

**D01 – Inception Report**  
**DIGITAL SKILLS TO INCREASE QUALITY AND**  
**RESILIENCE OF THE HEALTH SYSTEM IN ITALY**  
**REFORM/SC2022/047**

December 2022

## Table of Contents

1	Introduction.....	2
1.1	Purpose of the document .....	2
1.2	Structure of the document .....	2
2	Context .....	3
3	Objectives and scope of the project.....	5
4	Stakeholders' management .....	6
4.1	Elicitation of the project's stakeholders .....	6
4.2	Stakeholders' roles and engagement strategy.....	7
4.3	Stakeholder's map .....	12
5	Project ambitions.....	13
5.1	Stakeholders' engagement over the Digital Upskilling Lifecycle model.....	17
6	Project approach and workplan .....	18
6.1	Project approach overview .....	18
6.2	Project work plan overview .....	20
6.3	Project approach in details.....	24
6.3.1	Phase 1 - Inception .....	24
6.3.2	Phase 2 - Situation Analysis.....	25
6.3.3	Phase 3 - Guidelines for EHR 2.0 specific upskilling .....	28
6.3.4	Phase 4 - Strategy design .....	30
6.3.5	Phase 5 - Roadmap for the implementation of EHR 2.0 .....	33
6.3.6	Phase 6 - Action Plan .....	35
6.4	Project organisation.....	36
7	Risks and mitigation actions .....	38

# 1 Introduction

This chapter describes the main purpose and the structure of the document.

## 1.1 Purpose of the document

---

This document constitutes the Inception Report (the “report”) of the project “Digital skills to increase quality and resilience of the health system in Italy” (the “project”) under the Structural Reform Support Programme (“SRSP Regulation”) of the Directorate-General for Structural Reform Support (DG REFORM) of the European Commission (EC). The project aims to “assist national authorities in improving their capacity to design, develop and implement reforms and improving their capacity to prepare, amend, implement and revise recovery and resilience plans pursuant to Regulation (EU) 2021/241”, in line with Article 4 of the TSI Regulation.

This report contains Deloitte’s detailed understanding of the assignment’s objectives, a consolidated project approach, work plan and the refined stakeholder map, as a result of the meetings and insights held with the project stakeholders during the Inception Phase. It also includes an overview of digital skills in the health sector and related ongoing projects.

The content of this report has been shared and agreed amongst Deloitte and DG REFORM stakeholders during Phase 1 – Inception.

## 1.2 Structure of the document

---

The present document is structured in 9 chapters, as described below:

- **Chapter 1 – Introduction:** the present chapter, including purpose and structure of the entire report;
- **Chapter 2 – Context:** provides a high-level view of the Italian context related to digital competencies of healthcare professionals and the EHR’s reboot national program;
- **Chapter 3 – Objectives and scope of the project:** describes the general and specific objectives of the project and elaborates its scope;
- **Chapter 4 – Stakeholder management:** provide the list of stakeholders that will be engaged during the initiative;
- **Chapter 5 – Project’s ambitions:** describes how the identified framework of the project can support the upskilling process of the health workforce and how it can be used for the project’s deliverables;
- **Chapter 6 – Project approach and work plan:** identifies the project approach and methodology for each Phase and related foreseen tasks and introduces the updated planning for the assignment;
- **Chapter 7 – Risk and mitigation actions:** details the potential risks that could affect the initiative and related mitigation actions put in place to reduce their occurrence and impact.

## 2 Context

This chapter describes the national context on EHR and healthcare digital skills in which the project works.

**Digital Health is expected to transform healthcare globally as well as the e-health in past decades.** However, many of the digital health's promises are still the same of the e-health era. Despite technologies such as Telemedicine, EMR and EHR solutions, Health Data Exchange platforms and related standards have been on stage since the last century. A complete digital transformation of the healthcare sector is indeed yet to come, both in Italy and across the EU. The EMRAM (Electronic Medical Record Adoption Model)<sup>1</sup> score, which represents the most reliable index for evaluating the digitalization of hospitals, shows that only 13 hospitals across the EU have achieved stage 6 or 7.

Is **Digital Health** something different, or is it a sort of **e-health de ja vu**? Are we facing a new digital revolution, or is more a re-branding of old concepts?

There's no doubt that convergence between e-health native technologies and emerging digital health technologies and infrastructures such as Artificial Intelligence, Cloud Computing, Datafication, API economy, 3D and 5G have the potential for attempting to reshape healthcare.

At the same time, it must be considered that elevating the relationships through information technology and healthcare professionals is crucial to let digital health go mainstream. Otherwise, the risk is that the issues that have held back the adoption of e-health could affect Digital Health in the same way.

Tons of literature, studies, and research were dedicated to explaining why it seems so difficult to establish a positive balance between delivering healthcare and doing it digitally and paperless. As a matter of fact, doctors, and nurses, in Italy and across the world, frequently complain about information technology. Some of the typical healthcare professionals EHR and EMR's reported pain point are related to i) the number of clicks they have to do, and the amount of data entry required by the systems; ii) too many automatic alerts to look at and risks of mistake; iii) the poor usability of many clinical software, developed by people without proper knowledge of clinical operations; iv) lack of interoperability between different clinical applications.

While it is certainly true that a bad user experience could lead to a sort of "digital burn out" within the health workers, a lack of change management, training and continuous "digital posture" development in the workforce may compromise the adoption of even the best EMR/EHR available.

The awareness about how critical the Italian healthcare workforce's digital literacy is to realize the promises of digital health is the basis of the Digital Upskilling program within the Mission 6 of the National Recovery and Resilience Plan (PNRR). Nowadays statistics referred to the healthcare sector show that only 53% of clinicians claim to use online appointment booking and that just 31% of lab reports are digitalised and available in EHRs. Moreover, training in the use of digital technologies is seen by Italian clinicians as the main obstacle for implementation<sup>2</sup>. The PNRR allocate more than €1.3 billion aimed at rebooting and increasing the usage of the current EHRs (Mission 6C2 - investment 1.3.1). The Act "Decreto Riparto Fondi"<sup>3</sup> (Assegnazione di risorse territorializzabili riconducibili alla linea di attività M6C2 1.3.1(b)) establishes the allocation of over 600 million euros for the renewal, adoption, and usage of the EHRs by the Regions and the autonomous Provinces. About 50% of these

---

<sup>1</sup> <https://www.himss.org/what-we-do-solutions/digital-health-transformation/maturity-models/electronic-medical-record-adoption-model-emram>

<sup>2</sup> Deloitte's report "Digital transformation - Shaping the future of European healthcare"

<sup>3</sup> Gazzetta Ufficiale della Repubblica Italiana Anno 163° - Numero 232, October 2022

funds (311 million euros) is addressed to increase the digital skills of the healthcare workers (clinical and not clinical) and realize communication campaigns to underline and reinforce the relevance that the usage of EHR by the healthcare workforce as well as by the citizens could have, to provide better care and elevate patient experience across the country.

For over ten years, the EHR has been indeed one of the most discussed topics in the context of the digital journey of Italian healthcare system. Before the pandemic, most Regions and the autonomous Provinces had already built their own EHRs, but Covid 19 revealed some limits of the current EHRs and increased the awareness about the relevance of having a national digital health infrastructure able to support the health data exchange between regions through their harmonization and structuration led by the full adoption of standards and formats such as HL7/FHIR, IHE profiles, LOINC, SNOMED. To overcome these past criticalities, the project for the reboot of the current EHRs mentioned before is already started, under the name of “EHR 2.0”, with the aim of switching the current EHRs infrastructure from a repository of clinical documents to a repository of structured clinical data. These new usage scenarios will be concretized at national level with the feeding of the EHD (Ecosystem of Health Data) through the individual regional dossiers.

### The Italian “EHR 2.0” strategic action lines



The lines of action defined within the FSE 2.0 Guidelines - elaborated by the Department for the Digital Transition (also called “DTD”) are a support for the Regions and the Autonomous Provinces in the implementation of the technological adaptation plans shared with the central government in October 2022. These lines are divided into 4 areas of application defined as follows: **Services**, **Content**, **Architecture** and **Governance**. Each of these lines explores topics and defines implementation standards that will have to be taken into consideration by all regional information systems and that will need to be **appropriately transferred to the target users involved in the construction and adoption of the EHR**. In summary, the objectives to be pursued in terms of **services** concern are simplifying and standardizing the access and use of NHS services for citizens and operators, integrating and sharing clinical data between professionals across healthcare facilities, supporting the personalization of care and creating monitoring systems and data analysis to support national and regional levels of government. The **content** concerns the data to be included in the EHR and primarily the administrative and clinical data inside the clinical documentation produced by the healthcare facilities (reports and images), appropriately coded and structured according to the reference standards identified. The **architecture** of the EHR concerns the adoption of a model on the national and central level capable of guaranteeing the same services throughout the territory, favouring the standardization of processes and interoperability. Lastly, **governance** has the objective of promoting and guaranteeing levels of adoption that can be reached by all healthcare entities, providing guidance tools on the one hand, and monitoring and control tools on the other.

In this context, the digital upskilling programs and communication campaigns funded by the PNRR must accompany each Region and the autonomous Province in the effort of leveraging and explaining the strength points of the EHR 2.0 project both to healthcare workers and citizens. The outcome expected by the central government funding these initiatives is not a simple increase in digital skills but a tangible impact on the adoption and usage of digital health platforms by health workers and citizens, starting from the EHR 2.0. The box below highlights some of the key traits of Italian healthcare workforce, provides an immediate snapshot of the final target of the project and arises some aspects to consider carefully as the ageing and digital skills of the health workers.

### Italian healthcare workforce in a nutshell



The Italian healthcare sector employs more than **1,200,000 healthcare professionals** working in public and private facilities. The total amount of staff employed by the Italian NHS is over 617,000, with 72.3% belonging to healthcare roles, including 103,092 doctors and 264,686

nurses (data source: Ministry of Health - 2020). The **average age of Italian NHS doctors is around 52 years**, with 56.4% of doctors older than 55 years, above the European average percentage of 30.1% (data source: World Health Organization - 2020). On the territory there are 41,707 general practitioners and 7,285 paediatricians (data source: ISTAT - 2020), and a significant share of these will retire in the upcoming years without an adequate turnover. The DESI 2022 ranked **Italy third to last in basic and advanced digital skills**, with only around 23% of individuals with digital skills above the basic level (data source: Digital Economy and Society Index Report, Human Capital - 2022). The healthcare sector also shows this skills shortage, with **only 4% of healthcare workers with sufficient level of digital skills** (data source: Polytechnic of Milan, Digital Innovation Observatory on Healthcare - 2021-2022).

Every Region and autonomous Province has already prepared its own **Regional operational plan** (also called “PCF”), to be compliant with reference on EHR 2.0 legislation. PCFs were prepared with the support of the national Department for Digital Transition who provides a common template and related instructions. **PCFs contain the digital upskilling programs**, and more specifically: a) the general training plan on EHR 2.0 topics b) more detailed ones linked to the launch of the application updates foreseen in response to the EHR 2.0 technical indications. Furthermore, the PCF’s template includes even the communication plan. These plans should be based on the already defined national EHR communication strategy, the Regions and the autonomous Provinces have identified and planned the communication initiatives they intend to carry out both towards healthcare professionals and citizens, align to the expected EHR’s service release.

However, once the regional plans have been analysed, the intention of the Ministry of Health and the Department for Digital Transition through this project is **to provide guidelines, methods, tools, and resources to the Regions and the autonomous Provinces** to effectively manage, integrate and refine the upskilling and communication processes to support the achievement of the target stated in their plans.

In this context, the **main ambition** of this project is to **help central government and Regions and the autonomous Provinces to look at the Digital Health Upskilling not as a single episode enabled by the PNRR funds but, at the opposite, to leverage this opportunity to make Digital Health Literacy one of the permanent priorities of Italian NHS**. Furthermore, digital health is subjected to a continuing evolution, consistently with new technologies, that will enable exponential changes in the clinical service delivery and operations provided by healthcare workforce.

### 3 Objectives and scope of the project

This chapter describes the general and specific objectives of the project and elaborates its scope.

The overall objective of this project is to contribute to support structural reforms in Italy, in line with Article 3 of the TSI Regulation. Within this frame, the project will provide to the Italian NHS involved stakeholders all the guidelines, methods, processes, tools, and resources **aimed at improving the effectiveness of digital upskilling programs** of the healthcare workforce throughout all the phases that should be performed at central and regional level (or both) by different stakeholders to initiate, plan, execute, launch and monitor digital upskilling initiatives on a large scale.

At the end of the Inception Phase, the tailored goals of this project that arise according with the results of the preliminary conversation undertaken with DG REFORM, Ministry of Health, Department for Digital Transition, ProMIS, and AGENAS are:

- **support the digital upskilling programs** addressed to the health workers by the Regions and the autonomous Provinces through the design of an integrated approach to collect and update the priority digital skills to reinforce;
- **provide guidelines and resources** to the Regions and the autonomous Provinces aimed at supporting the execution of upskilling programs at local level;
- **define a set of KPI and all the related processes** (collection, analysis, reporting) required to monitor the results of upskilling programs both in terms of output (coverage, hours, etc.) and outcome (more or better usage of digital platforms);
- **increase EHR adoption and usage** through the design of appropriate initiatives for EHR upskilling;
- **support the definition of a national EHR communication strategy**.

Based on the above consideration, the main deliverable who define and framing the project's scope are:

- **definition of EHR 2.0 Guidelines** aimed at leading Regions and the autonomous Provinces in the implementation of operational plans for communication and upskilling;
- **definition of a strategy for improving the digital skills** of health workers and establishing an **action plan** for its deployment, including the implementation of pilot projects in some regions to validate the approach.

