
Aura team

Digital Inclusion in Naples

The background features a warm orange-to-yellow gradient. On the left, there is a faint, light-colored geometric logo consisting of overlapping hexagons and circles. On the right, a large, solid orange circle is partially visible, extending from the edge into the frame.

Background

In Naples, many elderly people live alone and struggle to use smartphones or digital public services. Digital exclusion increases social vulnerability and reduces autonomy.



The Problem:



Forced digitalization is creating a deep "Digital Divide" that excludes the elderly, undermining their independence.

1. Healthcare and Medical Prescriptions

- Missing Tools: Difficulty receiving electronic prescriptions (e-prescriptions) due to lack of smartphones, email, or the skills to use them.
- Blocked Access: Inability to obtain and use Digital IDs (like SPID) and Electronic Health Records (EHR) to book appointments or view results.
- Confusion: The disappearance of paper printouts (memos) causes anxiety and reliance on doctors or pharmacists.

2. General Technology Barriers

- Physical/Cognitive Hurdles: Vision problems, arthritis (difficulty with mouse/touchscreen), or memory deficits (passwords) make usage frustrating.
- Digital Illiteracy: Lack of basic skills to navigate, recognize scams, or use apps.
- Exclusion from Essential Services: Inability to manage services (banking, pensions, utility bills) that are moving online-only.

Main Consequence: A sense of uselessness, intense frustration, and a total loss of autonomy, forcing them to depend on family for every simple task.

Medical Prescription

MATRICE | TAGLIANDO ADESIVO

SERVIZIO SANITARIO NAZIONALE
REGIONE

Numero

Codice fiscale

Cognome e nome dell'assistito

Indirizzo dell'assistito

Diagnosi

PRESCRIZIONE

COGNOME E NOME DELL'ASSISTITO (o NOME E COGNOME DELL'ASSISTENTE)

INDIRIZZO (con indicazione della via)

SERVIZIO SANITARIO NAZIONALE
REGIONE

CODICE FISCALE

NON ESSENTE CODICE ESSENTE RICEVITO FIRMA AUTOCERTIFICANTE

ISOLA PROVVISORIA CODICE ASL

NOTE (sempre da compilare)

NOTA CUP

NOTA CUC

PRIORITÀ DELLA PRESCRIZIONE

NUMERO CONFEZIONI / PRESTAZIONI

TIPO RICETTA

DATA

TIPO E FIRMA DEL MEDICO

DATA SPEDIZIONE / TIPO E FIRMA DELL'OGNANTE

NUMERO PROGRESSIVO

IMPORTI

TRONET

CALENDAIO DI CHIAMATA

ALTRI

Focus on Healthcare Digitalization

The specific focus of our project is the digital medical prescription (ricetta medica elettronica).

In Italy today, when a doctor prescribes a medicine or a medical visit:
the doctor no longer gives a paper form; instead, he issues a digital prescription with a unique electronic code;
to use this prescription, the patient must go online (on the ASL/CUP website) or use a digital app to book the medical visit or to buy the medicine at the pharmacy;
this process requires digital skills (copying codes, logging, navigating a website, or using an online booking form).

For many elderly people, this procedure is too complex. They cannot complete it alone and must ask their family for help every time. This makes them dependent and less autonomous in managing their health.

Slide: Real process of digital prescription in Italy

- **Step 1:** The doctor writes the digital prescription in the official system.
- **Step 2:** The patient receives a code via SMS / WhatsApp / e-mail.
- **Step 3:** The patient must go online (ASL website) and log in with SPID
- **Step 4:** The patient must enter the NRE code manually.
- **Step 5:** The patient must choose hospital / specialist / date / time.
- **Step 6:** The booking confirmation is digital again (no paper).



What is SPID?

SPID is the official digital identity system used in Italy to access public services online. It is like a “digital ID card” that proves who you are.

To do many things online (healthcare, taxes, school, INPS, etc.) Italians must log in using SPID.

For elderly people this is a problem because SPID requires:

- username
- password
- smartphone app
- sometimes 2 factor authentication

For many seniors, SPID feels complicated and stressful.

