



# Patient Summaries in the Netherlands

History, purpose, context, and future



Ministry of Health, Welfare and Sport

*With special thanks to Herko Coomans*

*Robert A. Stegwee*



*With special thanks to Maayke Klinkenberg*



# Many different patient summaries in NL



“  
The nice thing about  
standards is that there are  
so many of them to choose  
from.

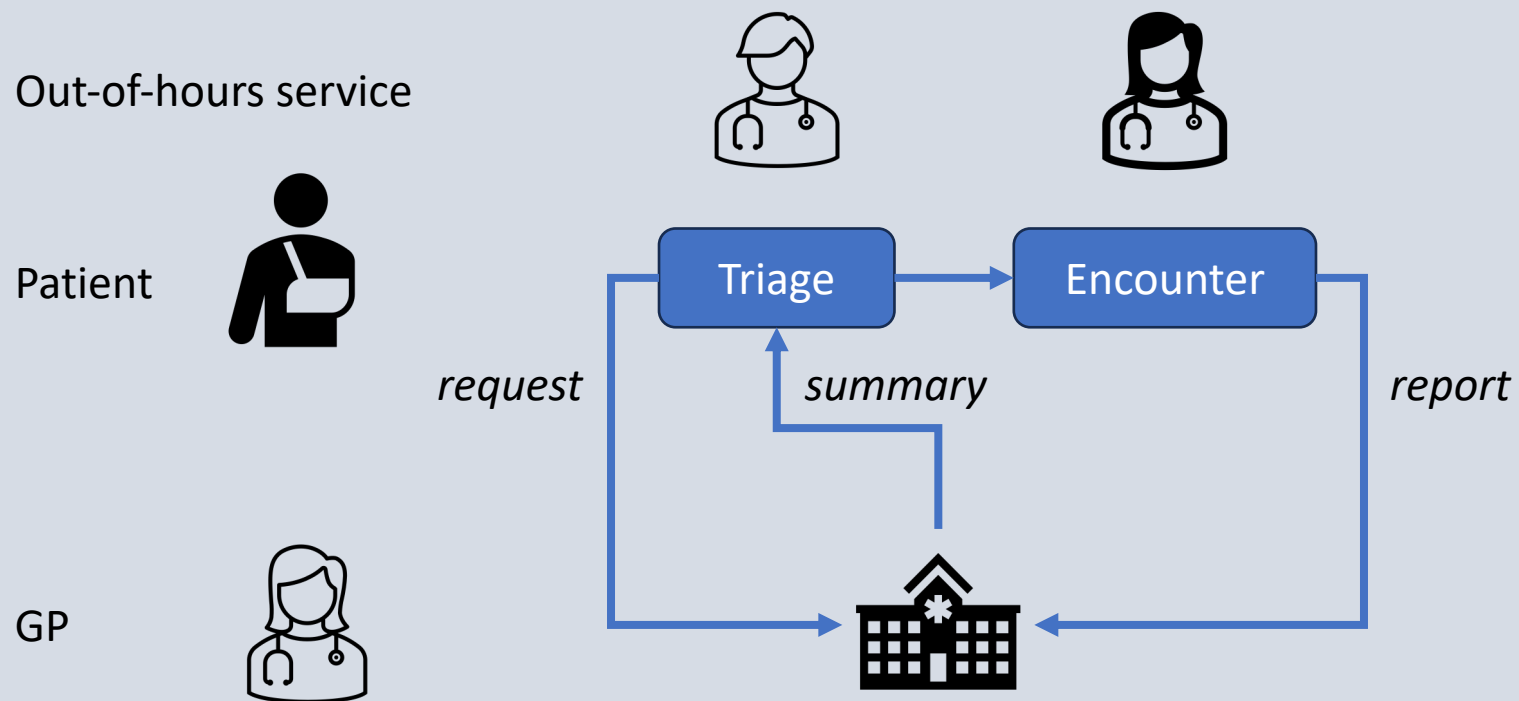


Andrew S. Tanenbaum

- GP out-of-hours summary
- Emergency care summary
- Basic care dataset
- European patient summary
  - MyHealth@EU
- International Patient Summary?



# GP out-of-hours summary





# GP out-of-hours summary

GP out-of-hours offices were created in the late 1990s to serve multiple GP offices to provide the evening, night and weekend services

- Operational since before 2011
- More than 90% participation by GPs and out-of-hours offices
- Opt-in patient consent (including a Corona opt-in)
- Out-of-hours office asks the patient permission to access their summary
- Out-of-hours office requests the summary from the network
- If the patient provided consent to GP, the GP system receives the request
- GP system produces the summary (no summaries are stored)
- The network delivers the summary to the out-of-hours office
- The out-of-hours office completes the visit and provides a report
- The GP processes the report and includes relevant data in patient record



