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Deliverable No. 9.3 Dissemination Activities Report – Part 2

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	Deliverable Type	
R	Document, report	Х
DEM	Demonstrator, pilot, prototype	
DEC	Websites, patent fillings, videos etc.	
OTHER		
	Dissemination Level	
PU	Public	X
СО	Confidential (Consortium members including the Commission Services)	
CI	Classified Information (Commission Decision 2015/444/EC)	

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Table of Contents

1.	Versions History	4
2.	Executive Summary	5
3.	Introduction	6
4.	Activities Report (Y3 and Y4)	7
	4.1. Branding and Publicity	7
	4.1.1. Project Leaflets, Posters and Visuals	7
	4.1.2. Artist-in-Residence and Project Artwork	10
	4.1.3. Physical Gadgets	11
	4.2. Website and Social Media	12
	4.2.1. Project Website	12
	4.2.2. Social Media	13
	4.3. General (Non-scientific) Media Releases	14
	4.4. Scientific Publications	15
	4.5. Presentations, Posters, and Demos	18
	4.6. Organization of Events	24
	4.6.1. Final Event	25
	4.6.2. PhotoVoice Exhibitions	26
	4.6.3. Focus Group with Patients	28
	4.6.4. Meetings with the Nutritionist	29
	4.6.5. CAPABLE Workshop	30
	4.7. Participation in Events	31
	4.8. Web Actions	32
	4.9. Liaisons with Other EU Projects and Initiatives	33
	4.10. Contacts with Relevant Stakeholders, KOLs and Expert Groups	35
	4.11. Teaching and Mentoring	36
5.	Summary	39
6.	Glossary	42
7.	References	43

List of Figures

Figure 4.1. CAPABLE poster aimed at clinicians (left) and at patients (right)	8
Figure 4.2. CAPABLE key visual	9
Figure 4.3. CAPABLE leaflet aimed at patients (in Italian). The leaflet on the right an	nounces
the PhotoVoice exhibition for the patients participating in the clinical tests	9
Figure 4.4. Presentation of the PhysicAI Garden video at ICSM	10
Figure 4.5. A festival flyer advertising PhysicAI Garden (left) and a photo from a	n actual
presentation (right) showing interactions with the simulated garden using a tablet	11
Figure 4.6. Physical CAPABLE gadgets	12

H2020-875052



Figure 4.7. Sample Instagram posts (top) and reels (bottom)14
Figure 4.8. Agenda of the CAPABLE final event26
Figure 4.9. Photo from the round table discussion26
Figure 4.10. Photos from the PhotoVoice exhibition in Pavia – a poster with the invitation (top-
left), stands with printed photos and associated notes (top-right), a gratitude corner (bottom-
left) and the installation of PhysicAI Garden (bottom-right)27
Figure 4.11. Photos from the PhotoVoice exhibition in Bari – a poster with the invitation (left)
and a permanent display of photos on the walls(right)28
Figure 4.12. A brochure with nutritionist recommendations for a healthy Christmas lunch
distributed during the exhibition
Figure 4.13. Photos from the focus group – a poster with the invitation (left) and a meeting
room with CAPABLE gadgets (right)29
Figure 4.14. Photos from the meeting with the nutritionist – a poster with the invitation (left)
and a talk (right)
Figure 4.15. Photos from the CAPABLE workshop - keynote (left) and the CAPABLE project
session (right)
Figure 4.16. Agenda of the "Lessons Learned" CS_AIW seminar
Figure 4.17. The CS_AIW video pill prepared as part of the PDES service
Figure 5.1. Announcement of the demo availability at the CAPABLE website

List of Tables

Table 4.1. Project posters and visuals	7
Table 4.2. Project leaflets	8
Table 4.3. Project social media accounts and profiles	13
Table 4.4. Non-scientific media releases	14
Table 4.5. Scientific publications	15
Table 4.6. Presentations, posters, and demos	18
Table 4.7. Audience groups targeted by presentations, posters and demos	24
Table 4.8. Events organized by CAPABLE partners	24
Table 4.9. Participation in events	31
Table 4.10. Web actions	32
Table 4.11. Liaisons with other EU projects and initiatives	34
Table 4.12. Contacts with stakeholders, KOLs and experts	36
Table 4.13. Educational presentations and lectures related to CAPABLE	37
Table 4.14. Theses and dissertations related to CAPABLE	38
Table 5.1. Traffic on the CAPABLE website	39
Table 5.2. Followers of the CAPABLE social media profiles	39

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1. Versions History

Version	Date	Author	Comments
1.0	2024-01-02	SW	Initial draft
1.1	2024-01-07	SW	Update and extension
1.2	2024-01-13	SW	Update and extension
1.3	2024-01-16	SW	Update and extension
1.4	2024-01-20	SW	Update and extension
1.5	2024-01-24	SW	Update and extension
1.6	2024-01-27	SW	Update and extension
1.8	2024-01-28	SW	Prepare for the first review
1.9	2024-02-04	SRC	Review
2.0	2024-02-05	SW	Revised after the first review
2.1	2024-03-28	SW	Revised after the second review

H2020-875052

2. Executive Summary

CAPABLE

In this document we report communication and dissemination (C&D) activities conducted in Work Package 9 (WP9) of the CAPABLE project and completed in months M25—M49. However, for simplicity later in the text we refer to years 3 and 4 (Y3 and Y4, respectively).

Section 3 briefly describes WP9, its tasks and deliverables. In Section 4 we present detailed information on completed C&D activities (they are summarized below). Finally, in Section 5 we provide a summary and outline future C&D activities after finishing the project.

In Y3 and Y4 the following C&D actions were completed:

- Project posters, visuals and leaflets were released and used during clinical studies and other events to advertise the project and convey relevant information.
- Physical gadgets with the project branding were released and distributed during multiple events, especially those focused on patients and clinicians.
- The artist-in-residence initiative was continued, the video presenting the PhysicAI Garden artwork was released to public. Moreover, the artwork was finalized and demonstrated at multiple events, including art shows and meetings with stakeholders.
- The website and social media profiles were being maintained and updated. Moreover, an intense dissemination campaign on Instagram and Facebook targeted at various audiences was prepared and ran. CAPABLE was also disseminated using websites and social channels of selected partners (AIMAC).
- 7 non-scientific media releases were prepared and published. Some of them appeared in multiple outlets (e.g., in different languages) thus increasing their reception range.
- 6 journal paper was published, and 3 other papers were submitted for publication. Moreover, one book chapter was accepted and now it is in press.
- 10 papers were published in peer reviewed materials of international conferences and workshops. Moreover, 5 posters with corresponding peer-reviewed abstracts were presented at international conferences.
- 42 presentations were given by the CAPABLE partners at scientific, professional and other events. The most frequently targeted audience was the academic community, then professionals, healthcare, and industry. There were also 2 presentations aimed at the general public.
- 10 events were organized by the CAPABLE partners. These events were aimed at diversified stakeholders and include among others: the final CAPABLE event and the CAPABLE international scientific workshop.
- Personal contacts with relevant stakeholders (e.g., med-tech, health IT services) were continued. CAPABLE partners also participated in 9 professional events with various audiences (e.g., investors, entrepreneurs, or innovators).
- Various actions related to teaching and mentoring were performed. CAPABLE partners gave 10 lectures to the educational community (high school, university). Moreover, multiple theses and dissertations related to the project were supervised by representatives of selected partners – some of them will continue after the end of the project.



3. Introduction

Communication and dissemination (C&D) activities in the CAPABLE project are managed by WP9. The main objective of this WP is to make the project and its result known to all relevant stakeholders (audience groups), including the scientific community, patients and care providers, healthcare policy makers and influencers, and finally the general public.

This main objective of WP9 is translated into more specific goals:

- To raise awareness of the CAPABLE project around Europe and internationally.
- To communicate progress and disseminate results of the CAPABLE project by targeted dissemination efforts and through exploitation of direct contacts of partners.
- To transfer the results beyond the lifetime of the CAPABLE project and to promote potentially impacting findings (e.g., evidence derived from data collected in a clinical trial of the CAPABLE system).

WP9 includes the following tasks (in brackets we give their start and end months corrected for the project extension), for more detailed description of the tasks see the project proposal (Quaglini, 2019):

- T9.1: Preparation and distribution of dissemination and communication material (M1-M49)
- T9.2: Dissemination events organization (M1-M49)
- T9.3: Scientific dissemination activities/publications (M1-M49)
- T9.4: Transfer of project results beyond its lifetime (M37-M49)

Moreover, WP9 is responsible for the following deliverables:

- D9.1: Project Logo, Leaflets, Presentation & Website (M6)
- D9.2: Dissemination Activities Report part 1 (M24)
- D9.3: Dissemination Activities Report part 2 (M49)

In this document we summarize activities related to all four tasks. Specifically, we expand on results presented in deliverable D9.1 (Wilk et al., 2020) and D9.2 (Wilk et al., 2021).



4. Activities Report (Y3 and Y4)

This section reports on C&D activities that were completed in Y3 and Y4 of the CAPABLE project according to the dissemination strategy and plan described in D9.2. Support of all partners in dissemination efforts is gratefully acknowledged with a special focus on UNIPV, ICSM, AIMAC, UoH and BIT who were responsible for relevant activities, described in the following subsections.

During the reporting period, at each of the consortium meetings, the WP9 leader together with representatives of relevant partners involved in this WP (UNIPV, ICSM, AIMAC) gave presentations aimed at engaging and informing the consortium partners about the importance and nature of dissemination activities and explaining related procedures, such as reporting. Contact with partners between consortium meetings was maintained using Base-camp, e-mail and teleconferences.

4.1. Branding and Publicity

4.1.1. Project Leaflets, Posters and Visuals

In Y3 we finalized project posters aimed at patients and clinicians and released them in electronic and physical form (stands) – details are given in Table 4.1 and selected posters are displayed in Figure 4.1. The posters for clinicians cover general aspects related both to cancer care and medical informatics (including big data and AI) and thus can be also presented to general, academic, and professional audiences. We also prepared a key visual advertising the final version of the project – it is displayed in Figure 4.2.

Moreover, in Y4 we prepared additional leaflets aimed at facilitating clinical tests of the CA-PABLE system. They provided detailed information and short user manuals related to specific functions available in the Patient App, with a special focus on virtual capsules – non-pharmacological interventions aimed at improving physical and mental wellbeing. They also announced a social event – an exhibition of pictures taken by patients with the PhotoVoice capsule (for more details see Section 4.6.2). The leaflets are presented in Table 4.2 and selected examples are given in Figure 4.3.

Due to internal regulations at NKI that do not allow presenting and providing "marketing" materials to patients, posters and leaflets were prepared in English or Italian and they were presented in hospitals in Pavia and Bari.

