Project Title:	**Sensing and predictive treatment of frailty and associated co-morbidities using advanced personalized models and advanced interventions**
Contract No:	690140
Instrument:	Collaborative Project
Call identifier:	H2020-PHC-2014-2015
Topic:	PHC-21-2015: Advancing active and healthy ageing with ICT: Early risk detection and intervention
Start of project:	1 January 2016
Duration:	36 months

Deliverable No: D8.4

Dissemination plan and FrailSafe dissemination material (vers. d)

Due date of deliverable:	**30 April 2019**
Actual submission date:	**30 April 2019**
Version:	1.0
Lead Author:	Nhu Tram (AGE)
Lead partners:	Sandra Degelsegger (AGE), Anne-Sophie Parent (AGE)
	Kosmas Petridis (HYPERTECH)
	Roberto Orselli (SMARTEX)

Horizon 2020
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Change History

Ver.	Date	Status	Author (Beneficiary)	Description
1.0	04/02/2019	Draft	Sandra Degelsegger (AGE)	First draft version (structure)
1.1	13/02/2019	Draft	Sandra Degelsegger (AGE)	First Draft + inclusion MATERIA contribution
1.2	21/03/2019	Draft	Nhu Tram (AGE)	Draft version + Hypertech input
1.3	15/04/2019	Draft	Nhu Tram (AGE)	SMARTEX input & feedback
1.4	23/04/2019	Draft	Nhu Tram (AGE)	Integration of HYPERTECH input
1.5	30/04/2019	Final	Nhu Tram; Anne-Sophie Parent (AGE)	Final version of D8.4

EXECUTIVE SUMMARY

The present deliverable (D.8.4) is the fourth and last version of the dissemination plan. It reports on the activities implemented during M25-M40 and their outcomes. In order to fulfil the objectives of task 8.1 on dissemination, the Dissemination Manager organised together with project partners a number of key activities to ensure that the target customers identified in the exploitation plan (D.8.6) were properly approached.

The present document provides a comprehensive overview of the activities implemented during the last phase of the project, explaining what type of audiences it targeted and what impact, where possible, were achieved.

All KPIs related to dissemination were reached and even exceeded:

- 10 papers were published in conference proceedings and prestigious scientific review journals (KPI: at least 7);
- Project video available on the website;
- Over 1.910 visitors per month on the website (KPI: at least 1.500);
- More than double web-server logs: 11366/month (KPI: at least 5.000);
- Continuing dissemination of project results to specific groups of investors who search for exploitable ideas to fund.

Finally, the deliverable ends with dissemination channels and recommendations that project partners are committed to continue promoting the project results after the end of the project duration.

DOCUMENT INFORMATION

Contract Number:	H2020-PHC–690140	Acronym:	FRAILSAFE
Full title	Sensing and predictive treatment of frailty and associated co-morbidities using advanced personalized models and advanced interventions		
Project URL	http://frailsafe-project.eu/		
EU Project officer	Mrs. Mirela Negrean		

Deliverable number:	8.4	Title:	Dissemination plan and FrailSafe dissemination material (vers. d)
Work package number:	8	**Title:**	Dissemination and exploitation

Date of delivery	Contractual	30/04/2019 (M40)	Actual	30/04/2019 D8.4 (v. d)
Status	Draft ☐		Final ☒	
Nature	Report ☒	Demonstrator ☐	Other ☐	
Dissemination Level	Public ☒	Consortium ☐		
Abstract (for dissemination)	D8.4 reports on the dissemination activities, materials produced and built community during M25 – M40 to engage with the identified target customers and promote the FrailSafe Solution to potential clients.			
Keywords	Dissemination, communication			

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1. INTRODUCTION

Following the reviewers' comment on dissemination, during the last phase of the project the dissemination strategy and activities were organised as to be focused on establishing contacts with the target customers identified in the exploitation plan (D8.6).

As planned in D8.3, the Dissemination Manager (AGE) implemented the "information, exploitation & marketing" phase by organising key events and creating dissemination material to influence target customers' behaviour, so they would adopt or at least become aware of the FrailSafe solution.

Depending on the target audience, different channels were chosen to disseminate project results. Social media channels were favoured to address a wider public in Europe and connect with health professionals, innovators and experts outside Europe. The website was intentionally adapted as to facilitate the access to project videos and various infographics to website visitors. Finally, key events were organised during the last phase of the project to ensure a greater impact on the target audience, where target customers could interact with the developed solution and therefore increase their potential interest.

The present D8.4 gives a comprehensive overview of the different dissemination activities carried out to reach out to the market audience, explaining what type of audience it targeted and the impact, where possible, were achieved.
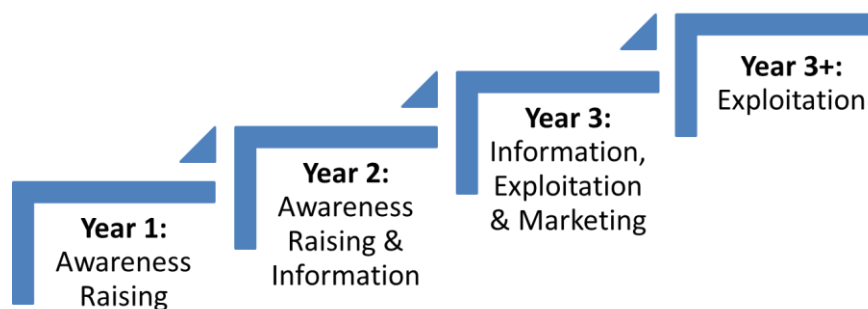
2. DISSEMINATION ACTIVITIES: M25 – M40 (JAN 2018 – APRIL 2019)

As announced in D8.3 and recommended by reviewers, specific dissemination activities were organised throughout phase 3 of the project (months from 25 to 40) to establish contact with potential clients identified in the exploitation plan (D8.6). These activities were meant to make the promotion of the FrailSafe solution, but also to continue informing them about the project progress and stimulating interest. The activities and channels used are described here below.

2.1 Website

From 01 January 2018 to 31 March 2019[1] (M25-M39), the website (www.frailsafe-project.eu) generated 28654 page-visits, creating an average of 1910 web visits per month and 11366

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[1] M40 was left out of the reporting for drafting purposes.

sessions[2]. These successful figures complied with the KPIs set at the beginning of the project, namely an average of 1500 web visits per month and >5000 sessions.
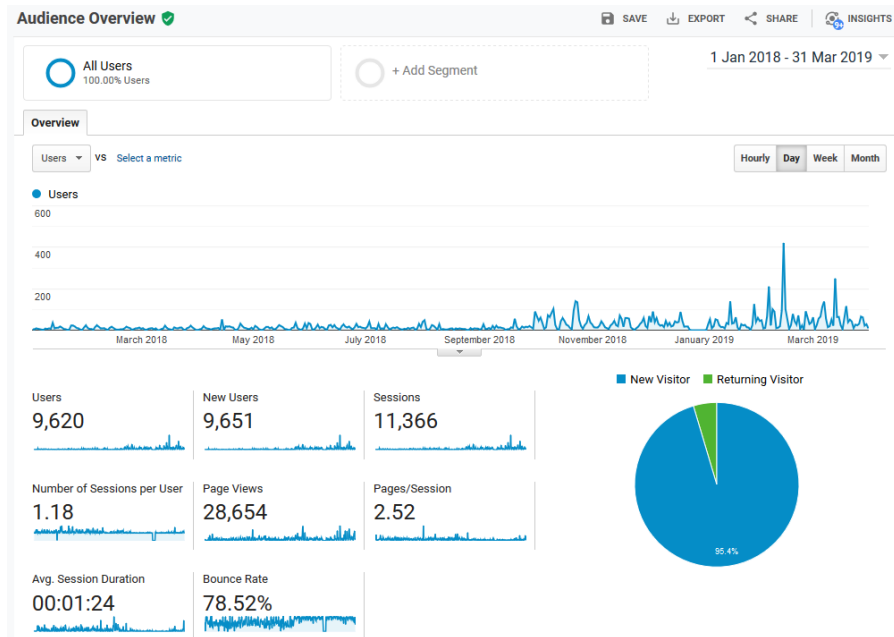

Fig. 1: Google Analytics of the project website

Based on the tables below (Fig. 2; 3), the webpage visits during the project duration have increased progressively, and substantially for the sessions.
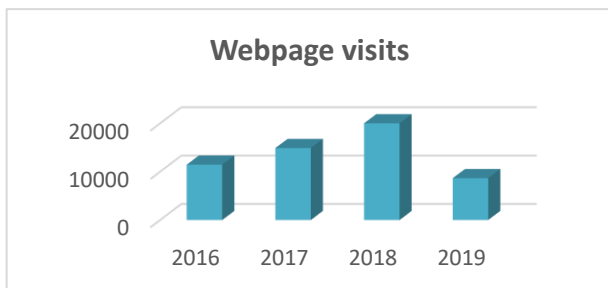

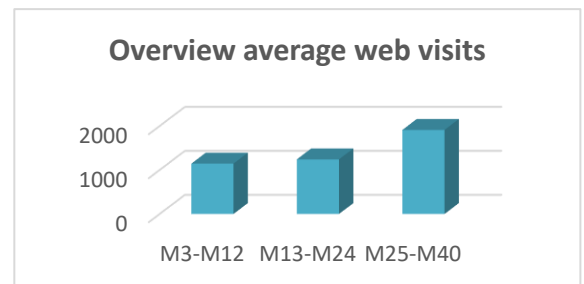Fig. 2: Overview of web visits over the project duration[3]

Fig. 3: Overview of the average of web visits over the project duration[4]

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[2] The figures are dated from 31.03.2019.

[3] Last figures are dated from 01.04.2019

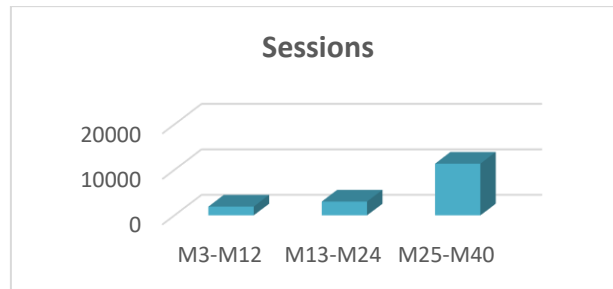[4] Last figures are dated from 01.04.2019

Fig. 4: Overview of sessions over the project duration[5]

Different Website Sections and corresponding objectives:

In phase 3, the website underwent several changes to display the main results of the project which can now be exploited and therefore also further be developed and enhanced by project partners in the future.

The main changes include:

(a) **Renaming of sections** in the main tab:
  ➢ "Solution": The previous "results" section has been renamed and is now providing a one-stop location on the website where information can be retrieved on the:
    • societal and health challenges;
    • FrailSafe Solution and how it works;
    • Benefits of the FrailSafe Solution from different stakeholders' perspective;
    • Additional information about the innovative aspects of the solution.
  ➢ "Forum": Was later added to the section to provide a direct access to the Virtual Community Platform that encourage an exchange of citizens around the topic of frailty.
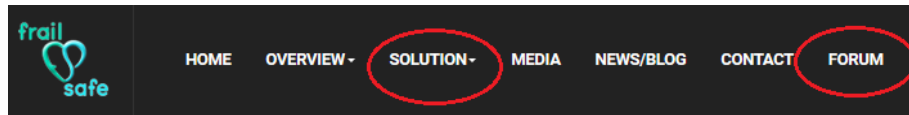
Fig. 5: "Solution" & "Forum" section on homepage.

(b) the change of **picture sliders** on the main page using tailored EU FrailSafe internal visuals with testimonies about the final product;

(c) **re-shaping** of the homepage of the website to showcase the project and technical video, allowing a better overview of the FrailSafe Solution and its benefits;

Our Solution

Discover how our innovative solution is built and its benefits.

READ MORE

Our Community

Be a member of our community. Ask your questions and get in touch with people with similar concerns.

READ MORE

Meet our Partners

Learn more about our partners and their perspective on the FrailSafe solution.

