



## D9.1 Dissemination Strategy and Action Plan

and

## D9.2 Project Branding

### ABSTRACT

This deliverable provides the Dissemination Strategy and Action Plan developed for the purpose of InteropEHRate project in order to raise awareness about the project's ambitions, progress and end-results. It describes the Dissemination Strategy and strategic objectives of communication and dissemination, the Dissemination Action Plan and expected achievements. Project Branding is included in section 3.1 identifying the values of the project and its application to visual identity.

<b>Delivery Date</b>	3 <sup>rd</sup> July 2019
<b>Work Package</b>	WP9 Communication, Dissemination and Collaboration
<b>Task</b>	T9.1
<b>Dissemination Level</b>	Public
<b>Type of Deliverable</b>	Report
<b>Lead partner</b>	EHTEL



This document has been produced in the context of the InteropEHRate Project which is co-funded by the European Commission (grant agreement n° 826106). All information provided in this document is provided "as is" and no guarantee or warranty is given that the information is fit for any particular purpose.



This work by Parties of the InteropEHRate Consortium is licensed under a Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>).

### CONTRIBUTORS

	Name	Partner
<b>Contributors</b>	Tino Marti Stephan Schug Marc Lange	EHTEL EHTEL EHTEL
<b>Reviewers</b>	Lucie Keunen Argyro Mavrogiorgou	Andaman7 UPRC

### LOGTABLE

Version	Date	Change	Author	Partner
0.1	03-05-19	Table of contents	Tino Marti	EHTEL
0.2	29-05-19	Table of contents reviewed outline and project branding section	Marc Lange, Tino Marti, Stephan Schug	EHTEL
1.0	30-05-19	Incorporation of comments gathered in WP9 calls	Tino Marti	EHTEL
1.1	31-05-19	Merge of D9.1 and D9.2 in Appendix 1	Tino Marti	EHTEL
1.2	03-06-19	Refinement of chapters 2 and 3	Tino Marti	EHTEL
1.3	05-06-19	WP9 revision	Tino Marti, Marc Lange	EHTEL
1.4	14-06-19	Completion of chapter 3.6-3.8	Tino Marti	EHTEL
1.5	24-06-19	Internal review	Lucie Keunen Argyro Mavrogiorgou	Andaman7 UPRC
2.0	28-06-19	Incorporation of reviewers' comments and final review	Tino Marti Marc Lange	EHTEL
2.1	02-07-19	Quality check	Argyro Mavrogiorgou	UPRC
Vfinal	02-07-19	Final version for submission	Laura Pucci	ENG

## ACRONYMS

Acronym	Description
API	Application Programming Interface
D2D	Device to Device
EC	European Commission
EHR	Electronic Health Record
EHTEL	European Health Telematics Association
EU	European Union
GDPR	General Data Protection Regulation
HL7-FHIR	Health Level 7 - Fast Healthcare Interoperability Resources
ICT	Information and Communication Technologies
IEHR	InteropEHRate project
IoT	Internet of Things
KPI	Key Performance Indicator
NIS	Network and Information Security directive
R2D	Remote to Device
S-EHR	Smart HER
SMEs	Small and Medium Enterprises
WP	Work Package

## TABLE OF CONTENT

1.	INTRODUCTION .....	1
1.1.	Scope and objective of the document .....	1
1.2.	Intended audience.....	2
1.3.	Structure of the document .....	2
1.4.	Updates with respect to previous version (if any) .....	2
2.	DISSEMINATION STRATEGY .....	3
2.1.	Objectives of the project .....	3
2.1.1.	Technical and scientific objectives.....	3
2.1.2.	Health system and exploitation-related objectives .....	3
2.2.	Target audience and stakeholder mapping .....	4
2.3.	Resulting priorities for dissemination.....	5
2.3.1.	European, National and Regional dissemination .....	6
2.3.2.	Technical, scientific, health system and exploitation-related dissemination.....	6
2.4.	Dissemination and project lifecycle .....	7
2.5.	Synergies with other projects and networks .....	8
2.6.	Market maturity .....	9
2.7.	Values of the project .....	11
3.	DISSEMINATION ACTION PLAN AND ACHIEVEMENTS .....	12
3.1.	Branding .....	12
3.2.	Website .....	13
3.3.	Printed materials .....	13
3.4.	Social networks.....	14
3.5.	Publications and scientific dissemination .....	15
3.6.	Networking and participation at dissemination events .....	16
3.7.	Mid-term workshop and final conference .....	17
3.8.	Impact of INTEROPEHRATE dissemination activities: Key Performance Indicators .....	17
4.	CONCLUSIONS AND NEXT STEPS .....	19
	Appendix 1. D9.2 Project Branding.....	21

## LIST OF FIGURES

Figure 1 – Dissemination process, audience and tools by phases .....	5
Figure 2 – InteropEHRate timeline and dissemination phases .....	8
Figure 3 – Technology Hype Cycle .....	9
Figure 4 – Digital health hype cycle 2019 .....	11
Figure 5 – Project branding: logo and tagline .....	13
Figure 6 – InteropEHRate twitter account banner .....	14

## LIST OF TABLES

Table 1 – Stakeholders, impact and InteropEHRate contribution .....	5
Table 2 – Key messages for political axes of dissemination .....	6
Table 3 – Benefits and barriers for objective-related axes of dissemination .....	7
Table 4 – Hype Cycle for Health Providers 2018 .....	10
Table 5 – Values of InteropEHRate .....	12
Table 6 – Online dissemination channels and objectives .....	14
Table 7 – Open access journals .....	15
Table 8 – List of recurring events .....	17
Table 9 – Dissemination and communication key performance indicators .....	18

## 1. INTRODUCTION

### 1.1. Scope and objective of the document

According to the Grant Agreement, the work dedicated to communication, dissemination and collaboration contemplated in WP9 has three main general objectives:

- (1) The **Communication Strategy** and plan will be designed and implemented combining several axes of activities such as regional and European dissemination as well as technical, clinical and policy-oriented dissemination. It is a key tool to safeguard impact and sustainability of the InteropEHRate approach;
- (2) **Dissemination**: raising awareness at European and national/regional level about project's ambitions, lessons learned during the deployment phase and finally the end result;
- (3) **Stakeholder Collaboration** (Engagement): Collecting and sharing lessons learned (knowledge transfer) on the processes involved in using the S-EHR Model and System to inform decision-makers about its potential to provide European wide applicable methods for implementing distributed, accessible and GDPR conformant health records in support of health and care needs in Europe.

Four principles related to how data is shared and exchanged underpin the overall objectives of InteropEHRate:

- (1) Data sharing mediated by the citizen: through the adoption of a D2D protocol (device to device, i.e. without the usage of the Internet) and a R2D protocol (remote to device, i.e. with the usage of Internet), which allows citizens to import their own health data on personal smart devices, and exchange them, in a confidential way, with healthcare professionals and researchers, without the intervention of other authorities;
- (2) Data sharing authorized by the citizen: through peer-to-peer protocols, using decentralized authorization mechanisms based on citizens' consent, to guarantee data accountability and provenance traceability, in compliance to patients' rights and GDPR;
- (3) Open and incremental Interoperability: based on open specifications, connecting for-profit and non-profit data providers with different levels of interoperability, starting from a low level for secure exchange of unconverted data, to a high-level combining knowledge extraction and adaptive data integration, to translate data to a common HL7 FHIR profile and into the natural language of the consumer;
- (4) A co-design approach and a specific governance model will manage human aspects related to ethics, laws, and technology evolution."