#	Release date	Target group	Thematic area	URL	Comment
1	Jan 2022	Patients	eHealth, cancer care	<u>https://capable-pro- ject.eu/poster-pa- tients-it/</u>	To be displayed as a stand in clinics and hos- pitals to present patient-focused features of the CAPABLE system.
2	Jan 2022	Clinicians, aca- demia, industry	eHealth, cancer care, medical informatics, Al	https://capable-pro- ject.eu/poster-physi- cians-en/ https://capable-pro- ject.eu/poster-physi- cians-it/	To be displayed as a stand during scientific events and classes to present clinical, meth- odological, and technological aspects of the CAPABLE project. The poster was also on per- manent display at the convention center of the ICSM hospital.

Table 4.1. Project posters and visuals



#	Release date	Target group	Thematic area	URL	Comment
3	Nov 2023	Professionals, healthcare	eHealth, medi- cal informatics	<u>https://capable-pro- ject.eu/capable-key- visual/</u>	A promotional key visual for the CAPABLE project to support dissemination and exploi- tation efforts (e.g., to advertise the system)

Table 4.2. Project leaflets

#	Release date	Target group	Thematic area	URL	Comment
1	July 2023	Patients	eHealth, cancer care, wellbeing	<u>https://capable-pro-</u> ject.eu/capsules- overview-it/	General presentation of virtual capsules available in the CAPABLE system.
2	July 2023	Patients	eHealth, cancer care, physical wellbeing	https://capable-pro- ject.eu/capsules-tai- chi-yoga-pa-it/	Detailed presentation of virtual capsules aimed at physical wellbeing – Tai-chi, Yoga, and Physical Activity Promotion (videos with indoor physical exercises).
3	July 2023	Patients	eHealth, cancer care, mental wellbeing social event	https://capable-pro- ject.eu/capsules- photo-voice-it/	Detailed presentation of the PhotoVoice vir- tual capsule for capturing and describing pic- tures and advertisement of an exhibition at ICSM with pictures taken using this capsule.



Figure 4.1. CAPABLE poster aimed at clinicians (left) and at patients (right).





Figure 4.2. CAPABLE key visual.



Figure 4.3. CAPABLE leaflet aimed at patients (in Italian). The leaflet on the right announces the PhotoVoice exhibition for the patients participating in the clinical tests.

As an extension of the introductory leaflet to capsules, ICSM prepared a video advertising the Vase of Gratitude capsule aimed at improving mental wellbeing, where the patients reflect on what they are grateful for. The video was published on Instagram and Facebook (<u>https://www.facebook.com/reel/305152222469852</u>) – additional details are provided in Section 4.2.2

D9.3

H2020-875052

4.1.2. Artist-in-Residence and Project Artwork

In the reported period we continued the cooperation Anna Dumitriu and Alex May (*artists in residence*) on PhysicAI Garden. PhysicAI Garden is an interactive artwork inspired by a cancer treatment process and application of AI-based decision support to mitigate adverse interactions between prescribed medications (for more details see D9.2). It is worth mentioning that the artwork itself is a complex software system that employs multi-agent simulation to control the "behavior" of the garden.

In Y3 the artists released a video presenting the ideas behind PhysicAI Garden and showing snapshots from the ongoing development process. The video was published on the website (<u>https://capable-project.eu/physicai-garden/</u>) and used to enrich CAPABLE demonstrations at various events. Moreover, it was being presented at ICSM to attract attentions of patients, clinicians, and members of general audience. In Figure 4.4 we show how the video was displayed in the patient waiting are at ICSM.



Figure 4.4. Presentation of the PhysicAI Garden video at ICSM

The work on PhysicAI Garden was finished in Y4 and it was first presented in October 2023 at the International Digital Culture & Spotlight Heritage Festival in Timisoara, Romania. The artwork gained a lot of attention from the general audience and provided an opportunity to disseminate information about the CAPABLE project, its goals, and results. In Figure 4.5 we present an official festival flyer advertising PhysicAI Garden and a photo from its presentation.





Figure 4.5. A festival flyer advertising PhysicAI Garden (left) and a photo from an actual presentation (right) showing interactions with the simulated garden using a tablet

The artwork was presented to patients, clinicians and member of general audience at ICSM as part of the PhotoVoice exhibition held at ICSM from December 19, 2023 to January 10, 2024 (for more information about this event see Section 4.1.2). We also plan to prepare a permanent installation of PhysicAI Garden at ICSM that will be available after the end of the project.

PhysicAI Garden was also demonstrated at the StartupItalia Open Summit on December 22, 2023 (see Section 4.7). This provided another opportunity of presenting the CAPABLE project and highlighting its advanced AI-based features (mitigating adverse drug interactions) to relevant audience (investors, entrepreneurs, and innovators).

4.1.3. Physical Gadgets

In addition to electronic materials described earlier (posters, leaflets, artwork) in Y4 we also prepared a set of CAPABLE-branded physical gadgets to be distributed at various project events. The gadgets are presented in Figure 4.6 and include:

- Bags,
- Notebooks,
- Pens,
- Badges,
- Pen-boxes (with equipment).





Figure 4.6. Physical CAPABLE gadgets and their distribution at the CAPABLE exhibition in ICSM hospital

The CAPABLE gadgets were primarily offered to patients. For example, during enrollment in the study, the patients received a required equipment (a smartphone and a smartwatch) and accompanying materials packed in the project bag. Moreover, wrapped pen-boxes were presented to patients as gifts during the opening ceremonies of the PhotoVoice exhibitions (see Section 4.6.2 for details).

4.2. Website and Social Media

4.2.1. Project Website

In the reporting period the project website (<u>https://www.capable-project.eu</u>) was updated on regular basis to include up-to-date information, e.g., news, published papers, submitted public deliverables or other dissemination materials. Despite our preliminary plans indicated in D9.2, we did not introduce localized information in Italian and Dutch related to clinical studies at ICSM and NKI. During the studies relevant information was provided in form of dedicated materials (e.g., leaflets – see Section 4.1.1 for details) or in person during follow-up visits and



phone calls. Considering patients' preference toward live in-person communication, we decided to focus on such modality and offered it throughout the study.

The traffic on the website is constantly monitored and the related statistics (numbers of visits and visitors) are provided in Section 4.8 as part of Web actions.

The CAPABLE website is hosted at PUT premises and we plan to keep it alive after the official end of the project. We will use it as a venue to inform about additional results (e.g., papers, presentations) based on experience and data collected during the project and on efforts associated with further exploitation of CAPABLE.

4.2.2. Social Media

In Y3 and Y4 we actively maintained project accounts and profiles on popular social media platforms – they are listed in Table 4.3. Moreover, basic statistics for specific platforms and the reporting period are given in Section 4.8 as part of the description of Web actions.

Social media	Account / profile
Facebook	capableprojecteu
Twitter/X	capable_project
LinkedIn	company/capableprojecteu
Instagram	capable_project

Table 4.3. Project social media accounts and profiles

Following the plan put forward in D9.2 we started and ran an active dissemination campaign on Instagram and Facebook that was led by ICSM and UNIPV. Its goals were to distribute relevant news related to the project (e.g., publication of a paper, participation in a conference, presentation of the project artwork), and to report on important scientific, social and health events and initiatives that are relevant for the CAPABLE audience (e.g., Clinical Trials Day, International Day of Older Persons, or World Cancer Day). Published posts were created using graphical templates described in D9.2 for uniform branding and formulated in lay language to facilitate their reception by diversified audiences. In addition to regular posts, we also published reels (short videos) to make the presentation form even more attractive (i.e., to show PhysicAl Garden projected on a historical building) – examples of posts are given in Figure 4.7.

Given the positive response to our dissemination campaign and the increasing number of followers on the targeted platforms, we decided to use it to reach out not only to general audience (including patients and their families), but also the professional one with relevant stakeholders from academia and industry. Thus, we used professionally-focused posts published within the campaign as a replacement of an initially planned electronic newsletter.





Figure 4.7. Sample Instagram posts (top) and reels (bottom)

4.3. General (Non-scientific) Media Releases

Table 4.4 lists non-scientific media (press) releases prepared by CAPABLE partners in Y3 and Y4. The interview with Itske Fraterman (row 1) is scheduled for publication in 2024, and all the remaining materials were published.

#	Title	Publisher or broadcaster	Lan- guage	Part- ner	Date	Notes
1	Interview with Itske Fra- terman about the CAPA- BLE intervention	Psychosociale Oncologie, The Netherlands	Dutch	NKI	Feb 2024	A personal interview for the magazine of the Dutch Society of Psychosocial Oncol- ogy. Interview consists of a detailed de- scription of the aim of the project, the dif- ferent features of the app, initial study re- sults and thoughts on the future.
2	Exhibition "CAPABLE pa- tients tell their story: im- ages and thoughts of a very special journey"	La Provincia Pa- vese, Il Giornale di Vigevano, University of Pavia News	Italian	ICSM, UNIPV	Dec 2023	A note about the exhibition and associated events organized for CAPABLE patients, their families and clinicians at ICSM (see Section 4.6.2 for additional details).
3	Uit de kennishub: Pilot study of the eHealth ap- plication 'Cancer Patients Better Life Experience'	Psychosociale Oncologie, The Netherlands	Dutch	NKI	Oct 2023	A one-pager in the magazine of the Dutch Society of Psychosocial Oncology, in which they highlight a psychosocial intervention in the field of oncology. In this edition, the CAPABLE intervention was highlighted (project details, aim, clinical relevance, im- plementation)

Table 4.4. Non-scientific media releases



#	Title	Publisher or broadcaster	Lan- guage	Part- ner	Date	Notes
4	Interview with Professor Quaglini	Sole 24 ore, It- aly	Italian	UNIPV	May 2023	An interview with Silvana Quaglini in a na- tional Italian newspaper.
5	Interview with Professor Quaglini	Sanità e Benessere, Italy	Italian	UNIPV	Mar 2023	An interview with Silvana Quaglini in an ap- pendix to selected national Italian newspa- pers.
6	Digital health accelerator funded by Margalit Startup City Haifa	Ynet, Maariv, Jerusalem Post, Israel	Hebrew (Ynet, Maariv), English	UoH	Nov 2022	A note on an event attended by Alex Kogan who discussed challenges faced by entre- preneurs who need to handle medical data
7	The "Hamsa" EU Grant Winners Ceremony	University of Haifa Weekly Newsletter, Is- real	English	UoH	May 2022	UoH Weekly Newsletter covered a cere- mony for recipients of 2019-2020 EU grants, mentioning Prof. Mor Peleg and CA- PABLE.

4.4. Scientific Publications

Table 4.5 lists scientific publications prepared in Y3 and Y4. It includes 9 journal papers, 1 book chapter, and 10 papers presented at international conferences and workshops (20 papers in total). All these papers are peer-reviewed. Most of the papers are published or accepted, and 3 have been submitted (papers 1—3). We should note that papers 11 and 19 were listed in D9.2 as submitted – they were published in Y4 and Y3, respectively.