## 4 Stakeholders' management

This chapter describes the stakeholders of the project identified at this initial stage, highlighting their role and level of involvement.

### 4.1 Elicitation of the project's stakeholders

---

The **digital upskilling** has a lot of point of contacts and connections with **central and local government authorities** in charge of healthcare education, because of the relevance that training and continuous updating have always held in the healthcare professions. Healthcare professionals have indeed a deontological obligation to put new knowledge and skills into practice to offer qualitatively useful assistance. Since 2008, AGENAS has the responsibility to manage the **CME (Continuing Medical Education)**. In the Italian NHS, CME is the process through which the health professional keeps himself updated to respond to the needs of patients, the needs of the Health Service, the evolution of service delivery and his own professional development. Furthermore, each Region and autonomous Province has its own CME office, as well as many public & private healthcare providers has an office/department that operates as a teaching centre at operational level even through the provisioning and/or delivering of CME qualified training.

**Align digital upskilling programs with the network of CME regulatory authorities and providers is crucial for the success of this project.** Digital upskilling program should be consistent to the digital transformation strategy overall. That's the reason why DTD and ProMIS (MATTONI International Health Program), which are the authorities that are supporting and coordinating the digital transformation of the Italian NHS at Central and Regional level, must be involved with Ministry of Health, AGENAS and Regions and autonomous Provinces (with related network of providers, in-house etc.) in this project at a strategic and operational level.

Moreover, it needs to be considered that the 1,200,000 healthcare professionals that operate in public and private healthcare are grouped in 30 official categories and 9 professional boards. The boards

promote the autonomy of the health professions, the quality of services, the ethical principles of the professional exercise indicated in the deontological codes, to guarantee people's health. Boards have interest in participating or being consulted to define how digital will change the future of their work. The boards should be even a catalyst for digital upskilling programs because of the roles they play in the CME processes and personal CME Dossier.

In addition to the primary stakeholders mentioned above, there are many others subject to involve or keep updated with reference to digital upskilling because of many different interests (project sponsorship, financial reporting, and funding, etc.).

As such, one of the first project activities performed in collaboration with DG Reform, Ministry of Health, Department for Digital Transition, AGENAS and ProMIS were some meetings dedicated to proper stakeholder elicitation and related clustering to define how each group of stakeholders should be managed along the entire project lifecycle.

## 4.2 Stakeholders’ roles and engagement strategy

One of the most important tasks of the project is the stakeholder engagement: it provides an important opportunity to communicate the purpose of the project, generates creative solutions and results, while also identifying potential obstacles and how they can be avoided. Plus, stakeholder engagement can enable the chance to build trust, provide transparency, and create an opportunity for awareness, all of which can enhance the ability to succeed, and to start the change management process. Stakeholder engagement achieves these important purposes because it provides a place for incorporating the varied interests and knowledge. Besides, designing and implementing a significant stakeholder engagement effort is time consuming and requires decision sharing by the main working group. To segment stakeholders in homogenous clusters, there must be identified, at first, two different types of stakeholders:

- **stakeholders engaged by default** throughout the project, because part of the **TSI Working Group**, both for the Guidelines and the General Upskilling Strategy;
- **stakeholders to-be-engaged** in the execution of specific tasks consistently with the phases of the General Upskilling Strategy or in the definition of the Guidelines, in brief or in depth.

It should be considered instead, that for specific activities or models, stakeholders may be progressively identified and involved to allow the correct and more efficient performance of the tasks, a sort of involvement by competence harmonized with the phases of the project.

Table 1 shows the list of stakeholders of the project as resulted at end of stakeholder elicitation meetings. The table provides for each stakeholder a short profile.

Category	Name	Mission	Stakeholder Type
	<i>Alphabetic order</i>		
<b>EU institutions</b>	<b>DG REFORM</b>	The Directorate-General for Structural Reform Support (DG REFORM) helps EU countries to design and implement reforms as part of their efforts to support job creation and sustainable growth. DG REFORM coordinates and provides tailor-made technical support to EU Member States, in cooperation with the relevant Commission services. The support is primarily provided through the Technical Support Instrument (TSI). The goal is to support Member States’ efforts to design and implement resilience-	<i>TSI Working Group</i>



Category	Name	Mission	Stakeholder Type
	<i>Alphabetic order</i>		
		enhancing reforms, improving the quality of public services and getting back on the path of sustainable and inclusive growth.	
Central Government	<b>Ministry of Health</b>	<p>The Ministry of Health, based on the constitutional right to health, exercises the functions pertaining protection of human health and coordination of the whole national healthcare system, in order to guarantee to all citizens, the fairness of the system, quality, efficiency and transparency, highlighting inequities and promoting corrective and improvement actions, and also to trace the lines of innovation and change and deal with states of emergency that threaten public health. It is represented in this project by:</p> <ul style="list-style-type: none"> <li>• DGDSISS - The Directorate General for Digitisation, Health Information System and Statistics. Main goals of the DGDSISS are the guidance, planning, coordination, monitoring and promotion of digital administration principles, the definition of digitization guidelines, the implementation of the provisions of the Digital Administration Code, the strategic coordination of the ICT in healthcare, the evolution of the new health information system, the analysis of NHS data, support on national e-health and m-health strategies.</li> <li>• DGPROF - The General Directorate of Health Professions and Human Resources of the NHS. Main goals of the DGPROF are health professions' regulation, supervision on health professions' orders, liability of health professionals, organization of territorial health services and health professions and related litigation, promotion of telemedicine in collaboration with other General Directorates, relationship management between the NHS and universities, detection with Regions and autonomous Provinces of the NHS workforce needs and profiles, workforce organic permanent training and upskilling with medical-scientific companies and their federations.</li> </ul>	<i>TSI Working Group</i>
	<b>Department for Digital Transition</b>	<p>The Department for Digital Transition (DTD) is the support structure for the Italian government for the promotion and coordination of government actions aimed at defining a unified strategy for the digital transformation and modernization of Italy through digital technologies. It encourages the deployment of simple, inclusive and efficient digital services, dealing with innovation and new technologies. DTD promotes equality, ethics and justice, in a strategy of innovation and development focused on people. In addition to Digital Transition, it ensures control on the implementation and use of the digital technologies. This aims at ensuring the effectiveness, efficiency, definition of strategic guidelines on open government and the enhancement of public information assets, promotion of maximum accessibility to technologies cooperation with other authorities on cybersecurity, development and circulation of the skills needed to use digital technologies.</p>	<i>TSI Working Group</i>
	<b>Ministry of Economy and Finance</b>	<p>The Ministry of Economy and Finance (MEF) carries out the tasks and responsibilities of the State in the fields of economic policy, financial policy, budgeting, and tax policies. Additionally, it carries out all the activities related to the coordination of public spending and its oversight, planning of public investments,</p>	<i>To-be-engaged</i>

Category	Name	Mission	Stakeholder Type
	<i>Alphabetic order</i>		
		monitoring and oversight of public financial management, public debt management, and of State stockholdings.	
	<b>Ministry of Work and Social Policies</b>	The Ministry of Work and Social Policies designs, implements and coordinates labor policy and employment development interventions, job protection and the adequacy of the social security system, social policies, with particular reference to the prevention and reduction of conditions of need and hardship of individuals and families.	<i>To-be-engaged</i>
	<b>National commission for continuing education</b>	The Commission is chaired by the Minister of Health and is made up of four vice-presidents, one of whom is appointed by the Minister of Health, one by the Minister of Education, University and Research, one by the Standing Conference on the Relations between the State, the Regions and the autonomous Provinces, one represented by the President of the national federation of surgeons and dentists, as well as 25 members of the health professions' federations. It defines goals on training courses of national interest, with particular reference to the characterisation, diffusion and adoption of the guidelines and related diagnostic-therapeutic pathways.	<i>To-be-engaged</i>
	<b>National Centre for Rare Diseases</b>	The Centre operates in all phases of translational research, trains the NHS workforce, promotes the quality of diagnoses and treatments, provides information on services and regulations of interest, promotes the social inclusion of patients and their empowerment, and participates to the development of EU and international programs on rare diseases also by monitoring the rare diseases through the development and updating of registers.	<i>To-be-engaged</i>
<b>Central Agencies</b>	<b>ProMIS</b>	<p>The ProMIS (MATTONI International Health Program) was created on the "MATTONI SSN" international project to respond to the need of bringing, on one hand, the healthcare systems of Italian Regions and autonomous Provinces to Europe and, on the other, Europe to the Health Systems of the Italian Regions; it was developed under the direction of the Ministry of Health with the coordination of the Veneto Region, flanked by the Tuscany Region.</p> <p>The ProMIS supports and coordinates the digital transformation of Italian Regions and autonomous Provinces, facilitating the communications and the interaction with the identified regional point of contact.</p>	<i>TSI Working Group</i>
	<b>AGENAS</b>	The National Agency for Regional Health Services (AGENAS) is a non-economic public body. Its tasks are identified by the Standing Conference on the Relations between the State, the Regions and the Autonomous Provinces, and it also carries out the tasks laid down by the existing legislation. Its main goals are the monitoring of Health Spending, the National health outcomes Program, the Regional recovery and requalification plans, the support to the healthcare organizations' Management, the National Observatory on Best Practices in the Safety of Healthcare, the health care workforce training programmes, and the CME management (providing technical and administrative support to the National Continuing Education Commission -	<i>TSI Working Group</i>

Category	Name	Mission	Stakeholder Type
	<i>Alphabetic order</i>		
		CNFC). AGENAS also ensures the enhancement of the digitization of services and processes in healthcare.	
	<b>AgID</b>	<p>The Agency for Digital Italy (AgID) is the technical agency of the Presidency of the Council of Ministers. The main purpose of the Agency is to guarantee the achievement of the Italian digital agenda objectives and contribute to the diffusion of information and communication technologies, with the aim of fostering innovation and economic growth.</p> <p>AgID has the task of coordinating public administrations in the implementation of the Three-Year Plan for information technology in Public Administration. AgID also supports digital innovation and promotes the dissemination of digital skills, also in collaboration with international, national and local institutions and bodies.</p>	<i>To-be-engaged</i>
<b>Local Authorities</b>	<b>Regions and autonomous provinces</b>	Institutional local entities which manage the Regional Health System according to the National Health System, with structures and services that aim at guaranteeing to all citizens, under conditions of equality, universal access to the equitable provision of health services, in observance of the article 32 of the Italian Constitution. Regions and autonomous Provinces independently plan and manage healthcare in the area under their jurisdiction, also thanks to the Local Health Authorities (Asl) and hospitals.	<i>To-be-engaged</i>
	<b>Local Health Authorities and Public Hospitals</b>	Institutional local entities which manage local healthcare initiatives. The Local Health Authorities and public hospitals are autonomous bodies led by a general manager, a medical director and an administrative director, who are directly responsible for the proper functioning of the services and the operations.	<i>To-be-engaged</i>
	<b>Scientific Societies</b>	Scientific Societies' (e.g., AIO, AMD, SIC) mission is to go into detail to better understand diagnosis, treatment, and prevention of specific diseases or health sectors, to promote research, clinical care, education, and training, and to improve the lives of all people affected by diseases or conditions.	<i>To-be-engaged</i>
<b>Associations and Organisations</b>	<b>Hospital Associations</b>	Hospital care Associations (e.g., AIOP, FIASO), represent private hospitalization and treatment healthcare facilities (Scientific Institutes), highly specialized facilities such as cardiac surgery, neurosurgery and others, acute care facilities, rehabilitation facilities, post-acute long-term care facilities etc.	<i>To-be-engaged</i>
	<b>Territorial Associations</b>	Territorial and Outpatient care industry associations (e.g., CARD, SIMG), including facilities for non-self-sufficient elderly people, RSA, for functional recovery for handicaps, neuropsychiatric rehabilitation facilities and General Practitioners.	<i>To-be-engaged</i>
	<b>Citizens/Patients Associations</b>	Citizens/Patients Associations (e.g., Cittadinanza Attiva).	<i>To-be-engaged</i>

Category	Name	Mission	Stakeholder Type
	<i>Alphabetic order</i>		
	<b>COGEAPS</b>	“The Consortium for the Management and the Registry Health Professions”, born with the aim of guiding and coordinating the Federations of health Professional Orders, is a non-profit organization. Its main goals are the management of the National Registry of CME (Continuing Medical Education) training credits, the understanding of all the activities connected with the CME National Registry, the promotion of funding and technology for the registration, classification, and certification of CME credits.	<i>To-be-engaged</i>
	<b>Standardisation Associations</b>	Standardisation Associations (e.g., HL7): developing comprehensive framework and related standards for the exchange, integration, sharing, and retrieval of electronic health information that supports clinical practice and the management, delivery and evaluation of health services.	<i>To-be-engaged</i>
	<b>Federations of Professional Orders</b>	Federations of Professional Orders (e.g., FNOMCeO, FOFI, FNOPI). The Orders and the related national Federations are non-economic public bodies and act as subsidiary bodies of the State, to protect the public interests, guaranteed by the law, connected to the professional practice. They have patrimonial, financial, regulatory, and disciplinary autonomy and are subject to the supervision of the Ministry of Health. The territorial Orders are united in national Federations; their main tasks are guidance, coordination and administrative support to the Orders in carrying out their institutional tasks and functions.	<i>To-be-engaged</i>
	<b>In-House Companies / Assinter</b>	In-House Companies are public companies in the ICT sector controlled by Regions and autonomous Provinces, entities that choose to entrust the majority of their ICT spending to in-house.  Most in-house companies are associated with Assinter. The Assinter Association presents itself as a technical-organisation pole which contributes to the creation of the Digital Company and promotes the development of the Country System. It represents and develops the publicly owned companies operating in the ICT sector for Public Administration, in accordance with the in-house providing model and favours co-operation.	<i>To-be-engaged</i>
	<b>Universities and Institutes for Specific Training</b>	Universities and Institutes for Specific Training (e.g., Università Vita-Salute San Raffaele, Fondazione SSP).	<i>To-be-engaged</i>
	<b>Observatories and research entities</b>	Observatories and research entities (e.g., Humanitas, GSK, PoliMI). The Observatories aim is to promote interdisciplinary academic and research activities in various fields of science, technology, or arts and to have an impact on society in their respective areas. Research entities disseminate and promote research and studies on the collections of reference works, documents, and materials that they hold and conserve.	<i>To-be-engaged</i>

Category	Name	Mission	Stakeholder Type
	<i>Alphabetic order</i>		
	<b>Other Associations for Professional</b>	Other Associations for Professional (e.g., AISIS, AIIC) with the aim of giving visibility to those who professionally deal with ICT in Italian healthcare companies, whether they are public or private, and to encourage greater attention to the related problems the use of ICT in healthcare as a strategic lever for change.	<i>To-be-engaged</i>
	<b>SME</b>	Experts in specific fields, identified by stakeholders cited above, which can contribute to the identification of contents and modalities of upskilling initiatives.	<i>To-be-engaged</i>

*Table 1 – Stakeholders engaged and to-be-engaged during the project*

### 4.3 Stakeholder’s map

All the stakeholders included in the list have been clustered with the support of a stakeholder matrix. Stakeholder matrix is a project management tool used to analyse the project’s stakeholder to determine the actions which are necessary to align their goals with the project. There are several different types of stakeholder matrices, but for the scope of the analysis the project team has decided to use the Power/Interest matrix.