Therefore, the novel approach of InteropEHRate is based on a paradigm shift consisting of two main elements. The first one refers to the adoption of a bottom-up approach instead of the traditional top-down approach to make health data interoperable among national and regional health information systems. The second one refers to the consideration of the citizens as mediators of such interoperability and, hence,

empowering the citizens and easing the European data sharing among healthcare stakeholders in compliance with the GDPR.

This innovative value proposition faces different barriers such as:

- (1) the lack of data exchange among healthcare institutions;
- (2) the lack of semantic and syntactic interoperability among healthcare institutions;
- (3) the lack of involvement of the citizens/patients;
- (4) the lack of open specifications enabling the realization of a new interoperability-based economy.

### **1.2.Intended audience**

This deliverable is intended primarily for InteropEHRate partners and those organisations involved in the execution of the project, namely the definition and development of solutions and the implementation through pilots.

### **1.3.Structure of the document**

Three main components vertebrate this document:

- Section 2, defining InteropEHRate dissemination strategy and intended and target audiences;
- Section 3, establishing an action plan and describing communication and dissemination elements and activities;
- Section 4, setting conclusions and next steps of the dissemination strategy and action plan;
- Appendix 1 Project Branding, expanding section 3.1 to merge deliverable D9.2 on Project Branding.

### **1.4.Updates with respect to previous version (if any)**

Not Applicable.



## 2. DISSEMINATION STRATEGY

### 2.1. Objectives of the project

InteropEHRate overall goal is to empower the citizen and unlock health data from local silos, using a bottom-up approach for EHR interoperability that does not require the coordination by a superior authority and that leaves more control of health data to the citizen. It complements and integrates the current interoperability infrastructures with new technologies for health data exchange centred on the citizen.

To pursue this goal, it has also defined specific technical and scientific objectives together with health system and exploitation-related objectives.

#### 2.1.1. Technical and scientific objectives

From a technical and scientific standpoint, InteropEHRate Grant Agreement specifies objectives O1 to O6:

- (1) define a standard secure model for mobile health repositories, called S-EHRs (Smart EHRs), that does not require mandatory cloud storage;
- (2) define a new secure D2D (device to device) protocol and API and a complementary R2D (remote to device) protocol;
- (3) define a new secure remote protocol and API allowing researchers to request health data for specific research initiatives, as well as allowing citizens to donate their health data;
- (4) define an open decentralized and scalable architecture for cross-border European EHR federation that is interoperable with existing systems and infrastructures supporting incremental levels of interoperability;
- (5) define secure and decentralized security mechanisms that are able to guarantee the application of access constraints chosen by citizen ensuring identification of interacting actors/devices and compliance with national and European security regulations covering medical devices, data transmission and data access (GDPR and NIS); and
- (6) support complementary levels of accountability and provenance traceability based on the usage of corresponding security technologies.

#### 2.1.2. Health system and exploitation-related objectives

Health system objectives comprise a wide range of health stakeholders from European institutions to national and regional health authorities, including health care purchasers, providers and patients, while exploitation-related objectives encompass both technical and functional exploitation.

From a health system and exploitation-related perspective, InteropEHRate Grant Agreement specifies objectives O7 to O11:

- (7) “develop a reference implementation (the InteropEHRate platform) of the architecture for cross-border European EHR federation together with prototype applications for citizens, health care operators and researchers;
- (8) define a governance model to maintain the EHR federation and manage human aspects related to data protection, ethics, laws and technology evolution including the evolution of the HL7-FHIR profile adopted by the federation;

- (9) trial the InteropEHRate platform in three representative use cases involving four pilot sites of the corresponding four different countries (Greece, Italy, Belgium, Romania);
- (10) create channels of communication with relevant stakeholders including healthcare institutions, patients and healthcare professionals;
- (11) disseminate with open access and collaborate with other EU initiatives and standardization activities.

## 2.2. Target audience and stakeholder mapping

Due to the breadth of objectives, the target audience of InteropEHRate will be very broad and diverse. Therefore, it is necessary to map out all the potential stakeholder based on specific project objectives. This exercise will facilitate to adequately convey tailored key messages to identified target audiences. The following table enlists target audiences and their primary benefits from achieving InteropEHRate objectives.

Stakeholders	Type of impact	InteropEHRate contribution
Citizens	Social impact	Improved mobility and continuity of care, prompt and safe treatment, more control of personal data, more health awareness, more clarity for trial participants and better self-management of health
Healthcare professionals	Social and business impact	Improved patient information sharing and reduced patient safety errors
Healthcare providers	Social and business impact	Saving of administrative, clinical and risks costs, improved health services and reduced effort and costs for EHR interoperability
Healthcare institutions	Social and business impact	Preservation of previous investments on EHR interoperability infrastructure, exploit private investment for EHR integration and interoperability and accelerate EHR interoperability
Health authorities	Social impact	Facilitation of the implementation of cross-border health care, eventual development of new legislation and better health system planning at country and regional level
Clinical researchers	Social impact	Easier recruitment of patients for trials and increase of health data donation
Healthcare ICT providers	Business impact	Lower costs for cross border interoperability and more competitiveness thanks to innovative applications and services
Privacy and security providers	Business impact	Innovative offers for the security market and lower costs by re-using the project results in other domains
SMEs and start-up	Business impact	Increased competitiveness, higher innovation potential and new opportunities in eHealth and mHealth markets
Healthcare standardization bodies	Business impact	New impacting standards, new applications and improvement of existing standards

<b>Projects and other initiatives</b>	Social and business impact	Advances in the field of EHR interoperability
---------------------------------------	----------------------------	---