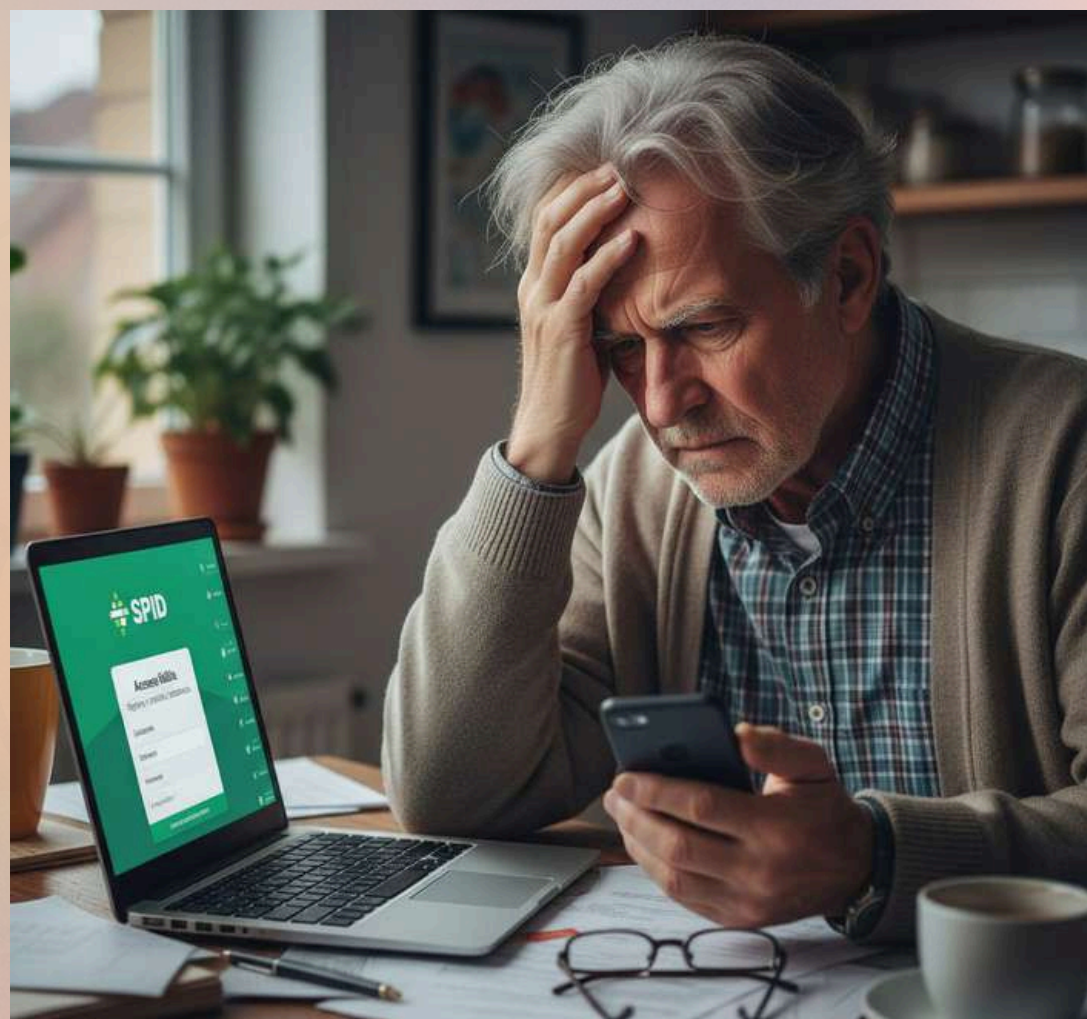
What is ASL?

“Local Health Authority” in Italy.

It is the territorial public health organization that manages healthcare services for citizens (hospitals, specialists, visits, exams) in a specific geographical area.

In Naples there are multiple ASLs, and each ASL has its own booking system.

WHY THIS IS HARD ?



For Naples elderly
they don't understand what SPID is
they don't know where to click
they are scared to type the wrong code
they freeze and do nothing

Where seniors get stuck in the process

Step where they freeze:

After inserting SPID credentials and before choosing the service.

Why?