READ MORE
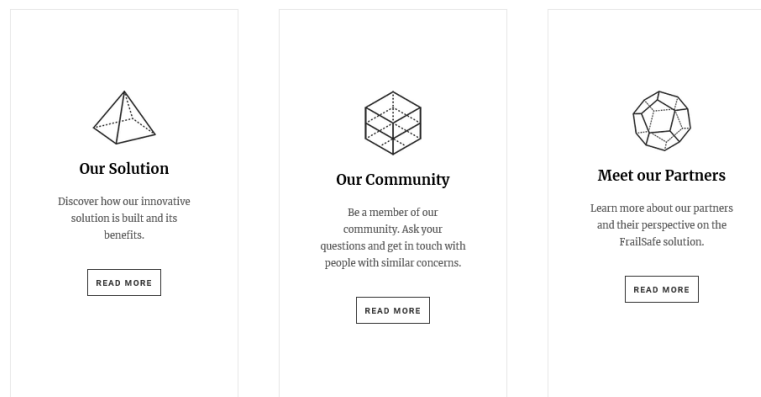
[5] Last figures are dated from 01.04.2019

(d) enhanced **cross-referencing** in project news articles, to direct users/website visitors to additional material of interest;

(e) A new sub-section was created in the "Overview" section: the Q&A section.

Following GDPR, the partners have secured the protection of personal data collected through the website or the newsletter list. Some indicative actions in this direction include:

- use of simple language communication to explain to users which personal data will be collected, where it will be stored and for how long
- users are encouraged to provide their active and clear consent on the personal data to be retained and processed
- users are informed about how they will be able to access their data and modify the privacy settings at any time
- any personal data can be erased upon request from the users
- Sensitive personal data are processed with extra caution

The website and domain will remain active for as long as required. Project partners will thus continue referring to the website when meeting potential investors and clients. Target customers will be able to retrieve important information related to the developed digital health solution, easily accessible with the latest update of the website. The content will be replaced by a new exploitation initative that may come up from the foreseen exploitation activities of the consortium in the future.

2.2 Newsletters

2 newsletters were planned and published during the last phase of the project. They were respectively published in M31 (newsletter #5) and M37 (newsletter #6). All newsletters are available in the media section of the website in "newsletter". They are available in a downloadable PDF format.

For the last 2 editions, a mailchimp layout (newsletter #5 and newsletter #6) was used to share the newsletter information to the subscribers[6]. The layout put forward attractive information of the past 6 months about the project progression to the readers and invited them to read the full newsletter by clicking on "Find out more". As for the previous editions, it was agreed by the partners that the Dissemination Manager would continue to use its email address to send out the newsletter, to decrease the risk of landing in the spam/junk folder. Alongside emails, the newsletters were also announced on social media where relevant stakeholders were tagged to encouraged to read the newsletter.

Partners were invited to disseminate them to their own networks, using their channels to increase the chance of the information being read by their respective target customers (medical professionals, IT specialists, civil society, older people, EU stakeholders, pharmaceutical).

Finally, with the GDRP implemented in May 2018, the Dissemination Manager inserted a notification at the end of the newsletter announcement explaining to the reader why they received the newsletter and giving them the option to opt-out of the contact list. The Dissemination Manager monitored the list, so far, 1 person filled in the form to opt-out.

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[6] Newsletter #5: 120 subscribers (dated 10.07.2018) – Newsletter #6: 240 subscribers (dated: 18.12.2018). At M40: 300 subscribers (dated 27.03.2019)
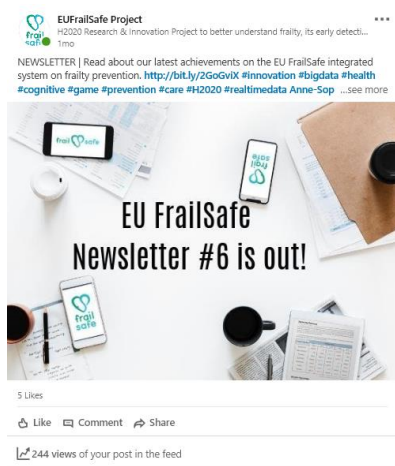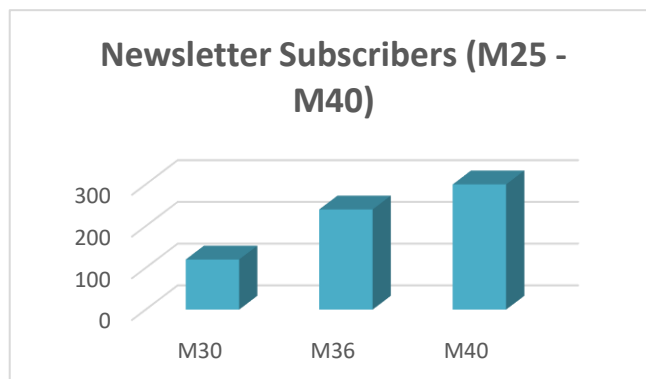
Fig. 6: Newsletter #6 announced through LinkedIn

Fig. 7: Newsletter subscribers (M25 – M40)

2.3 Articles

The writing methodology remained unchanged for the last phase of the project. The articles were written as the previous ones in tandem with the Dissemination Manager and the partners responsible for the topic.

A total of 53 articles were published to the website. They can be divided into two types of articles (M25 – M40):

- Informative approach: articles about project progression, achievements and activities;
- Marketing approach: build legitimacy among target customers by interviewing representative stakeholders.

The informative articles were a way to keep the audience and stakeholders informed about the project evolution, activities, and keep their interest about the latest technological achievements. On the other hand, the interview articles were written to build the legitimacy of the solution provided by representative stakeholders. They were written to convince the audience (when relevant) that the EU FrailSafe Solution was an important tool to keep in mind for the future of frailty management and assessment and in the best-case scenario, to include it in one's daily practice. This was done by carrying out interviews with representative of the target customers by trying to convey their approval about the developed digital health solution (see 3.4 Stakeholders interview for further information). All articles are available here and in annexe 1.

2.4 Stakeholders' interviews

The Dissemination Manager, AGE Platform Europe, together with some key project partners, organized interviews with the identified stakeholders to collect their testimonies and opinions regarding the benefits and innovative aspects of FrailSafe in their respective field of work. The interviews are either available in writing (article) or in a recorded interview available on the website and on FrailSafe YouTube Channel. The following stakeholders were interviewed, each representing a strand of customers identified in the exploitation plan:

TARGET CUSTOMERS	
☑ Older people, informal carers	☑ Medical professionals
☑ Healthcare organisation, care providers	☑ Healthcare seller
☑ Insurance Companies	☑ Researchers
☑ Policy makers	☑ Third-party vendors

In a nutshell...	
Activity	Video or written interviews with relevant stakeholders
Partners involved	AGE, UoP, Materia Group
Timeline	M25 – M40
Objective	Collect testimonies and opinions on the benefits of FrailSafe from stakeholders identified as target customers in the exploitation plan.
Target audience	• Medical professionals: physiotherapist & nurses & geriatrist • Informal carers • Business expert • Health product vendor • Insurance companies • Older people from the clinical studies • Policy and Practice in Care of Older People • Care and nursing service provider • Policy-maker

Outcome/Indicators[7]	Physiotherapist	Twitter • 690 impressions • 8 engagements Facebook: • 51 reach • 4 post click • 3 engagement
	Nurses	Twitter • 4578 impressions • 216 engagements
	Geriatrician	Twitter • 512 impressions • 12 engagements Youtube: 69 views Facebook: • 121 reach • 22 post click • 8 engagement
	Informal carers	Twitter • 788 impressions • 34 engagements Facebook: 35 reach
	Business expert	Facebook: • 35 reach • 2 post click • 1 engagement
	Volunteer from pilot site	Twitter • 628 impressions • 2 engagements Youtube: 38 views Facebook: • 349 reach • 24 click • 16 engagement
	Policy and practice in care of older people	Twitter • 255 impressions • 4 engagements Facebook: • 146 reach • 11 post click

[7] Figures are dated from 21/03/2019

		• 10 engagement
	Care and nursing service provider	Twitter • 299 impressions • 4 engagements Facebook: • 43 reach • 4 post click • 4 engagement Youtube: 108 views Facebook: • 104 reach • 14 post click • 8 engagement
	Policy-maker	These articles were published end March 2019, too recently to reliably assess impact at the time of drafting.
	Health product vendor	
	Insurance companies	

2.5 Videos

Project video

As planned in the D8.3, a 3-min project video was created by Hypertech in order to make the project understandable for the public. The video was created using the online animation editing tool PowToon, which offers unique features of combining video, animation schenes, audio and pictures. The scenario was scripted from scratch using contribution and input from all the partners, while the oral narration was performed by English native-speaking professional narrator. The technical, medical and clinical details of the project video were validated by all consortium experts before its finalization.

Hypertech and the Dissemination Manager proposed a draft scenario to the project partners for input and fine-tuning of the final narrative. The video follows the below scenario:

1. Context of demographic ageing and its various social and health challenges;
2. The FrailSafe project proposed a digital health solution to address the challenge of frailty;
3. The video explains the benefits for the different targeted customers;
4. The video closes with the mention of the EU.

The video was used to promote the project among external stakeholders and as additional material when promoting project activities, such as the webinars. Finally, the project video was shared on social media to enhance its visibility towards externals.

The video was published on 17 September 2018 to the FrailSafe Youtube Channel and was viewed 464 times[8]. The video is also listed in the FrailSafe website, in the Media section, under "Gallery".

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[8] These figures are dated from 10.04.2019

Technical video:

The project partners approved the project video; however, partners also agreed that the technical infrastructure needed to be better illustrated in a video with real people. Such video was an added value when approaching targeted customers and promoting the project at conference. It was also used in the evaluation phase carried out with external stakeholders. It enabled respondents to view the video and fill in the online surveys for the evaluation of the system for commercials, community members, healthcare professionals, researchers and IT professionals[9].

With the support of Materia Group and volunteers of the clinical study, the Dissemination Manager and Materia Group set up a narrative that staged an older person on a regular day with the FrailSafe system.

The technical video shows an older man putting on the FrailSafe smart garment in his house, preparing himself for the day (breakfast, going for a walk, grocery shopping, entertaining himself by playing with the FrailSafe serious games and plugging the whole system again for the next day). Different scenarios were imagined showing the full potential of FrailSafe and its benefits, such as the outdoor localisation, cognitive training, visualisation of real-life health data by health professional and older person, personalised recommendations.

Through such a video, targeted customers can imagine the different benefits the FrailSafe solution means for their quality of life, namely, older people can identify themselves with the main character and see how easy it is to integrate the solution in their daily life and self-manage their health.

The video was first projected at the ICT 2018 event in Vienna (Dec 2018) and received positive feedback. However, it needed further fine-tuning (e.g. shortening, video editing, subtitles additions), which explains why the technical video was only published a month later.

The technical video was promoted through the invitation emails for the final event, as a support for the last webinar organised by the Dissemination Manager and was widely shared on social media. The video was uploaded on the FrailSafe Youtube Channel on 5 February 2019 and was viewed 589 times[10].

2.6 Meet our partners campaign

A "Meet our Partners' Campaign" was initiated by the Dissemination Manager to be launched 9 weeks before the final conference. The same set of questions were given to the partners to feed in the campaign:

- What is your role in the EU FrailSafe project?
- From your perspective – what makes EU FrailSafe innovative?
- The project is coming to an end – what are your main contributions to the final EU FrailSafe solution? OR The project is coming to an end – do you have some preliminary findings to share?

Based on their answers, the articles were published each of the weeks before the final conference. Their input also provided material to compose the infographic on the innovative aspect of the project (see section on "visual material").

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[9] The surveys contributed to D7.4.

[10] Figures are dated from 10.04.2019.

In a nutshell...		
Activity	Website Article Campaign	
Partners involved	ALL	
Timeline	M37-M39 (9-weeks campaign)	
Objective	• Build up and draw attention to the upcoming final event • Start displaying the final project results of the FrailSafe solution, giving the main partners visibility for their innovative efforts	
Target audience	Older people, medical professionals, researchers, healthcare organisations, insurance companies	
Outcome/Indicators[11]	Meet Materia Group	Twitter • 381 impressions[12] • 7 engagements[13] Facebook: • 1200 reach • 45 post click • 113 engagement
	Meet CERTH	Twitter • 302 impressions • 13 engagements Facebook: • 47 reach • 8 post click • 0 engagement
	Meet INSERM	Twitter • 884 impressions • 25 engagements Facebook: • 68 reach • 8 post click • 5 engagement
	Meet Smartex	Twitter • 222 impressions • 2 engagements Facebook:

[11] Figures are dated on 21/03/2019

[12] Impressions meaning "number of times users saw the tweet on Twitter"

[13] Engagement meaning "Total number of times a user has interacted with a tweet. This includes all clicks anywhere on the tweet (including hashtags, links, avatar, username and tweet expansion), retweets, replies, follows and likes".