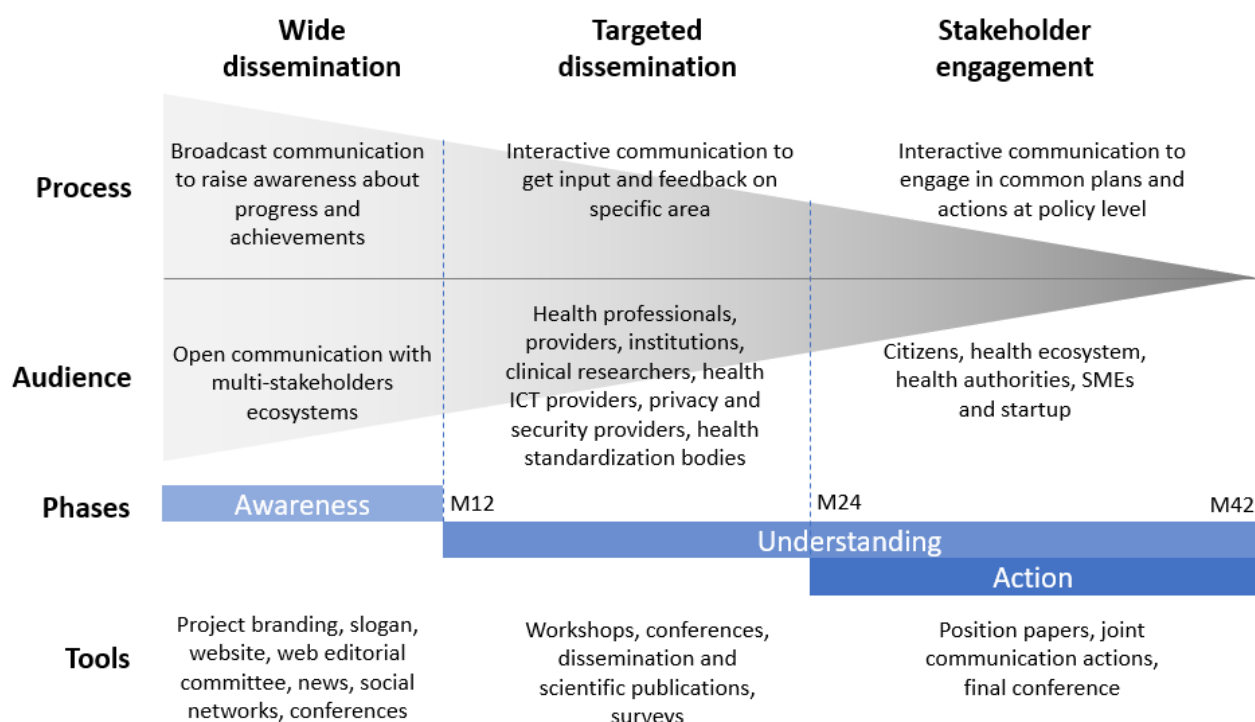
*Table 1 – Stakeholders, impact and InteropEHRate contribution*

In addition, the External Stakeholder Board formed as part of the tasks of WP9 will provide complementary perspectives from other society stakeholders that will complete this comprehensive mapping of target audiences.

### 2.3. Resulting priorities for dissemination

InteropEHRate dissemination strategy cannot exclusively focus on one of the project dimensions being technical, scientific, health system or exploitation-related. On the contrary, it must combine all of them. As most technologies that will be used in InteropEHRate are still at an emerging phase, communicating solely on the technical dimension could lead the audience to consider non-realistic the project's promise. Likewise, communicating strictly on the technical and scientific dimension could lead the audience to lose sight of the social and policy benefits expected from InteropEHRate and the exploitation potential of the interoperable solutions.

To reach the wider audience and not only the audience that is specifically linked to the InteropEHRate objectives, our tactics will change from the early stages (phase one) to the final stages (phase two and three) of the project in terms of channels adopted, audience addressed and contents dispatched as illustrated in the following figure.



*Figure 2 – Dissemination process, audience and tools by phases*

Scientific dissemination is an integral part of the dissemination and communication process linking project results with further exploitation.

Impact of InteropEHRate communication activities will be continuously monitored, helping to adjust dissemination tactics in order to maximize the community engagement along the project timeline.

### 2.3.1. European, National and Regional dissemination

A key component of the project is the multiplicity of objectives and the breadth of target audiences. From a policy-oriented viewpoint, InteropEHRate aims at reaching different policy players at European, National and Regional level in connection with the implementation of the European Directive 2011/24/EU on patients' rights in cross-border healthcare [1] and the adoption within the Digital Single Market strategy of the Commission Recommendation on a European Electronic Health Record exchange format of 6 February 2019. [2]

Political axes of dissemination activities	Key messages
European	<ul style="list-style-type: none"> <li>• Cross-border health care, EHR exchange format, People's rights, Digital Single Market</li> </ul>
National, Regional and Local	<ul style="list-style-type: none"> <li>• Operationalize cross-border health care through exchange format standards.</li> <li>• Overcome organizational and legal boundaries for health data exchange among health institutions within and between national and regional administrative borders.</li> <li>• Empower citizens to access, share and donate personal health data to improve own healthcare and health research.</li> </ul>

Table 2 – Key messages for political axes of dissemination

### 2.3.2. Technical, scientific, health system and exploitation-related dissemination

Related to the objectives of InteropEHRate, dissemination activities will convey messages about the potential and actual benefits of the project to overcome identified barriers.

Objective-related axes of dissemination activities	Benefits	Barriers
Technical	International standards, Bottom-up interoperability	Lack of semantic and syntactic interoperability among the healthcare institutions
Scientific	Technical research: interoperability Health research: population health, data donation	Lack of integrated health data repositories

Health system	Patients: citizen empowerment, self-care, health literacy Providers: clinical continuity and longitudinality, facilitation of health data exchange, Digital Single Market	Lack of involvement of citizens/patients Lack of data exchange among healthcare institutions
Exploitation-related	Technical: interoperability Health system: transferability, openness to scale-up	Lack of open specifications enabling the realization of a new interoperability-based economy

*Table 3 – Benefits and barriers for objective-related axes of dissemination*

## 2.4. Dissemination and project lifecycle

In connection to the dissemination and communication objectives, the content of the messages that will be delivered to the InteropEHRate target audiences will vary overtime, as the project progresses. The dissemination strategy organises this procedure through different phases along the project lifecycle:

- **Phase one - Awareness:** Create awareness and greater visibility of InteropEHRate (M1-M12) by:
  - Developing the project branding and graphical identity and its digital applications;
  - Creating a community of interest with Social Media accounts, local information outlets (i.e. newsletters);
  - Starting to attract traffic to the website, through social media and content creation with articles and offline with the use of flyers;
- **Phase two - Understanding:** Facilitate understanding of InteropEHRate by focusing on the preliminary results and the initial release of the tools (M12-M42):
  - Technical and scientific events will be targeted;
  - The community of interest will receive updates through different channels and website publications;
- **Phase three - Action:** Focus on InteropEHRate overall consolidated results in the form of software components especially, ready-to-use approaches and technologies (M24-M42):
  - The development of a governance model aiming at initial commercialization of the technology.
  -