#	Reference	Partners	Туре	Sta- tus	URL/DOI	Target group	Open access
1	I. Fraterman, L. Sacchi, H. Malo, V. Ti- bollo, S.L. Glaser, S. Medlock, R. Cornet, M. Gabetta, V. Gisko, V. Khodakou, E. Barkan, L. del Campo, D. Glasspool, A. Kogan, G. Lanzola, R. Leizer, M. Ottavi- ano, M. Peleg, K. Sniatala, A. Lisowska, E. Parimbelli, S. Quaglini, M. Rizzo, L. Locatti, A. Boekhout, L.V. van de Poll- Franse, S. Wilgenhof: Exploring the im- pact of the multimodal CAPABLE eHealth intervention on health-related quality of life in melanoma patients undergoing immune-checkpoint inhibition: A pro- spective pilot study. JMIR Cancer, 2024.	all	J	S		Academia (medical in- formatics)	Go
2	S.L. Glaser, I. Fraterman, N. van Brum- melen, V. Tibollo, L. del Campo, H. Mallo, S. Wilgenhof, L.V. van de Poll-Franse, V. Gisko, V. Khadakou, R. Cornet, M. Ottavi- ano, S. Medlock: Usability and useful- ness testing of a symptom management and coaching system for cancer patients treated with immune checkpoint inhibi- tors: a comparative qualitative study. JMIR Formative Research (2024).	AMC, NKI, ICSM, BIT, UPM	ſ	S		Academia (medical in- formatics)	Go
3	S. Rabinovici-Cohen, D.E. Platt, T. Iwamori, I. Guez, M. Ghalwash, S. Dey, A. Bose, M. Kudo, A. Koseki, P. Meyer: Pre- dicting End Stage Chronic Kidney Disease	IBM	J	S		Academia (AI, data science)	Gr

Table 4.5. Scientific publications



#	Reference	Partners	Туре	Sta- tus	URL/DOI	Target group	Open access
	from Asymptomatic and Prodromal Indi- viduals. Nature Medicine (2024).						
4	S. Rabinovici-Cohen: Artificial Intelli- gence to Support Choices in Neoadju- vant Chemotherapy in Breast Cancer Pa- tients, in: Technology in Healthcare: In- troduction, Clinical Impacts, Workflow Improvement, Structuring and Assess- ment, Now publishers, 2024 (in press).	IBM	В	A	https://capable- project.eu/tech- nology 2024_rab- inovici-cohen/	Academia, healthcare (AI, data science)	Gr
5	A. Kogan, S. W. Tu, M. Peleg: Inferring Monitoring Recommendation Frequen- cies for Multimorbidity Patients, in: Pro- ceedings of the 13th International Work- shop on Knowledge Representation for Health Care (KR4HC), 2023, pp. 21-27.	UoH	IW	Ρ	https://capable- pro- ject.eu/kr4hc_202 3 kogan_infer- ring/	Academia (AI, medical informatics)	Gr
6	A. Zaitoun, T. Sagi, Sz. Wilk, M. Peleg: Can Large Language Models Augment a Biomedical Ontology with Missing Con- cepts and Relations? In: Proceedings of the 13th International Workshop on Knowledge Representation for Health Care (KR4HC), 2023, pp. 43-52.	UoH, PUT	IW	Ρ	https://capable- pro- ject.eu/kr4hc 202 3 zaitoun/	Academia (AI)	Gr
7	A. Lisowska, Sz. Wilk, M. Peleg: Personal- ising Digital Health Behaviour Change In- terventions using Machine Learning and Domain Knowledge, in: Proceedings of the 13th International Workshop on Knowledge Representation for Health Care (KR4HC), 2023, pp. 53-61.	UoH, PUT	IW	Ρ	https://capable- pro- ject.eu/kr4hc_202 3 lisowska/	Academia (AI, data science)	Gr
8	N. Veggiotti, S. Panzarasa, V. Tibollo, S. Quaglini, G. Lanzola, L. Sacchi: Defining and Simulating Scenarios for the CAPA- BLE Clinical Decision Support System. in: Proceedings of the 13th International Workshop on Knowledge Representation for Health Care (KR4HC), 2023, pp. 62- 74.	UNIPV	IW	Ρ	https://capable- pro- ject.eu/kr4hc 202 3 veggiotti/	Academia (medical in- formatics)	Gr
9	L. Sacchi, N. Veggiotti, S. Quaglini: Chal- lenges in Symptoms Reporting in a Pa- tient's Application. In: Proceedings of the 13th International Workshop on Knowledge Representation for Health Care (KR4HC), 2023, pp. 75-81.	UNIPV	IW	Ρ	https://capable- pro- ject.eu/kr4hc_202 3_sacchi/	Academia (medical in- formatics)	Gr
10	A. Kogan, R. Leizer, Sz. Wilk, D. Glass- pool: A Hybrid Execution Environment for Computer-Interpretable Guidelines in PROforma. In: Proceedings of the 13th International Workshop on Knowledge Representation for Health Care (KR4HC), 2023, pp. 82-89.	UoH, DEON, PUT	IW	Ρ	https://capable- pro- ject.eu/kr4hc_202 3 kogan hybrid/	Academia (medical in- formatics)	Gr
11	G. Lanzola, F. Polce, E. Parimbelli, M. Gabetta, R. Cornet, R. DeGroot, A. Kogan, D. Glasspool, Sz. Wilk, S. Quaglini, The Case Manager: An Agent Controlling the Activation of Knowledge Sources in a FHIR-based Distributed Reasoning Envi- ronment. Applied Clinical Informatic, 14 (04) (2023), pp. 725-734.	UNIPV, BIOM, AMC, UoH, DEON, PUT	J	Ρ	https://doi.org/10. 1055/a-2113-4443	Academia (medical in- formatics)	Go

H2020-875052



#	Reference	Partners	Туре	Sta- tus	URL/DOI	Target group	Open access
12	A. Lisowska, Sz. Wilk, M. Peleg: SATO (IDEAS expAnded wiTh BCIO): Workflow for Designers of Patient-centered Mobile Health Behaviour Change Intervention Applications. Journal of Biomedical Infor- matics, 138 (2023), p. 104276.	PUT, UoH	J	Ρ	https://doi.org/10. 1016/j.jbi.2022.10 4276	Academia, professional (medical in- formatics)	Go
13	E. Barkan, C. Porta, S. Rabinovici-Co- hen,V. Tibollo, S. Quaglini, M. Rizzo: Arti- ficial Intelligence-Based Prediction of Overall Survival in Metastatic Renal Cell Carcinoma. Frontiers in Oncology, 13 (2023).	IBM, ICM, UNIPV	J	A	https://doi.org/10. 3389/fonc.2023.10 21684	Academia, healthcare (AI, data science)	
14	I. Fraterman, B.M. Wollersheim , V. Ti- bollo, S.L. Glaser, S.K. Medlock, R. Cor- net, M. Gabetta, V. Gisko, E. Barkan, N. di Flora, D. Glasspool, A. Kogan, G. Lanzola, R. Leizer, H. Mallo, M. Ottavi- ano, M. Peleg, L.V. van de Poll-Franse, N. Veggiotti, K. Sniatala, Sz. Wilk, E. Parim- belli, S. Quaglini, M. Rizzo, L. Locati, A.H. Boekhout, L. Sacchi, S. Wilgenhof: An eHealth App (CAPABLE) Providing Symp- tom Monitoring, Well-Being Interven- tions, and Educational Material for Pa- tients With Melanoma Treated With Im- mune Checkpoint Inhibitors: Protocol for an Exploratory Intervention Trial. JMIR Research Protocols 12 (2023), p. e49252.	All	J	Ρ	https://doi.org/10. 2196/49252	Academia, healthcare (medical in- formatics, medicine)	Go
15	S. Quaglini, L. Sacchi, N. Veggiotti, E. Girani, V. Tibollo: Personalising Symp- toms Reporting in Telemonitoring Appli- cations for Cancer Patients, in: Chal- lenges of Trustable AI and Added-Value on Health (Proceeding of MIE 2022), Studies in Health Technology and Infor- matics, 2022, vol. 294, pp. 900-904.	UNIPV	IC	Ρ	https://doi.org/10. 3233/SHTI220621	Academia, professional (medical in- formatics)	Gr
16	C. Strusi, A. Dagliati, D. Pala, C. Larizza, R. Bellazzi, S. Quaglini: Taking a Walk Avoiding Polluted Routes: An Application to a Virtual Coach for Cancer, in: 2022 IEEE 21st Mediterranean Electrotech- nical Conference (MELECON), Palermo, Italy, 2022: Proceedings, IEEE, 2022, pp. 1107-1111.	UNIPV	IC	Ρ	https://doi.org/10. 1109/MELECON53 508.2022.9843091	Academia, professional (AI, medical informatics)	Gr
17	G. Lanzola, F. Polce, V. Tibollo, S. Quaglini, Sz. Wilk: Designing a Testing Environment for the CAPABLE Telemoni- toring and Coaching Platform, in: 2022 IEEE 21st Mediterranean Electrotech- nical Conference (MELECON), Palermo, Italy, 2022: Proceedings, IEEE, 2022, pp. 1112-1117.	UNIPV, PUT, AMC, NKI, UPM, UofH	IC	Ρ	https://doi.org/10. 1109/MELECON53 508.2022.9843001	Academia, professional (medical in- formatics)	Gr
18	A. Kogan, M. Peleg, S.W. Tu, R. Allon, N. Khaitov, I. Hochberg, A Goal-Oriented Methodology for Treatment of Patients with Multimorbidity - Goal Comorbidi- ties (GoCom) Proof-of-Concept Demon- stration, in: M. Michalowski, S.S.R. Abidi,	UoH	IC	P	https://doi.org/10. 1007/978-3-031- 09342-5 44	Academia, professional (AI, medical informatics)	Gr

H2020-875052



#	Reference	Partners	Туре	Sta- tus	URL/DOI	Target group	Open access
	S. Abidi, S. (eds): 20th International Con- ference on Artificial Intelligence in Medi- cine, AIME 2022, Halifax, NS, Canada, June 14–17, 2022, Proceedings, LNCS, vol 13263, 2022, Springer, pp. 426-430.						
19	I. Fraterman, S.L.C. Glaser, S. Wilgenhof, S.K. Medlock, H.A. Mallo, R. Cornet, L.V. van de Poll-Franse, A.H. Boekhout, Ex- ploring Supportive Care and Information Needs Through a Proposed eHealth Ap- plication among Melanoma Patients Un- dergoing Systemic Therapy: A Qualita- tive Study, Supportive Care in Cancer, 30 (2022), pp. 7249–7260	NKI, AMC	J	Ρ	https://doi.org/10. 1007/s00520-022- 07133-z	Academia (medicine)	Go
20	M. Peleg, Y. Shahar, S. Quaglini. Mo- biGuide: Guiding Chronic Patients and their Clinicians Anytime, Anywhere. Communications of the ACM, 65 (4) (2022), pp. 74-79.	UoH, UNIPV	J	Р	https://dx.doi.org/ 10.1145/3511596	Academia, professional (medical in- formatics)	Go
Тур		• •	IC = inte	ernation	al conference paper,	IW= internation	onal

Status: S = submitted, A = accepted, P = published

Open access: Go = gold, Gr = green

4.5. Presentations, Posters, and Demos

Table 4.6 lists presentations, posters, and demos (later in the text we collectively refer to them as presentations) given by the CAPABLE partners in Y3 and Y4 and planned for the next few months (presentations 1-3 had to be postponed due to the war between Hamas and Israel). There were 42 presentations and they targeted diversified audience with a detailed breakdown given in Table 4.7. Please note that some presentations were aimed at multiple audiences therefore the total number in this table is larger than the number of presentations. Moreover, Table 4.6 does not include presentations for the educational community (high-school students and teachers, university students) – they are described in Section 4.11 together with other activities related to teaching and mentoring.

