more than 10 events during 2020, in a total of more than 20 since the beginning of the project.





		Evaluation times					
Material / Activity	Effectiveness measures	M18	M24	M30	M36	M48	
Project branding	Availability	logo, colours and template for deliverables available	All templates available				
Project Web- page	Availability		Fully functional				
Press releases	Number of news by circulation / audience level. Automatic Advertising Value (AAV)		Regarding prototype of the availability of the integrated system		Press releases for Belgian use case	Final of the project	
Physical or digital promotional materials	Availability		First promotional materials	4/3 promotional materials	More than six promotional materials	More than six promotion al materials	
Social Media disseminatio n	Number of posts and tags. Automatic Advertising Value.	First mention at social media	More than five mentions at social media		More than 20 mentions at social media	More than 20 mentions at social media	
Information events of the community	Number of events		First participation			More than three participatio ns	
Workshop organization			One workshop organized			One workshop organized	
Participation in events	Number of events	First participation	More than 10 participations		More than 20 participation s		
Scientific papers	Number of documents		First publication achieved		More than 4 publications		
PhD and master thesis	Number of documents	First thesis concluded	3 thesis concluded				
Project deliverables with access level defined as public	Number of documents	50% made available 4/5		75% made available 6/6	100% made available 11/11	100% made available 14/14	

Table 6 Effectiveness measures