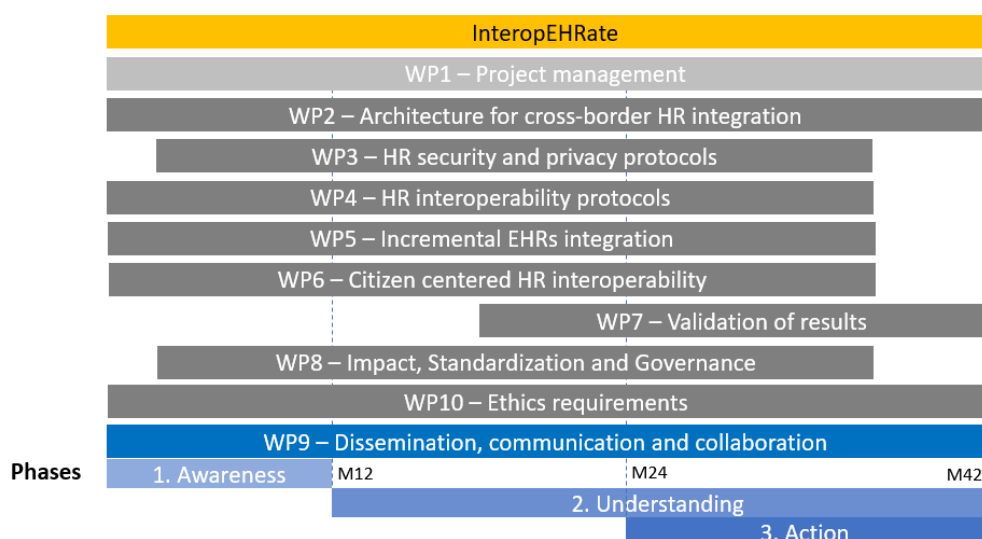


Figure 2 – InteropEHRate timeline and dissemination phases

## 2.5.Synergies with other projects and networks

InteropEHRate will inform the European Commission future recommendations on cross-border exchange format of EHR capitalizing on the work developed by eHealth Action [3] and the EU mHealth Hub [4]. Europe has independently defined the key activity of “patient access to their health data” already in the Europe 2020 Strategy of 2010, where its latest manifestations are in the Digital Single Market and Multiannual Workplan 2018-2021 of the eHealth Network.

Some European projects and eHealth networks stand out as synergic with InteropEHRate scope and purpose. Establishing channels of continuous exchanges with these projects and networks is relevant for disseminating InteropEHRate results. The following projects and networks have been selected by their significance in relation to these dissemination objectives as they share principles such as citizen empowerment or health data sharing and donation.

**Smart4Health** is an ongoing European project set forth around Citizen-centred EU-EHR exchange for personalized health. Smart4Health aims to enable citizens to manage and bridge their own health data throughout the EU and beyond, advancing own and societal health and wellbeing. Its stated general objective is to develop, test and validate a platform prototype for the Smart4Health citizen-centred health record with integrated abilities for aggregation of data, for sharing and for data provision/donorship to the scientific community. It will “provide citizens secure access to health records, support data infrastructure to advance research, disease prevention and personalized health and care, and better prevention and personalised and precision medicine.” [5]

**DigitalHealthEurope** enables the digital transformation of health and care in the Digital Single Market. Synergies can be set forth through its multistakeholder community 1 (citizen’s secure access to and sharing of health data across borders) [6] and multistakeholder community 3 (digital tools for citizen empowerment and for person-centred care with a particular focus on the interaction between citizens and healthcare providers). [7]

**IHAN©** - Human-Driven Data Economy is a proof of concept set of pilots developed by the Finnish Innovation Fund Sitra. [8] IHAN aims to create common European level rules, as well as solutions for an

ecosystem of human-oriented exchange of information aligned with the movement of Fair Data as a competitive force that connects with the foundations and rationale of InteropEHRate.

**ELO-Network** is a long-standing permanent working group that was created by EHTEL to convene national and regional eHealth competence centres across Europe. Its objective is to exchange developments and share lessons learned in the path of digitally transforming health and social care systems enabled by secure and interoperable digital health infrastructures, including cross-border eHealth services, standardisation and other Europe-wide initiatives. Among others, the following institutions are participating members of the ELO-Network: gematik (Germany), Agence eSanté (Luxembourg), Fundació TIC Salut Social (Catalonia, Spain), MEDCOM – Danish Centre for Health Telematics (Denmark), Nictiz – Nationaal ICT Instituut in de Zorg (Netherlands), Serviços Partilhados do Ministério da Saúde - SPMS (Portugal) and the National Institute for Health and Welfare – THL (Finland). The ELO-Network is a fit-for-purpose dissemination platform for InteropEHRate activities. [9]

## 2.6. Market maturity

InteropEHRate aims to bring to the market of EHR and health data exchange novel solutions based on advanced interoperability standards. Therefore, it is central to explore the maturity of this market to ensure the exploitation and scale-up of the solutions designed through the project pilots. Two opposed scenarios about market maturity can be addressed by communication endeavours. A first scenario where the market is still not mature for the array of technologies defined and developed, communication activities can contribute to accelerate market readiness to adopt these new solutions. The alternative scenario where the market is prepared to absorb InteropEHRate innovations can benefit from communication activities to market and directly deliver these solutions to primary beneficiaries.

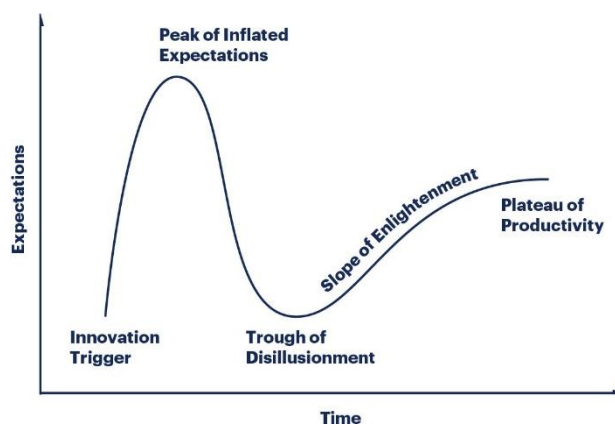
A continuous technology and market trend-watching is necessary then to reflect on the innovation potential and its timeliness. WP8 on Impact, Standardization and Governance will perform this exercise through task 8.1 Market Analysis and innovation planning from month 6 to 36, producing three deliverables on Market, Competitor and Technology watch (D8.1, D8.2 and D8.3).

From a communication perspective, trend-watching is relevant to convey to the target audience the relevance and timeliness of InteropEHRate solutions. An initial step is to explore the position of InteropEHRate related technologies along Gartner's Hype Cycle.

Since 1995, Gartner produces analysis of technological trends shaped in hype cycles structured in five phases based on the observation of short run overestimates and long run underestimates of the impact of technologies.

Five segments configure hype cycles:

- (1) innovation trigger;
- (2) peak of inflated expectations;
- (3) trough of disillusionment;
- (4) slope of enlightenment;
- (5) plateau of productivity.



Source: Gartner [10]

Figure 3 – Technology Hype Cycle

In the healthcare domain, Gartner recently published the Hype Cycle for Healthcare Providers 2018. The table below classifies the emergent technologies applied to health management.