		• 59 reach • 4 post click • 1 engagement
	Meet Brainstorm	Twitter • 212 impressions • 1 engagements Facebook: • 48 reach • 6 post click • 3 engagement
	Meet Gruppo Sigla	Twitter • 208 impressions • 0 engagements Facebook: • 206 reach • 45 post click • 43 engagement
	Meet UoP	Twitter • 78 impressions • 1 engagements
	Meet AGE[14]	Twitter • 165 impressions • 9 engagements Facebook: • 47 reach • 3 post click • 2 engagement
	Meet Hypertech[15]	Twitter • 44 impressions • 3 engagements Facebook: • 31 reach • 0 post click • 1 engagement

2.7 Dissemination Events

As planned in D8.3, various dissemination events were organised/attended by partners during M25-M40 to support the exploitation of the FrailSafe Solution. These events were identified

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[14] These figures are dated from 26.03.2019

[15] Figures are dated from 28.03.2019

based on the attending audience in order to stimulate interest and approach the target customers.

Workshop

Joint EIP AHA Conference of Partners workshop

Together with 2 other EU-funded project (ICT4Life and I-Prognosis) that also developed a digital solution to address the European demographic ageing, the Dissemination Manager co-organised a market-oriented workshop back to back with the EIP AHA Conference of Partners on 26 February 2018 in Brussels. The event invited public and private investors interested in exploiting innovative technologies in the healthcare field, such as health insurance, health service providers, public authorities in charge of regional and national healthcare systems. The event is reported here.

In a nutshell...	
Activity	Joint Workshop
Partners involved	AGE, UoP,
Timeline	28 February 2018
Objective	Showcase the FrailSafe solution and its benefits to older people external to the project.
Target audience	Public and Private investors
Outcome/Indicators	24 participants
Deviation Dissemination Plan vers c	Not planned

Business/Exploitation Workshop Valencia

The exploitation workshop was initially planned in May 2018 and was supposed to take place in Brussels. Due to budget and travel constrains from project partners, the consortium decided to organise it back to back with the plenary meeting where all consortium partners needed for the exploitation workshop would be present. The Dissemination Manager, AGE Platform Europe, organised the workshop, identified and invited the experts in investment, exploitation and health to take part in the discussion. The participants were:

- Antonio Cano, Head of Service at the Hospital Clínico Universitario in Valencia, representing the health sector and able to provide feedback on how hospitals would welcome a solution such as FrailSafe.
- David Garrido, Innovation Manager at Institute of biomechanics provided input on the innovative aspects of FrailSafe.
- Vicente Travers, R&D Manager at Technologies for Health and Wellbeing - ITACA, Universitat Politècnica de València provided input on the innovative aspects of FrailSafe.
- Manuel Pacheco, CEO at PLUX provided input on the innovative aspect of FrailSafe but also on the exploitation plan.
- Pia Erkinheimo, Board member of the Finnish Business Angels Network provided the perspective of investors and what aspects needed to be emphasized to attract investors.
- Vassili Louziotis, Advisor to the co-federation of Greek pensioners, represented the older people's perspective and input in terms of affordability of FrailSafe of the exploitation plan.

In a nutshell...	
Activity	Exploitation workshop back to back with the Valencia plenary meeting with experts in investment, exploitation, innovation and e-health.
Partners involved	All
Timeline	03 July 2018
Objective	Reach a vast consensus of consortium and several experts on project business scenarios and use cases by presenting the exploitation plan, business models and marketing strategy of FrailSafe.
Target audience	Experts in investment, exploitation, innovation and e-health
Outcome/Indicators	Recommendations from the experts: • Emphasize on the FrailSafe product's benefits • Build momentum on pilot sites and initial customers • Start targeting care centers for older people • Focus on more targeted business models • Link the MonitorMe and DoctorMe packages in one unified marketplace • Adapt the product to each "vertical" market, e.g. patients with reduced physical activity etc. • Have a structured and coherent pricing method
Deviation Dissemination Plan vers c	Deviation of timing and place

User Forum with older persons at AGE General Assembly

Older people were one of the target customers identified in the exploitation plan (D8.6). As planned in D8.3, a **user forum** was organized by AGE Platform Europe during its General Assembly on 8 June 2018 in Brussels. Taking the opportunity of having +/- 110 representatives of national and European associations of older people or working with older people from across the EU, it made sense to organize a session where technical and medical partners of the project would come and demonstrate the whole system to one of the identified target customers. A general presentation on frailty and the importance to address it as early as possible was made by Yiannis Ellul (UoP). Followed by a technical presentation of the FrailSafe system by Kostas Deltouzos (UoP) and Luca Bianconi (Gruppo Sigla) and finished by the exploitation scenarios by Kosmas Petridis (Hypertech). AGE members were then divided into 2 different groups, where they could test and manipulate the different devices with the help of 2 project partners. As a follow-up, participants were invited by AGE to fill in the "system usability scale" survey to contribute to the evaluation of the system (D7.4). Participants also shared their feedback (user-friendliness, exploitation comments, etc.) that was communicated to the consortium. The event is reported here and here.

In a nutshell...	
Activity	User forum
Partners involved	AGE, UoP, Sigla, Hypertech,

Timeline	8 June 2018
Objective	Showcase the FrailSafe solution and its benefits to older people external to the project.
Target audience	Older people & informal carers
Outcome/Indicators	23 AGE members and externals attended the user forum.
Deviation Dissemination Plan vers c	N/A

Demo at ICT 2018 Vienna

AGE Platform Europe applied for a networking session at the ICT 2018 event, taking place in December 2018 in Vienna. This research and innovation event focused on the European Union's priorities in the digital transformation of society and industry. It was an opportunity for the people involved in this transformation, such as policy makers, ICT innovators and investors, to share their experience and vision of Europe in the digital age. Thematic networking sessions were organized by stakeholders and aimed to boost exchanged between all participants. FrailSafe organized a session on 5 December in the morning named "Connected Health System for Frailty Prevention", where our partners presented the developed FrailSafe system and its different components. Given the high competition among the different simultaneous networking sessions and various activities organised during the ICT 2018 event, the Dissemination Manager contacted individually the registered participants based on their scope of work: ehealth, entrepreneur, investor, policy maker, pharmaceutical, medical professionals, researchers, industry and older people. The room was full and we could count among the participants people coming from the innovation sector, physicians and entrepreneurs. The discussion was very lively and fruitful, some offered to introduce their own sensor in the FrailSafe serious games. The event is reported here.

In a nutshell...	
Activity	Networking session
Partners involved	AGE, UoP, Smartex, Brainstorm
Timeline	5 December 2018
Objective	Promote the FrailSafe solution and boost information exchange between the audience.
Target audience	Innovators, physicians and entrepreneurs
Outcome/Indicators	Contact established with different designers and innovateurs, e.g. i4Helse (i4Health), a new welfare-technology center in Norway, with whom the implementation of FrailSafe was discussed in Norway.
Deviation Dissemination Plan vers c	Not planned

Fairs: Exposanità

Exposanità is a fair dedicated to medical devices and services that is held every two years in Bologna (Italy). It is the most important one at national level and one of the most important at the European level. The Dissemination Manager with the partners prepared updated rollups for the event (see section "visual material) to support the project promotion.

During 4 days, Smartex had an exhibition booth to present FrailSafe results. 194 people visited the booth and exchanged with Smartex and Gruppo Sigla about the solution: physicians, nurses, people involved in rehabilitation, first responders, managers of services for assisted houses/clinics, suppliers of several components/materials for medical devices and insurance brokers. Visitors showed more interest in the serious games and the smart garment.

In a nutshell...	
Activity	Exposanità Fair – exhibition booth
Partners involved	Smartex, Gruppo Sigla, AGE,
Timeline	April 2018
Objective	• Present the FrailSafe solution • Provide a hands-on experience with the FrailSafe smart garment
Target audience	Health care professionals, health innovation suppliers, end-users, managers of services for assisted houses/clinics
Outcome/Indicators	194 people visited the booth
Deviation Dissemination Plan vers c	Not planned

Materia Group Photo Exhibition

On Saturday 21st of June 2018, Materia Group hosted the opening of The Frail Trail, a photography exhibition aimed at raising awareness on the frailty syndrome and the FrailSafe project. People from the community, older adults, caregivers, healthcare professionals, artists and IT developers had the opportunity to attend the event and interact with the FrailSafe system. The event is reported here.

In a nutshell...	
Activity	Photography Exhibition "The Frail Trail"
Partners involved	Materia Group, AGE Platform (synergy with AAL project STAGE live streaming)
Timeline	21 July to 1 August 2018
Objective	• Raise awareness on frailty • Present the FrailSafe solution • Provide a hands-on experience with the FrailSafe devices
Target audience	Older adults, healthcare professionals, family members and caregivers, students from medical and social sciences, healthcare institutions, artists

Outcome/Indicators	Around **500 people** from all target groups visited the exhibition and interacted with the FrailSafe system. All target groups expressed their interest in the FrailSafe system and project.
	Several **older adults** expressed their interest to be included as participants to the FrailSafe study and, also, expressed the wish that their Ministry of Health would cover the costs for such a prevention-oriented solution.
	All **healthcare professionals** expressed interest in purchasing the system or some of its modular services and requested to be informed first upon the commercialization of the system.
	Caregivers and older adults were eager to interact with the devices, ask questions and said that this kind of solution would give them more confidence and independence.
Deviation Dissemination Plan vers c	Not planned

Conferences

Congrès Fragilité - Paris

INSERM, represented FrailSafe at a Congress on frailty among older people in Paris on 5 and 6 April 2018. It was a great opportunity to make FrailSafe known among French General Practitioners and nurses working on frailty among older people. A poster was submitted by the Dissemination Manager and Gruppo Sigla. It was approved by the organisers to present the FrailSafe solution and how the project plans to prevent frailty. The audience was very interested in the quantification of frailty, the personalized recommendations, the collected data and in particular, in the various parameters taken into account in the FrailSafe methodology. The event is reported here and the poster is available here.

In a nutshell...	
Activity	Poster submission at a Conference
Partners involved	Sigla, AGE, INSERM
Timeline	6 April 2018
Objective	Present the FrailSafe solution
Target audience	Healthcare professionals, students from medical sciences, healthcare institutions
Outcome/Indicators	Poster submission
Deviation Dissemination Plan vers c	Planned

Games for Health Europe Conference

The conference was organised by Games for Health Europe Foundation, Europe's leading professional organization in the field of applied health games. On 8-9 October 2018, AGE Platform EU was invited in the session on "Silver Games". AGE took the opportunity to showcase the FrailSafe serious games by explaining that the heterogeneity of older people was taken into account in order to develop these serious games. Their continuous feedback helped our partners (Brainstorm Multimedia and CERTH) to improve and update the serious games used in the EU FrailSafe integrated system. The event is reported here.

In a nutshell...	
Activity	Presentation at a Conference
Partners involved	AGE, Brainstorm
Timeline	8-9 October 2018
Objective	Promote the FrailSafe serious games
Target audience	Applied health games specialist
Outcome/Indicators	N/A
Deviation Dissemination Plan vers c	Not planned

Annual Conference of European Platform for Rehabilitation

On September 21, AGE Platform Europe was invited to attend the Annual Conference of the European Platform for Rehabilitation (EPR) in Utrecht (the Netherlands). The EPR is a network of service providers to people with disabilities with the mission to build the capacity of its members to provide sustainable, high quality services through mutual learning and training. EU FrailSafe was invited to present its solution's aims, methodology and mid-term outcomes in a mutual learning session on Independent Living/ICT/Assistive Technology and had a great discussion with the participants around the user acceptance of digital health innovations - possibilities and barriers. The opportunity was taken to present the newly launched serious game, the Railway game. The event is reported here.

In a nutshell...	
Activity	Presentation at a conference
Partners involved	AGE
Timeline	21 Sept 2018
Objective	Presentation of FrailSafe solution
Target audience	Service providers to people with disabilities
Outcome/Indicators	N/A

Deviation Dissemination Plan vers c	Not planned

Final Conference

Venue

The final event was organized by the Dissemination Manager, AGE Platform Europe, on 3 April 2019 in Brussels. In order to present the final outcomes and developed digital system in a meaningful way for the targeted customers, different venues were contacted: Cypriot and Greek Permanent Representation Office to the European Union, the EESC, the CoR, the Council of European Municipalities and Regions, Life Tech Brussels, Fraunhofer, EU Digital SME, Spanish Research Council and the European Regions Research and Innovation Network.