This matrix considers two variables which affect the project more than any other:

- **Power** - is the ability of the stakeholder to stop, change or influence the project;
- **Interest** - is the size of the overlap between the stakeholder’s and the project’s goals.

These two central variables are plotted on a chart with the x-axis being power and the y-axis being interest. Then each stakeholder was positioned on a chart during the Inception phase meetings. The resulting chart is a solid analysis of the stakeholder’s interaction with the project. Based on general Power/Interest general recommendations, 4 stakeholder management strategies were defined for the stakeholder groups of this specific project:

- **Cluster 1** - this cluster is composed of stakeholders that should be kept informed about the project and might be consulted on specific matters;
- **Cluster 2** - this cluster is composed of stakeholders from whom it is recommended sponsorship and support for the dissemination of the project’s result;
- **Cluster 3** - this cluster is composed of stakeholders who lead the entire project or specific project’s phase and are responsible for the project’s result;
- **Cluster 4** - this cluster is composed of stakeholders that must be kept satisfied about the project’s results and might require to be periodically updated on that.

Figure 1 shows the results of the stakeholder analysis. The digital upskilling’s stakeholder map will be adopted to properly manage each group along the projects.

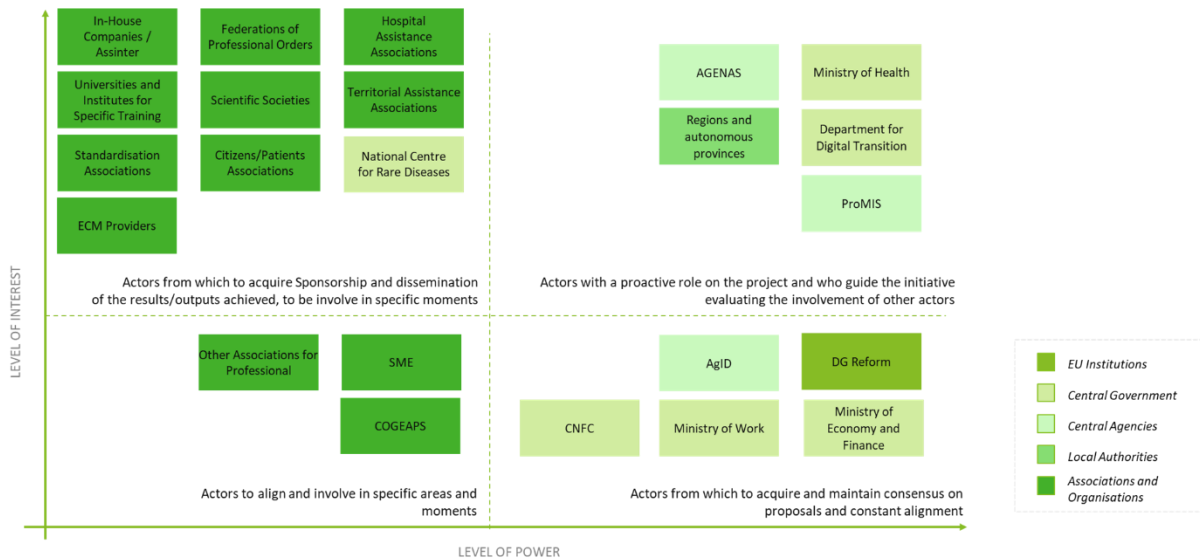


Figure 1 - Stakeholder matrix

In addition to the matrix, with specific reference to the delivery of the projects a complementary view of the stakeholder list is provided in Figure 2. The chart provides a preliminary view of the roles that stakeholders are expected to play with specific reference to the main project deliverables stated in Chapter 3.

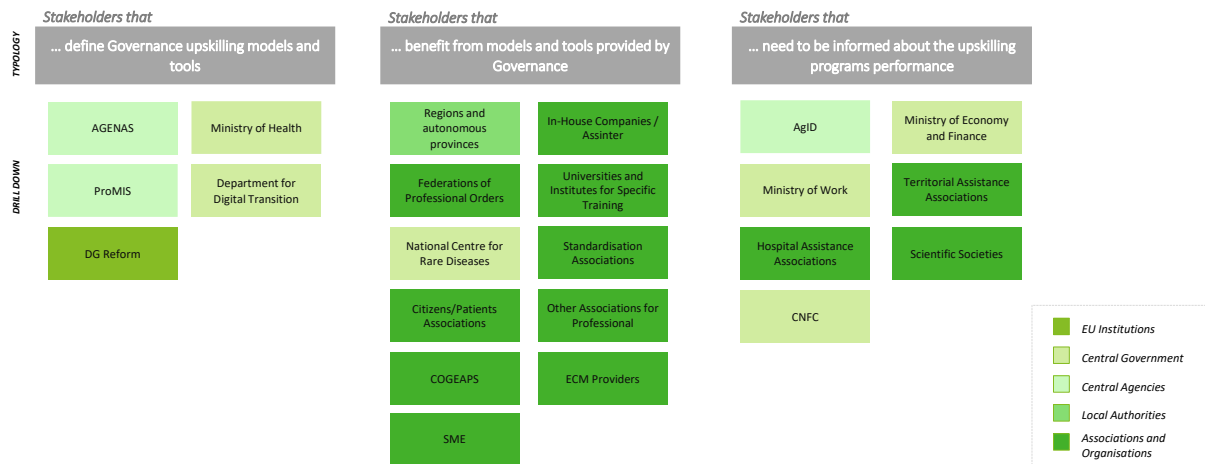


Figure 2 - Stakeholder typologies

## 5 Project ambitions

The Chapter describes how the Digital Upskilling Lifecycle model can help institutions out to build an outcome-based method for Digital Upskilling strategies and guidelines.

For the Italian NHS, the Digital Upskilling program represents the most relevant challenge and the biggest change management effort ever. The ambition of this project is to help the different stakeholders be concretely involved in the realization of the Digital Upskilling initiatives to meet the expectations of the PNRR which are not a simple reporting of the increasing of hours who clinical headcount dedicates to attend training on Digital Health. **Digital Upskilling should help to develop a digital mindset**

within the healthcare workforce and must have a direct impact on the usage rates of their digital platforms and applications to deliver healthcare in a different way than people expect usually.

The effectivity management of this program and, at end of it, the hope of making Digital Upskilling a permanent topic part of the health workers education, requires a framework aimed at aligning all the involved stakeholders, harmonizing the approaches across the Regions and the autonomous Provinces, supporting the planning and the delivery of the upskilling initiatives on the ground, supporting monitoring, and learning by experience, sharing the best practice. We will refer to this framework as “**Digital Upskilling Lifecycle model**”. The Digital Upskilling Lifecycle framework will be at **the core of Digital Upskilling strategy and guidelines**. The detailed Digital Upskilling Lifecycle framework and related project deliverables will be co-designed with proper stakeholders through project activities delivery, starting from a preliminary and high-level model that has been already discussed with the project team during the Inception Phase.

Figure 3 shows the structure of the proposed framework. This framework has been conceived **to be applied annually** by each Region and autonomous Province and consists of six phases. Starting from the high-level description provided below, each phase and related resources should be developed in depth through a series of co-design workshops, meeting and focus groups with selected stakeholders.

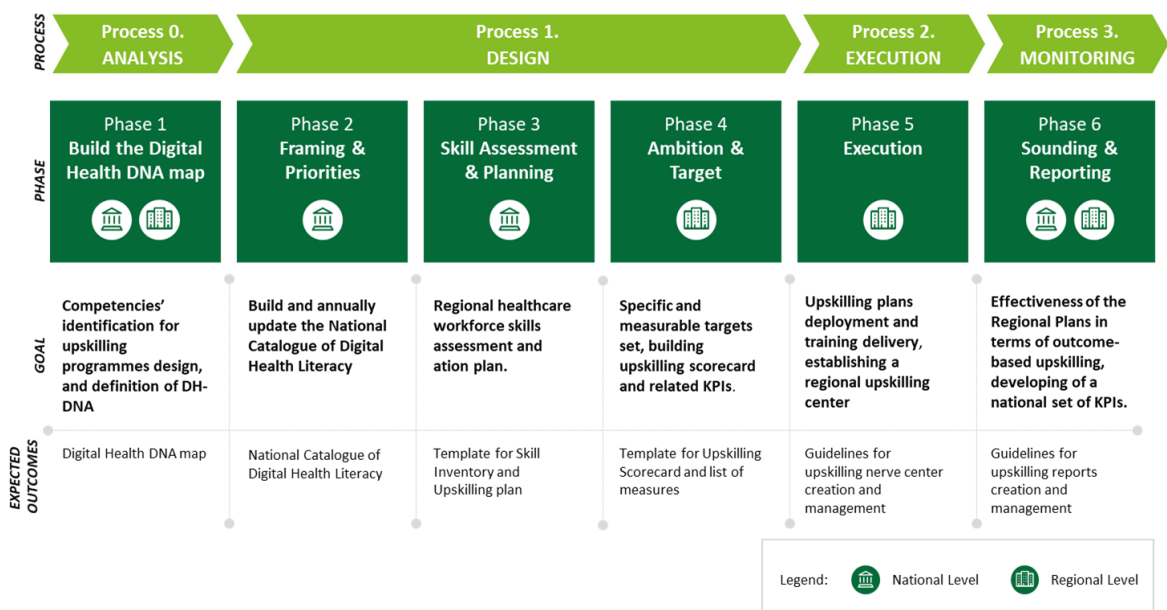


Figure 3 - Digital Upskilling Lifecycle model

A short and preliminary description of each phase is provided in the tables below.

### Phase 1

<b>BUILD THE DIGITAL HEALTH DNA MAP</b> <i>The pillars of the Digital Fluency success</i>	
<b>Short description</b>	
<p>Current and future digital skills of healthcare workforce will enable the transformation of the Italian healthcare system. Define and periodically update the set of competencies of doctors, nurses and other healthcare professionals is mandatory. This is required to develop a continuous cycle of digital upskilling across the country. We will refer to this set of competencies as a “Digital Health DNA map”. The Digital Health DNA map is a set of the traits that every healthcare professional should have or mature into, as they become “more digital” at work. This map will serve as a blueprint for both central and regional level-upskilling programs. The Digital Health DNA map is both-dynamic, because of the continuum of emerging technologies, and capable of being versioned, to manage</p>	

different health professions, different ages and attitudes of healthcare workforce as well as different context at regional and local levels.


The main inputs for the design of the Digital Health DNA map could be stated as follows:

- National and regional projects in the field of Digital Health;
- Digital Health trends and emerging technologies at national and global levels;
- “Voice” of the workforce, by consultation the main healthcare workers association.
- Outcome and feedback of previous upskilling programs delivered by the Regions and the autonomous Provinces.


The Digital Health DNA map will be updated annually based on the input above and will be formally approved as a framework for the activation and update of the National Catalogue of Digital Health Literacy.

<b>Setting</b>	This phase will be delivered at a central level.
<b>Expected output</b>	A model of Digital Health DNA map will be codesigned with the designated stakeholders and released at the end of the project. Stakeholders involved in this phase with their role will be included in the guidelines.

## Phase 2

<b>FRAMING &amp; PRIORITIES</b> <i>Framing and define the upskilling priorities</i>		
<b>Short description</b>		
<p>Based on the Digital Health DNA map, a National Catalogue of Digital Health Literacy will be carried out. It will serve as an outline aimed at detailing the traits of Digital DNA and providing a set of best practices, tools, techniques, and methods. The contents of the Catalogue should be considered a national priority for the upskilling of the healthcare workforce. Each Region and autonomous Province can enrich the contents of the Catalogue during the Skill Assessment &amp; Planning phase.</p> <p>The Catalogue will be formally approved at central level. Regions and autonomous Provinces, healthcare providers as well as universities and others education providers should align their upskilling programs and related resources consistently to the Catalogue.</p> <p>The National Catalogue of Digital Health Literacy will be updated annually to reflect the changes in the Digital Health DNA map.</p>		
<b>Setting</b>	This phase will be delivered at a central level.	
<b>Expected output</b>	The first version of the National Catalogue of Digital Health Literacy will be codesigned with the designated stakeholders and released at the end of the project. Stakeholders involved in this phase with their roles will be included in the guidelines.	