On the rise	At the peak	Sliding into the trough	Climbing the slope	Entering the plateau
<ul style="list-style-type: none"> <li>• Digital Speech Analysis for Clinical Diagnoses</li> <li>• Precision Health</li> <li>• AI-Enabled Diagnostic Imaging Interpretation</li> <li>• <b>Health Data Curation and Enrichment Hub</b></li> <li>• Precision Medicine</li> <li>• Automated Patient Decision Aids</li> <li>• Blockchain in Healthcare</li> <li>• 3D Bioprinted Organ Transplants</li> <li>• Critical Condition Surveillance Systems</li> <li>• <b>AI for Healthcare Providers</b></li> </ul>	<ul style="list-style-type: none"> <li>• Healthcare Analytics Architecture for Providers</li> <li>• Algorithmic Medicine</li> <li>• Real-Time Healthcare Costing</li> <li>• Value-Based Performance Management Analytics</li> <li>• AI Healthcare Advisors</li> <li>• IoT: Hospitals</li> <li>• Healthcare Consumer Persuasion Analytics</li> <li>• Eldercare-Assistive Robots</li> <li>• 3D Printed Surgical Implants</li> <li>• Genomics Medicine</li> </ul>	<ul style="list-style-type: none"> <li>• Healthcare, Cloud-Architected ERP</li> <li>• PHI Consent Management</li> <li>• Real-Time Health System Command Center</li> <li>• Population Health Management Solutions</li> <li>• Healthcare CRM</li> <li>• 3D Bioprinted Human Tissue</li> <li>• Patient Portals (Non-U.S.)</li> <li>• Real-Time Physician Documentation Improvement</li> <li>• Patient Throughput and Capacity Management</li> <li>• 3D Printed Presurgery Anatomical Models</li> <li>• <b>Enterprise EHR Systems (Non-U.S.)</b></li> <li>• OpenNotes</li> </ul>	<ul style="list-style-type: none"> <li>• Accountable Care Organization</li> <li>• Computer-Assisted Coding (Hospital)</li> </ul>	<ul style="list-style-type: none"> <li>• Healthcare Real-Time Location System</li> </ul>

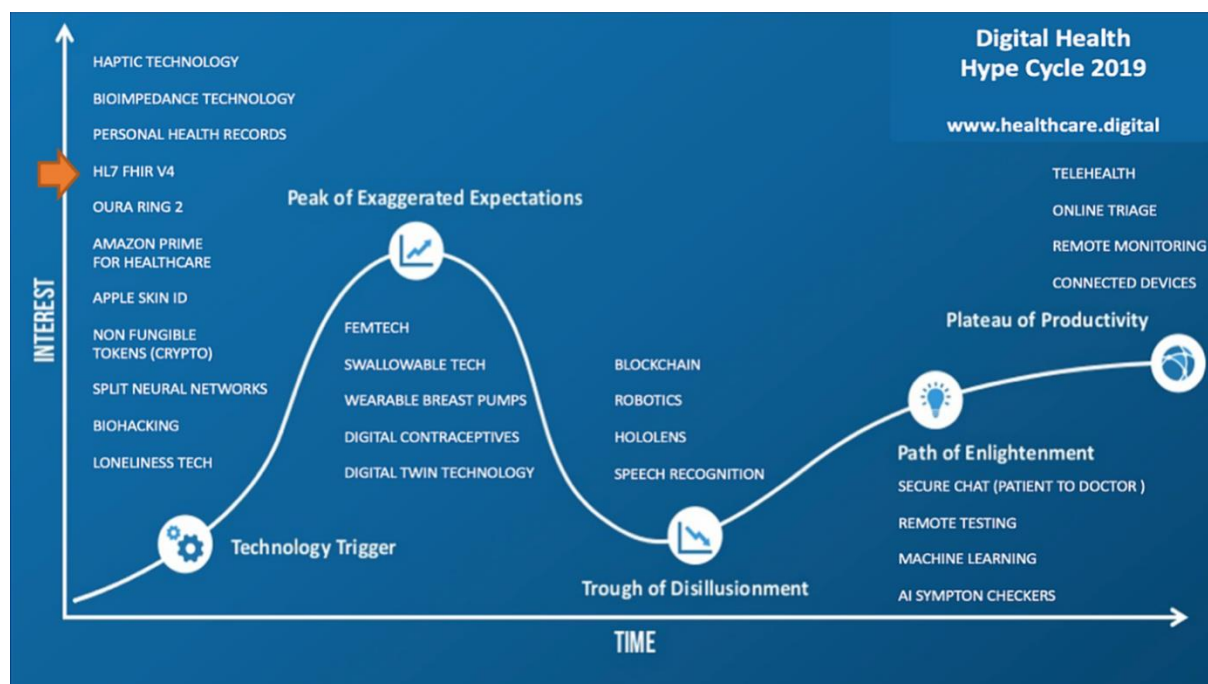
Adapted from Gartner [11]; in bold, technologies used by InteropEHRate

*Table 4 – Hype Cycle for Health Providers 2018*

Other trend-watching agencies conduct similar exercises close to the domain of eHealth and digital health. In the last three years, Lloyd Price, editor of Healthcare Digital, has published the Digital Health Hype Cycle covering cutting edge, emerging, developing and mature technologies from the digital health world. The



last update positions some relevant InteropEHRate technologies on the rise, as they are depicted in the following figure.



Source: Healthcare Digital 2019 [12]

Figure 4 – Digital health hype cycle 2019

## 2.7.Values of the project

The value proposition of InteropEHRate is intended to a diversity of stakeholders. Communication and dissemination activities are underpinned by these values to convey key messages to this diverse audience. The following table exhibits the list of values of InteropEHRate.

Values	Value proposition
Citizen and patient empowerment	Empower citizens by making their personal health history fully available to them, allowing them to become the hub of cross-border health record exchange.
Data sharing	Make health data exchange as simple and secure as contactless payments, reducing the risk of data interception.
Health research	Allow researchers to receive health data and data usage consent directly from the citizen, avoiding the centralized intermediation of higher authorities.
Transparency and participation	Enable researchers to explain the reasons that they need the health data of the citizen, exploiting this transparency to better motivate the citizens to participate (in both future health research and validation activities of the project).

<b>Data donation</b>	Make it possible for the citizens to provide their personal health data to research just as simply and securely as donating money via SMS.
<b>Privacy</b>	Assure compliance with EU/national regulation (GDPR) and preserve the privacy of the citizen also within research initiatives.
<b>Data ownership</b>	In line with the GDPR, make the citizens the owners of their health data, fully protecting their privacy and giving them full control over access to their health data, even when this data is exchanged without their direct intervention.
<b>Cross border healthcare</b>	Allow healthcare professionals to exploit data from citizens and health care operators of different countries to assure continuity of care as the citizen moves from country to country.
<b>Interoperability</b>	Reduce the risk of misinterpretation of foreign health data thanks to the exploitation of the common FHIR profile used by translation services.
<b>Trust and accountability</b>	Take advantage of contexts where multiple peer nodes can collaborate to enhance the level of trustfulness and accountability.
<b>Federation of EHR</b>	Assure the survival and continuity of the EHR federation.

Table 5 – Values of InteropEHRate

### 3. DISSEMINATION ACTION PLAN AND ACHIEVEMENTS

#### 3.1. Branding

Branding definition and specifications are detailed in the Appendix 1 of this deliverable that is the result of merging the D9.1 Dissemination Strategy and Action Plan with D9.2 Project Branding, as they are both to be released in M6. Connected with identified InteropEHRate values, project branding develops InteropEHRate visual identity and applications in a set of communication materials and channels of dissemination. The latter includes InteropEHRate logo, the tagline and slogan, the presentation templates, the graphical charter for the web site and other digital and offline dissemination materials.

InteropEHRate visual identity was developed throughout an iterative process to materialise the values of citizen empowerment, citizen-mediated data sharing, bottom-up interoperability and cross-border health care.



*Figure 5 – Project branding: logo and tagline*

A set of graphic elements derive from this branding and will be consistently applied to other communication and dissemination materials to enhance an on-line presence that will contribute to enhance the visual identity of the project.