Eventually, the final conference took place at the **European Institute of Innovation and Technology in Brussels (EIT House)**, that has a dedicated branch to health, the **EIT Health**. EIT Health is one of the largest research community around healthcare worldwide. Its goals are to strengthen healthcare systems in Europe, promote better health of citizens and contribute to a sustainable health economy in Europe[16].

Sören Haar, Public Affairs Coordinator at EIT Health, opened the final conference and explained the importance of health innovation and how EIT Health is contributing to the three abovementioned objectives through collaborating with key stakeholders such as the target customers identified in the exploitation plan (D8.6). Indeed, the EIT Health leverages the expertise of more than 140 partners from the pharma, diagnostics and med tech fields, payers, insurances, research institutions and universities. In 2017, the EIT Health provided support to some 100 health startups across Europe. 22 new products and services were developed. 22 million euros were attracted from external investors[17]. Mr. Haar was very interested in the outcomes of the FrailSafe project and encouraged partners to pursue strategic collaboration with the EIT Health network for the future implementation of the FrailSafe Solution.

Invitations & Save the Date

The Dissemination Manager identified relevant stakeholders to invite at the final conference based on their field of work: investors, policy makers, researchers in ageing issues, geriatricians, older people organisations, health insurance organisations, health professionals, e-health specialist, innovators. The identified stakeholders were invited by email or were contacted by social media. Finally, participants to the activities organized by the project (e.g. webinars, user forum, third party events, newsletter subscribers) were also invited to attend the final conference. Project partners were invited to spread the information among their network to encourage a greater participation. Besides personalized invitations, a "Save the Date" was announced on social media from mid-December 2018 until 22 March 2019 on Twitter, Facebook and LinkedIn.

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[16] https://eit.europa.eu/eit-community/eit-health

[17] http://bit.ly/2WgmLBB

Finally, the information was posted on strategic platforms and networks, such as the EIP AHA, EU Health Policy Platform, ERRIN, European Ageing Network, EU Events.
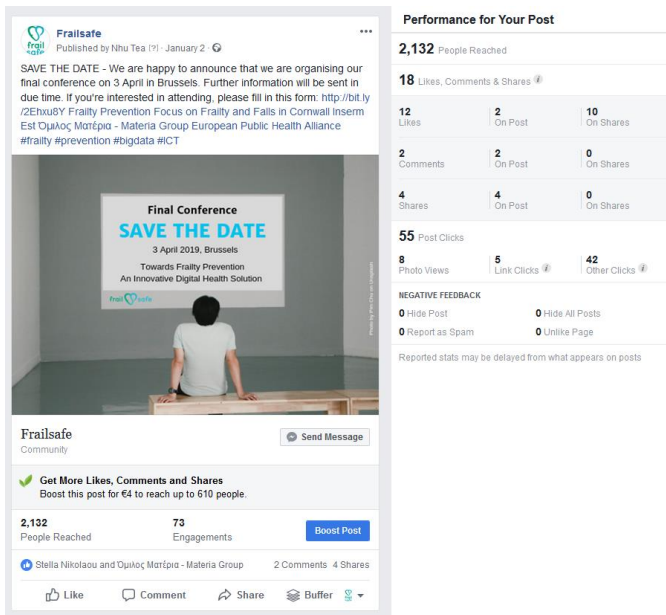
Fig 8: "Save the date" on Facebook

Fig 9: "Save the date" on Twitter

Fig 10: "Registration to Final Conference" pinned on Twitter
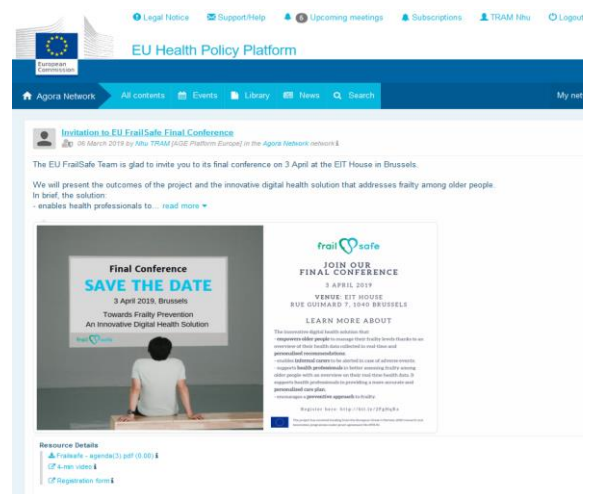
Fig 11: "Registration to Final Conference" on EU Health Policy Platform

Agenda & speakers

The Dissemination Manager organized bilateral discussions with the project partners in January 2019 to discuss how they envisaged the final conference: results to present, format, speakers, venues. Based on the different exchanges, the Dissemination Manager set up a draft agenda approved by the consortium partners. Partners agreed to divide the conference into 4 different panels with key speakers (see Annex 2).

The conference started with a broad approach towards technology as a support for independent living, explaining its benefits but also its challenges. The first discussion led naturally towards the importance of early detection of frailty and the different tools available to policy makers, health professionals and community care. It opened the way to how FrailSafe is a solution to consider in supporting independent living but also a better and comprehensive approach towards frailty.

- The first panel focused on a broader approach of how technology can support independent living among older people. The panel was moderated by Anne-Sophie Parent and was covered by **Valentina Ancona** from MedTech Europe and **Liz Mestheneos** from 50plus Hellas and the Hellenic Association of Gerontology and Geriatrics[18];
- The second panel invited speakers to reflect on why it was needed to address frailty as early as possible. The panel was again moderation by Anne-Sophie Parent and was covered by **Yuka Sumi** from WHO Department of Ageing and Life Course, **Cristina Alonzo Bouzon** from Hospital Universitario de Getafe and co-deputy coordinator of the Advantage JA, **Joke de Ruiter** from OWN-NL and AGE member association and **Yiannis Ellul** from the University of Patras and consortium partner;
- The third panel briefly exposed in which context the project started, what societal challenge it addressed and how FrailSafe can respond to the challenge. It was moderated by Anne-Sophie Parent, and covered by **Athanasios Benetos** form INSERM, **Vasilis Megalooikonomou**, University of Patras, and **Kypros Polycarpou** a volunteer from the Cypriot pilot site;
- The last panel presented the project results and outcomes: data management, frailty index, serious games, FrailSafe dashboard, preliminary evaluation results, smart garment, exploitation and the clinical studies. The panel was moderated by Nhu Tram (project officer at AGE) and covered by the project partners: **Vasilis Megalooikonomou, Marina Kotsani, Ilias Kalamaras, Marina Polycarpou, Roberto Orselli and Kosmas Petridis**.

Speakers and moderators received 2 weeks in advance a briefing note prepared by the Dissemination Manager to ensure a smooth organization of the conference.

Final Conference:

45 participants attended the conference and 5 attended remotely via web stream[19]. A good representation from the target customers were present, such as:

- **Older people and informal carers**: AGE Member Associations and Eurocarers;

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[18] MEP Heinz K. Becker was initially planned in the agenda but had to cancel on the day due to sickness.

[19] 60 people registered to attend the event.

- **Health organisations**: European Hospital and Healthcare Federation (HOPE),
- **Policy makers**: European Regional and Local Health Authorities, European Health Management Association; FundeSalud – Government of Extremadura
- **Industry, pharma**: MedTech Europe, iPropeller nv/sa, Merck Sharp & Dohme, European Pharmaceutical Students' Association; European Health Telematics Association
- **Researchers**: Université de Namur, Université de Liège, European Ageing Network, INSERM

A technical booth was set up during the lunch break and the coffee networking to enable participants to interact with the FrailSafe devices and ask technical questions to the project partners.

A satisfaction survey was sent to the participants regarding the content, the venue, networking opportunities, technical booth and an evaluation of the solution. 14 out of 45 participants responded to the survey and expressed an overly positive satisfaction (see Fig.12).
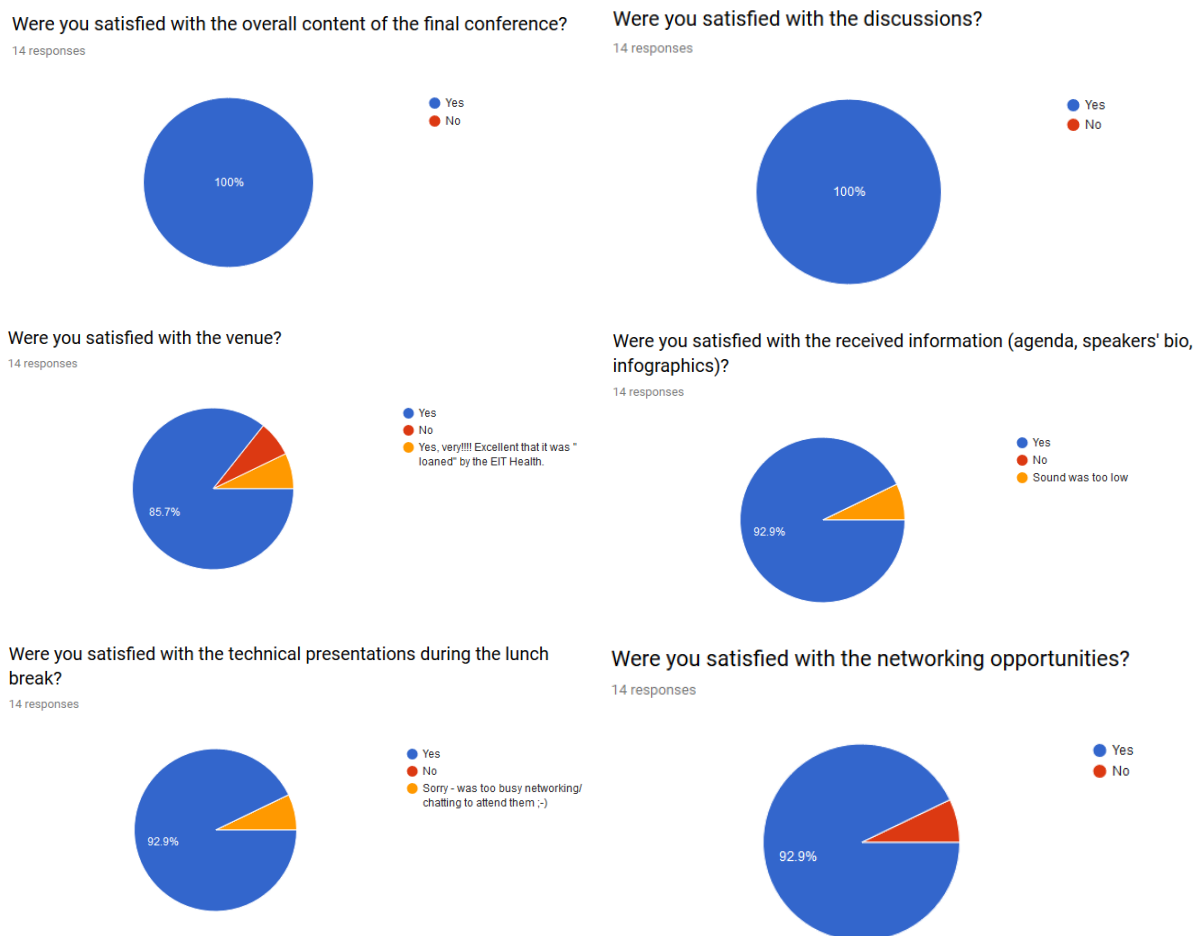

Fig. 12: Results of the satisfaction survey carried out after the final conference.

In a nutshell...	
Activity	Final conference
Partners involved	AGE Platform EU, all
Timeline	M36 – M40

Objective	Present final outcomes and digital innovation to targeted customers
Target audience	Older people, medical professionals, healthcare organisations, pharmaceutical industry, insurance companies, service providers
Outcome/Indicators	50 participants (among which 5 attended remotely)
Deviation Dissemination Plan vers c	Planned

2.8 Webinars

As stated in D8.3, webinars are a cost-effective way to gather different targeted customers and present the benefits of the FrailSafe Solution. 3 webinars were organised by the Dissemination Manager during the last phase of the project to reach out to the targeted customers and continue with promoting the FrailSafe results. All webinars were recorded[20] and published on the FrailSafe Youtube Channel and on the website, in the Media Section, under "Webinars".