Table 4.6. Presentations, posters, and demos

#	Authors and title	Part- ners	Date	Loca- tion	Туре	Event Name	Event type	Target group	Notes
1	M. Peleg*, A. Lisowska, Sz. Wilk: Using AI to De- velop Health Habits	UoH, PUT	Mar 20, 2024	Tel Aviv, Is- rael	Ρ	Israel Associa- tion for Medi- cal Informatics Annual Sym- posium	S	Aca- demia, Indus- try	Postponed
2	T. Zaitoun, M. Peleg*, T. Sagi: Using a LLM to Ex- tend a Medical Ontol- ogy	UoH	Mar 19, 2024	Tel Aviv, Is- rael	Ρ	Israel Associa- tion for Medi- cal Informatics Annual Sym- posium	S	Aca- demia, Indus- try	Postponed
3	S. Quaglini: Overall Presentation of CAPA- BLE	UNIPV	Jan 22, 2024	Rome, Italy	Р	CAPABLE Final Event	IE, M	Aca- demia, healthc are,	

H2020-875052



#	Authors and title	Part- ners	Date	Loca- tion	Туре	Event Name	Event type	Target group	Notes
								profes- sionals	
4	L. Sacchi: Demo Presen- tation	UNIPV	Jan 22, 2024	Rome, Italy	D	CAPABLE Final Event	IE, M	Aca- demia, healthc are, profes- sionals	
5	L. Locati: The Pilot Ex- perience in Fondazione Maugeri	ICSM	Jan 22, 2024	Rome, Italy	Ρ	CAPABLE Final Event	IE, M	Aca- demia, healthc are, profes- sionals	
6	M. Ottaviano: Main Re- sults Achieved	UPM	Jan 22, 2024	Rome, Italy	Ρ	CAPABLE Final Event	IE, M	Aca- demia, healthc are, profes- sionals	
7	M. Peleg*: Personaliz- ing Digital Health Inter- ventions with AI to Sup- port Behavior Change	UoH	Dec 7- 9, 2023	Malta	Р	IEEE EMBS Data Science in Healthcare	IE, C	Aca- demia	Keynote. Postponed
8	L. Sacchi: CAPABLE Pro- ject AI Coaching System for Cancer Patients	UNIPV	Nov 16, 2023	Rome, Italy	Ρ	FAITH project networking event "Al in Healthcare"	Sm	Aca- demia, indus- try, healthc are	A networking event, dedicated to artifi- cial intelligence in the healthcare do- main, organized by the FAITH project.
9	P. Kukhareva, F. Ma- grabi, Z. Wong, S. Med- lock, P. Scott: Regula- tion vs Innovation in Health Information Techology Markets	AMC	Jul 11, 2023	Sydney, Aus- tralia	Ρ	MedInfo 2023	IE, C	Aca- demia	Panel presentation on Medical Device Regulation, includ- ing some lessons learned from CAPA- BLE
10	A. Kogan, R. Leizer, Sz. Wilk*, D. Glasspool: A Hybrid Execution Envi- ronment for Computer- Interpretable Guide- lines in PROforma	UoH, DEON, PUT	Jun 15, 2023	Porto- roz, Slove- nia	Ρ	13th Interna- tional Work- shop on Knowledge Representa- tion for Health Care (KR4HC)	W	Aca- demia, profes- sionals	
11	L. Sacchi [*] , N. Veggiotti, S. Quaglini. Challenges in Symptoms Reporting in a Patient's Applica- tion	UNIPV	Jun 15, 2023	Porto- roz, Slove- nia	Ρ	13th Interna- tional Work- shop on Knowledge Representa- tion for Health Care (KR4HC)	W	Aca- demia, profes- sionals	
12	N. Veggiotti*, S. Panzarasa, V. Tibollo, S. Quaglini, G. Lanzola, L. Sacchi. Defining and Simulating Scenarios for the CAPABLE Clinical Decision Support Sys- tem	UNIPV	Jun 15, 2023	Porto- roz, Slove- nia	Ρ	13th Interna- tional Work- shop on Knowledge Representa- tion for Health Care (KR4HC)	W	Aca- demia, profes- sionals	

H2020-875052

Public

D9.3



#	Authors and title	Part- ners	Date	Loca- tion	Туре	Event Name	Event type	Target group	Notes
13	A. Kogan*, S.W. Tu, M. Peleg: Inferring Moni- toring Recommenda- tion Frequencies for Multimorbidity Patients	UoH	Jun 15, 2023	Porto- roz, Slove- nia	Ρ	13th Interna- tional Work- shop on Knowledge Representa- tion for Health Care (KR4HC)	W	Aca- demia, profes- sionals	
14	A. Zaitoun, T. Sagi, Sz. Wilk, M. Peleg*: Can Large Language Models Augment a Biomedical Ontology with missing Concepts and Rela- tions?	UoH, PUT	Jun 15, 2023	Porto- roz, Slove- nia	Ρ	13th Interna- tional Work- shop on Knowledge Representa- tion for Health Care (KR4HC)	W	Aca- demia, profes- sionals	
15	A. Lisowska, Sz. Wilk*, M. Peleg: Personalising Digital Health Behav- iour Change Interven- tions using Machine Learning and Domain Knowledge	UoH, PUT	Jun 15, 2023	Porto- roz, Slove- nia	Ρ	13th Interna- tional Work- shop on Knowledge Representa- tion for Health Care (KR4HC)	W	Aca- demia, profes- sionals	
16	Sz. Wilk: CAPABLE: Supporting Cancer Patients and Their Physicians	PUT, others	Jun 1, 2023	Poz- nan, Poland	Ρ	Al in preven- ing diseaes, supporting treatment and improving quality of life	Sm	Aca- demia	Seminar organized by the Computer Science and Auto- mation Commis- sion, Poznan Branch of the Polish Acad- emy of Sciences
17	A. Kogan*, S.W. Tu, M. Peleg: Inferring Moni- toring Recommenda- tion Frequencies for Multimorbidity Patients - Winning Poster (1st place)	UoH	May 22, 2023	Haifa, Israel	Ро	DSRC Poster Day 2023	NE	Aca- demia	
18	M. Peleg: How to de- velop an app that helps form health habits	UoH	May 3, 2023	UC Berke- ley, CA	Р	Computa- tional Preci- sion Health Seminar	Сq	Aca- demia	via Zoom
19	L. Sacchi, S. Azzini: Medical Device Regula- tion: Experience from the Perspective of a EU Funded Project	UNIPV	Apr 19, 2023	online	Ρ	Lessons Learned on Digital Health Technologies Related to Cancer	IE, Sm	Aca- demia, healthc are, profes- sionals	Webinar organized by CS_AIW
20	M. Rosen-Zvi: Adopting Al for Personalized Medicine: Oncology as an Example	IBM	Mar 29, 2023	Kfar Saba, Israel	Р	The 1st Sum- mit of the Is- raeli Society of Health TECH	NE	Aca- demia, indus- try	https://isoh- tech.org/1st-sum- mit-israeli-society- for-healthtech/
21	M Peleg: Personalized clinical-guideline based AI decision-support for patients: what data is needed and how to make it FAIR	UoH	Mar 10, 2023	UC San Diego, CA	P	UC San Diego Health Depart- ment of Bio- medical Infor- matics (DBMI) virtual lecture series	Sm	Aca- demia	via Zoom



#	Authors and title	Part- ners	Date	Loca- tion	Туре	Event Name	Event type	Target group	Notes
22	A. Lisowska*, S. Lavy, Sz. Wilk, M. Peleg: Per- sonalizing Digital Health Interventions with Al	PUT, UoH	Mar, 2023	Haifa, Israel	Р	University of Haifa's Data Science Collo- qium	Сq	Aca- demia	
23	M. Peleg: How to De- velop an App that Helps Form Health Habits	UoH	Feb 26, 2023	Haifa, Israel	Ρ	Technion R&D Foundation Ltd. Lecture series	0	Aca- demia, profes- sionals	via Zoom. Scientists and administrators
24	M. Peleg. How to De- velop an App that Helps Form Health Habits	UoH	Feb, 2023	Tech- nion, Haifa, Israel	Р	Big Data in Re- search Series	Sm	Aca- demia, general	
25	E. Hexter: BiomedSciAl	IBM	Jan 15, 2023	Jerusa- lem, Is- rael	Ρ	The 5th Ad- vanced School in Computer Science and Engineering: Al for Better Medicine	NE	Aca- demia, healthc are	https://iias.huji.ac.il /event/5th-cse- school
26	A. Lisowska, S. Wilk, S Lavy, M. Peleg*. Per- sonalizing Digital Health Interventions with AI to Support Behavior Change	UoH, PUT	Jan, 2023	Tech- nion, Haifa, Israel	Ρ	Behavioral Data Science Symposium	S	Aca- demia	Invited seminar
27	M Peleg*. R Cornet: Clinical Data Sharing in the EU CAPABLE pro- ject	UoH, AMC	Dec 5, 2022	Sarona Center, Tel- Aviv, Is- rael	Ρ	Digital Medi- cine Commu- nity Israel (DMCI) Event	NE, S	Aca- demia, Indus- try	
28	A. Kogan [*] , M. Peleg, S. W. Tu: Extending FHIR Timing Representation for Expressing Monitor- ing Recommendations	UoH	Nov 5- 9, 2022	Wash- ington DC, USA	Ро	AMIA 2022 Annual Sym- posium	IE, C	Aca- demia, healthc are, profes- sionals	
29	A.Lisowska*, S. Lavy, Sz.Wilk, M.Peleg: How to Improve Digital Well- being Intervention? Preliminary Study of Factors Affecting Inter- vention Impact and Habit Formation	PUT, UoH	Nov 5- 9, 2022	Wash- ington DC, USA	Ро	AMIA 2022 Annual Sym- posium	IE, C	Aca- demia, healthc are, profes- sionals	
30	I. Fraterman*, S.L.C. Glaser, S. Wilgenhof, S.K. Medlock, H.A. Mallo, R. Cornet, L.V. van de Poll-Franse, A.H. Boekhout: Exploring Supportive Care and In- formation Needs Through a Proposed eHealth Application Among Melanoma Pa- tients Undergoing Sys- temic Therapy: A Quali- tative Study	NKI, AMC	Sep 26-27, 2022	Copen- hagen, Den- mark	Po	European Can- cer Survivor- ship and Reha- bilitation Sym- posium (ECRS)	IE, C	Aca- demia, healthc are, profes- sionals	Acta Oncologica Symposium for cli- nicians, research- ers, and people em- ployed in the health administration on all levels in Euro- pean societies and abroad