In the exploitation phase of InteropEHRate, branding will also be used to spread its results beyond the end of the project.

### 3.2. Website

Details on the website initial phase are provided in D9.10 Project Web Site released in M3. As a core application for the spread of InteropEHRate messages, the website will ensure the successful dissemination of project results and non-confidential information to the widest possible audience including all stakeholders and end-users identified in section 2.2 of this deliverable.

A web editorial committee will be created to manage the update of the website. Against the backdrop of the dissemination strategy stated in section 2, the creation of two sub-sections will be its first track, explaining:

- The functional aspects of the project and the related design decisions
- The technical aspects of the project and the related design decisions

Other sections will be created in upcoming months for reporting on pilot sites activities and making additional resources available to the wider audience.

The website will incorporate a plugin with social media that will contribute to increase the community of interest as well as attracting traffic to the website.

### 3.3. Printed materials

Flyers and posters will also be used to spread InteropEHRate activities and generate traffic to online channels. All materials will be in line with the dissemination strategy and will portrait the project branding.

Used in conferences and at every opportunity where the project meets with some of its target audience, the role of the printed materials will be complementary to other online communication channels.

Two deliverables will provide and apply visually the InteropEHRate progress:

- **D9.3: Project Flyer - V1 [M9]:** Project Flyers to disseminate the project results. There will be two generations of paper-based material. The first one will aim to present the project and its ambition, whereas the second one will be delivered in D9.9 Project Flyer – V2.

- **D9.9: Project Flyer - V2** [M24] Project Flyers to disseminate the project results. Paper-based material. This refers to the second release of the paper-based material, which will present testimonials from those who have used the outcome of the project.

### 3.4. Social networks

While the website is communicating in “pull mode”, social media will be used to “push” traffic on the website and spread the messages and results of InteropEHRate to a wider target audience.

A project Twitter account has been created and branded properly with the handle @InteropEHRate. EHTEL is in charge of managing the account and all the consortium partners are invited to tweet and retweet on InteropEHRate related issues, including mentions to InteropEHRate handle and related hashtags. This will also enable InteropEHRate account to retweet and comment amplifying the messages about project-related topics.



Figure 6 – InteropEHRate twitter account banner

Attention will be paid to align the consortium practice to social media guidelines for EU-funded Research and Innovation projects with the development of a guide to increase viral impact.

	Objective
Twitter	Twitter is used as an alert mechanism for followers on any new important content being published on the website in order to announce relevant events related to the project.
LinkedIn	As a means to further interact beyond the twitter limitations with followers, LinkedIn will be complementary activated.
News	News about the project's progress and milestones will be produced and published through the project website ( <a href="http://www.interopehrate.eu">www.interopehrate.eu</a> ). This news will be syndicated through external newsletters such as those from project partners or health providers involved in the pilots.

Table 6 – Online dissemination channels and objectives

### 3.5. Publications and scientific dissemination

The project will produce scientific knowledge in several scientific domains which are suitable for dissemination within the research community dealing with incremental and semantic interoperability, citizen empowerment, health information systems, health data economy, cross border health data exchange and EHR formats. Furthermore, it will generate a wealth of material relevant to the research community dealing with varied health research interests.

According to the Grant Agreement objective O11, all peer-reviewed journal articles produced by the project will be published in open access journals. In consequence, a list of Open Access journals for health research and innovation has been identified as potential publication outlets for InteropEHRate scientific knowledge production based on Thomson Index ranking (Table 7). Furthermore, a budget for publication fees has been foreseen.

Title	Ranking	Publication
Journal of the American Medical Informatics Association	3.698	online + print
International Journal of Medical Informatics	3.210	online + print
Health Services Research	3.089	online + print
Medical Care	2.897	online + print
International Journal of Integrated Care	2.230	online
Journal of Clinical Monitoring and Computing	2.178	online + print
Telemedicine and e-Health	2.031	online + print
Journal of Telemedicine and Telecare	2.008	online + print
Methods of Information in Medicine / Methods Open	1.772	online
ACI - Applied Clinical Informatics	1.496	online
Healthcare Management Science	1.419	online + print
Journal of Healthcare Engineering	0.965	online + print
International Journal of Technology Assessment in Health Care	0.912	online + print
International Journal of Care Coordination	0.354 (SJR)	online + print
Journal of Healthcare Informatics Research	just since 2017	online + print
International Journal of Care and Caring	just since 2017	online
Journal of the International Society for Telemedicine and eHealth	no data	online
International Journal of Healthcare Technology and Management	no data	online
International Journal of Telemedicine and Applications	no data	online + print
Healthcare Technology Letters	no data	online

Table 7 – Open access journals

A scientific committee will be formed *ad hoc* to identify the subjects of scientific dissemination and streamline the organization of the publication process.

Posters will also be prepared to be presented in information and communication technology, and medical conferences.

### 3.6. Networking and participation at dissemination events

All InteropEHRate dissemination activities take advantage of the networks of all the partners in the consortium. As an impact multiplier, the activity of these networks enables InteropEHRate dissemination and communication activities to reach out specific and wider audiences. This is particularly relevant for the activities addressed to policy-oriented and exploitation targets. The pan-European multi-stakeholder networks of EHTEL and EFN together with the respective communication activities of all the partners play a strong role in targeted dissemination. Networked collaboration with other EU projects and initiatives described in section 2.5 will also contribute significantly to achieve the dissemination and communication goals.

Participation at dissemination events will serve to spread the key messages of InteropEHRate and to report on technical and scientific progress. Medical conferences and congresses as well as ICT-based innovation conferences will of course be a key channel for dissemination. An initial list of recurring events potentially useful for InteropEHRate dissemination has been prepared and is displayed in Table 8.

Event date	Event name	Location	Audience
February (annual)	<a href="#">Innovation for Health</a>	Rotterdam (Netherlands) in 2019	Dutch innovators ecosystem
April-May (annual)	<a href="#">conhIT</a>	Berlin (Germany)	Digital health ecosystem
June (annual)	<a href="#">European Neuro-Convention</a>	London (UK)	Neurologists
June (annual)	<a href="#">WoHIT</a>	Helsinki (Finland) in 2019	Hospitals chief information officers, HIMSS network
June (annual)	<a href="#">IoT Week</a>	Aarhus (Denmark) in 2019	IoT ecosystem
June (annual)	<a href="#">EHMA Conference</a>	Dipoli (Finland) in 2019	Hospital managers and research
June (annual)	<a href="#">Digital Assembly 2019</a>	Bucharest (Romania) in 2019	ICT Innovation ecosystem
September (annual)	<a href="#">AAL Forum</a>	Aarhus (Denmark) in 2019	AAL ecosystem
October (annual)	<a href="#">WHINN</a>	Odense (Denmark)	Innovators in healthcare

Event date	Event name	Location	Audience
November-December (annual)	<a href="#">EHTEL Symposium</a>	Brussels (Belgium)	Multi-stakeholder digital health ecosystem
November-December (annual)	<a href="#">ICT 2018 Conference</a>	Vienna (Austria) in 2018	ICT Innovation ecosystem

Table 8 – List of recurring events

Other conferences on ICT innovation in healthcare to target could be, subject to further investigations:

- Annual International Conference of the IEEE Engineering in Medicine and Biology Society
- AIME (Artificial Intelligence in Medicine) Conference
- IEEE International Conference on Healthcare Informatics (IEEE ICHI)
- IEEE Conference on Computer Based Medical System (IEEE CBMS)
- AIS Conference: International Conference on Information Systems
- European Conference on Information Systems
- BIOSTEC: Health Inf
- ICE/IEEE International Conference on Engineering, Technology and Innovation
- CPDP2020 Data Protection and Artificial Intelligence
- ACM Conference on Fairness, Accountability, and Transparency (ACM FAT\*) Barcelona from January 27th to January 30th, 2020.