FrailSafe Webinar: Game Changer in Frailty Prevention

On 18 April 2018, a webinar was organized for the members of the EIP AHA A3 action group on "Lifespan health promotion and prevention of age-related frailty and disease". After exposing the technological innovation of the FrailSafe solution at one of their meetings in January 2018, the A3 members showed great interest in knowing more on the medical and clinical methodology applied for the project. A webinar was thus a great opportunity to have a discussion with the A3 members and FrailSafe project medical partners. Moreover, it allowed the project to reach out to targeted customers of the updated exploitation plan: researchers and medical professionals. 33 people registered to the webinar and 24 attended on the day of the webinar. The webinar is reported here.

In a nutshell...	
Activity	Webinar EIP - AHA
Partners involved	AGE, UoP, INSERM, Materia Group
Timeline	18 April 2018
Objective	Present the benefits, clinical study and evaluation phase of the project
Target audience	Researchers, medical professionals
Outcome/Indicators	33 registration - 24 participants
Deviation Dissemination Plan vers c	Time (April instead of March 2018)

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[20] Speakers were informed about the recording and could opt-out at any time. Participants were informed at the beginning of the session about the recording and could leave the session at any given time.

Together for Frailty Prevention Webinar

Advantage JA is a Joint Action with 22 Member States (MS) and 33 organization. It is co-funded by the European Union and the MS (Health Ministries). Its final output will be the "Frailty prevention approach" (FPA), a common European model to tackle frailty and indicate what should be prioritized in the next years at European, National and Regional level and on which to base a common management approach of older people who are frail or at risk of developing frailty in the European Union (EU).

Given their scope of work and the organisations and Members States involved, the Dissemination Manager contacted the coordinators of the Advantage JA project to organise a joint webinar on 19 October 2018. Both projects deal with frailty prevention, but from a different perspective and have different networks. The Dissemination Manager created an invitation that was disseminated to FrailSafe network but also to Advantage JA's network and on social media. It was an opportunity for FrailSafe to reach out to medical professionals, researchers and policy makers. 130 people registered to attend and 67 participants attended the session on that day. The webinar is reported here.

A follow-up survey was sent to the participants to assess the quality of the webinar content but also evaluate the FrailSafe solution, which contributed to D7.4 13 people took part in the survey. Advantage JA published an article on FrailSafe and included the name of the project in "a Frailty Prevention Approach" Part I. Core document (p.30) meant for policy makers.

In a nutshell...	
Activity	Joint Webinar with JA Advantage Project
Partners involved	AGE, UoP, Brainstorm
Timeline	19 October 2018
Objective	Explain the benefits of using FrailSafe in supporting traditional clinical assessments.
Target audience	Researchers, medical professionals, policy makers
Outcome/Indicators	130 registrations – 67 participants - Mention in "a Frailty Prevention Approach" Part I. Core document (p.30) meant for policy makers - Article on their website 3950 web visits in October 2018
Deviation Dissemination Plan vers c	- Time: October 2018 instead of September 2018 - Topic: Initial topic "How if Big Data used in FrailSafe" to an overall technical presentation of the FrailSafe system.

Joint Webinar WHO & FrailSafe: Intrinsic Capacity

In order to put FrailSafe at a more global context by linking it to the WHO's Intrinsic Capacity concept, result of WHO's effort in the area of Integrated Care for Older People (ICOPE), the

Dissemination Manager organised a joint webinar with the [WHO Ageing and Life Course](#) Department.

The Intrinsic capacity comprises all the mental and physical capacities that a person can draw on and includes their ability to walk, think, see, hear and remember. The level of intrinsic capacity is influenced by several factors such as the presence of diseases, injuries and age-related changes. The Dissemination Manager saw the link to establish between the FrailSafe Solution and how it can support the prevention of intrinsic capacity decline from a medical perspective. The webinar is reported [here](#).

An [invitation](#) was sent to health professionals and public health experts and promoted on social media in February 2019. 142 people registered and 54 participants attended the session. Moreover, the joint webinar advertisement generated 2836 web visits in February 2019.

A follow-up [survey](#) was sent to the participants to assess the quality of the webinar content but also evaluate the FrailSafe solution, which contributed to D7.4. 10 people took part in the survey. The WHO is in the process of publicising the webinar on the [Age-friendly World](#) webpage.

In a nutshell...	
Activity	Joint Webinar WHO – ICOPE & FrailSafe
Partners involved	AGE, MATERIA, UoP
Timeline	5 March 2019
Objective	Establish the link between WHO Intrinsic Capacity approach and FrailSafe benefits from a medical perspective.
Target audience	Health Professionals, Public Health Experts
Outcome/Indicators	• 142 people registered - 54 participants; • 2836 web visits in February 2019; • In the process of publicizing the webinar on Age-Friendly World webpage.
Deviation Dissemination Plan vers c	• Time: March 2019 instead of October 2018.

2.9 Visual Material

Leaflets

The design of the leaflet was updated during the last phase of the project to make it more attractive for readers. From M25, this was the only version used by the partners at conferences. The leaflet was produced in the three languages of the pilot sites (Greek, English and French) and are available on the website (Media section → Dissemination Material).
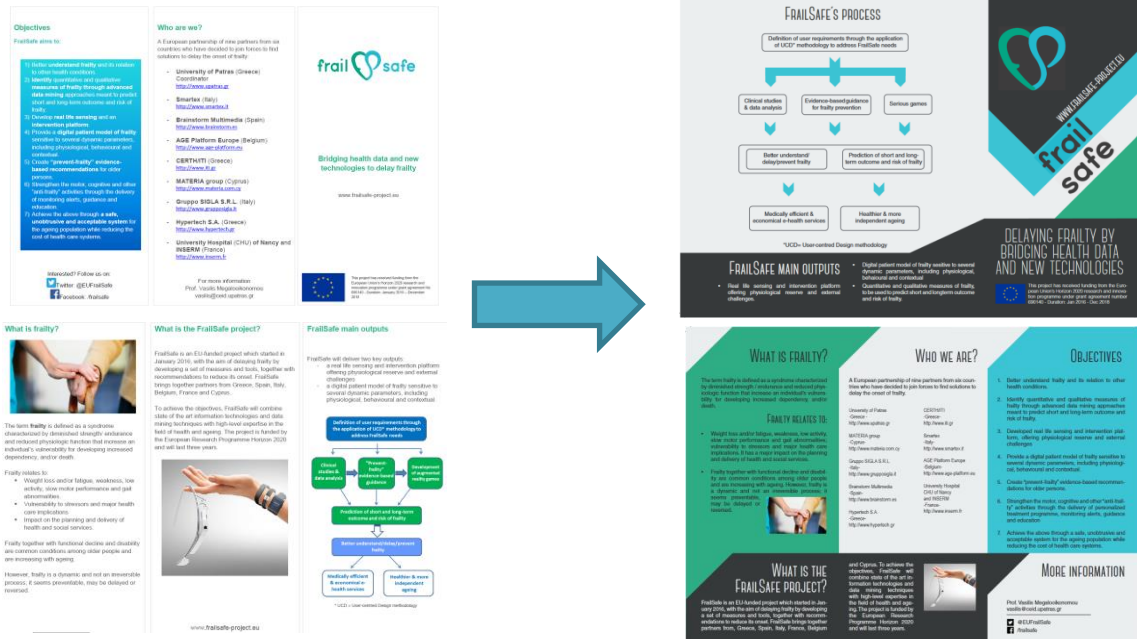
Fig. 13: updated leaflet

Infographics

Two infographics were created for the final conference and were also uploaded to the website. The objective of the infographics is to summarise the information in a visual and attractive one-pager that people can take along. Both infographics are available in the "media" section and dissemination material subsection.

The first infographic was based on the input of the "Meet the Partners Campaign"[21] gathering the innovative aspects of Frailsafe according to each partner. A visual was created to summarise the innovative components of the solution (see annex 3).

The second infographic was created to explain the societal and health challenge of frailty but focused particularly on the benefits that the solution brings to the different targeted customers (see annex 4).

Roll-ups

In April 2018, 5 rollups were created to support Smartex at the Exposànita Fair. The Dissemination Manager coordinated its creation with the partners responsible for the outputs of the project:

- General presentation roll up on FrailSafe;
- Serious games roll up;
- System architecture roll up;
- WWBS roll up;
- Data Analysis roll up.

The rolls ups were finally used for the final conference and supported the technical booth.

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[21] (see section 2.6).

Fig. 14: Roll-ups

Dissemination activities visual support

The Dissemination Manager created during the last phase of the project various visual support to accompany information regarding the project dissemination activities.

The project logo and the colours were used for the project identity. These different supports were generated with the free software Canva and can be reused by the partners for further communication after the end of the project.

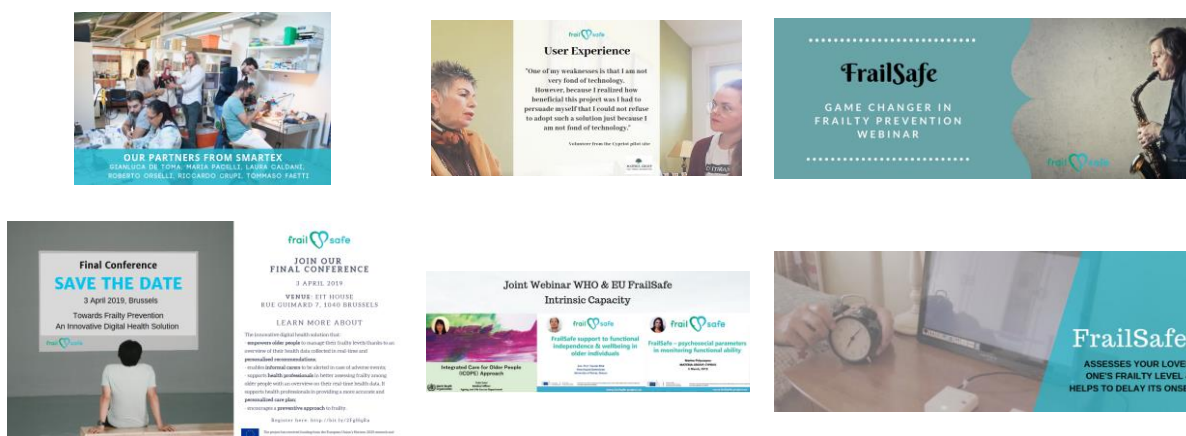*Fig. 15: example of visual dissemination material*

2.10   Social Media

During the last phase of the FrailSafe project, a threefolded change regarding the social media management and overall strategy has been performed and reached a higher impact on the diverse channels of communication used for communication and dissemination purposes.

This change included (1) the use of **social media management software** to allow targeted scheduling of selected contents at specific times of the day with the support of the management software built-in algorithms to raise the views of the posts and its engagements. Given that the project has not foreseen any budget for this, freeware platforms and trial versions have been used – namely – Hootsuite, Buffer and ContentStudio.

(2) This change has also allowed the Dissemination Manager to **adopt the strategy on which contents are shared** on the project profiles. We launched a communication boost on twitter

in 2018 where we have shared a minimum of 2-3 tweets per working day Monday-Friday and 1-2 Facebook and LinkedIn posts per week, composed of an almost 50:50 balance between project internal posts and external content on frailty. Project internal posts usually lead the audience to one of our news posts on the website, to our other communication channels or to our scientific publications. External posts included any frailty related news from a diverse range of stakeholders to draw their attention to our work and potentially profit of their own followership.

(3) Building on the first two changes, we also started an **online dialogue** on twitter (which offers more tools than other social media platforms with this regard) and more concrete exchange with our followers and stakeholders interested in frailty related issues. This dialogue was composed of (a) twitter chat tools such as tchat and similar to identify new social media champions on twitter and monitor the most recent developments around frailty, as well as contribute to ongoing conversations. Such tools allow to follow specific trending hashtags around a topic and therefore react in almost real-time where possible. (b) The launch of twitter polls to get direct feedback from our followers and stimulate them to share the poll and thereby direct other users to our profile. An example for such a poll is the one which was launched on the World Parkinson Day 2018:

Fig. 16: example of Twitter dialogue

(c) To reach out to a more diverse group of stakeholders, we have translated key social media posts in the period of the communication boost in 2018 into all languages available within the consortium and beyond. Languages covered include: French, German, Greek, Italian and Spanish. This allowed the access to other social media champions.