## Phase 3

<b>SKILL ASSESSMENT &amp; PLANNING</b> <i>Perform digital skill inventory &amp; plan the upskilling campaign</i>		
<b>Short description</b>		
<p>Based on the Digital Health DNA map, each Region and the autonomous Province must perform and keep updating a skill inventory of their healthcare workforce aimed at understanding the needs and the timing of digital upskilling with respect to its own digital journey. The skills assessment could be</p>		



based both on workforce consultation (surveys, interviews, expert panels, etc.) and subject matter experts' advice to understand the implications that technologies may have on the future of work for healthcare professionals.

The skill assessment's results will be the baseline for the design of the upskilling plan (Plan). The Plan's scope is to define which of the initiatives part of the National Catalogue for Digital Health Literacy will be delivered in each Region and autonomous Province. Furthermore, the plans may include other topics on top of the catalogue as well as other training initiatives based on innovative methods and resources (innovation challenge, hackaton, learning by doing, LABs, etc.). Target of population, contents, resources, timeframe and required funds should be included in the regional upskilling plans.

<b>Setting</b>	This phase will be delivered at a regional level.
<b>Expected output</b>	A template for performing the Skill Inventory and designing the related Upskilling plan will be codesigned with the designated stakeholders and released at the end of the project. Stakeholders involved in this phase with their roles will be included in the guidelines.

#### Phase 4


<b>AMBITION &amp; TARGET</b> <i>Define ambition &amp; set the target</i>		<b>Process 1.</b> DESIGN
<b>Short description</b>		
The goal of this phase is to set at a regional level, within a common reference framework represented by the Digital Health DNA Map, specific and measurable targets to achieve through the delivery of the upskilling plan. This allows several regions to have clear goals for their upskilling plan implementation, which can be translated into an upskilling scorecard and related KPIs (target population coverage, certifications, hours or initiatives, expenditure, usage increase of digital platforms, number of digital documents managed with the EHR, etc.).		
<b>Setting</b>	This phase will be delivered at a regional level.	
<b>Expected output</b>	A template for the upskilling scorecard and a list of measures to include in it will be codesigned with the designated stakeholders and released at the end of the project. Stakeholders involved in this phase with their role will be included in the guidelines.	

#### Phase 5

<b>EXECUTION</b> <i>Execute the upskilling campaign</i>		<b>Process 2.</b> EXECUTION
<b>Short description</b>		
In the execution phase, the main purpose is to implement the upskilling plans and deliver training and other initiatives that form part of each plan through the regional structures and the various providers (universities, training schools, CME providers, etc.) involved. The way in which the plans will be delivered may vary greatly across Regions and autonomous Provinces, but each one will have to guarantee effective governance of all the related processes.		
<b>Setting</b>	This phase will be delivered at a regional level.	

<b>Expected output</b>	A set of guidelines to help Regions and autonomous Provinces create and manage the upskilling nerve centre will be co-designed with the designated stakeholders and released at the end of the project. Stakeholders involved in this phase with their role will be included in the guidelines.
------------------------	---

## Phase 6

<b>SOUNDING &amp; REPORTING</b>		
<i>Evaluate &amp; report the results</i>		
<b>Short description</b>		
<p>This phase is dedicated to closely monitor the achievement of the ambitions set as targets in the upskilling scorecard, having a clear understanding of the effectiveness of the upskilling plan, and guaranteeing the level of satisfaction within the clinical workforce. During this phase, data is gathered and the achievement of each KPI on the upskilling scorecard is compared to the target. This will also happen by collecting opinions directly from the trainees, which will be helpful to generate inputs for the update of the "Digital Health DNA Map" (outcome-based upskilling) and have a better understanding of the specific level of digital fluency across the healthcare workforce.</p> <p>Finally, due to the common structure of the scorecards, the consolidation of the data at a central level could also be used at central level for establishing peering processes and the develop a national set of KPIs that could represent the results both in terms of output and outcome of the upskilling programs.</p>		
<b>Setting</b>	This phase will be delivered both at a regional and central level.	
<b>Expected output</b>	A set of guidelines to help Regions and autonomous Provinces and central authorities to create and manage upskilling reports will be co-designed with the designated stakeholders and released at the end of the project released at the end of the project.	

## 5.1 Stakeholders' engagement over the Digital Upskilling Lifecycle model

The main purpose of the **Digital Upskilling Lifecycle** model is to provide guidelines and strategy basics to enable national and local digital health upskilling plans for all categories of health workers.

Co-design and stakeholder engagement over the Digital Upskilling Lifecycle model is decisive to aid the definition of the guidelines and the success of the **Digital Fluency** target.

A specific engagement strategy has been defined and will be refined throughout the project to ensure that stakeholders are appropriately involved and consulted on each Digital Upskilling Lifecycle model phase.

Co-design activities, with stakeholders linked at every phase, generate a participatory space aimed at decision-making in the moments (or redefinition) of the project, so that the protagonists begin to feel their own concrete role in the definition and co-creation of the guidelines.

This open innovation process, in which the logic of co-design is installed, requires the stakeholders' commitment in carrying out actions which are consistent with the results of the co-creation action. In fact, the responsibility of meeting the expectations generated by this process requires agility in decision-making after the co-design itself, therefore in Figure 4, there are several moments and tools through which the stakeholders are involved with respect to the Digital Upskilling Lifecycle model.

STAKEHOLDERS ENGAGEMENT MOMENTS	DESCRIPTION	Phase 1 Build the Digital Health DNA map	Phase 2 Framing & Priorities	Phase 3 Skill Assessment & Planning	Phase 4 Ambition & Target	Phase 5 Execution	Phase 6 Sounding & Reporting
STAKEHOLDERS ENGAGEMENT	SELECTING AND ENGAGING STACKEOLDERS IN ORDER TO INVOLVE THEM IN THE PHASE'S ACTIVITIES						
ONBOARDING MEETINGS	INFORMING THE ENGAGED STAKEHOLDERS ABOUT THE PHASE AND THE PROJECT, ITS GOALS AND TO INVOLVE THEM IN PROJECT ACTIVITIES.						
WEEKLY PROGRESS MEETINGS	MONITORING ACTIVITIES AND SHARING UPDATED DRAFTS OF DELIVERABLES FOR ACHIEVED RESULTS.						
IN-DEPTH MEETINGS	ACQUIRING INFORMATION AND USEFUL INFO FROM RELEVANT STAKEHOLDERS						
FOCUS GROUPS	BRINGING TOGETHER A SMALL GROUP OF STAKEHOLDERS TO FIND SPECIFIC SOLUTIONS IN A MODERATED SETTING						
DATA COLLECTION	COLLECTING RELEVANT DATA AND DOCUMENTS FROM SELECTED STAKEHOLDERS ACCORDING TO THEIR AREAS OF EXPERTISE						
WORKSHOPS	EXPLORING AND DISCUSSING WITH KEY ACTORS THE MAIN DOMAINS OF ANALYSIS AS WELL AS PRELIMINARY RESULTS						
DELIVERABLE VALIDATION	ENSURING COMPLETENESS AND HIGH QUALITY OF PROJECT OUTPUTS AND DELIVERABLES, ASSESSED BY RELEVANT STAKEHOLDERS.						
TRAINING SESSIONS	FINAL MEETING TO PROVIDE INTERESTED ACTORS WITH AN OVERVIEW OF THE PROJECT ACTIVITIES AND TO PRESENT KEY FINDINGS AND LESSONS LEARNT.						

Legend


<b>TSI WG - SH</b>	Stakeholders engaged by default throughout the project, because part of the TSI Working Group, both for the Upskilling Lifecycle and the definition of the EHR Guidelines.
<b>TO-BE-ENGAGED SH</b>	Stakeholders to-be-engaged in the execution of specific tasks consistently the phases of the Upskilling Lifecycle or the definition of the EHR Guidelines, in brief or in depth.
<b>BOTH</b>	Both Types of Stakeholders.  Possible activity to be defined by TSI WG needs

Figure 4 - Co-design and stakeholders engagement Matrix over the Digital Upskilling Lifecycle model

The Matrix represented in the figure - *being a planning and scheduling custom tool* - shows how stakeholders' engagement could be modelled depending on the emerging circumstances and the annual reworking of the Digital Upskilling Lifecycle model according to national and regional priorities. Plus, it displays how all tasks or tools, such as onboarding meetings, in-depth meetings, data collection, focus groups, deliverable validation can generate the expected value for the outputs of each phase, in furtherance of better structuring and ensuring effective co-creation during the Upskilling Lifecycle.

In fact, regarding the Digital Upskilling Lifecycle model from the "Analysis" phase to the "Design" one, up to the "Execution" and "Monitoring", there will be moments of stakeholder's specific engagement through focus groups, or design meetings, or even workshops (where necessary), in order to define the content of the phases and come up with new solutions through a co-design perspective and assisted by the Service Design methodology. Besides, specific or transversal co-design meetings, over the various phases of the Digital Upskilling Lifecycle model and/or for the EHR 2.0 Guidelines, may be organised also thanks to the Designers-Italia kit and methodology.

## 6 Project approach and workplan

This chapter reports and details the refined project approach and related work plan, consolidated during the Inception phase, and validated by stakeholders.

### 6.1 Project approach overview

This paragraph describes the refined high-level approach and methodology consolidated during the inception phase. To better organize the activities, the project plan has been broken in to three main streams as shown in Figure 5.

- **EHR 2.0 Communication Stream**, aimed at providing the communication strategy and the guidelines for the support of the activation and usage of EHR 2.0;

- **EHR 2.0 Upskilling Stream**, aimed at providing the upskilling strategy and the guidelines for the support of the activation and usage of EHR 2.0;
- **Digital Health Literacy Stream**, aimed at providing a model (the Digital Upskilling Lifecycle model) for realizing a continuous digital health upskilling addressed to the healthcare workers.

The EHR 2.0 Upskilling and the EHR 2.0 Communication streams are the most time sensitive of the project, due to the approaching deadlines of the PNRR. Related tasks will be aligned with the upskilling processes already on going at regional level with the support of the Department for Digital Transition.

Consistently to the Request for Proposal (RFP) and the technical offer, each stream plan is structured in the same way, with a list of 6 phases: Inception, Situation analysis, Guidelines for EHR specific upskilling, Strategy design, Roadmap for the implementation of EHR 2.0, and Action plan. Table 2 shows the intersection between the 3 project's streams and the 6 phases.

Stream	Inception	Situation analysis	Guidelines for EHR 2.0 specific upskilling	Strategy design	Roadmap for the implementation of EHR 2.0	Action plan
EHR 2.0 Communication	✓	✓	✓	✓	✓	
EHR 2.0 Upskilling	✓	✓	✓	✓	✓	
Digital Health Literacy	✓	✓		✓		✓

*Table 2 - Intersection between the 3 project's streams and the 6 phases.*

The 6 phases of the project and related deliverables are synthetically described below according to the request and the outcome of the Inception phase:

- **Phase 1: Inception**

**Objective:** This phase aims at consolidating the project approach and working methods, as well as the main objectives of the project and the project work plan. The Inception report is the deliverable whose acceptance ends the phase.

- **Phase 2: Situation analysis**

**Objective:** The objective of this phase is to collect information and data about activities and possible best practice at international, national, and regional level related to Digital Health & EHR as well as on lessons learned about digital health adoption models, barriers to overcome, and good practices to take inspiration from. The analysis of the current situation report is the deliverable whose acceptance will end the phase.

- **Phase 3: Guidelines for EHR specific upskilling**

**Objective:** This phase aims at providing guidelines addressed to the Regions and the autonomous Provinces and other stakeholders involved in the national upskilling programs. Through the guidelines, the project will provide processes, methods, and other tips to support both EHR upskilling as well as communication initiatives. The Guidelines for EHR 2.0 Upskilling and EHR 2.0 Communication are the deliverable whose acceptance will end the phase.

- **Phase 4: Strategy design**

**Objective:** The goal of this phase is to design a strategic framework for the implementation of the national upskilling programs. There will be specific deliverables for the EHR 2.0 Upskilling stream and Digital Health Literacy stream (EHR 2.0 Upskilling Strategic Plan and Digital Health Literacy Strategic Plan) whose acceptance will end the phase.

- **Phase 5: Roadmap for the implementation of EHR**

**Objective:** The objective of this phase is to review the regional operational plan (PCF) provided by the Regions and the autonomous Provinces to DTD and, based both on contents of the plans and EHR 2.0 Upskilling and Communication Guidelines, get back to the Regions and the autonomous Provinces with recommendations related to the plan contents and/or its execution. The Recommendations document related to EHR 2.0 Upskilling stream and EHR 2.0 Communication stream are the deliverables whose acceptance will end the phase.

- **Phase 6: Action plan**

**Objective:** The scope of this phase is to define the action plan for implementation of the Digital Health Literacy Upskilling strategy at the end of its prototyping with the 2 Regions that will be chosen as pilots and the building of the consequent capacity. Moreover, Deloitte will draft a knowledge management e-platform requirement elicitation report. The Action plan for the implementation of the Digital Health Literacy Upskilling strategy is the deliverable whose acceptance will end the phase.

## 6.2 Project work plan overview

---

This paragraph describes the refined high-level project workplan consolidated during the inception phase. The workplan is then described in detail in paragraph 6.3.

The entire project will last 16 months, starting in November 2022 and ending in February 2024.