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H2020-875052
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#	Authors and title	Part- ners	Date	Loca- tion	Туре	Event Name	Event type	Target group	Notes
31	I. Fraterman*, V. Ti- bollo, S. L.C. Glaser, S. Medlock, R. Cornet, M. Gabetta, V. Ganicheva, E. Barkan, N. di Flora, R. de Groot, D. Glasspool, A. Kogan, G. Lanzola, R. Leizer, H. Mallo, M. Ot- taviano, M. Peleg, L.V. van de Poll-Franse, K. Sniatala, S. Azzini, N. Veggiotti, Sz, Wilk, E. Parimbelli, S. Quaglini, L. Locati, S. Wilgenhof, A.H. Boekhout, L. Sac- chi. Symptom monitor- ing, well-being inter- ventions and infor- mation provision in one eHealth-tool: A study protocol for the CAPA- BLE intervention pilot trial.	All	Sep 26-27, 2022	Copen- hagen, Den- mark	Ро	European Can- cer Survivor- ship and Reha- bilitation Sym- posium (ECRS)	IE, C	Aca- demia, healthc are, profes- sionals	Acta Oncologica Symposium for cli- nicians, research- ers, and people em- ployed in the health administration on all levels in Euro- pean societies and abroad
32	Sz. Wilk*, A. Kogan, D. Glasspool: Guideline- based Decision Support	PUT, UoH, DEON	Sep 1, 2022	War- saw, Poland	Ρ	Telemedicine and eHealth 2022	NE, C	Aca- demia, healthc are	
33	M. Peleg. How to De- velop an App that Helps Form Health Habits	UoH	Jun 29, 2022	Haifa, Israel	Ρ	Monthly Semi- nar	0	General	Talk at an event of volunteers of an Intl Women's Organiza- tion (WIZO)
34	C. Strusi, A. Dagliati, D. Pala, C. Larizza, R. Bel- lazzi, S. Quaglini: Taking a Walk Avoiding Pol- luted Routes: An Appli- cation to a Virtual Coach for Cancer	UNIPV	Jun 16, 2022	Pa- lermo, Italy	P	2022 IEEE 21st Mediterra- nean Electro- technical Con- ference (MELECON)	IE, C	Aca- demia, profes- sionals	
35	G. Lanzola, F. Polce, V. Tibollo, S. Quaglini, Sz. Wilk: Designing a Test- ing Environment for the CAPABLE Telemonitor- ing and Coaching Plat- form	UNIPV, PUT	Jun 16, 2022	Pa- lermo, Italy	Ρ	2022 IEEE 21st Mediterra- nean Electro- technical Con- ference (MELECON)	IE, C	Aca- demia, profes- sional	
36	A. Kogan*, M. Peleg, S. W. Tu, N. Khaitov, R. Al- lon, I. Hochberg: A Goal-oriented Method- ology for Treatment of Patients with Multimor- bidity - Goal Comorbidi- ties (GoCom) Proof-of- concept Demonstration	UoH	Jun 15, 2022	Halifax Nova Scotia, Canada	P, D	20th Interna- tional Confer- ence on Artifi- cial Intelli- gence in Medi- cine (AIME 2022)	IE, C	Aca- demia, profes- sionals	
37	S. Quaglini, R. Cornet, S. Demurtas, Rowdy de Groot, A. Dumitriu, M. Gabetta, V. Ganicheva, V. Gisko, D. Glasspool,	UNIPV, AMC, BIOM, BIT, DEON,	May 27, 2022	Nice, France	D	Medical Infor- matics Europe - MIE 2022	IE, C	Aca- demia, profes- sionals	
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#	Authors and title	Part- ners	Date	Loca- tion	Туре	Event Name	Event type	Target group	Notes
	A. Kogan, R. Leizer, A. May, M. Ottaviano, S. Panzarasa, E. Parim- belli, M. Peleg, F. Polce, N. Veggiotti, L. Sacchi, Sz. Wilk, G. Lanzola: The H2020 CAPABLE Project (Cancer Patients Better Life Experience)	UoH, UPM, PUT							
38	S. Quaglini, L. Sacchi, N. Veggiotti, E. Girani, V. Tibollo: Personalising symptoms reporting in telemonitoring applica- tions for cancer pa- tients	UNIPV, ICSM	May 27, 2022	Nice, France	Ρ	Medical Infor- matics Europe - MIE 2022	IE, C	Aca- demia, profes- sionals	
39	I. Fraterman*, S.L.C. Glaser, S. Wilgenhof, S.K. Medlock, H.A. Mallo, R. Cornet, L.V. van de Poll-Franse, A.H. Boekhout, Exploring the Supportive Care and In- formation Needs of Melanoma Patients Re- ceiving Immune-check- point Inhibition to De- velop an eHealth Appli- cation: A Qualitative Study	NKI, AMC	Mar, 2022	Utre- chrt, The Nether- lands	Ρ	NVPO (Dutch Society of Psy- chosocial On- cology)	NE, C	Aca- demia, healthc are	Healthcare workers and academia in psychosocial oncol- ogy
40	A. Lisowska, S. Wilk, S Lavy, M. Peleg*: Per- sonalizing Digital Health Interventions with AI to Support Behavior Change	UoH, PUT	Jan 8, 2022	Ein Gedi, Israel	Ρ	Israeli Data Science Initia- tive Annual Conference	С	Aca- demia, indus- try	
41	M. Peleg: Goal-oriented Evidence-based Deci- sion Support Combined with Temporal Reason- ing and Multi Criteria Decision Making for De- tection and Mitigation of Adverse Events in Multimorbidity Patients	UoH	Jan, 2022	Ein Gedi, Israel	Ро	The First Inter- national Israel Data Science Initiative Con- ference	IE, C	Aca- demia	
42	M. Peleg: System Engi- neering for Digital Health: Clinical Deci- sion-support and Pa- tient Wellbeing	UoH	Jan, 2022	Virtual, Israel	Ρ	Digital Sys- tems Engi- neering as a New Chal- lenge and an Opportunity for Systems Engineering, Organized by the Gordon Center for Sys- tems Engi- neering	IE, C	Aca- demia	
A	Authors: present	ing autho	or marke	d with *					
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Туре:	P = presentation, D = demo, Po = poster, Pa = panel
Event type:	IE = international event, NE = national event, C = conference, W = workshop, S = symposium,
	Sm =seminar, Cq = colloquium, M = meeting, O = other

Table 4.7. Audience groups targeted by presentations, posters and demos

Target group	No events
Academic community	41
Professional community	21
Healthcare community	13
Industry community	6
General public	2

4.6. Organization of Events

In Y3 and Y4 CAPABLE partners organized 10 events targeted at various audiences – they are listed in Table 4.1. Selected important events (organized as in-person meetings) are described in detail in the following subsections. In the text and table among other project partners involved in event organization we also mention the Polyclinic of Bari (PoB) – one of the two clinical sites in Italy, where the CAPABLE clinical study was conducted.

Loca-Part-Target # Event name Event Date Notes audience tion type ners 1 **Final Event** IE, Sm Jan 22, Rome, AIMAC All stake-Final event presenting the CAPA-2024 Italy holders BLE project and its major results to various relevant stakeholders, e.g., clinicians, patients, hospital managers (see Section 4.6.1). 2 PhotoVoice CAPABLE NE, O Dec 21, Bari, It-PoB Patients, Exhibition of pictures and exhibition 2023 clinicians thoughts produced by patients aly using the PhotoVoice virtual capsule. The pictures will permanently be displayed in a hospital hall (see Section 4.6.2) CAPABLE patients tell NE, O Dec 19, Pavia, ICSM, Patients, Exhibition of pictures and 3 their story: images 2023 Italy UNIPV clinicians thoughts produced by patients and thoughts of a using the PhotoVoice virtual capsule. Additionally, demonstration very special journey of PhysicAI Garden and the gratitude corner (see Section 4.6.2) 4 Focus Group NE, M Nov 23, Pavia, **ICSM** Patients Focus group with patients partici-2023 Italy pating in the clinical study (see Section 4.6.3) 5 Meeting with a Nutri-NE, M Nov 23, Patients Meeting with a nutritionist for Bari, It-PoB tionist 2023 aly CAPABLE patients (see Section 4.6.4)

Table 4.8. Events organized by CAPABLE partners

H2020-875052

Public

D9.3



#	Event name	Event type	Date	Loca- tion	Part- ners	Target audience	Notes
6	SWOT analysis in digi- tal health project re- lated to cancer	NE, O	Sep 27, 2023	online	UPM	Aca- demia, healthca re (can- cer)	Presentation of SWOT analysis of different research project CAPA- BLE, FAITH, ASCAPE, round table
7	Meeting with a Nutri- tionist	NE, M	July 20, 2023	Pavia, Italy	ICSM	Patients	Meeting with a nutritionist for CAPABLE patients (see Section 4.6.4)
8	CAPABLE workshop	IE, W	Jun 15, 2023	Porto- roz, Slo- venia	UoH, UNIPV	Aca- demia, profes- sionals	An international workshop re- lated to the project, co-located with AIME 2023 conference (see Section 4.6.1)
9	Death Valley work- shop	IE, W	Jun 11, 2023	online	UPM	Aca- demia, healthca re (can- cer)	Presentation of barriers and aspects related to the gap between R&I projects and their commercialization
10	Lesson Learnt on Digi- tal Health Technolo- gies related to Cancer	IE, Sm	Apr 19, 2023	online	UPM	Aca- demia, healthca re (can- cer)	Webinar organized by the CS_AIW cluster <u>https://capable-project.eu/webi-</u> <u>nar-with-the-cs_aiw-cluster/</u>

Event type: IE = international event, NE = national event, C = conference, W = workshop, S = symposium, Sm =seminar, Cq = colloquium, M = meeting, O = other

4.6.1. Final Event

The final event summarizing the CAPABLE project was organized by AIMAC and it took part on January 24, 2024 in Rome. It was aimed at multiple stakeholders for whom the project and its results may be relevant – patients and patient associations, clinicians, hospital managers and scientists. The event was available also online (via Zoom) and it was attended by more than 60 participants.