The above mentioned efforts led us to - not only - an extended followership on our social media channels and an increased average of website visits per month (see section 3.1), but also allowed us to 'build bridges' to other key initiatives around frailty research and advocacy, e.g. to ADVANTAGE JA, the First European Joint Action tackling frailty of older people with whom we have organised a webinar[22].

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[22] See section 2.8 for further details.

Based on the figures extracted from Google Analytics for social channels referrals (see fig.17), though Facebook has a lower number of followers (224) compared to Twitter (935), it was the most efficient social channel that referred back to the FrailSafe website, increasing web visits.
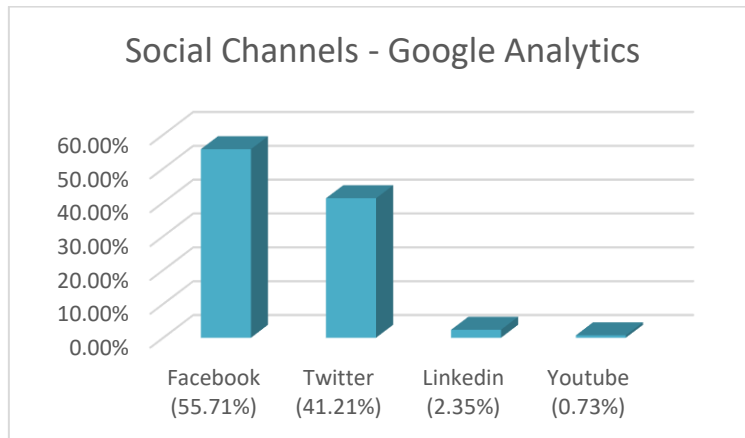

Fig. 17: Social channel Google Analytics of website traffic

Twitter

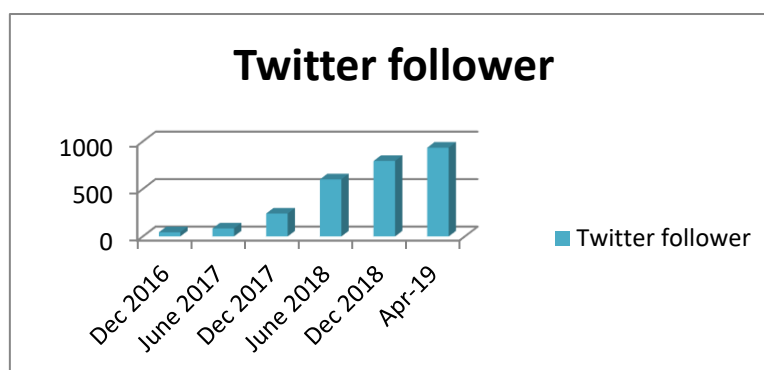| In a nutshell...	
Activity	All Twitter Activities
Partners involved	ALL
Timeline	M25-M40
Objective	• Spread project events/news/outcomes • Engage with frailty and digital health social media champions • Identify individuals/organisations/networks involved in frailty research • Stay involved in the digital health dialogue on EU level • Direct users/profiles towards FrailSafe website
Target audience	Wide public; EU level stakeholders; e-health specialists; medical practitioners;
Outcome/Indicators	• The number of followers increased substantially during the last phase of the project. Going from 241 followers in Dec 2017 to 935 on 10 April 2019. (see Fig. 18 to have an overview). • 41.21% of web visits coming from social media come from Twitter communication (see Fig. 17)

Fig. 18: Overview of Twitter followers

Facebook

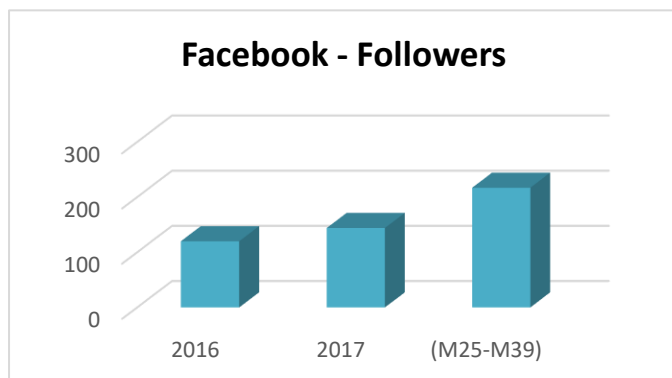| In a nutshell...	
Activity	All Facebook Activities
Partners involved	Mainly AGE
Timeline	M25-M40
Objective	• Spread project events/news/outcomes • Direct users/profiles towards FrailSafe website
Target audience	Older persons; networks on frailty; civil society organisations
Outcome/Indicators	• Numbers of followers increase progressively (224 followers[23]) • 55.71% of web visits coming from social media come from Facebook communication (see Fig. 17)

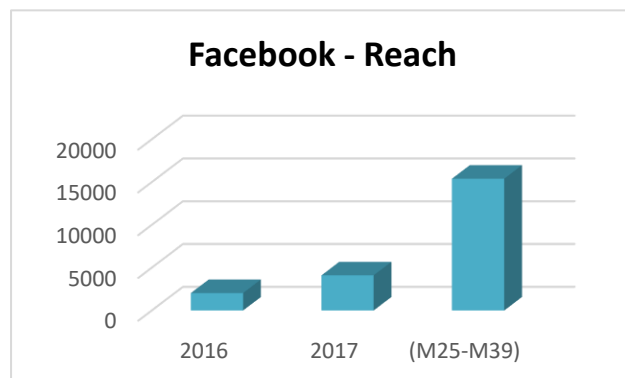Fig. 19: Overview of Facebook followers

Fig. 20: Overview of number of posts reached on Facebook

LinkedIn

In a nutshell...	
Activity	All LinkedIn Activities
Partners involved	AGE
Timeline	M25-M40
Objective	• Spread project events/news/outcomes • Identify individuals/organisations/networks investing in digital health solutions • Direct users/profiles towards FrailSafe website

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[23] Figures are dated from 10.04.2019.

	• Explore potential investors and send direct messages to them, e.g. to meet FrailSafe partners at ICT2018 event in Vienna December 2018
Target audience	Digital Health Investors, innovators, researchers in active and health ageing, medical professionals.
Outcome/Indicators	• Joined and/or requested to join groups identified to potentially support reaching the objectives set for this activity • Experienced high barrier due to the fact that AGE is a non-profit organisation and therefore no expert in digital health investments • Support from other consortium partners due to time constraints limited and other channels used • Lowest impact of social media channels has been reached via LinkedIn • Only 2.35%[24] of web visits coming from social media come from LinkedIn communication (see Fig. 17)

YouTube

In a nutshell...	
Activity	Launching project videos and/or related interviews on YouTube
Partners involved	ALL
Timeline	M25-M40
Objective	• Attract the attention of the wider public • Disseminate targeted interviews • Share webinar recordings for interested stakeholders who were not able to participate in the webinars itself • Expand the visual identity of the project • Explain individual innovative aspects of the solution • Display the final project solution
Target audience	Wider public
Outcome/Indicators	In total 13 EU FrailSafe videos have been released on YouTube in the reporting period M25-M40 with a very diverse range of views and engagements received. The videos gathered a total of 1557[25] views. Details: • 27 MARCH 2019: EU FrailSafe - Insurance companies' perspectives goes online; • 22 March 2019: EU FrailSafe - A policy maker perspective is published. • 05 March 2019: Joint Webinar WHO + EU FrailSafe recording goes online • 1 March 2019: EU FrailSafe – User experience is published • 5 Feb 2019: The final FrailSafe Technological System is launched • 19 Oct 2018: Joint Webinar Advantage JA & EU FrailSafe goes online

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[24] The figures are dated from 01.04.2019

[25] The figures are dated from 01.04.2019.

- 17 Sept 2018: Information video '[What is the EU FrailSafe solution?](#)' is launched
- 26 July 2018: [EU FrailSafe interview with Dr. Ioannis Ellul (University of Patras)](#) goes online
- 25 July 2018: [EU FrailSafe interview](#) with the CEO from the Materia Group is launched
- 13 June 2018: An impression of the EU FrailSafe User Forum where [AGE president](#) presents the EU FrailSafe smartvest goes online
- 13 June 2018: [EU FrailSafe Fall Detection Demo](#)
- 3 May 2018: [FrailSafe Game Changer in Frailty Prevention Webinar](#) goes online
- 1 March 2018: coordinator Vasilis Megalooikonomou presents [EU FrailSafe at the jointly organized event](#): solutions taking up the digital shift in healthcare: speed-dating workshop.

Only 0.73% of web visits coming from social media come from YouTube communication (see Fig. 17)

2.11   Scientific Publications

Consortium partners have published the 10 scientific papers during the period M25 – M40:

- Kalogiannis S[1], Deltouzos K[2], Zacharaki EI[1], Vasilakis A[3], Moustakas K[3], Ellul J[4], Megalooikonomou V[1], *Integrating an openehr-based personalized virtual model for the ageing population within hbase*, [BMC Med Inform Decis Mak.](#) 2019 Jan 28; 19(1):25. doi: 10.1186/s12911-019-0745-8
- Ilias Kalamaras, Nikolaos Kaklanis, Kostantinos Votis, Dimitrios Tzovaras, *Towards big data analytics in large-scale federations of semantically heterogeneous iot platforms*, AIAI 2018: [Artificial Intelligence Applications and Innovations](#) pp 13-23, 22 May 2018
- E. Pippa, E.I. Zacharaki, A.T. Özdemir, B. Barshan, V. Megalooikonomou, *["Global vs local classification models for multi-sensor data fusion"](#)*, 10th Hellenic Conference on Artificial Intelligence, Patras, Greece pdf July 2018
- S. Kalogiannis, E.I. Zacharaki, K. Deltouzos, M. Kotsani, J. Ellul, A. Benetos, V. Megalooikonomou, *["Geriatric group analysis by clustering non-linearly embedded multi-sensor data"](#)*, IEEE International Conference on INnovations in Intelligent SysTems and Applications (IEEE (SMC) INISTA 2018), July 2018, Thessaloniki, Greece pdf
- Papagiannaki, E.I. Zacharaki, K. Deltouzos, R. Orselli, A. Freminet, S. Cela, E. Aristodemou, M. Polycarpou, M. Kotsani, A. Benetos, J. Ellul, V. Megalooikonomou, *["Meeting challenges of activity recognition for ageing population in real life settings"](#)*, 20th IEEE International Conference on e-Health Networking, Applications and Services (Healthcom), Ostrava, Czech Republic pdf September 2018
- Thomas Tegou ; Ilias Kalamaras ; Konstantinos Votis ; Dimitrios Tzovaras; *[A low-cost room-level indoor localization system with easy setup for medical applications](#)*, IEEE, 2018 11th ifip wireless and mobile networking conference (wmnc), 04 October 2018
- T. Papastergiou, E.I. Zacharaki, V. Megalooikonomou, "*[Tensor decomposition for multiple instance classification of high-order medical data](#),*" *Complexity*, article ID 8651930, 13 pages, 6 December 2018.
- Markos G. Tsipouras; Nikolaos Giannakeas; Thomas Tegou; Ilias Kalamaras; Kostantinos Votis; Dimitrios Tzovaras; *[Assessing the frailty of older people using bluetooth beacons data; IEEE ; 2018 14th International conference on wireless and mobile computing, networking and communications (WiMob)](#)*; 27 December 2018; DOI: 10.1109/WiMOB.2018.8589154

- Thomas Tegou , Ilias Kalamaras, Markos Tsipouras, Nikolaos Giannakeas, Kostantinos Votis and Dimitrios Tzovaras; *A low-cost indoor activity monitoring system for detecting frailty in older adults*; MDPI Journal; 22 January 2019; DOI: 10.3390/s19030452
- Papagiannaki, E.I. Zacharaki, G. Kalouris, S. Kalogiannis, K. Deltouzos, J. Ellul, V. Megalooikonomou, "*Recognizing physical activity of older people from wearable sensors and inconsistent data*," Sensors, 20 February 2019, in press.

3. ADVISORY BOARD ACTIVITIES

As recommended by the reviewers, the project partners took advantage of having knowledgeable Advisory Board members to improve its dissemination activities. 5 meetings in total were held during the last phase of the project between Advisory Board members and project partners.

The meetings were managed and organized by Brainstorm together with project partners on specific topics. The main conclusion of the work carried out by the Advisory Board of the FrailSafe project is summarized in the value provided by the six advisors to the members of the Consortium, with whom they have maintained a fluid and very productive relationship, having participated in some cases in face-to-face meetings carried out in Cyprus, Patras, Valencia and Brussels.