All these events have a European or an international dimension. Relevant events at national and regional level will also be monitored to identify and catch dissemination opportunities for InteropEHRate.

### 3.7. Mid-term workshop and final conference

Two key dissemination public events will be organized by InteropEHRate:

- A mid-term public workshop will take place before June 2020 to present the lessons learned and interim results of the project achieved during the first 18 months. It will target a technical, scientific and health system audience of at least 50 delegates.
- InteropEHRate final conference will take place before May 2022 to present the lessons learned and final results of the project. A wider audience including technical, scientific, health system and exploitation-related profiles will be targeted to reach at least 100 participants.

### 3.8. Impact of INTEROPEHRATE dissemination activities: Key Performance Indicators

To monitor the implementation of dissemination and communication activities, a set of key performance indicators (KPI) were proposed and agreed in the Grant Agreement. An annual review and report will be generated to evaluate progress and adapt dissemination and communication tactics through the different channels to reach these goals. The following table displays KPIs grouped by communication channels and express cumulative targets at annual base from 2019 to 2022.

KPI	2019	2020	2021	2022
<b>Website</b>				
# of unique visits to the website	250	500	750	1000
# of news and events published in the website	5	10	20	30
# of resources published in the website	0	10	20	30
<b>Social media</b>				
# of followers on twitter (cumulative)	50	100	150	200
# of tweets using InteropEHRate-related hashtags	50	100	200	300
<b>Publications</b>				
# of press releases for each pilot site	-	2	4	6
# of publications on technical matters published in magazines and blogs	-	1	3	5
# of publications on non-technical matters published in magazines and blogs	-	1	3	5
<b>Events</b>				
# of exhibition workshops in national or European fair	-	1	2	3
# of webinars (cumulative)	1	2	4	5
# of project presentations in national or European conferences	2	5	8	10
# of local events (cumulative)		1	2	3
# of Stakeholder engagement workshops (cumulative)	-	2	4	6
# of participants registered in the mailing list (cumulative)	20	40	80	100
# of participants to the mid-term workshop	-	-	50	-
# of participants to the final conference	-	-	-	100
<b>Synergies</b>				
# of synergetic dissemination activities	0	2	3	4

Table 9 – Dissemination and communication key performance indicators



## 4. CONCLUSIONS AND NEXT STEPS

InteropEHRate dissemination strategy has set forth technical, scientific, health system and exploitation-related objectives that will lead communication activities to reach the identified map of stakeholders. Citizen and patient empowerment, data sharing, health research, transparency and participation, data donation, privacy, data ownership, cross border healthcare, interoperability, trust and accountability and federation of EHR are identified values that will underpin communication activities and the exploitation of synergies with other projects and EC initiatives.

Communicating progress and results of InteropEHRate is a responsibility for all members of the consortium. As leader of the WP on Communication, Dissemination and Collaboration, EHTEL will stimulate and coordinate the editorial committee for updating the website, the dissemination through social networks, the planning and coordination of InteropEHRate publications and participation in events, the organization of the mid-term workshop and the final conference, and the reporting on dissemination activities.

Accelerating communications through all activated communication channels and producing dissemination materials like the Project Flyer are the immediate next steps during the “awareness” phase until December 2019.

This will precede the organization of the mid-term workshop in June 2020 and the dissemination activities during 2020, including networking and participation in events, webinars, workshops and scientific publications. Engaging with target groups of health professionals, providers, institutions, clinical researchers, health ICT providers, privacy and security providers and health standardization bodies will lead the activities of the “understanding phase”.

Finally, in the last project phase dedicated to “action” stakeholder engagement will be prioritized from 2021 to maximize impact to health system and exploitation-related stakeholders, targeting citizens, health ecosystems, SME and start-ups and health authorities.

## REFERENCES

Footnotes will be incorporated in this section at the later stage of preparation of this deliverable.

- [1] [EC 2011] European Commission. Directive 2011/24/EU on patients' rights in cross-border healthcare. Web site: [https://ec.europa.eu/health/cross\\_border\\_care/overview\\_en](https://ec.europa.eu/health/cross_border_care/overview_en)
- [2] [EC 2019] European Commission. Digital Single Market. Recommendation on a European Electronic Health Record exchange format. Web site: <https://ec.europa.eu/digital-single-market/en/news/recommendation-european-electronic-health-record-exchange-format>
- [3] [eHealth Action] eHealth Action. Joint Action supporting the eHealth network. Web site: <http://ehaction.eu/>
- [4] [EU mHealth Hub] EU mHealth Hub Project. Web site: [https://www.itu.int/en/ITU-D/ICT-Applications/eHEALTH/Be\\_healthy/Pages/The-EU-mHealth-Hub-Project.aspx](https://www.itu.int/en/ITU-D/ICT-Applications/eHEALTH/Be_healthy/Pages/The-EU-mHealth-Hub-Project.aspx)
- [5] [Smart4Health] Smart4Health. Web site: <https://www.smart4health.eu>
- [6] [DigitalHealthEurope] DigitalHealthEurope – Multi-stakeholder Community 1. Web site: <https://digitalhealtheurope.eu/collaboration-platforms/citizen-access-cp-1.html>
- [7] [DigitalHealthEurope] DigitalHealthEurope – Multi-stakeholder Community 3. Web site: <https://digitalhealtheurope.eu/collaboration-platforms/citizen-empowerment-mc-3.html>
- [8] [Sitra] Sitra. IHAN – proof of concept pilots. Web site: <https://www.sitra.fi/en/projects/ihan-proof-concept-pilots/>
- [9] [EHTEL] EHTEL. ELO-Network. Web site: <https://www.ehtel.eu/activities/wg-tasks-forces/elo-network.html>
- [10] [Gartner] Gartner. Hype Cycle. Web site: <https://www.gartner.com/en/research/methodologies/gartner-hype-cycle>
- [11] [Gartner 2018] Gartner. Hype Cycle for Healthcare Providers, 2018. Web site: <https://www.gartner.com/en/documents/3882882-hype-cycle-for-healthcare-providers-2018>
- [12] [Healthcare Digital] Healthcare Digital. The Digital Health Hype Cycle 2019. Web site: <https://www.healthcare.digital/single-post/2019/01/12/The-Digital-Health-Hype-Cycle-2019>

## Appendix 1. D9.2 Project Branding

This appendix covers the following contents related to the project branding and visual identity:

1. Introduction
2. Logo and tagline
3. Logo in grayscale
4. Primary colours
5. Typography
6. Web design
7. Social networks
8. Word template
9. PowerPoint template
10. Other applications

### **1. Introduction**

This Visual Identity Guide has been designed to ensure that throughout the 42 months of operation of the InteropEHRate project the members of the project consortium can prepare their communication materials in a coherent way. This manual includes the usage rules of the communication elements aimed at promoting the InteropEHRate project and acknowledgement of the EU funding. These visual identity guidelines are in line with the obligations of beneficiaries regarding information and communication and dissemination measures included in the Grant Agreement Nr. 826106.