Figure 5 represents a high-level planning of each stream, including relevant deliverables while Figure 6, Figure 7, and Figure 8 show the Gantt charts of the three project streams activities (**EHR 2.0 Communication Stream; EHR 2.0 Upskilling Stream, Digital Health Literacy Stream**)

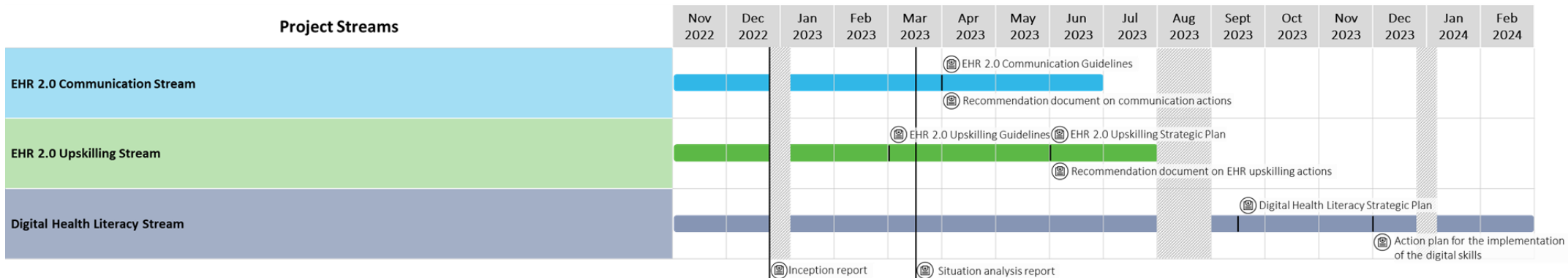


Figure 5 - Gantt chart of the three project streams

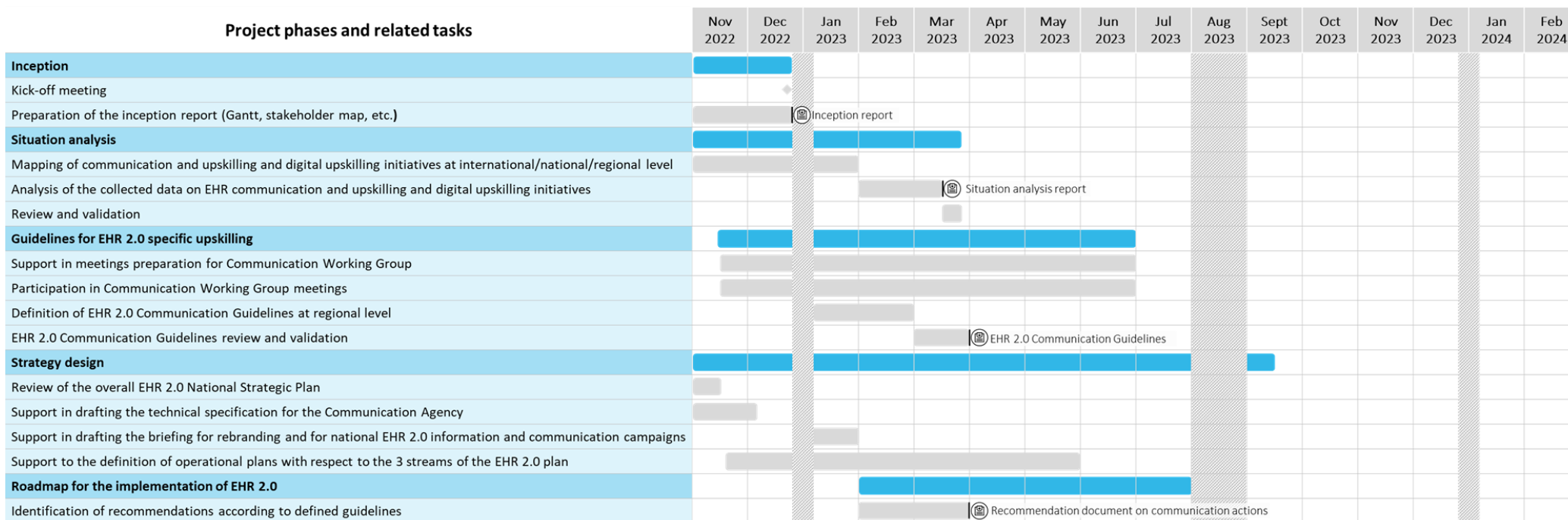


Figure 6 - EHR 2.0 Communication Stream Gantt chart

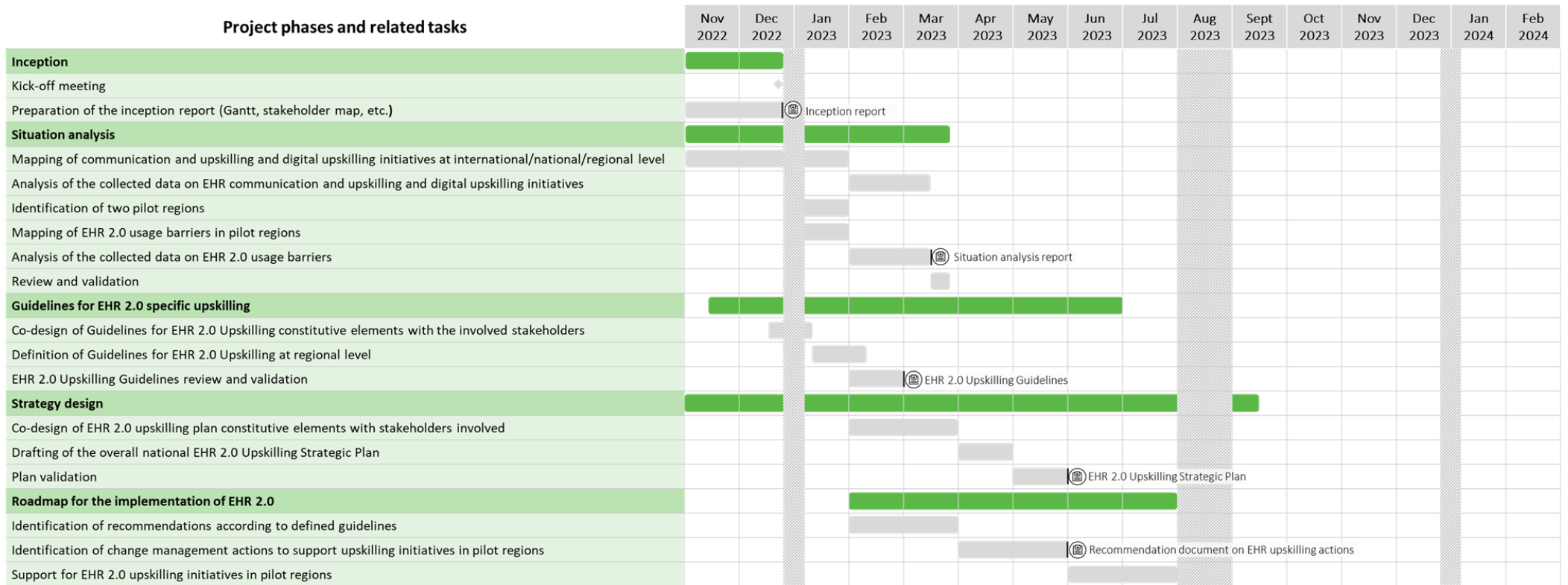


Figure 7 - EHR 2.0 Upskilling Stream Gantt chart

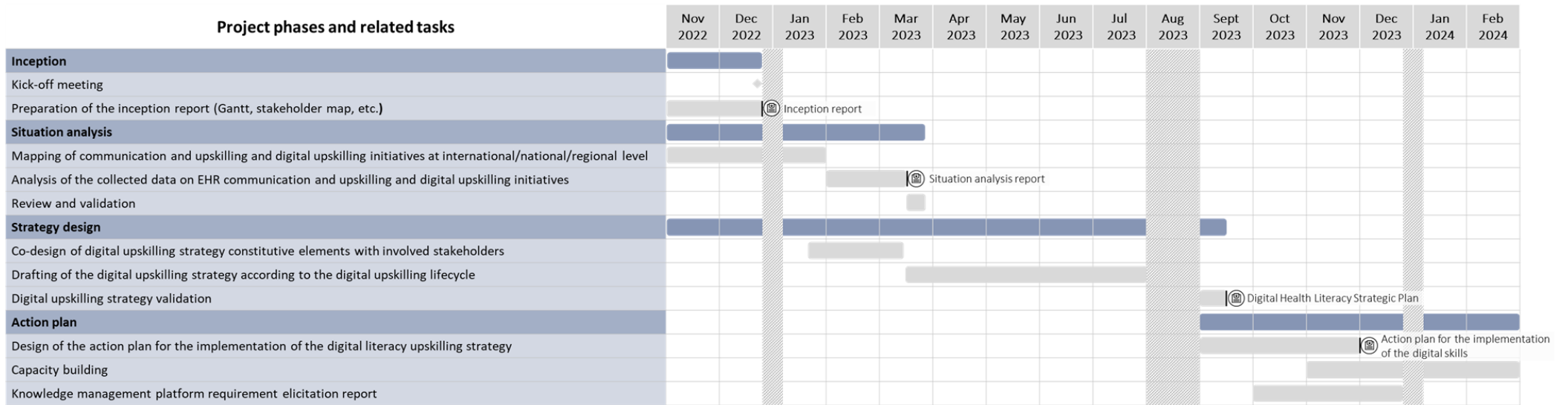


Figure 8 - Digital Health Literacy Stream Gantt chart



## 6.3 Project approach in details

In the following paragraphs, all the different phases and tasks are explained in detail, providing the expected starting and ending date of the operational activities.

### 6.3.1 Phase 1 - Inception

The Inception Phase aims at consolidating the project approach and working methods, as well as the main objectives of the project, the work plan, and the organisational model, involving the main stakeholders and beneficiary authorities through online meetings.

This phase is structured in the following tasks, activities, and deliverables, while additional details are provided in the following paragraphs:

Stream	No. T	Task	Brief description
All	T 1.1	<b>Kick-off meeting</b>	The Kick-off meeting of the project defines the main goals, work plan and involved stakeholders as stated in the Deloitte's proposal.
All	T 1.2	<b>Preparation of the inception report</b>	The complete set of meetings and related activities that allow to the project's team to refine the original proposal, align it with the context, prepare and submit to the client the Inception report.
<b><u>Deliverable</u></b>			
<b><u>D01</u></b>	<b><u>Inception report</u></b>		A Word document in English language reporting and synthesising the project details and decision taken with the Steering Committee during the inception phase.

*Table 3 - Phase 1 summary: tasks, activities, high-level plan and deliverable*

The following subparagraphs describe the details of each task and related activities.

#### Task 1.1 - Kick-off meeting

The first project activity was the implementation of the operational kick-off meeting. The Kick-off meeting involved the key persons which will be part of the Steering Committee and other key stakeholders, part of the main authorities and involved agencies. The goals of the operational kick-off meeting, held on the 21st of October 2022, were: 1) introduction of the Deloitte team to the key people involved 2) alignment on the context evolution and confirmation of the project's scope 3) description of the proposed project approach as defined in the proposal and discussion about any outstanding issues on its implementation, 4) presentation of the preliminary list of potential stakeholders provided by Deloitte. The official kick-off meeting will be scheduled after the submission and approval by the Steering Committee of this Inception report.

#### Task 1.2 - Preparation of the inception report

The scope of this task was the refinement of the topics discussed during the operational kick-off meeting aimed at consolidating all the inputs required to prepare the Inception report. Through a series of weekly meetings and some workshops on specific topics, all the relevant information was collected, and some decisions have been taken. The main meetings and workshops can be described as follows:

- an internal Deloitte meeting aimed at performing a preliminary analysis of the inception report document requirements and at subsequently defining the outline and the main contents of each Chapter of the Inception report. The document structure, as defined, is detailed in paragraph 1.2;

- a series of meetings with the Steering Committee to align on project scope and timing with the needs expressed during the kick-off meeting and collect some inputs for the project’s organisational structure. The project plan and the organisational model that results at the end of these meetings are shown in this report (D01-Inception Report);
- individual and group-work sessions for drafting the details of the project plan and the related organisational model chapter, containing a detailed description of all tasks, sub-tasks, timing and the project’s organisational structure;
- meetings with project beneficiary authorities and main point of contact (DG REFORM, Ministry of Health, Department for Digital Transition, ProMIS, AGENAS) to identify and map stakeholders to be engaged and involved;
- individual and group-work sessions aimed at performing the stakeholder analysis and drafting the related chapter of the Inception report;
- drafting of project-related risks, environmental risks, and possible mitigation actions to be implemented within the project’s scope;
- meetings with the main stakeholders and beneficiary authorities to gather feedback and implement any further refinement on the document until the final approval.

### DELIVERABLE 01: Inception report



The final output of this phase is the present **D01 - Inception report**.

### 6.3.2 Phase 2 - Situation Analysis

The objective of this phase is to collect and look at helpful best practice, case history and experiences related to digital upskilling (training strategy, communication campaigns, delivery models, etc.) at international, national and regional level. Information will be collected mainly through desk research. The gathered information will be organised with the help of a proper framework and then analysed in dept to identify useful inputs to support and inspire the realization of the project deliverable. During this task, Italian context of EHRs and digital health adoption with the related barriers, national and international success stories will be explored too, to enrich a picture of the current situation and help in proposing suitable solutions to make the upskilling program a success.

This phase is structured in the following tasks, activities, and deliverables, while additional details are provided in the following paragraphs:

Stream	No. T	Task	Brief description
All	T 2.1	<b>Mapping of EHR communication and upskilling and digital upskilling initiatives at international/national/regional level</b>	Collection of information on EHR and digital health communication and upskilling initiatives and insertion within the analysis framework.
All	T 2.2	<b>Analysis of the collected data on EHR communication and upskilling and digital upskilling initiatives</b>	Analysis of the collected initiatives according to target, specific objectives, responsible, upskilling and communication channels exploited.