On the technical level, they have contributed with ideas and validated the serious games. The contribution of the advisors to the initial conceptualization of the Business Plan has been greatly appreciated. Moreover, the Advisory Board has been very enthusiastic about the global approach of the FrailSafe project, considering it correctly aligned with the trends that are shaping the future: application of Big Data technologies and Artificial Intelligence to the field of health care.

Regarding dissemination, a Skype call was organized with Mr. Jim Playfoot, co-founder of White Loop, a technology implementation expert with 15 years' experience consulting and managing large public and private sector projects, and also a respected communications expert. He praised the website content, which was well fed with project development, but stressed that a one-stop location should be integrated to ease the reader's way towards the main information or should create an entirely new website dedicated solely to the proposed solution to support the exploitation activities of the partners.

Given the budget and time constrains, the Dissemination Manager and Hypertech (that manages the website) to reach a compromise by dedicating a section to the Solution (see section 2.1). Moreover, at the time the recommendation was made by Mr. Playfoot, the project video was not finished yet, which later contributed to a better understanding and promotion of the solution.

Finally, the commercial materials developed have been very well evaluated, in particular the promotional video[26].

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[26] Further details of the various AB meetings are to be found in the Advisory Board Internal Report

4. RECOMMENDATIONS TO SUPPORT POST-PROJECT DISSEMINATION

4.1 Conferences & events

In order to pursue the promotion of the developed technological system and solution after the duration of the project, project partners have identified events where the work of FrailSafe can further be promoted:

- EuGMS congress in Krakow in September 2019
- Medicon 2019 in Coimbra, September, 26-28, 2019
- EuGMS 16th International Congress workshop, October 7-9, 2020, Athens

4.2 Scientific papers

Scientific papers also greatly contribute to an increased visibility of project results. Project partners have submitted the following papers, but are not yet accepted:

- T. Papastergiou , E.I. Zacharaki, V. Megalooikonomou, TensMIL2: Improved Multiple Instance Classification Through Tensor Decomposition and Instance Selection, 27th European Signal Processing Conference (EUSIPCO), 2019, submitted.
- G. Kalouris, E.I. Zacharaki, V. Megalooikonomou, Improving CNN-based activity recognition by data augmentation and transfer learning, IEEE Transactions on Industrial Informatics (Fast track of INDIN'19), submitted.
- T. Tegou, A. Papadopoulos, I. Kalamaras, K. Votis and D. Tzovaras, "Using Auditory Features for WiFi Channel State Information Activity Recognition", SN Computer Science, Springer (submitted)

Other articles are under preparation:

- Tsirtsi, E.I. Zacharaki, S. Kalogiannis, V. Megalooikonomou, et al., Clinical profile prediction by multiple instance learning from multi-sensorial data, 10th International Conference on Information, Intelligence, Systems and Applications, 2019.
- (Authors not finalized yet), FrailSafe: An ICT platform for unobtrusive sensing of multi-domain frailty for personalized interventions, ACM Transactions on Computing for Healthcare.

4.3 Website & Social media

The Dissemination Manager recommends project partners to continue referring potential investors and customers to the project website and publish (when needed) information to the website with relevant news. The social media community for FrailSafe is now well established, with followers from various fields of work and returning to the project website to seek out information. It is therefore crucial to maintain the social media accounts, by focusing on those that provided more impact, namely Facebook and Twitter. The Dissemination Manager will hand over the credentials to other project partners for their future exploitation activities.

4.4 Letters of interest

For the future exploitation activities of the project, the Dissemination Manager recommends project partners to contact the organisations that signed the letter of support (see D8.7 – exploitation plan). The organisations and companies that have marked their interest will be strong potential future customers and should be kept informed about future exploitation activities.

5. CONCLUSIONS

The last period of the project was full of opportunities to organise the planned dissemination activities listed in D8.3 meant to promote the developed digital health solution but also approach the target customers mentioned in the exploitation plan. Having a clearer idea of what the developed solution encompassed and which target customers to reach, specific dissemination activities and actions took place. The organized activities contributed to an increase visibility of the project translated by an increase in the web visits during the last phase of the project, reaching an average of 1900 web visits per month, an increase in Twitter (935) and Facebook (224) followers and an increase in newsletter subscribers (300). Moreover, as a result of the various dissemination activities, letters of support signed by organisations and companies that showed an interest in the FrailSafe solution are available in the exploitation deliverable.

First of all, the website homepage was revised to make sure readers could find clear and short information on the solution. This was made by dedicating a section to "solution", where the societal and health challenges are clearly explained and how FrailSafe can contribute to these challenges. The benefits are clearly listed depending on whether the reader is an older person, informal carer, a health organization, medical professional, Pharma Company or health insurance or a policy maker or a researcher. Moreover, both project and technical videos are displayed on the homepage for readers to click on.

The Dissemination Manager wrote together with the project partners 53 articles that fulfilled the purpose of either informing the reader about project achievements and progresses, or providing legitimacy to the solution through the interview articles. The most attractive and relevant ones were used to compose the two newsletters published in July 2018 and December 2018.

Regarding dissemination activities, the last phase of the project was punctuated by major relevant events, workshops, conferences, fairs, user forum, webinars and the project final conference that enabled partners to better approach target customers.

Following the reviewers' recommendation to be more active on social media to have a better visibility of the project results, the Dissemination Manager adapted and improved its strategy and achieved successful results. Indeed, the number of followers on Twitter increased from 241 followers in Dec 2017 to 935 mid-April 2019. Regarding Facebook, the number of followers (224) was not as impressive as the Twitter ones; however, when analyzing the social channel referrals on Google Analytics for the web visits, 55.71% of social channel referrals came directly from Facebook.

Finally, to ensure future dissemination activities regarding project results after the end of the project, partners have identified clues on how to continue promoting the results, such as through the publishing of scientific papers, continue referring to the project website, attending key events, keep on using the social media accounts of the project where the community is already created and contacting again the organisations and companies that have shown an interest in the solution by signing the letter of support.

6. ANNEXES

Annex 1: Website articles

Title	Date	Partners	Link
Using advanced informatics to turn the tables in frailty	24.01.2018	AGE + UoP	http://frailsafe-project.eu/news/72-big-data
Loss of Orientation application	05.02.2018	AGE + CERTH	http://frailsafe-project.eu/news/73-loss-of-orientation
Indoor Localization application	26.02.2018	AGE + CERTH	http://frailsafe-project.eu/news/74-indoor-localisation-app
Solutions taking up the digital shift in healthcare	12.03.2018	AGE	http://frailsafe-project.eu/news/75-eipaha-cop
FrailSafe meeting the EIP AHA A3 Group on frailty prevention	22.03.2018	AGE + Sigla	http://frailsafe-project.eu/news/76-eipaha-a3
FrailSafe Webinar announced: Game changer in frailty prevention	30.03.2018	AGE	http://frailsafe-project.eu/news/77-webinar-1
The commercial value of FrailSafe	05.04.2018	AGE + Hypertech	http://frailsafe-project.eu/news/78-commercial-value
Future plans for FrailSafe	16.04.2018	AGE+ Hypertech	http://frailsafe-project.eu/news/79-future-plans
Frailty detection from text analysis	17.04.2018	UoP+AGE	http://frailsafe-project.eu/news/80-text-analysis
French Congress on Frailty among Older People	17.04.2018	AGE + INSERM	http://frailsafe-project.eu/news/81-fragilite-2018
FrailSafe Webinar: Game changer in frailty prevention	23.04.2018	AGE	http://frailsafe-project.eu/news/82-webinar-01
Simon 2.0 for frailty prevention	08.05.2018	Brainstorm + AGE	http://frailsafe-project.eu/news/84-simon
Looking into the future of later life	09.05.2018	AGE	http://frailsafe-project.eu/news/85-ingrid-eyers
Early detection, prevention and management of frailty: Introducing the FrailSafe system	14.06.2018	Materia + AGE	http://frailsafe-project.eu/news/87-medical-perspective
User Forum on Frailty Prevention	14.06.2018	AGE	http://frailsafe-project.eu/news/88-age-ga
Frailty & physiotherapy and its future	14.06.2018	AGE	http://frailsafe-project.eu/news/89-gerti-wewerka
FrailSafe meets Physiotherapy	18.07.2018	AGE	http://frailsafe-project.eu/news/90-physiotherapy
Welcome to the 5th issue of the FrailSafe biannual newsletter!	20.07.2018	AGE	http://frailsafe-project.eu/news/91-5th-newsletter
FrailSafe interview with Ioannis Ellul (University of Patras)	30.08.2018	AGE + UoP	http://frailsafe-project.eu/news/92-ellul
The FrailSafe system used by Care Providers	30.08.2018	Age + Materia	http://frailsafe-project.eu/news/93-care-providers

The Frail Trail - Photography Exhibition	31.08.2018	Materia + AGE	http://frailsafe-project.eu/news/94-frail-trail
Granted best paper award at IEEE International Conference on E-health networking, application & services	27.09.2018	UoP+AGE	http://frailsafe-project.eu/news/95-heathcom-2018
Joint Webinar on Frailty Prevention announced	01.10.2018	AGE	http://frailsafe-project.eu/news/96-webinar-2
Together for frailty prevention Webinar	22.10.2018	AGE	http://frailsafe-project.eu/news/97-webinar-02
FrailSafe at the Annual EPR Conference	26.10.2018	AGE	http://frailsafe-project.eu/news/100-epr-2018
FrailSafe at the Games for Health Europe 2018 Conference	01.11.2018	AGE	http://frailsafe-project.eu/news/101-g4h-europe-2018
The importance of frailty management starts with educating health professionals	06.11.2018	AGE	http://frailsafe-project.eu/news/99-deirdre-lang
Discover our Dynamic Railway Game	26.11.2018	AGE + Brainstorm	http://frailsafe-project.eu/news/102-railway-game
FrailSafe at ICT 2018 event	10.12.2018	AGE	http://frailsafe-project.eu/news/103-ict-2018
Welcome to the 6th issue of the FrailSafe biannual newsletter!	19.12.2018	AGE	http://frailsafe-project.eu/news/104-6th-newsletter
Save the Date!	15.01.2019	AGE	http://frailsafe-project.eu/news/105-save-the-date
Personalized Recommendations phase	24.01.2019	Materia + AGE	http://frailsafe-project.eu/news/106-recommendations
Towards better frailty assessment – meet our partners and learn more about their expertise! This week: Materia Group	31.01.2019	AGE + Materia	http://frailsafe-project.eu/news/107-meet-our-partners-materia
Towards better frailty assessment – meet our partners and learn more about their expertise! This week: CERTH	06.02.2019	AGE + CERTH	http://frailsafe-project.eu/news/108-meet-our-partners-certh
Towards better frailty assessment – meet our partners and learn more about their expertise! This week: INSERM	11.02.2019	AGE + INSERM	http://frailsafe-project.eu/news/109-meet-our-partners-inserm
Interview with Stecy Yghemonos, Executive Director of Eurocarers	12.02.2019	AGE	http://frailsafe-project.eu/news/110-eurocarers
Joint Webinar on Intrinsic Capacity and Frailty coming up!	14.02.2019	AGE	http://frailsafe-project.eu/news/111-webinar-3
Towards better frailty assessment – meet our partners and learn more about their expertise! This week: Brainstorm	19.02.2019	AGE + Brainstorm	http://frailsafe-project.eu/news/112-meet-our-partners-brainstorm