The agenda (see Figure 4.8) included presentations by CAPABLE partners and invited guests, and a round table on barriers and opportunities revealed throughout the project and further steps. The panelists (see Figure 4.9) emphasized benefits of CAPABLE, including monitoring of patient reported outcomes (PROs) and comprehensive guideline- and evidence-based decision support and coaching, and pointed at technical and organizational challenges, such as integration with electronic health record and need for reimbursement associated with using such a system in regular practice.



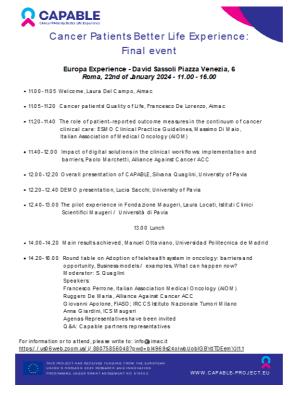


Figure 4.8. Agenda of the CAPABLE final event



Figure 4.9. Photo from the round table discussion

4.6.2. PhotoVoice Exhibitions

During the Christmas holidays in Y4 we organized two exhibitions of photos taken by CAPABLE patients using the PhotoVoice virtual capsule – we received more than 60 pictures, some with associated notes and thoughts. All the received photos and notes were printed and exposed to patients, their families, and clinicians.

The first event, titled "CAPABLE patients tell their story: images and thoughts of a very special journey" was organized in Pavia by ICSM and UNIPV on December 19, 2023 – specifically, it started on that day and the exhibition was opened until January 10. During this event we presented the final version of PhysicAI Garden, giving the audience an opportunity to test it. We

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H2020-875052
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also prepared a "relax corner" where they could try the Imagery Training capsule, and a "gratitude corner" where the patients could write down their thoughts on paper and put them in a real vase, to enhance the experience associated with the Vase of Gratitude capsule. Some of these gratitude notes were then used to decorate a Christmas tree standing in the exhibition area. In Figure 4.10 we present photos from the event held in Pavia. Furthermore, the gratitude Christmas tree and the exhibition were captured as reels and presented on Instagram and Facebook (see <u>https://www.facebook.com/reel/1510557006172677</u> and <u>https://www.facebook.com/reel/1389628458305465</u>, respectively).



Figure 4.10. Photos from the PhotoVoice exhibition in Pavia – a poster with the invitation (top-left), stands with printed photos and associated notes (top-right), a gratitude corner (bottom-left) and the installation of PhysicAl Garden (bottom-right)

The second event, titled "PhotoVoice CAPABLE exhibition", was organized by PoB in Bari on December 21, 2023. Selected photos from this event are displayed in Figure 4.11. During both events, the patients were served food and drinks, and they were offered small gifts – CAPABLE gadgets (see Section 4.1.3). Moreover, they were provided with a brochure with nutritionist

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H2020-875052
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Page 27

Public



recommendations on how to prepare a healthy Christmas lunch – it is presented in Figure 4.12.



Figure 4.11. Photos from the PhotoVoice exhibition in Bari – a poster with the invitation (left) and a permanent display of photos on the walls(right)





4.6.3. Focus Group with Patients

In Y4 ICSM and UNIPV organized a focus group with patients participating in the CAPABLE study. The main purpose was to collect usability information on the Patient App directly from patients and learn how they received it and "implemented" it in everyday life as part of their cancer treatment. The group was led by Dr. Paola Gabanelli – an onco-psychologist from ICSM and the meeting was organized in Pavia on November 23, 2023, i.e., late in the study to ensure patients had been sufficiently long exposed to the CAPABLE system. In Figure 4.13 we present pictures from the preparation to the event (due to privacy reasons we cannot present photos from the meeting). Results from the focus group will be used to prepare a paper and they will be considered during exploitation activities.

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H2020-875052
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Page 28

Public





Figure 4.13. Photos from the focus group – a poster with the invitation (left) and a meeting room with CAPABLE gadgets (right)

4.6.4. Meetings with the Nutritionist

For Italian patients participating in the CAPABLE clinical study and their home care givers in Y4 ICSM, PoB and UNIPV organized meetings with the nutritionist – Dr. Alessandra Vincenti from ICSM. During the meeting she gave a talk on the importance of proper diet and eating habits, focusing on oncological patients. Dr. Vincenti also responded to questions and concerns raised by the audience. The events had a hybrid form with patients participating in person and remotely (via Zoom) and it was held at both Italian clinical centers – in Pavia on July 20 and in Bari on November 23, 2024. In Figure 4.14 we present selected pictures from the event.



Figure 4.14. Photos from the meeting with the nutritionist – a poster with the invitation (left) and a talk (right)

H2020-875052

Page 29

Public



4.6.5. CAPABLE Workshop

As declared in the project proposal, in Y4 we ran an international workshop related to the CAPABLE project. Specifically, the workshop was organized by Mor Peleg (UoH) and Enea Parimbelli (UNIPV) as part of the well-established KR4HC (Knowledge Representation for Healthcare) series of events. The CAPABLE workshop constituted the 13th edition of the event, and it was co-located with AIME 2023: 21st International Conference on Artificial Intelligence in Medicine in Portoroz, Slovenia. It took place on June 15, 2023 and was attended by more than 30 participants from academia and industry. In Figure 4.15 we present some photos taken during the event.

The general program of the workshop is given below (for additional details see the workshop website at https://sites.google.com/view/kr4hc2023) – all accepted papers were reviewed by at least 3 members of the Program Committee:

- Keynote,
- Multimorbidity session 4 papers,
- CAPABLE project session 5 papers,
- Knowledge representation session 3 papers.

In addition to 5 papers in the CAPABLE session, another paper related to research conducted in the project was presented in the multimorbidity session, as it was the main theme of that work. The details for the CAPABLE related papers are given in Table 4.5 (rows 4 - 9).

We would like to note that the keynote ("Is there a place for Medical Knowledge Representation in the Age of Deep Learning?" by Peter Lucas) and the remaining papers, while not directly related to CAPABLE, discussed issues relevant to the research conducted in the project, such as:

- Explainable decision models,
- Computer-interpretable guidelines,
- Handling imperfect clinical data,
- Automatic construction of cohorts for clinical trials,
- AI-based clinical education.





Figure 4.15. Photos from the CAPABLE workshop – keynote (left) and the CAPABLE project session (right)

4.7. Participation in Events

Table 4.9 presents professional events participated by the CAPABLE partners in Y3 and Y4. During these events they were showcasing the project to relevant stakeholders and seeking for new contacts and cooperation possibilities (e.g. related to further exploitation of the CA-PABLE system).

#	Event name	Event type	Date	Loca- tion	Part- ners	Target audi- ence	Notes
1	IHI community b2match https://ihi-call- days.ihi.b2match.io/	IE, O	Jan 24, 2024	online	BIT	Academic, professionals, industry	A pitch in a networking event fo- cused on user centric hospital pro- cedures (IHI Call 7 Topic 2)
2	StartupItalia Open Sum- mit <u>https://startupitaliao-</u> pensummit.eu/	NE, O	Dec 22, 2023	Mi- Iano, Italy	UNIPV	Investors (pri- vate and pub- lic), entre- preneurs, in- novators	Demonstration of PhysicAl Garden and presentation of the CAPABLE project and activities in its last phases. CAPABLE was the main act of the "partner" stand of the ITIR institute of UNIPV (itir.io), featured as ex excellent project example from their Healthcare Transfor- mation T-LAB (https://www.itir.io/t- lab/healthcare-transformation- lab/)
3	Access, Innovation and Incentives: power for civilization to tackle can- cer - and for better healthcare for ALL	IE, M	Oct 19- 20, 2023	Ma- drid, Span	UPM	Healthcare (oncologists), researchers, IT innovators	Meeting organized by EUAPM
4	Life Science Baltics 2023 https://life-sciences-bal- tics-2023.b2match.io/	IE, C	Sep 20- 21, 2023	Vil- nius, Lithua- nia	BIT	Academia, in- dustry, SMEs	Roche Lithuania contacted and a demo of CAPABLE will be scheduled
H20	020-875052			Page	31		Public

Table 4.9. Participation in events



#	Event name	Event type	Date	Loca- tion	Part- ners	Target audi- ence	Notes
5	L'Ingegneria Oltre le In- frastrutture Fisiche. Un Crocevia tra Ingegneria, In-Formatica, Medicina e Diritto: Il Caso CAPABLE (The Engineering Be- yond Physical Infrastruc- tures: A Crossroads Be- tween Engineering, In- formation Technology, Medicine, and Law - The Case of CAPABLE)	NE, Sm	Jun 20, 2023	Bre- scia, It- aly	UPM, UNIPV, BIOM	Professional (engineers)	Seminar organized by the Brescia Engineering board. Presentation of the CAPABLE project.
6	High-level Stakeholder Conference: Reducing Disparities Across the European Union <u>https://canheal.eu/can- heal-high-level-stake-</u> holder-conference/	IE, C	Apr 26, 2023	Rome, Italy	UPM	Healthcare (oncologists), researchers, IT innovators	Meeting organized by the CAN.HEAL project.
7	Showcase panel of the first Digital Health accel- erator taking place at the Margalit Startup City	NE, O	Nov 24, 2022	Haifa, Israel	UoH	Startup entre- preneurs	CAPABLE short introduction
8	SMAU https://www.smau.it/mi lano/2022/english-ver- sion	NE, O	Oct 11- 12, 2022	Milan, Italy	ICSM	Innovation, startup	Networking, informal presentation of progress made in the CAPABLE project, short demo of the CAPA- BLE project
9	The Digital Healthcare Show <u>https://healthmanage-</u> ment.org/c/it/event/the -digital-healthcare-show	IE, O	May 18, 2022	Lon- don, UK	UPM	Healthcare, academia, professionals	Participation in the round table ses- sion titled "Co-creating the digital health solutions with end-users for sustainable adoption"

Event type:

IE = international event, NE = national event, C = conference, W = workshop, S = symposium, Sm =seminar, Cq = colloquium, M = meeting, O = other

4.8. Web Actions

Table 4.10 shows web actions completed in Y3 and Y4 (later in the text we refer to specific rows in this table). Statistics for the website and social media accounts are given for January 22, 2024. In addition to the project website and social media channels (rows 1 - 5), we were also supported by AIMAC and selected stories and posts – especially these focused on cancer patients and their families – were posted on the AIMAC website and social channels (rows 9 - 13). This allowed us to reach a wider audience possibly interested in the CAPABLE project and its results.