Stream	No. T	Task	Brief description
EHR 2.0 Upskilling	T 2.3	Identification of two pilot Regions	Identification of the most proper Regions for the analysis of the barrier to adoption and usage of EHR.
EHR 2.0 Upskilling	T 2.4	Mapping of EHR 2.0 usage barriers in pilot Regions	Identification and analysis through a specific data collection framework of the most relevant EHR usage barriers in pilot Regions.
EHR 2.0 Upskilling	T 2.5	Analysis of the collected data on EHR 2.0 usage barriers	Analysis and clustering of the identified barriers with reference to the project's scope.
All	T 2.6	Review and validation	Review of the created EHR and digital health initiative's map and validation with the relevant stakeholders.
<b><u>Deliverable</u></b>			
<b><u>D02</u></b>	<b><u>Situation analysis report</u></b>		A Word document reporting the output of the analysis of the current situation on EHR upskilling, digital upskilling and communication initiatives at regional, national and international level.

Table 4 - Phase 2 summary: tasks, activities, high-level plan and deliverable

The following subparagraphs describe the details of each task and related activities.

### Task 2.1 - Mapping of EHR communication and upskilling and digital upskilling initiatives at international/national/regional level

Deloitte will provide a **map of the digital and EHR communication and upskilling initiatives**, at **international, national and regional level**, addressed or addressable to the health professionals (clinicians, general practitioners, nurses, pharmacists, healthcare managers, etc.), based on the framework represented in Figure 9. The framework will aim at organising all the relevant initiatives consistent with the scope of the program, in order to identify related trends, strengths, and possible pain points that should be taken in consideration to get useful insights for the project.

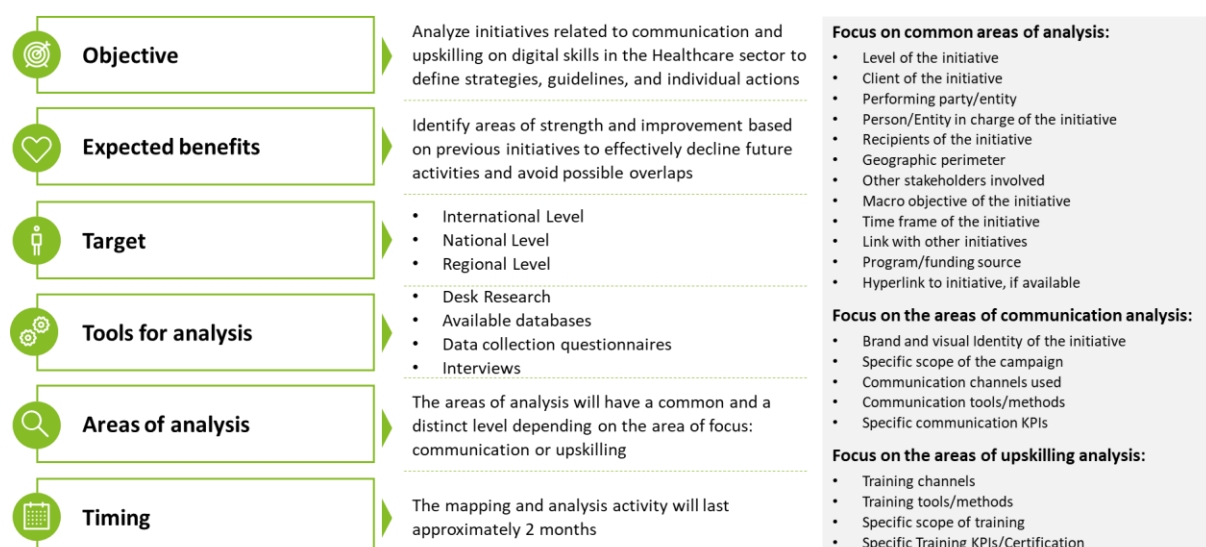


Figure 9 - Proposed approach for initiatives mapping

To accomplish the task, Deloitte will identify data sources at international, national and regional levels. Desk research will be mainly used as a discovery tool, investigating different categories of documents/information, including EU reports, national reports, international reports, Deloitte insights, and academic journals. As part of the research, Deloitte will also investigate and map all the information related to

the current communication of the EHR in each Region and autonomous Provinces, through each specific regional website and other data provide by the stakeholders. To ensure that all the relevant information has been mapped, Deloitte will deepen the understanding of the different regional contexts even through some interviews.

### Task 2.2 - Analysis of the collected data on EHR communication and upskilling and digital upskilling initiatives

Deloitte will perform an analysis of the relevant initiatives for both communication and upskilling collected and mapped at international, national, and regional level, according to the predefined framework. At the end of the analysis, the level of maturity of the context at national and regional level will be evaluated, as well as some initiatives that could be elected as best practices. The output of the analysis will be a summary of the EHR communication and upskilling and digital upskilling insights, lesson learned and best practice.

With specific reference to the **regional EHRs context**, Deloitte will add a focus of analysis aimed at collecting information related to the specific regional EHR brand identities, key messages, useful documents, and the communication campaigns already done by regions and autonomous Provinces addressed to increase people's awareness about how useful healthcare service experience could be.

### Task 2.3 - Identification of two pilot Regions

Based on the collected insights and consultation with Steering Committee and other selected stakeholders, 2 Regions will be identified to investigate on their EHR adoption experience and related barriers they experimented during the journey. The selection criteria will take in proper consideration the national landscape where, with respect to the EHR utilisation, pioneer and early adopters Regions coexist. That's the reason why we suggest onboarding as a pilot: a) a Region where digital health adoption is quite advanced and the usage rate of EHR by health workers and citizens is high b) a second Region, at the opposite, where digitalisation of healthcare is still in its early stages and the EHR is not fully developed, implemented, and adopted.

### Task 2.4 - Mapping of EHR 2.0 usage barriers in pilot Regions

The project team will identify and map the main barriers that could prevent the correct information feeding and usage of the EHR 2.0 by healthcare workers in the selected pilot Regions. Among the main barriers that will be investigated through interviews and focus groups, the following cases will be included: the eventual reluctance of the healthcare to the change of way of working, skills gap and lack of basic digital literacy, timing/resources constrains, heterogeneity in technological and organisational aspects, policy complexity, etc. Specifically, Deloitte will aim at identifying, at institutional, cultural, normative, and administrative levels, the main barriers which constitute an impairment to the spreading of EHR at national level. Deloitte will then use the collected information on EHR usage and feeding to **execute focus groups investigations** with the aim of **identifying the key barriers to EHR's introduction** at regional and local level. This kind of information collected and mapped will be made available also for other groups/projects working on the main aspects of the EHR (organizational, technological, usability, perception of the users).

### Task 2.5 - Analysis of the collected data on EHR usage barriers

Based on information and data collected through the mapping, the project team will identify clusters of institutional, cultural, normative, and organisational barriers which constitute an impairment to the spreading of EHR 2.0 at national level. This cluster will be adopted as lesson learned and considered during the delivery of the project's scope.

### Task 2.6 - Review and validation

The analysis of current situation on digital and EHR upskilling, and communication report (Situation analysis report) will be then reviewed by Deloitte and validated by the Steering Committee.

## DELIVERABLE 02: Situation analysis report



The final output of this phase is the **D02 - Situation analysis report**

### 6.3.3 Phase 3 - Guidelines for EHR 2.0 specific upskilling

Based on the key findings and output of the analysis of the current situation held in Phase 2, the goal of this phase is to define EHR 2.0 Upskilling Guidelines for healthcare workers and related guidelines for communication initiatives aimed at improving the EHR 2.0 related skills, one of the requirements needed to standardize the digitalization of healthcare services across the Italian Regions and autonomous Provinces. For this purpose: a) co-design tools will be exploited to engage stakeholders in the definition of EHR 2.0 Upskilling Guidelines; b) the already operating Communication Working Group will be supported in the definition of the regional EHR 2.0 Communication Guidelines.

This phase is structured in the following tasks, activities, and deliverables, while additional details are provided in the following paragraphs:

Stream	No. T	Task	Brief description
EHR 2.0 Upskilling	T 3.1	Co-design of Guidelines for EHR 2.0 Upskilling constitutive elements with the involved stakeholders	Identification of guidelines building blocks (plan components and framework) through cooperation with the stakeholders.
EHR 2.0 Upskilling	T 3.2	Definition of Guidelines for EHR 2.0 Upskilling at regional level	Drafting of the regional guidelines for EHR upskilling, based on the output of the situational analysis and suitable for an immediate transposition into a legal and enforceable act.
EHR 2.0 Upskilling	T 3.3	EHR 2.0 Upskilling Guidelines review and validation	Review of the EHR 2.0 Upskilling Guidelines and validation with the relevant stakeholders.
EHR 2.0 Communication	T 3.4	Support in meetings preparation for Communication Working Group	Creation of the agenda and support to the realisation of artefacts that should be present during the working group meeting.
EHR 2.0 Communication	T 3.5	Participation in Communication Working Group meetings	Attendance of Working Group meeting to gain highlights for the definition of the guidelines.
EHR 2.0 Communication	T 3.6	Definition of EHR 2.0 Communication Guidelines at regional level	Organization of the meetings with all the relevant stakeholders to define structure, data sources and content to develop communication guidelines' framework.
EHR 2.0 Communication	T 3.7	EHR 2.0 Communication Guidelines review and validation	Review of the communication guidelines and validation with the relevant stakeholders.
<b><u>Deliverable</u></b>			
<b><u>D03.1</u></b>	<b><u>Guidelines for EHR 2.0 Upskilling</u></b>	A Word document reporting the defined EHR 2.0 Upskilling Guidelines.	

Stream	No. T	Task	Brief description
<u>D03.2</u>		<u>Guidelines for EHR 2.0 Communication</u>	A Word document reporting the defined EHR 2.0 Communication Guidelines.

*Table 5 - Phase 3 summary: tasks, activities, high-level plan and deliverable*

The following subparagraphs describe the details of each task and related activities.

### Task 3.1 - Co-design of Guidelines for EHR 2.0 Upskilling constitutive elements with the involved stakeholders

The project team will deploy guidelines constitutive elements using a **co-creative approach** with national and regional key stakeholders identified, to ensure the maximum support to the digital transformation process of the Italian health system and the creation of homogeneous healthcare services across the Regions and the autonomous Provinces. The co-creative approach will aim at establishing the building blocks (plan components and framework) of the guidelines that will be drafted once the constitutive elements will be approved by the Steering Committee.

### Task 3.2 - Definition of Guidelines for EHR 2.0 Upskilling at regional level

With reference to the output of the analysis of the current situation, Deloitte will draft detailed regional guidelines for EHR 2.0 upskilling, suitable for a **transposition into a legal and enforceable act** without further interventions by the beneficiary authorities. The guidelines will be defined through a series of a co-design workshops aimed at leveraging the Digital Upskilling Lifecycle model. At end of the first cycle of co-design workshops, each phase of the model, as resulted after the discussion with the stakeholders will be further refined and deepened with a second series of workshops with the aims of moving from a high-level management model to a detailed outline for each phase of the framework containing: main concepts, processes, RACI matrix, suggested tools & techniques. Deloitte will also consider the **lessons learned** coming from previous co-design experiences: identify the **Personas**, to properly address the sessions based; lead the meeting using the **tailored storytelling** without conveying unmet expectations; being realistic about the effort required in cascading the **right messages** with **effective and timely communication** and **appropriate contents**.

### Task 3.3 - EHR 2.0 Upskilling Guidelines review and validation

The EHR upskilling guidelines will be then reviewed by Deloitte and validated by the Steering Committee.

### Task 3.4 - Support in meetings preparation for Communication Working Group

Deloitte will support the **production of some artifacts** that will be presented to the Working Group members, such as the formalization of the working plan. In addition, after the Working Group meeting, Deloitte will provide support in carrying out the activities agreed during the meeting, collaborating with the stakeholders involved.

### Task 3.5 - Participation in Communication Working Group meetings

Deloitte will take part in the Communication Working Group meetings to **gather insights that could be useful in the development of the guidelines** and, at the same time, will provide its point of view where it is required. Together with the other members of the Working Group, Deloitte will provide support, when needed, in the development of the main tasks and will provide updates on the project activities related to the EHR 2.0 Communication stream.

### Task 3.6 - Definition of EHR 2.0 Communication Guidelines at regional level

To define the communication guidelines at regional level, Deloitte will consider the output of the analysis of the current situation and will collaborate with relevant stakeholders to **develop communication guidelines' framework**. First, Deloitte will organize meetings with stakeholders of each Region and the autonomous Province, based on the roles and responsibilities agreed during the

workshop, to discuss and define the building blocks that should be addressed in the guidelines. Deloitte will then **prepare and participate in in-depth meetings on structure, data sources, contents of the guidelines to predispose the guidelines’ framework**. A co-creative approach will be followed to draft the communication guidelines to ensure the maximum support to the digital transformation process of the Italian health system, creating a framework suitable at national level and, at the same time, considering the specificity of each Region and autonomous Province. The content of the guidelines will also be coordinated with other campaigns at regional level and will contain cross references to other communication initiatives.

### Task 3.7 - EHR 2.0 Communication Guidelines review and validation

Deloitte will set up a table of **continuous collaboration and alignment with the identified stakeholders** to define revised and validated Guidelines on EHR 2.0 Communication. This report will consider the multiple national/regional needs and perspectives and will be compliant with current regulations. The final draft will be then reviewed by Deloitte and validated by the Steering Committee.

#### DELIVERABLE 03: Guidelines for EHR specific upskilling



The final outputs of this phase will be the **EHR 2.0 Upskilling and Communication Guidelines**

### 6.3.4 Phase 4 - Strategy design

This phase aims at developing an overall national strategy for the digital skills of healthcare workers through the drafting and dissemination of strategic communication and upskilling plans, with particular focus on EHR 2.0 issues. In the context of the EHR 2.0 communication stream, Deloitte will support the definition of the operational plans and the different activities outlined by central entities, including the revision of the national communication plan, the drafting of the technical specification for the Communication Agency and the definition of the activities for the rebranding and informative campaigns, through the organisation of meetings and documents drafting. As far as it concerns the Digital Health Literacy and EHR 2.0 Upskilling streams, Deloitte will pursue co-planning actions involving specifically identified stakeholders, with the aim of drafting the overall national EHR strategic upskilling plan and the digital upskilling strategy for health workers.