Because they don't understand the difference between:

- specialty / department (example: cardiology / dermatology / orthopedics)
- structure / location (which hospital)
- type of visit (first visit / follow-up)

So the digital interface asks them to choose.

They don't know what to choose.

They stop. They give up.

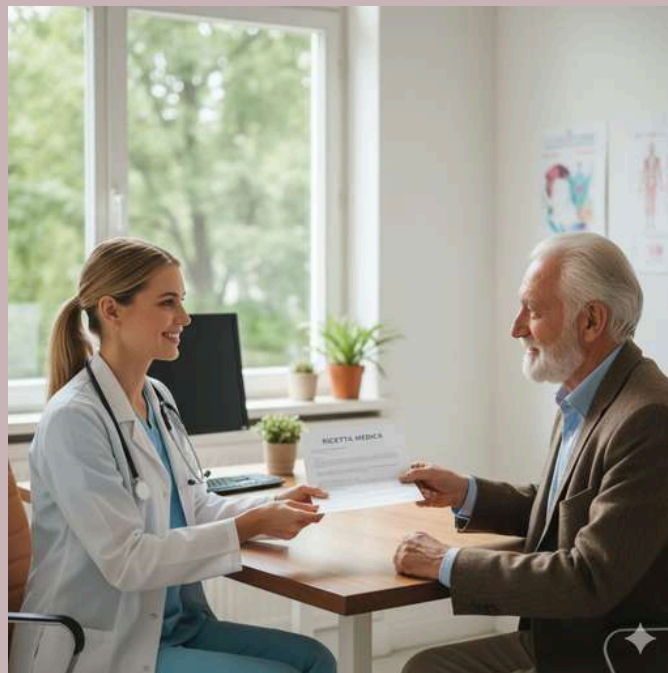
Result:

They call family for help.



From Paper to Digital: How Medical Prescriptions Changed in Italy

BEFORE (years ago)



The doctor gave the patient a paper prescription.
The patient took the paper home.
To book a medical visit, they simply went to the CUP desk or to the pharmacy with the paper.

Everything was physical and simple.

NOW (today)



The doctor creates a digital prescription online.
The patient receives a digital code (NRE) — often via SMS, WhatsApp, or e-mail.
To book the medical visit, the patient must enter the code on a website (ASL / CUP) and use SPID or CIE to access the system.

Everything is digital, but much more complex.

Research Sources + Links

Digital divide in Italian seniors

- ISTAT – The digital divide in Italy (UNECE conference paper):

<https://unece.org/statistics/documents/2023/04/digital-divide-italy-gender-and-territorial-problem-istat>

- Digital skills in Italy vs EU average:

<https://digital-skills-jobs.europa.eu/en/latest/briefs/italy-snapshot-digital-skills>

- “Grey Digital Divide” in Italy – University of Naples research (67% of over-65 not using Internet properly):

<https://www.iris.unina.it/handle/11588/908459>

- Impact of social ties on seniors’ digital inclusion in Italy:

<https://italiansociologicalreview.com/ojs/index.php/ISR/article/download/1015/591/>

Why we need a hybrid solution (physical + digital)

For elderly people, fully digital interfaces create fear and confusion.

They need physical, familiar elements to feel safe.

But physical solutions alone are not enough, because medical bookings and prescriptions are now only online.

So the solution must be hybrid:

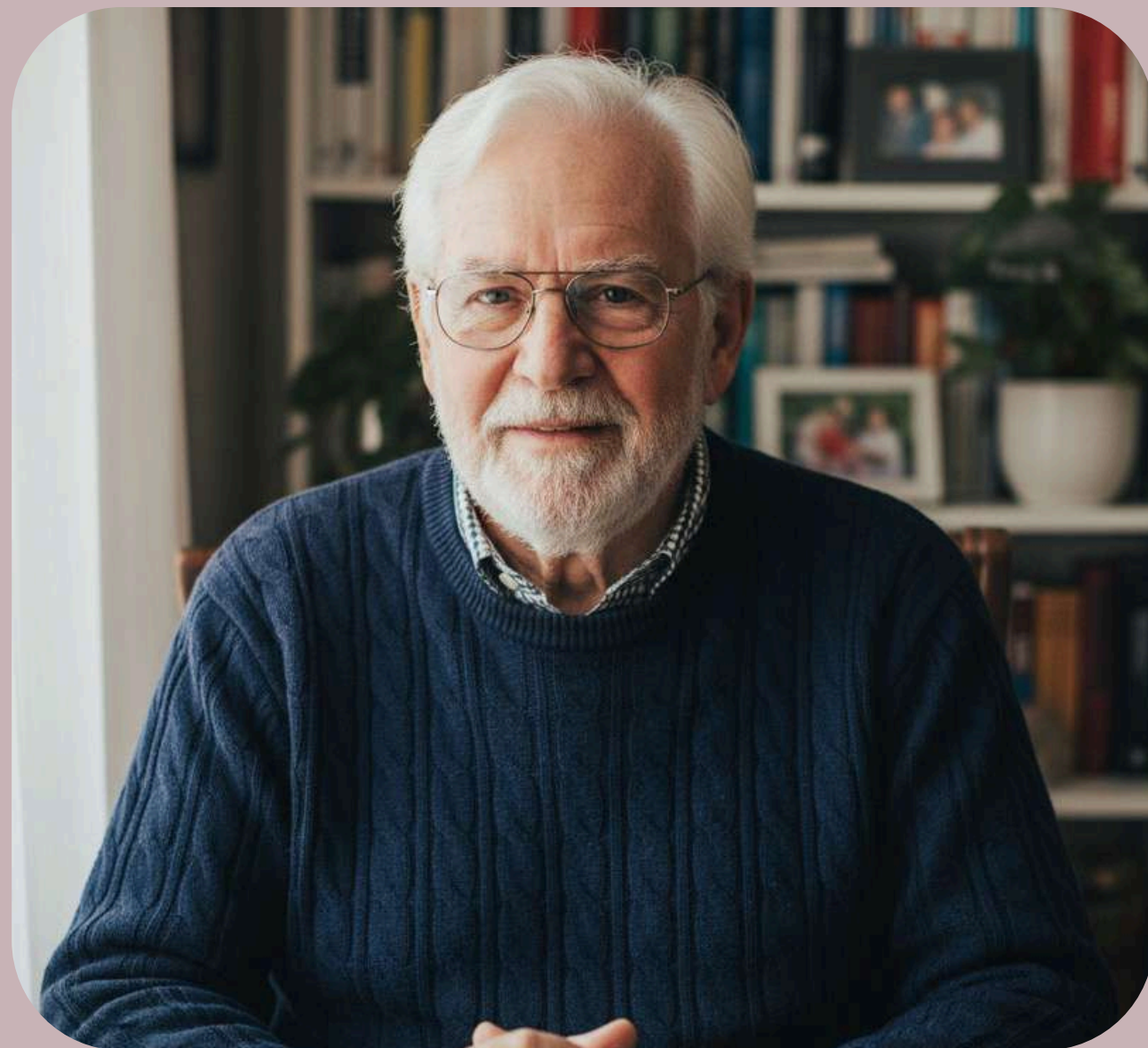
- Physical = object / card / printed guide / token that gives confidence
- Digital = simplified interface that connects to the ASL/CUP system and guides step by step

KEY IDEA:

Physical for safety. Digital for function.



Personas



Pasquale is 78 years old and lives in a neighbourhood in Naples.

He has a smartphone, but he does not feel comfortable using it alone.

He is afraid of:

- pressing the wrong button
- making a mistake that costs money
- “breaking the phone”

He wants:

- to book medical appointments independently
- to access his prescriptions without asking his son
- to feel capable and not dependent

Pain Point:

Technology makes him feel anxious, not empowered.

Market & Constraints

- **Budget:** max 500€
- We must design a physical + digital solution
- Focus on the **digital medical prescription** process (online booking through ASL/CUP)
- We must explain this process clearly and make it safer and easier
- **No compensation** (voluntary / educational work)
- **Target:** elderly 70+
- **Goal:** scalable and replicable solution for other areas

Advantage 03

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Design Requirements

Clear and simple → no confusion, minimal steps

Emotional and human-centred → reduce fear, increase trust

Inclusive and accessible → large buttons, readable text, guided flow

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Team



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