Tabl	e 4 1	0 1	leh	actions
TUNT	C T.I	0		actions

#	URL	Partners	Description
1	CAPABLE project website https://www.capable-project.eu	Various	Multiple revisions and updates with new content were introduced
			Statistics for Y3 and Y4: 92,913 visitors, 330,403
			visits, on average 13,430 visits per month





#	URL	Partners	Description
2	CAPABLE Facebook page https://www.facebook.com/capablepro- jecteu	Various	Various posts and updates were published 235 followers
3	CAPABLE Twitter/X profile https://twitter.com/capable_project	Various	Various posts and updates were tweeted 82 followers
4	CAPABLE LinkedIn profile https://www.linkedin.com/company/capa- bleprojecteu	Various	Various posts and updates were published 96 followers
5	CAPABLE Instagram profile https://www.instagram.com/capable_pro- ject/	Various	Various posts (photos) were published, and a cam- paign aimed at clinical users (patients, home care givers) and general audience was ran 679 followers
6	CAPABLE Zenodo community https://zenodo.org/communities/capable	PUT	Entries for all public deliverables were created and PDF files were uploaded and referenced from the project website
7	CAPABLE GitHub repository https://github.com/Capable-project/sato- ontology	PUT	A public repository with the SATO ontology de- scribed in the paper published in the Journal of Bi- omedical Informatics (row 11 in Table 4.5). The SATO ontology provides the extensions of the Be- havior Change Intervention Ontology (BCIO) along with examples of a BCI Scenario of Fatigue Reduc- tion.
8	EU result platform https://ec.europa.eu/info/funding-ten- ders/opportunities/portal/screen/opportu- nities/horizon-results-platform/43579;key- word=capable;missions=3	UPM	CAPABLE results were published
9	Aimac website https://www.aimac.it	AIMAC	Several news were published on the AIMAC web- site, including stories about the final event.
10	Aimac Facebook page https://www.facebook.com/aimac.associa- zione	AIMAC	Various posts and updates were published 17,000 followers
11	Aimac Instagram profile https://www.instagram.com/_aimac	AIMAC	Various posts and updates were published 1,400 followers
12	Aimac Twitter/X profile https://twitter.com/aimac_it	AIMAC	Various posts and updates were tweeted 1,248 followers
13	Aimac LinkedIn profile https://www.linkedin.com/company/aimac- onlus	AIMAC	Various posts were published 860 followers
14	NVPO (Nederlandse Vereniging Psychosciale Oncologie) website <u>https://nvpo.nl/project/pilot-study-of-the-</u> <u>ehealth-application-cancer-patients-better-</u> <u>life-experience/</u>	NKI	Published the description of the CAPABLE project and the clinical tests conducted at NKI
15	CAPABLE YouTube Channel https://www.youtube.com/@CapablePro- ject	ICSM, UNIPV	Published additional materials for patients (e.g., an instruction how to calibrate the smartwatch, or an opening speech by Silvana Quaglini at PhotoVoice exhibition at ICSM.

4.9. Liaisons with Other EU Projects and Initiatives

In Table 4.11 we list liaisons with other EU projects and initiatives in which the CAPABLE partners were involved in Y3 and Y4.



#	Project info	Pro- gram	Date	Location	Partners	Contact details	Notes
1	IHI IMPROVE	IHI	Jan 2024	Madrid, Spain	UPM	gfico@lst.tfo.upm.e s	The IMPROVE pro- ject has a specific use-case on cancer treatment. During its kickoff the CAPA- BLE solution was presented as poten- tial technology to be used.
2	CS_AIW – a cluster of 11 projects related to application of AI to cancer survivors: FAITH, MENHIR, ON- CORELIEF, LIFECHAMPS; QUALI- TYTOP, CLARIFY, ASCAPE, PERSIST, RE- BECCA, BD4QoL, CA- PABLE (https://www.h2020- faith.eu/tag/cs-aiw- cluster/)	H2020	2022— 2023 (multiple contacts)	online	UPM, UNIPV	Tom Flynn (tomflynn172 @gmail.com)	Sharing of experi- ence and common dissemination ac- tions (webinars, whitepaper)
3	A group of 4 projects: CAPABLE, ASCAPE, FAITH, DB4QoL sup- ported by Horizon Result Booster	H2020	2022- 2023 (multiple contacts)	online	UPM, PUT	Elena Martinelli Alessandro Tedeschi Gallo John Avramidis	Obtaining support in dissemination activi- ties related to the project group and the CS_AIW cluster

Table 4.11. Liaisons with other EU projects and initiatives

In Y3 CAPABLE joined the CS_AIW (Cancer Survivorship – AI for Wellbeing) project cluster led by the FAITH H2020 project. An active cooperation was maintained throughout the entire reporting period, and we were involved in the following activities:

- Participation in the "Meeting of Minds 4: How Can New Technologies Better Support Patients?" webinar on February 23-24, 2022, where the CAPABLE project was introduced to other cluster participants and the audience.
- Preparation and participation in the "Lessons Learned on Digital Health Technologies Related to Cancer" webinar held on April 19, 2023 – see Figure 4.16. The webinar was led by Manuel Ottaviano (UPM). Lucia Sacchi and Sara Azzini (UNIPV) presented challenges associated with Medical Device Regulation. Moreover, Silvana Quaglini (UNIPV) joined for the Round Table discussion.
- Preparation of the CS_AIW whitepaper that summarizes relevant aspects of the cluster including benefits and challenges, presents technological barriers to development and adoption of AI-based solutions for cancer survivors, and discusses scientific, legal and ethical aspects of such solutions – see https://capable-project.eu/cs_aiw-white-paperreleased/ for more details.

Moreover, in Y3 we applied for the support of the Horizon Result Booster (HRB) and formed a smaller group of 4 projects, also participating in the CS_AIW cluster. The goal of the group was to obtain support in common dissemination activities. The support service – Portfolio Dissemination and Exploitation Strategy (PDES) – was provided in Y3 and Y4 and it covered:

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H2020-875052
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Page 34



- Access to training materials and online courses related to C&D that were participated by representatives of specific projects.
- Preparation of a "video pill" (a short video clip) advertising the CS_AIW cluster see Figure 4.17 and <u>https://www.powtoon.com/online-presentation/bgJxmk7JhUK/</u> for a full video.
- Support in preparing the "*Lessons Learned*" seminar described above by distributing notifications about the event to relevant stakeholders.
- Recommendations for subsequent steps and actions related to C&D and further exploitation of the results achieved by specific projects and their group.

CANCER SURVIVORSHIP – II FOR WELL-BEING	Webinar's agenda	
КАТН		🔏 Lucia
theore .	15:00-15:10 Welcome 15:10 11:32: The project experience and technical herrises of ICT technologies	
ONCORELIEF	 15:10-15:25: The patient experience and technical barriers of ICT technologies (Zoraida Callejas Carrión, Universidad de Granada, Spain, <u>MENHIR Project</u>) 	
ife¥champs	 15:25-15:40: The health professionals' experience on the usage of the clinical decision support systems (Maria Torrente, Hospital Universitario Puerta de Hierro, Spain, CLARIFY project) 	MANUEL
UALITOP	 15:40-15:55: Medical Device Regulation: experience from the perspective of a EU 	1000
LARTEY	funded project (Lucia Sacchi and Sara Azzini, Universitá degli Studi di Pavia, Italy, CAPABLE project)	
ASCAPE	 15:55-16:10: Market acceptance of the results of EU funded projects (Maria Eugenia Beltrán, Universidad Politécnica de Madrid, Spain, FAITH project) 	🔏 Zorai
ersist	 16:10-16:50: Round table and Q&A from the audience. 16:50-17:00: Wrap up and conclusions 	
CAPABLE		X Maria
iD.gol.		

Figure 4.16. Agenda of the "Lessons Learned..." CS_AIW seminar

CAPABLE

By admin1030 | Updated: Oct. 18, 2023, 8:03 a.m.

Figure 4.17. The CS_AIW video pill prepared as part of the PDES service

4.10. Contacts with Relevant Stakeholders, KOLs and Expert Groups

Table 4.12 lists relevant stakeholders contacted by the CAPABLE partners in Y3 and Y4. Please note this list is not exhaustive and many additional and less formal contacts were made during professional (non-scientific) events participated by the partners (see Section 4.7 for details).

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H2020-875052
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Page 35

Public



Table 4.12. Contacts with stakeholders, KOLs and experts

#	Stakeholder info	Stake- holder type	Date	Location	Partners	Contact de- tails	Notesx
1	Dedalus	Healthcare IT services (e.g. HIS) provider	Nov 29, 2023	online	UPM	Davide Guerri (<u>da-</u> <u>vide.guerri@</u> <u>dedalus.eu</u>)	Discussion on implementation in the clinical practice, business models, opportunities and barriers.
2	Medtronic	Med-tech	Nov 24, 2023	online	UPM	Jorge Posada (jorge.po- sada@med- tronic.com)	Discussion on implementation in the clinical practice, business models, opportunities and barriers.
3	Spanish patient asso- ciation GEPAC <u>http://www.gepac.es/</u>	Patient as- sociation	Jul 7, 2022	Madrid, Spain	UPM	b.bar- ragan@gepa c.es, admin- istra- cion@gepac. es	GEPAC is an independent umbrella as- sociation representing 77 Spanish pa- tient association related with cancer. During the meeting UPM presented the CAPABLE project and discuss pos- sible further use in the Spanish con- text. Additionally, it has been dis- cussed the research agenda on survi- vorship care plan and how the project can be adapted to the context.
4	University of Mons, INFORTECH https://web.umons.ac .be/infortech/en/	Other - re- search in- stitute	Mar 24, 2022	Poznan, Poland	PUT	Said Mahmoudi (said.mahmo udi@umons. ac.be)	Prof. Mahmoudi is a member of the Computer Science, Software and Arti- ficial Intelligence Unit at the INFOR- TECH (Research Institute for Infor- mation Technology and Computer Sci- ence). His research interests include AI and IoT and their clinical application. In the meeting, participated by other researchers from INFORTECH we pre- sented the idea behind the CAPABLE project, its components and support modalities offered to patients during the follow-up phase. We also dis- cussed the use of wearable sensors in the project and ways of processing and using collected data.
5	Greater Poland Can- cer Centre https://wco.pl/en/	Health care provider	Jan 7, 2022	Poznan, Poland	PUT	Marek Konkol (marek. konkol @wco.pl)	Dr. Konkol is an oncologist and he is interested in applying modern IT solu- tions to support cancer treatment. During the meting we discussed the role of the CAPABLE system in the management process and benefits it may provide to out-patients. Dr. Konkol stated that a such a solution is complementary to a clinical care and addresses issues (e.g., mental wellbe- ing, information needs) that may be overlooked by an oncologist due to time pressure and constraints during regular visits.