This phase is structured in the following tasks, activities, and deliverables, while additional details are provided in the following paragraphs:

Stream	No. T	Task	Brief description
EHR 2.0 Communication	T 4.1	<b>Review of the overall EHR 2.0 National Strategic Plan</b>	Review of the EHR National Strategic Plan to provide feedback to central entities for subsequent validation.
EHR 2.0 Communication	T 4.2	<b>Support in drafting the technical specification for the Communication Agency</b>	Support in preparation of technical specification for Communication Agency.
EHR 2.0 Communication	T 4.3	<b>Support in drafting the briefing for rebranding and for national EHR 2.0 information and</b>	Support in preparation of the rebranding briefing for the definition of the main features of the new brand for communication campaigns.

		<b>communication campaigns</b>	
<b>EHR 2.0 Communication</b>	<b>T 4.4</b>	<b>Support to the definition of operational plans with respect to the 3 streams of the EHR 2.0 plan (technical communication, communication to operators and citizens)</b>	Definition of operational plans for the different identified targets of the National Strategic Plan.
<b>EHR 2.0 Upskilling</b>	<b>T 4.5</b>	<b>Co-design of EHR 2.0 upskilling plan constitutive elements with stakeholders involved</b>	Definition of the EHR 2.0 upskilling plan pillars in cooperation with the relevant stakeholders.
<b>EHR 2.0 Upskilling</b>	<b>T 4.6</b>	<b>Drafting of the overall national EHR 2.0 Upskilling Strategic Plan</b>	Preparation of the overall national EHR 2.0 strategic upskilling plan setting EHR upskilling goals, related target audience and KPIs.
<b>EHR 2.0 Upskilling</b>	<b>T 4.7</b>	<b>Plan validation</b>	Validation with the relevant stakeholders.
<b>Digital Health Literacy</b>	<b>T 4.8</b>	<b>Co-design of digital upskilling strategy constitutive elements with stakeholders involved</b>	Definition of the digital upskilling strategy pillars in cooperation with the relevant stakeholders.
<b>Digital Health Literacy</b>	<b>T 4.9</b>	<b>Drafting of the digital upskilling strategy according to the Digital Upskilling Lifecycle</b>	Draft of the digital upskilling strategy for healthcare workers setting clear goals for the improvement of digital and soft skills.
<b>Digital Health Literacy</b>	<b>T 4.10</b>	<b>Digital upskilling strategy validation</b>	Digital upskilling strategy validation with the relevant stakeholders.
<b><u>Deliverable</u></b>			
<b><u>D04.1</u></b>	<b><u>EHR 2.0 Upskilling Strategic Plan</u></b>	A Word document reporting the defined EHR 2.0 Upskilling strategies.	
<b><u>D04.2</u></b>	<b><u>Digital Health Literacy Strategic Plan</u></b>	A Word document reporting the Digital Health Literacy strategies.	

*Table 6 - Phase 4 summary: tasks, activities, high-level plan and deliverable*

The following subparagraphs describe the details of each task and related activities.

#### **Task 4.1 - Review of the overall EHR 2.0 National Strategic Plan**

Deloitte will **review the EHR National Strategic Plan**, already drafted and shared by the EHR Working Group and will **provide feedback on it**. Based on the experience in the definition of strategic plans, Deloitte will review and give high level advice on the structure of the EHR National Strategic Plan about consistency and comprehensiveness of the document.



#### Task 4.2 - Support in drafting the technical specification for the Communication Agency

Deloitte will support the Communication Working Group in defining the activities, roles, effort and methods for carrying out the services in order to draw up the **technical specification for the Communication Agency**.

#### Task 4.3 - Support in drafting the briefing for rebranding and for national EHR 2.0 information and communication campaigns

After the validation of the **technical specification for the Communication Agency**, Deloitte will support the Communication Working Group in the preparation of the rebranding briefing for the definition of the main features of the new brand for communication campaigns. To do so, Deloitte will firstly analyse the previous and ongoing communication initiatives both at national and regional level, as described in Phase 2, Task 2.1, to understand the current brand identity of the EHR. Based on the findings of the analysis and on the requirements identified for the rebranding, Deloitte will propose the key components of the briefing that will propose the new brand and visual identity of EHR 2.0. Besides the rebranding support, Deloitte will also support in the **definition of a communication template that can be applicable for all the EHR information and communication campaigns**, to guarantee high level of standardization in the messages that will be sent. Those requirements, defined at national level, should be then cascaded at regional level, to ensure consistency among all the Regions and the autonomous Provinces.

#### Task 4.4 - Support to the definition of operational plans with respect to the 3 streams of the EHR 2.0 plan (technical communication, communication to operators and citizens)

In accordance with the goals defined by the National Strategic Plan, it is possible to identify three population clusters to which communication activities on the EHR 2.0 are addressed. For each identified cluster, **Deloitte will support the definition of specific plans** focused on institutional communication initiatives addressed to technical personnel involved in the construction of EHR services, social and health workers, and citizens.

The operational plans will be defined taking into consideration the heterogeneity of the target, to ensure that each cluster can receive the right message at the right time. Each plan will be developed in a **co-creation approach** with the identified stakeholders and Deloitte will provide support in the **definition of the different key messages, activities, channels, timing, and KPIs for the three different streams**, that should be included in the operational plans.

#### Task 4.5 - Co-design of EHR 2.0 upskilling plan constitutive elements with stakeholders involved

Deloitte will set up **Focus Groups with the selected stakeholders** to have them contributing to the co-design of the pillars of the EHR 2.0 upskilling plan, understanding the priorities and the goals to be achieved through the plan.

#### Task 4.6 - Drafting of the overall national EHR 2.0 strategic upskilling plan

In collaboration with the identified stakeholders, Deloitte will **draft the overall national EHR strategic upskilling plan, setting EHR 2.0 Upskilling goals, related target audience, and KPIs**, to monitor the EHR upskilling effectiveness and trainee satisfaction. The plan will be defined thanks to the use of the Digital Upskilling Lifecycle model appropriately declined on the EHR issues in relation to national and regional planning and objectives.

#### Task 4.7 - Plan validation

The final draft of the EHR strategic upskilling plan will be reviewed and validated by the key stakeholders.

#### Task 4.8 - Co-design of digital upskilling strategy constitutive elements with stakeholders involved

Deloitte will involve the selected stakeholders in focus groups to make them contribute to the co-design of the strategy, identifying competencies, priorities through the following general approach: • **Planning**

**and organization of meetings** - date, duration, places, agenda, stakeholders, specific objectives, timeline and related methodology • **Facilitation** - presentation of the elements to be included in the strategy: reports, tools (e.g. analysis dashboard) and supporting materials (e.g. communication products, user guides). • **Debrief and formalization of the outcome** - collection and integration of feedback and inputs for the development of the strategy and, at the same time, sharing the results achieved with the participants.

#### Task 4.9 - Drafting of the digital upskilling strategy according to the Digital Upskilling Lifecycle

In collaboration with the identified stakeholders, Deloitte will develop the digital skills improvement strategy for healthcare professionals by setting clear goals for digital skills improvement using the **Digital Upskilling Lifecycle model** described above. The model will make it possible to support the process of improving the digital skills of the health workforce.

Specifically, the execution phase envisaged by the model will be structured around 4 key components: • **Training on digital skills** - the blended training approach and the focus of the training program will be on digital skills • **Management of change** - Deloitte will analyze the output of the assessment of digital readiness as well as roles and responsibilities to build a tailor-made training and engagement approach, also based on the Personas methodology. • **Communication and storytelling** - a tailored communication strategy and plan will ensure engagement, alignment, build awareness and promote the digital mindset for both healthcare professionals and management roles. • **Monitoring and Evaluation** - a KPI monitoring strategy will be designed to analyse and ensure that the culture and new skills are adopted.

#### Task 4.10 - Digital upskilling strategy validation

Once the strategy is drafted, Deloitte will set up a cycle of formal sessions to validate it with the key stakeholders. The **validation sessions** will be designed as a **co-validation workshop** with selected stakeholders and facilitated by Deloitte, to further refine the proposed approach. Furthermore, Deloitte, in this session, will present and highlight the **short-term actions to apply the strategy**.

### DELIVERABLE 04: Strategy design



The final outputs of this phase will be the **EHR 2.0 Upskilling** and **Digital Health Literacy Strategic Plans**

### 6.3.5 Phase 5 - Roadmap for the implementation of EHR 2.0

The objective of this phase is to draft the reports containing the recommendations on EHR 2.0 communication and upskilling actions in accordance with guidelines and in line with operational plans shared by Regions and autonomous Provinces. Moreover, Deloitte will support a set of initial activities about the upskilling initiatives that will be define with the pilot Regions identified.

This phase is structured in the following tasks, activities, and deliverables, while additional details are provided in the following paragraphs:

Stream	No. T	Task	Brief description
EHR 2.0 Communication & EHR 2.0 Upskilling	T 5.1	Identification of recommendations according to defined guidelines	Identification of recommendations to be shared with the Regions and the autonomous Provinces to review the upskilling and communication plans delivered in order to make them in line with the national guidelines.

Stream	No. T	Task	Brief description
EHR 2.0 Upskilling	T 5.2	<b>Identification of change management actions to support training initiatives in pilot Regions</b>	Definition of tailored change management initiatives to support training and adoption of EHR in pilot Regions.
EHR 2.0 Upskilling	T 5.3	<b>Support for EHR 2.0 upskilling initiatives in pilot Regions</b>	To support the implementation of some of the upskilling initiatives on EHR issues identified at the regional level.
<b><u>Deliverable</u></b>			
<b><u>D05</u></b>	<b><u>Recommendations on EHR 2.0 Communication and Upskilling actions</u></b>		A Word document reporting the defined recommendations on communication and EHR upskilling actions.

*Table 7 - Phase 5 summary: tasks, activities, high-level plan and deliverable*

The following subparagraphs describe the details of each task and related activities.

#### Task 5.1 - Identification of recommendations according to defined guidelines

Following the definition of the Communication and Upskilling Guidelines for EHR 2.0 and the analysis of the regional plans conducted by the central government, **Deloitte will support the definition of the recommendations to be shared with the Regions and the autonomous Provinces** for the revision of the plans and the consequent actions necessary for the implementation of the identified communication and upskilling initiatives.

#### Task 5.2 - Identification of change management actions to support upskilling initiatives in pilot Regions

Deloitte will identify with the pilot Regions the **change management actions** to be launched in relation to the defined EHR upskilling plan, will support in identifying the strategic actions to be implemented to operationally support the change and will support the administration involved in launching the main activities of upskilling in compliance with the project plan. Deloitte will **support the pilot Regions in using the upskilling monitoring tools**, already identified of the reference model, with the aim of identifying the specific corrective actions (based on the results of the proposed KPIs) and support any training obstacles, for example resistance to change.

#### Task 5.3 - Support for EHR upskilling initiatives in pilot Regions

**Deloitte will identify the upskilling initiatives** with the pilot Regions according to the objectives identified in the regional operational plans and will **support** - for some initiatives - **the definition of the contents**.

The selected upskilling initiatives will focus on the most relevant aspects of the implementation of EHR 2.0 according to the specificities of each pilot Region. **Deloitte will therefore support the selected training providers in building an upskilling project** (from a content and methodological point of view) on EHR 2.0 topics able to make healthcare workers aware of the motivations and advantages of introducing EHR in their organization, to understand the added value of using such a tool in their daily work and to collect feedback also functional to the improvement of future upskilling initiatives.

#### **DELIVERABLE 05: Recommendations**

The final outputs of this phase will be the **D05 - Recommendations on EHR 2.0 Communication and Upskilling actions**



### 6.3.6 Phase 6 - Action Plan

The objective of this phase is to define the action plan of a typical Region in response to the Digital Upskilling Lifecycle model: actions, timing, implementation modalities and stakeholder involvement.

The action plan will provide the beneficiary authorities with the practical elements for the digital upskilling strategy implementation, focusing on capacity building activities that will be activated in all Regions and autonomous Provinces. Moreover, Deloitte will also identify the main contents and functional requirements of a national knowledge management platform. The project will conclude with the sharing of the Action Plan for the implementation of digital skills with the beneficiary authorities.

This phase is structured in the following tasks, activities, and deliverables, while additional details are provided in the following paragraphs:

Stream	No. T	Task	Brief description
Digital Health Literacy	T 6.1	<b>Design of the action plan for the implementation of the literacy upskilling strategy</b>	Identification of the main activities aimed to implementing the Digital Upskilling Lifecycle model.
Digital Health Literacy	T 6.2	<b>Capacity building</b>	Definition of the upskilling plan, the curricula and the logistic aspects related to the upskilling activities with the main stakeholders.
Digital Health Literacy	T 6.3	<b>Knowledge management platform requirement elicitation report</b>	Definition of the main contents and functional requirements of a knowledge management platform aimed at sharing knowledge with healthcare workforce and supporting change.
<b><u>Deliverable</u></b>			
<b><u>D06</u></b>	<b><u>Action plan for the implementation of the Digital Upskilling Lifecycle</u></b>		A Word document reporting the defined action plan.

*Table 8 - Phase 6 summary: tasks, activities, high-level plan and deliverable*

The following subparagraphs describe the details of each task and related activities.