Towards better frailty assessment – meet our partners and learn more about their expertise! This week: Smartex	25.02.2019	AGE + Smartex	http://frailsafe-project.eu/news/113-meet-our-partners-smartex
The Augmented Reality Games for Frailty Prevention	25.02.2019	AGE + CERTH	http://frailsafe-project.eu/news/114-ar-games
Towards better frailty assessment – meet our partners and learn more about their expertise! This week: Gruppo Sigla	04.03.2019	Age + Sigla	http://frailsafe-project.eu/news/115-meet-our-partners-sigla
FrailSafe data visualization dashboard	04.03.2019	CERTH + AGE	http://frailsafe-project.eu/news/116-data-visualization
What does a business expert think of EU FrailSafe?	05.03.2019	AGE	http://frailsafe-project.eu/news/117-savvides
A user's experience with FrailSafe	06.03.2019	Materia + AGE	http://frailsafe-project.eu/news/118-user-experience
Intrinsic capacities: How to prevent frailty and care dependence in older age. A joint FrailSafe & WHO Webinar	06.03.2019	AGE	http://frailsafe-project.eu/news/119-webinar-03
Towards better frailty assessment – meet our partners and learn more about their expertise! This week: University of Patras	12.03.2019	UoP+AGE	http://frailsafe-project.eu/news/120-meet-our-partners-uop
Towards better frailty assessment – meet our partners and learn more about their expertise! This week: AGE Platform Europe	19.03.2019	AGE	http://frailsafe-project.eu/news/121-meet-our-partners-age
Towards better frailty assessment – meet our partners and learn more about their expertise! This week: Hypertech	26.03.2019	AGE + Hypertech	http://frailsafe-project.eu/news/122-meet-our-partners-hypertech
A policy-maker's perspective on FrailSafe	26.03.2019	Materia + AGE	http://frailsafe-project.eu/news/125-palladiou
Insurance companies' perspectives of FrailSafe	26.03.2019	Materia + AGE	http://frailsafe-project.eu/news/126-insurance
EU FrailSafe Solution Seen by a Health Products and Services Merchandiser	28.03.2019	Materia + AGE	http://frailsafe-project.eu/news/127-healthpharma
What makes FrailSafe innovative? The partners' perspectives	01.04.2019	ALL	http://frailsafe-project.eu/news/124-meet-our-partners-summary
FrailSafe final conference: Summary report	05.04.2019	AGE	http://frailsafe-project.eu/news/129-final-conference-report

Annex 2: Final Conference Agenda

INNOVATIVE DIGITAL HEALTH SOLUTION TOWARDS FRAILTY PREVENTION

Agenda
FrailSafe Final conference

3 April 2019
EIT House Brussels
Rue Guimard 7 - 1040 Brussels

	9:30 - 10:00 **Registration & welcome coffee**
Welcome speech 10:00 - 10:10 *By Sören Haar, EIT Health*	
	10:10 - 10:20 **Setting the scene**
How can technology support independent living among older people? 10:20 - 11:00	
Moderator: Anne-Sophie Parent, AGE Platform EU *Speakers:* • *Heinz K. Becker, Member of European Parliament* • *Valentina Ancona, MedTech Europe* • *Liz Mestheneos, 50plus Hellas*	

	11:00 - 12:00 **How important should frailty be addressed as early as possible ?**
	Moderator: Anne-Sophie Parent, AGE Platform EU *Speakers:* • *Yuka Sumi, WHO Department of Ageing and Life Course* • *Cristina Alonso-Bouzón, Hospital Universitario de Getafe* • *Joke de Ruiter, OWN-NL/OWN-EU, AGE member* • *Yiannis Ellul, University of Patras*
What is FRAILSAFE? 12:00 - 12:30 *Moderator: Anne-Sophie Parent, AGE Platform EU* *Speakers:* • *Athanasios Benetos, Inserm* • *Vasilis Megalooikonomou, University of Patras* • *Kypros Polycarpou, testimony from a Cypriot volunteer*	
	12:30 - 14:00 **Lunch break & technical booths**

But what exactly is FRAILSAFE? 14:00 - 15:30 *Moderator: Anne-Sophie Parent, AGE Platform EU* *Speakers:* • *Vasilis Megalooikonomou, University of Patras* • *Marina Kotsani, CHRU Nancy, INSERM Est* • *Ilias Kalamaras, CERTH/ITI* • *Roberto Orselli, Smartex* • *Marina Polycarpou, Materia Group* • *Kosmas Petridis, Hypertech*	
	15:30 - 15:45 **Closing remarks**
	15:45 - 17:00 **Networking coffee**

Annex 3: Infographics on Innovative Aspects of FrailSafe

What Makes EU FrailSafe Innovative?
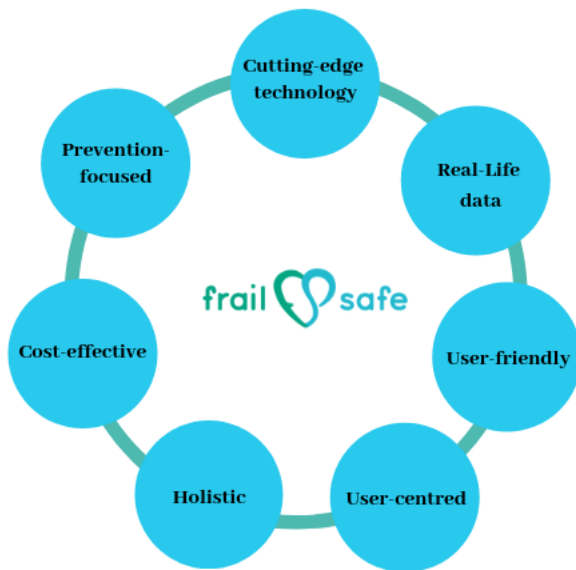
Cutting-edge technology: In combination with more traditional methods to assess frailty, FrailSafe uses cutting-edge technology ranging from novel wearable and ambient sensors to state-of-the-art cloud platforms, deep-learning algorithms, fabric electrodes, game framework systems and Internet of Things architecture.

Real-life data: The EU FrailSafe System collects prolonged real-life data in a natural environment from a set of heterogenous devices and sensors, from which the data is transmitted to the system's cloud-based architecture where raw and analysed data can be viewed and/or further analysed in a user-friendly interface. This links to the 'interoperable' characteristic.

User-friendly: FrailSafe is non-invasive and can be easily included in older people's everyday routines. The monitoring of the diverse aspects of frailty is performed in a way that the older person can perform their usual daily activities without any limitations while their health data is being recorded and assessed. User-friendliness as a criterium was part of FrailSafe's ambition right from the start, where older persons from the three clinical sites (Nancy, Nicosia and Patras) have been iteratively involved to define the user-requirements and give feedback throughout the project lifetime on its key developments. Informal and professional caregivers and medical staff were also directly involved in both – development and testing/evaluation – as end users.

User-centred: Next to a collective analysis of data to enhance the understanding of frailty as such, the EU FrailSafe System analyses individual user data to inform frailty detection and its management based on the person's abilities and needs. This is for example reflected in personalised recommendations for interventions – as well as – the adoption of serious games difficulty levels.

Holistic: The EU FrailSafe System collects, analyses and monitors data on a wide range of parameters – cognitive, medical, nutritional, physical, psychological and social. The different sensors and devices applied in the EU FrailSafe solution are highly interoperable, which means that data collected by heterogenous technologies is combined in an easy-to-use online dashboard without facing any troubles through different data formats or data communication protocols.

Cost-effective: The EU FrailSafe System is a cost-effective tool to collect real-life data that can then be analysed and provides management recommendations encourages self-management, as well as facilitates comprehensive integrated care plans. The modular solutions could be fully or partially integrated by national healthcare systems in order to prevent ageing-related social costs. Furthermore, this monitoring has the potential to predict adverse outcomes and thereby support their prevention, which lowers the high costs of a healthcare system caused through such adverse events.

Prevention-focused: The solution aspires to contribute to earlier and more accurate frailty detection and the prediction of adverse outcomes, allowing preventive measures to be applied in time, which is highly clinically relevant. As the system allows older people to monitor their own health, it increases their autonomy which in turn serves as intrinsic motivation to apply the system. The possibility of the person's physician to be directly informed is also provided. The preservation of an older person's functional autonomy supports active and healthy ageing and therefore also independent living.

Annex 4: General Infographics about FrailSafe & Benefits

EU FRAILSAFE
DIGITAL HEALTH INNOVATION
FOR FRAILTY PREVENTION

SOCIETAL AND HEALTH CHALLENGE

According to the 2015 EU Ageing Report, demographic ageing in European population will change dramatically over the coming decades. The percentage of citizens aged over 65 years is predicted to rise from 18% in 2013 to 28% by 2060 and the percentage of people aged 80+ will increase from 5% to 12% during the same time period.

Frailty is considered as one of the most complex and important issues associated with ageing. It is considered as a condition of diminished physiological reserves, that put the individual to a greater risk of a less efficient response and functional recuperation in case of exposure to stress and thus adverse health outcomes (e.g. hospitalisation, fall, disability). The syndrome has significant repercussions on the older persons' quality of life and on the health care system. The relationship between frailty and a higher risk of falling, loss of functional independence, reduced quality of life, institutionalization, and mortality has been well-documented.

Frailty is not an inevitable consequence of ageing. In many cases it can be pertinently managed and its evolution can be delayed or even postponed; thus a stronger focus on early screening and detection of frailty is needed for timely management and prevention of loss of autonomy.

THE EU FRAILSAFE SOLUTION FOR FRAILTY PREVENTION

EU FrailSafe offers an integrated assessment system, using cutting-edge technology. The solution estimates people's frailty level and locates a person's weakness in order to provide personalized suggestions. It also provides a health monitoring tool and has the potential to generate real-time notifications in case of adverse events. The solution complements traditional clinical assessments in identifying those at higher risk of developing adverse health events, and thus facilitating comprehensive integrated care plans for older people.

HOW DOES IT WORK?

Frailty assessment and monitoring is done through traditional clinical assessments and a set of devices and technologies, such as a smart garment, indoor/outdoor monitoring and localization, virtual augmented reality, and serious games. The developed system collects and analyses data from different domains (physiological, cognitive. behavioural, psychological, social), enabling the system to estimate the frailty level of a person. It generates a virtual patient model (VPM) that reflects a person's current health status and suggests personalised frailty preventive interventions.

Alongside this process, health care professionals can visualize their patients' health data through the EU FrailSafe Platform and take actions if deemed necessary. Not only health professionals but also older individuals themselves and their authorized family members can view their data through the Platform's dashboard and therefore monitor different parameters of their own health.

WHY SHOULD YOU USE THE EU FRAILSAFE SOLUTION?

OLDER PEOPLE AND INFORMAL CARERS

Older people can visualize real-time collected data related to their current health status and act, where necessary, to strengthen the spotted weakness thanks to the personalized recommendations. This enables them to remain independent, active and maintain their quality of life as long as possible by adopting a preventive approach.

The system also enables informal carers to remotely monitor relevant variables (such as physiological measurements) and alert them of any deviations. It can empower prefrail individuals in their homes and communities, increasing their autonomies, and consequently also the informal carers' quality of life.

MEDICAL PROFESSIONALS

Frailty evaluation and management is a challenge in geriatrics. Nowadays, health professionals are limited in monitoring the evolution of frailty and above all, detecting frailty accurately, efficiently and early enough.

Considering the abovementioned challenges, the FrailSafe solution supports medical professionals in detecting frailty earlier using a more accurate and comprehensive approach, allowing for preventive measures to be applied in time and delaying the onset of frailty among their older patients. Finally, by having access to their patients' real-time daily data and their medical history, medical professionals are able to better adapt their treatments.

RESEARCHERS & POLICY MAKERS

Due to the vast amount of available real-life measurements, vital signals and medical data collected via the devices and other clinical assessments, substantial research can be conducted based on this anonymized data. This will aim at the advancement of science towards long-term detection, delay, prevention and treatment of frailty. Data scientists, medical researchers and social workers might use the existing available data to uncover and design high-level theories which structurally correlate the data and propose relevant policies to prevent the consequences of frailty.

Based on the research results, regional or national policy-makers can implement initiatives to be tried in communities or regions and later be implemented as a general policy in the public domain.

HEALTHCARE ORGANISATIONS

Healthcare institutions are looking for ways to reduce treatment costs. The EU FrailSafe solution can be applied to their patients on a regular basis for screening and evaluation purposes. The system will give healthcare organisations the opportunity to reduce monitoring and treatment costs for older people's frailty-related diseases, increase the availability of their resources and expand their services to existing or new patients by providing high quality services.

INSURANCE COMPANIES

The costs of in-hospital treatment and rehabilitation for older patients are covered by their insurance company, be it public or private. Insurance companies can recommend to the use of the EU FrailSafe solution for prevention purposes to their clients. A large percentage of preventable incidents are related to frailty-related diseases, therefore it is in the insurance company' interest to reduce these costs by using a system that detects frailty early and provides personalized prevention measures.

PHARMACEUTICAL COMPANIES

Pharmaceutical companies can use the EU FrailSafe solution to accompany research for frailty-related drugs or treatments from the stage of sample selection up to the final results validation. The system can help pharmaceutical companies assess their products using an innovative and reliable method.