4.11. Teaching and Mentoring

In Table 4.13 we list presentations and lectures given in Y3 and Y4 to the educational communities that include high school students and teachers, and university students (undergraduate,

H2020-875052

Page 36



master, and doctoral). Many of these lectures (e.g., rows 3, 6 or 10) have been included in course programs and will be presented on regular basis after the end of the project thus supporting the transfer and further dissemination of project results.

Table 4.13. Educational presentations and lectures related to CAPABLE

#	Authors and title	Part- ners	Date	Loca- tion	Event Name	Notes
1	M. Peleg: User-centered Design: Experience from the CAPABLE Project App that Helps Patients Form Health Habits	UoH	Jan 31, 2024	online	Third Year Final Project Seminar	Lecture for Information Sys- tem students, UoH
2	S. Azzini, S. Quaglini: An Ex- ample of Medical Device: the CAPABLE Project	UNIPV	Nov 30, 2023	Pavia, Italy	Master class lecture in the module Ethical and Legal Aspects.	Lecture for graduate stu- dents. Explainable Artificial Intelligence in Healthcare Management Master Pro- gram), UNIPV.
3	Sz. Wilk: Al in Clinical Prac- tice: the CAPABLE System	PUT	18- Nov- 23	Poz- nan, Poland	Al in clinical practice (doctoral class lecture)	An elective course at the PUT Doctoral School
4	A. Kogan: Healthcare Infor- matics Introduction for School Students	UoH	May 28, 2023	Haifa, Israel	An introduction of sci- entific work in aca- demia and healthcare informatics for school students	Lecture for school students
5	M. Ottaviano: Presentation of examples of telemedi- cine systems, including CA- PABLE	UPM	Apr 30, 2023	Ma- drid, Spain	Telemedicine (master class lecture)	Master of Telemedicine - Medicine Enhanced by En- gineering Technology (UNIPV)
6	Sz. Wilk: CAPABLE practi- cal application of AI tech- niques	PUT, UoH	Apr 6, 2023	Poz- nan, Poland	Al in biomedical infor- matics (master class lecture)	Lecture for graduate stu- dents. Masters in AI (AI Tech programme), Institue of Computing Science, PUT
7	M. Ottaviano: Presentation of the CAPABLE architec- ture	UPM	Feb 23, 2023	Ma- drid, Spain	Software Architecture Design	Computer Science class (high school)
8	M Peleg: User-centered De- velopment in the CAPABLE project	UoH	Nov 30, 2022	Haifa, Israel	Projects seminar	Guest lecture for under- graduate students in Infor- mation Systems
9	M. Peleg: How to develop an app that helps form health habits	UoH	Nov 14, 2022	Haifa, Israel	HEALTH DAY	Two lectures for high school students
10	Sz. Wilk: CAPABLE practi- cal application of AI tech- niques	PUT, UoH	Apr 8, 2022	Poz- nan, Poland	Al in biomedical infor- matics (master class lecture)	Masters in AI (AI Tech pro- gramme), Institue of Com- puting Science, PUT

In Table 4.14 we list dissertations and theses related to the CAPABLE project – they cover all levels of university education, from bachelor/engineer, through master to doctoral. Their purpose has been to thoroughly check methods and technologies later used in the project and to expand the research started in CAPABLE. Several theses and dissertations (rows 1 - 5) are ongoing and they will be continued and finalized after CAPABLE has been finished, also contributing to the transfer and preservation of the project results.

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H2020-875052
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We should note that in Table 4.14 we list theses and dissertations for the entire lifetime of the project (Y1 - Y4), as they were not included in D9.2 summarizing the first period.

#	Author(s)	Supervisor	Title	Туре	Part- ner	Notes
1	I. Fraterman	L. van de Poll- Franse, S. Wilgenhof, A. Boekhout	Patient reported outcomes in pa- tients with melanoma on treat- ment with immune-checkpoint in- hibitors	PhD	NKI	Expected graduation 2024
2	V. Caropreso	TBD	Title draft: Qualitative ethno- graphic research about the usage of Cabable by patients and its social impact.	BSc	UNIPV	Expected graduation 2024
3	M.G. Ravera	M. Porta	Title draft: Usability study of the CAPABLE app	BSc	UNIPV	Expected graduation 2024
4	R. Ivaldi	M. Porta	Title draft: development of a pro- motional short movie for the Capa- ble results dissemination	BSc	UNIPV	Expected graduation 2024
5	V. Vicente	M. Ottaviano	Technological framework to sup- port patients during the cancer journey	ort patients during the cancer		Expected defense: Sep 2024
6	R. Leizer	M. Peleg	Generic methods for mapping ab- stract clinical guideline concepts to raw data utilizing HL7 FHIR	MSc	UoH	Approved on Feb 15, 2023
7	A. Zaitoun	M. Peleg	Automated ontology construction and expansion using a domain cor- pus	PhD	UoH	Declaration of Intent ap- proved on Nov 2, 2022
8	S. Wasik	Sz. Wilk	A Scala library for representing and executing clinical practice guide- lines	MSc	PUT	Approved on Sep 26, 2021
9	A. Kogan	M. Peleg	Goal-oriented planning toward pre- vention and mitigation of adverse events in multimorbidity patients	PhD	UoH	Research proposal ap- proved on Jul 5, 2021
10	S. Glaser	R. Cornet, S. Medlock	Clinical decisions and predictions in cancer patients	PhD	AMC	Research proposal ap- proved Feb 2021
11	M. Hradowicz	Sz. Wilk	Application of gamification tech- niques in mHealth applications	MSc	PUT	Approved on Dec 7, 2021
12	R. Wójcik. A. Chudzyński, R. Ciemny, B. Czachowski	Sz. Wilk	A web system for supporting long- term therapies based on clinical practice guidelines	Eng	PUT	Approved on Feb 12, 2021
13	K. Basiukajc, K. Birecki, M. Kamiński, M. Sałaj	Sz. Wilk	An mHealth system for supporting a patient during a long-term home- based treatment	Eng	PUT	Approved on Feb 11, 2021
14	R. de Groot	R. Cornet, N. de Keizer	A multi-domain study on semantic interoperability in healthcare	PhD	AMC	Research proposal ap- proved Sep 2020

Table 4.14. Theses and dissertations related to CAPABLE

H2020-875052



5. Summary

In this deliverable we presented C&D activities completed in Y3 and Y4. They targeted all relevant stakeholders (with a special focus on patients, their caregivers, and clinicians) and took various forms, also less usual for scientific projects, such as the demonstration of an interactive project artwork – PhysicAI Garden. The latter helped us increase the interest in CAPABLE and its results, and advertise its advanced AI-based features, like mitigation of adverse drug interactions.

In Table 5.1 we show the traffic on the CAPABLE website over the project duration period – there is a significant increase in Y3 and Y4. While some traffic peaks observed in the logs may be caused by bots, such a change reveals an increased interest in the project and confirms effectiveness of our C&D activities.

	Y1-Y2	Y3-Y4	Change [%]
Total visitors	38189	92913	243%
Total visits	95573	330403	346%
Monthly visits	4390	13430	306%

Table 5.1. Traffic on the CAPABLE website

Moreover, in Table 5.2 we show the numbers of followers on specific CAPABLE social media profiles and accounts over the project duration. We were able to attract new audience in Y3 and Y4, especially on Instagram where we gained more than 600 new observers. This clearly demonstrated positive effects of our intense dissemination campaign (110 posts with diversified content aimed at various audience groups).

Table 5.2. Followers of the CAPABLE social media profiles

	Y2	Y4	Y3 - Y4	Change [%]
Facebook	165	235	70	42%
Twitter	53	82	29	55%
LinkedIn	39	96	57	146%
Instagram	69	679	610	884%

In the reporting period we published 6 journal papers, 1 book chapter and 10 papers in peerreviewed proceedings of international conferences and workshops. Moreover, we presented 5 posters with peer-reviewed abstracts and submitted 3 other journal papers. During the entire project duration period (Y1 - Y4) we published 27 papers (8 journal, 1 chapter, 18 conference). This is generally consistent with the assumed publication activity indicated in D9.2 (26 expected papers), although the number of conference papers is slightly lower than expected (18 vs. 20), while the number of journal papers is higher than expected (8 vs. 6). We should note that 3 papers are under review, and we are working on additional publications based on results from the just finished clinical study.

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In Y3 and Y4 we gave 42 presentations, including demos of the CAPABLE project, aimed at diversified audiences, with a special focus on academia, healthcare, and professionals. CAPA-BLE partners also participated in 10 professional events to foster contacts with stakeholders potentially interested in the project. Moreover, additional stakeholders were contacted personally by specific partners.

In the reporting period we organized 10 physical and hybrid events for various audiences, including academia, professionals, and patients and clinicians participating in the CAPABLE clinical study. This allowed us to build stronger links with communities around selected clinical centers. AIMAC also organized the final event where we showcased the project, its potential, and results to important stakeholders from healthcare, and to define next steps in the exploitation process.

Finally, we were also involved in teaching and mentoring activities – CAPABLE partners gave 10 lectures to the educational community (high-school and university students) and supervised multiple theses and dissertations at various levels (from bachelor to doctoral). Some of these theses are ongoing and the work will be continued after the end of the project.

We will continue C&D activities after the end of the project and combine these efforts with exploitation actions from WP8 to further support the transfer of project results into practice. With the support of UPM we already prepared a dedicated IT infrastructure for the demo version of the CAPABLE system -- it was used during the final event for live presentation of the system. We also set up a notification service (e-mail and/or phone) for patients who participated in the clinical study and expressed their interest in being notified about further activities and results related to the CAPABLE project. Additionally, we plan the following activities:

- Further maintenance of the project website and profiles on social media, and updating them with relevant news and results (e.g., new publications),
- Preparation of additional publications based on the experience from the project and results obtained in the clinical study that are being processed now,
- Participation in scientific and non-scientific events to present the results of the project, including the CAPABLE system,
- Preparing of an "exploitation package" presenting the final version of the system the package will include the visuals described in Section 4.1.1 and a promotional video that is being prepared right now),
- Offering a supervised demo of the CAPABLE system to interested stakeholders the demonstration will be conducted in the form of a teleconference and use the infra-structure described below (see for the web page advertising the demo).





We are very happy to provide a supervised **demo** of the final version of the CAPABLE system. Please use the **contact** form or send an **e-mail to the coordinator** to get more information and to schedule a teleconference call during which the system will be presented.

Figure 5.1. Announcement of the demo availability at the CAPABLE website



6. Glossary

C&D	Communication and dissemination
HIS	Hospital information system
FAQ	Frequently asked questions
НМО	Health maintenance organization
KER	Key exploitable result
KOL	Key opinion leader
SME	Small and medium-sized enterprise
WP	Work package



7. References

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D9.3