#### Task 6.1 - Design of the action plan

This task aims at detailing the main activities to implement the strategy, providing guidance on the steps with reference to timing, and roles and responsibilities of the main actors. Starting from the goals of the Digital Upskilling Lifecycle model, Deloitte will develop an action plan including the **4 main processes**: • **Analysis** - the focus will be on the study of the context to identify thematic and organizational upskilling needs for a new digital health-focused approach to education that becomes a standard feature across all Italian institutions. This Analysis Process relies on International and national initiatives, surveys and data mining, and their results shall be the framework to enable the co-creation of a **Digital Health DNA map, to come up with guiding principles to keep up with Digital Upskilling goals**. • **Design** - the method, the toolkits, i.e., good upskilling practices, based on the evidence that emerged during the previous process, will prepare, for stakeholders' co-design, the field of priority areas of upskilling that the National level shall propose to the Regions and the autonomous Provinces, to the Professions boards and the training providers, and enables the co-creation of training contents for a Digital Health DNA full achievement. In this process the **skill assessment allows stakeholders to find the right** national and local **paths** in order to deliver the Upskilling initiatives to fill the gaps. The aim is to identify specific needs based on a common reference model of Digital Skills improvement and to define a Regional Plan declined by initiatives. Subsequently define the related target and ambition KPIs to be achieved by regions and autonomous Provinces which will be translated in Scorecards. • **Execution** - the main purpose is to develop the regionals and local administrations

plans and deliver training initiatives through the regional structures and the various providers. There will be identified quick wins actions, which will be validated by the main stakeholders and prioritised by Deloitte using a Benefits-Feasibility prioritisation matrix. • **Monitoring** - enable stakeholders to closely monitor the results and determine the effectiveness of the Regional Plans by measuring the KPIs **to verify goals' achievement and attest the level of satisfaction**. This will also happen by collecting outcome on the training outcomes by the trainees. The outcome reporting will be the starting point at national level, to create a standard to collect and harmonize the differences and needs across regions and autonomous Provinces.

### Task 6.2 - Capacity building

During the building phase, Deloitte, in co-design with the main stakeholders, will help Regions and autonomous Provinces to define and validate the **Continuing Digital Health Education** training plans as well as the aspects related to the Upskilling targets to equip the stakeholders with the capacity to then implement the Digital Upskilling Lifecycle Model by themselves. The operational drill-down, assembled by regions and autonomous Provinces **and based on CME**, will be created to take a first logical step into the understanding of digital skill levels across different healthcare services in regions and autonomous Provinces. Deloitte will help stakeholders focus on cultural change and change management and will organise and provide capacity building events to boost the **new mindset with regions and the autonomous Provinces who will be involved in the implementation of the Action Plan. Capacity building events will be mainly delivered virtually** to maximize the number of users as well as overcome possible limitations (e.g., dislocation of the health workers among Italy and inside each Region). To pursue these objectives and to support staff from all Regions and autonomous Provinces to embed the digital culture and develop the **Digital Fluency level** of the health workforce, Deloitte will organize **one seminar** aimed at providing information and knowledge on both digital and soft skills, with practice examples related to the healthcare industry and (when needed) workshops on digital and soft skills for each Regions and autonomous Provinces, coherently with the Digital Health DNA built.

### Task 6.3 - Knowledge management platform requirement elicitation report

Deloitte will define the main content and user interactions of a knowledge management platform aimed at collecting all the relevant information (i.e., guidelines, training plans as well as e-training methodologies and tools) developed to support for the healthcare workforce in enhancing digital competencies in accordance with the Digital Upskilling Lifecycle model.

#### **DELIVERABLE 06: Action plan**

The final outputs of this phase will be the **D06 - Digital Upskilling Lifecycle Action Plan**



## 6.4 Project organisation

Our multidisciplinary project team is composed of Deloitte professionals mainly covering the following two areas of expertise impacted by the project: *Digital Health & Public Sector* and *Human Capital*. In order to closely support the main beneficiary institutions of this specific contract (i.e., the Ministry of Health of Italy and the Department for Digital Transition) and the other national stakeholders during the entire delivery lifecycle, the project is led by Deloitte professionals from the Italian Consulting practice, with extensive experience in Health and Public Sector, but also actively participating in EU projects. Moreover, the Deloitte team benefits from the know-how and previous project experience of the entire Deloitte network. In particular, the team involves experts from the Deloitte Change Management practice specialized in the development of communication, training and upskilling strategy, as well as approach to monitor the adoption of new mindset and skills with experience on digital transformation projects. To ensure high effectiveness and a clear commitment on the project together with a structured but smooth involvement of all the stakeholders, the project is organised in a two-level operational structure:

**Level 1 - Governance:** the **Steering Committee** is composed of Deloitte Engagement Partners, in addition to officials from DG REFORM, Ministry of Health of Italy, the Department for Digital Transition, AGENAS and ProMIS. Their role is to ensure the contract is carried out in line with DG REFORM expectations and guidelines. The Framework Contract Quality Assurance responsible, Benoit Vandresse, steers the overall project, monitoring and reporting on the overall service quality. The **Engagement Partners**, Davide Lipodio and Matteo Zanza, lead the project team and advise the **Project Manager**, Ilaria Pacini, who acts as the point of contact between the governance and the execution levels of the project, managing the project team and ensuring deliverables are submitted on time and in line with expectations.

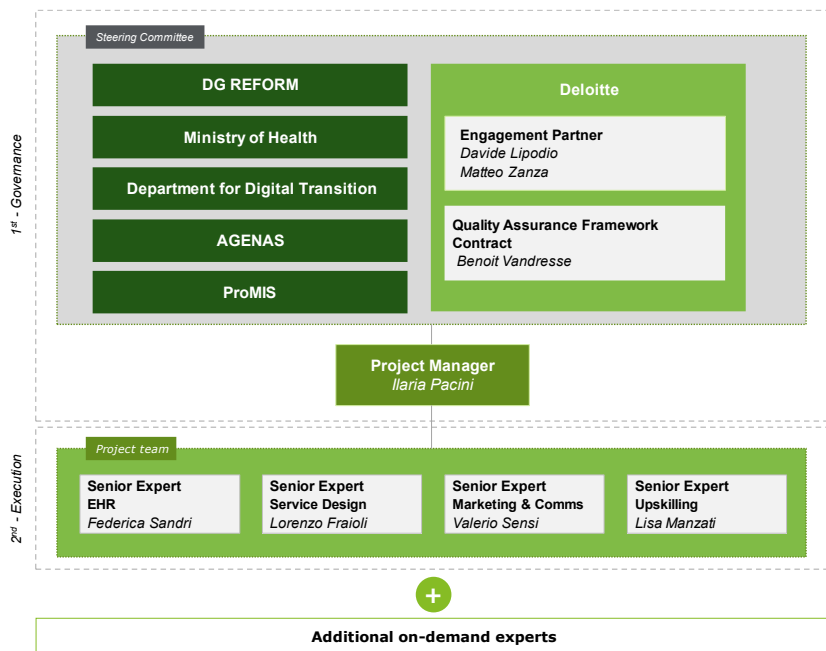


Figure 10 - Project organisational chart

**Level 2 – Execution:** the core team ensures the necessary skills mix required for the success of the project, leveraging on their experience in the public sector and knowledge of EU and Italian practices in the healthcare domain with a focus on digital transition, and competencies upskilling. The background of the Deloitte core team focuses mainly on the following areas of expertise:

- **senior experts with a multi-year consulting experience** in design of service solution in the healthcare sector, within the public and private sector, and with active experience in national and regional projects regarding digital transformation, especially in the development and implementation of the EHR (e.g., Veneto Region) and in the digitalisation of clinical processes. These experts provide an in-depth knowledge regarding the EHR (e.g., organisational, regulatory, technological) and its insertion in the healthcare ecosystem at national and regional level;
- **senior experts with a multi-year consulting experience in change management projects** within the public and private sector, and with active experience in national and regional projects regarding change management, especially in capacity building, learning on the job, and digitalisation and adoption support.

The team structure is based on **four main policy domains**: • **healthcare system**, • **e-Government**, • **human resources management**, • **state governance and better policy making**. These competencies guarantee an effective and efficient delivery, leveraging on:

- **specialist skills and previous experiences of team members:** all the profiles involved matured extensive experiences consistent with the scope of this request and have a long track record working together as a team;
- **presence of additional on-demand consultants:** if needed, the core team composition could be supplemented by on-demand professionals in order to offer vertical thematic support, with high specialist contents, or additional skills, which could be mostly complementary to those of the team;
- **workload management:** considering possible fluctuations related to activities' volume and complexity, as well as tight project timeline, the Project Manager could carry out internal staffing monitoring, to potentially re-modulate tasks' timing and assignments to guarantee the best team performance.

## 7 Risks and mitigation actions

This chapter briefly summarises the main risks of the project and related mitigation actions.

Deloitte project management expertise will be coupled with its consolidated and proactive approach to Risk Management. Deloitte will ensure that main risks are identified, analysed, planned around and managed dynamically. Risk management occurs across all levels and layers of a project and is particularly important on strategic projects such as this. We will establish a **risk management strategy and risk register** and apply techniques to manage and mitigate risks.

A key element in the planning and deployment of an effective risk management strategy is the use of the **Risk Matrix**, a matrix used to define the risk levels by considering the category of **probability or likelihood of occurrence** of an event against the category of **impact severity of its occurrence**. It is used to assess each risk identified on the project. Based on the results of this identification, real "risk areas" are identified, a first mapping of the risks is drafted, and to each risk is assigned a specific level of priority and a given containment interventions. The evaluation takes place by:

- the *actual Risk Matrix*, which represents each risk using two fundamental parameters: the numerical probability of its occurrence and the level of criticality (impact) when the risk occurs;
- the *Risk dispersion chart*, which provides a description of the risks, based on their likelihood of occurring and the related impact on the project. Each risk is mapped allowing immediate display of "critical" risks.

Risk assessment (degree of exposure) is therefore performed by multiplying the probability of occurrence (level of probability) for the assessment of criticality (impact level). Based on the values of the individual risks, the initial general risk of the intervention program (baseline) must be assessed. Periodically the value of the "baseline" is compared with the current risk assessment and displayed by means of the graph for risk monitoring. Over time, the overall risk value must decrease according to the actions taken to control the regular progress of the program and eliminate possible obstacles.

Deloitte had identified a set of **preliminary risks**, briefly described below in the following table.

	<b>Risk description</b>	<b>Mitigation actions</b>
<b>R1</b>	<b>Collaboration with key stakeholders:</b> lack of engagement and buy-in from the main stakeholders (i.e. Ministry of Health, Department for Digital Transition, AGENAS, ProMIS, Italian Regions and autonomous Provinces)	Regular meetings are scheduled twice a month with DG REFORM and the main stakeholders. Clear identification of project working group and the members of the Steering Committee.
<b>R2</b>	<b>Partial identification of stakeholders:</b> incomplete understanding and overview of project impacts caused by a partial identification of main stakeholders.	During the collaborative preparation of the assignment, key stakeholders shall be identified to attend the review and alignment meetings.
<b>R3</b>	<b>Complex governance:</b> large number of stakeholders involved	Adoption of structured project governance to monitor activities. Regular meetings are scheduled twice a month with DG REFORM and the main stakeholders.

Risk description	Mitigation actions
<p><b>R4</b> <b>Challenges in coordinating timelines and national deadlines:</b> different timelines and deadlines associated with EHR 2.0 Upskilling, Communication and Digital Health Literacy streams. The EHR 2.0 Upskilling and Communication streams are already on-going, and this aspect requires following the design phases with two different speeds of action depending on the streams to which they belong. This could generate complexity in managing the overall project and possible misalignments</p>	<p>Periodic alignment with the main interested parties, proposition of a project plan in 3 different streams with subdivision of deliverables and consequent release at different times, continuous updating of the plan and realignment of the phases envisaged by the three streams to ensure the achievement of the objectives as much as possible shared.</p>
<p><b>R5</b> <b>Access to documentation:</b> limited availability of supporting documentation for the identification of the ongoing initiatives at international, national and regional level and for the EHR 2.0 Upskilling and Communication Guidelines definition.</p>	<p>Deloitte will engage all the key stakeholders to maximise the quantity and quality of inputs, documentation and available data. Additionally, Deloitte will plan targeted interviews. It has been agreed with key stakeholders that Guidelines definition could not consider entirely the regional operational plans.</p>
<p><b>R6</b> <b>Communication:</b> lack of reporting, communication and feedback gathering on the progress of the project.</p>	<p>Regular meetings are scheduled twice a month with DG REFORM and the main stakeholders.</p>
<p><b>R7</b> <b>Difficulty in the implementation of the EHR 2.0 Upskilling and Communication Guidelines and Strategy:</b> identified actions and recommendations could not be easily implemented due to several contextual factors (e.g. regulatory constraints, lack of skills) and on-going activities based on prior recommendations and already defined milestones.</p>	<p>Deloitte will make sure to elaborate concrete and doable recommendations. Moreover, the guidelines will be co-created with the main stakeholders accordingly to the on-going achievements.</p>
<p><b>R8</b> <b>Formal validation of Deliverable:</b> project delays caused by missing validation.</p>	<p>Deloitte will make sure to seek timely input during the deliverables review process.</p>
<p><b>R9</b> <b>Regulatory changes:</b> Possible regulatory evolutions not known to date that could impact the project (i.e. National Recovery and Resilience Plan - PNRR).</p>	<p>Adoption of an agile approach and close collaboration with stakeholders and possible documentation update in line with the new recommendations if inside the time framework of the project.</p>
<p><b>R10</b> <b>Data quality and coverage:</b> during the project conduction it is crucial that data mining activities are powered with consistent data in terms of quality and coverage.</p>	<p>Deloitte will inform, warn and notify to key stakeholders about possible lacks on data collected that could generate inaccuracy of the results.</p>

*Table 9 - Project risks and related mitigation actions*