The dissemination strategy will be focused on maximizing communication, exploitation as well as scientific publications. Thus, all graphic material shall be fit to appear in these potentially different contexts.

### **2. Logo and tagline**

The symbol in the project logo reflect the multitude of health data connections and interactions and how a common goal and impact of the InteropEHRate project results can be spread and multiplied in Europe. The vertical bar in the pictogram is intended to reflect the data coming in and out of a smartphone, whilst it also represents the citizen empowered with their own health data.

The name of the project introduces the concept of EHR in interoperability to be combined with the smartphone, the individual and the data flow. At the centre of the logo, the vertical yellow bar represents

the technology empowered individual that access information through mobile applications and shares health data represented by different coloured dots.



Tagline:

EHR in people's hands across Europe

Pictogram:



Full composition:



### 3. Logo in grayscale

The greyscale symbol version is used when we want to reach a watermark effect. This is used partly on printed materials and on internal documents. It is always used on white background.



#### 4. Primary colours

The colours were chosen to create a comprehensive system with colours that match each other and reflect the multitude of users and health data connections and interactions.



##### CMYK

	59 % C + 52 % M + 0 % Y + 0 % B
	75 % C + 25 % M + 0 % Y + 0 % B
	46 % C + 0 % M + 15 % Y + 0 % B
	23 % C + 0 % M + 7,5 % Y + 0 % B
	0 % C + 34 % M + 100 % Y + 0 % B
	0 % C + 56 % M + 84 % Y + 0 % B
	0 % C + 100 % M + 0 % Y + 0 % B
	0 % C + 0 % M + 100 % Y + 0 % B
	27 % C + 0 % M + 100 % Y + 0 % B
	0 % C + 0 % M + 0 % Y + 100 % B

##### RVB

	122 % R + 125 % V + 182 % B #7A7CB6
	38 % R + 153 % V + 209 % B #2698D0
	148 % R + 210 % V + 217 % B #93D1D9
	207 % R + 233 % V + 236 % B #CEE9EC
	249 % R + 179 % V + 0 % B #F8B300
	240 % R + 137 % V + 53 % B #EF8935
	226 % R + 0 % V + 122 % B #7E20079
	255 % R + 237 % V + 0 % B #FFEC00
	208 % R + 213 % V + 0 % B #CFD400
	26 % R + 23 % V + 27 % B #1A171B



##### B & W

	70 % B
	55 % B
	40 % B
	20 % B
	50 % B
	65 % B
	80 % B
	40 % B
	50 % B
	100 % B

##### RVB

	112 % R + 113 % V + 115 % B #6F7072
	146 % R + 147 % V + 149 % B #919294
	177 % R + 179 % V + 180 % B #B1B2B4
	217 % R + 218 % V + 219 % B #D9DADB
	156 % R + 158 % V + 159 % B #9C9D9F
	123 % R + 124 % V + 126 % B #7B7C7E
	88 % R + 88 % V + 90 % B #57585A
	177 % R + 179 % V + 180 % B #B1B2B4
	156 % R + 158 % V + 159 % B #9C9D9F
	26 % R + 23 % V + 27 % B #1A171B

## 5. Typography

For the project logo InteropEHRate, the typeface Neo Sans was chosen.

Arial Narrow is the typography used for PowerPoint and Calibri in deliverables as alternative and commonly used fonts. Arial Narrow has been preferred to other classical fonts because it is less often used and it is nicely compatible with the original font of the logo.

The typography of the logo will therefore only be used for the logo and possibly for titles of printed materials.

## 6. Web design

The project website will include:

- Information fields with data from the project documentation, i.e. project summary, partnerships, etc.
- Dynamic information: news and events, project results, etc.

More details on the website are available in D9.10 Project Branding and on-line at [www.interopehrate.eu](http://www.interopehrate.eu).

Website banner:



The banner intends to complement the logo by making the reference to the smartphone clearer, and also adding the European dimension as well as the network one.

## 7. Social networks

Twitter:



LinkedIn:



Facebook:





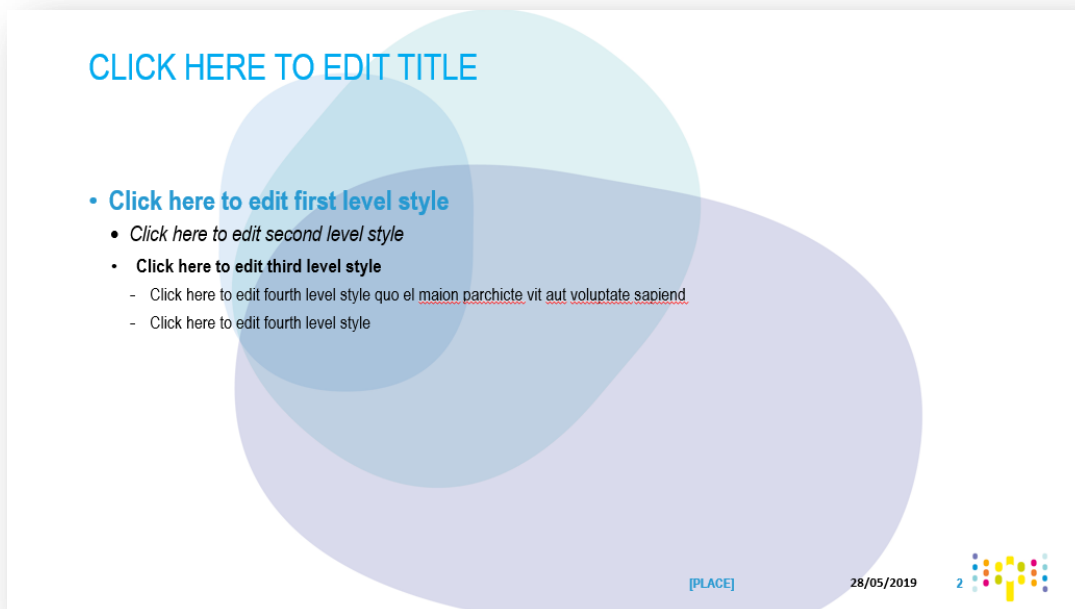


## 9. PowerPoint templates

Cover:



Content slide:



Other content slides:



Back cover:



### **Other applications**

Project flyers will be produced in deliverables D9.3 and D9.9 and will be released respectively in September 2019 and December 2020.

Flyers will be used as printed material for offline channels, particularly to enhance InteropEHRate presence in dissemination activities like conferences, symposiums and fair meetings. They will be used to through digital channels as infographics.