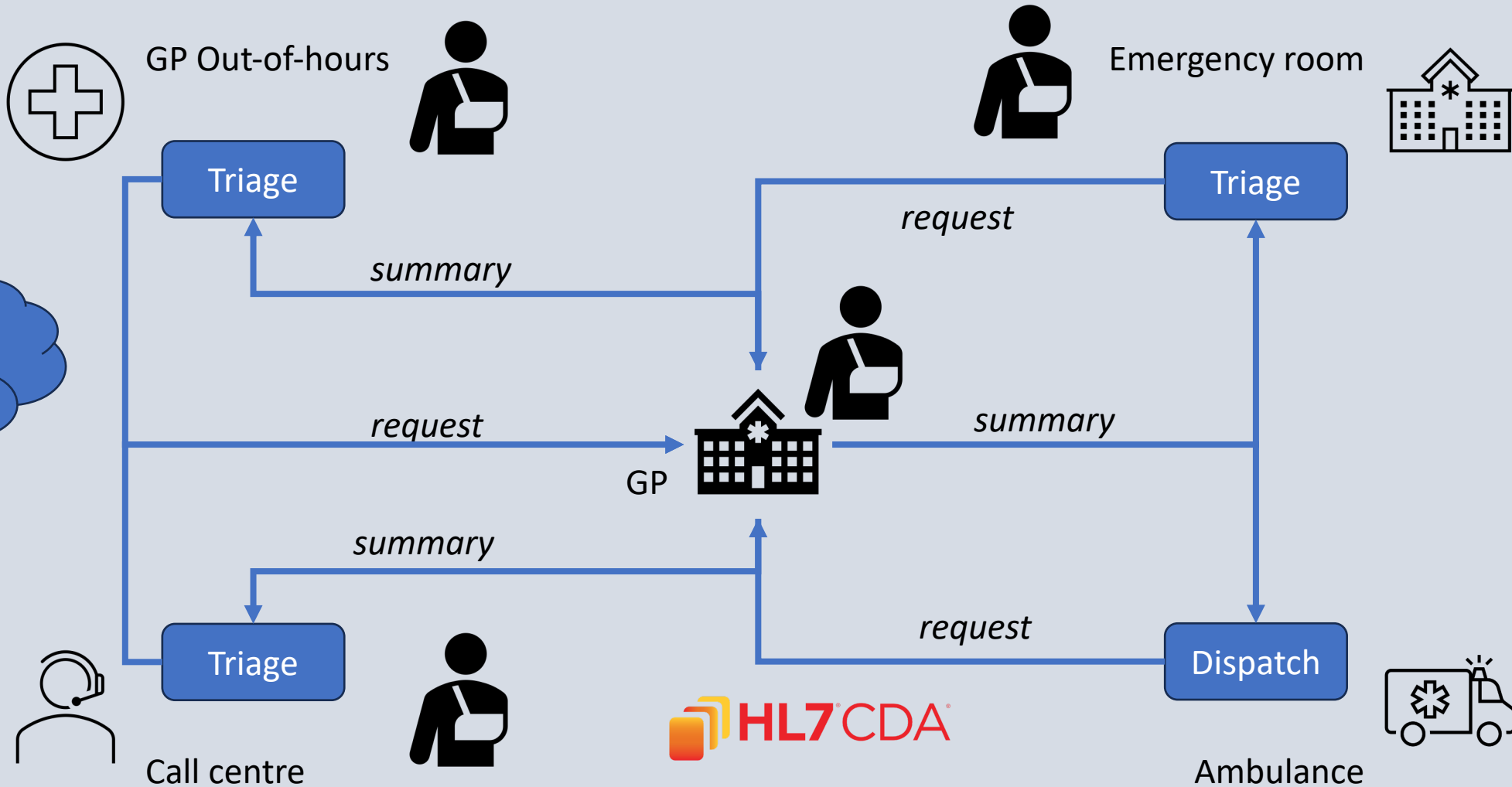
# What is in the GP Summary?

Derived from the reference model for GP systems, which was first introduced in 1985

Element	Description
Episodes of care (0..*)	All open episodes, as well as episodes of special attention, including the date of the last encounter
Encounters ((0..*))	All encounters related to the selected episodes of care over the last four months
Journal entry (0..*)	All journal entries (SOAP) related to the encounters selected
Prescriptions (0..*)	All current and chronic prescriptions for medication within the timeframe of the selected encounters
Results (0..*)	All measurements and results that are coded and registered within the timeframe of the selected encounters
Conditions (0..*)	Patient characteristics, including pregnancy, allergies, intolerances, contraindications, etc.
Transition of care information (0..*)	Additional points of attention that are important for the care of the patient and that a GP may have recorded in their GP system



# Emergency care summary



Reports have been left out for legibility





# Emergency care summary

- All summaries are generated automatically by the GP system
- Builds upon the GP out-of-hours summary
- Three (somewhat) different summaries:
  - For the call centre for emergency ambulance services
  - For the ambulance personnel, when an ambulance is dispatched
  - For the emergency department where the patient is brought to
- Each service sends out a summary request to the network
- Same opt-in rules apply regarding patient consent



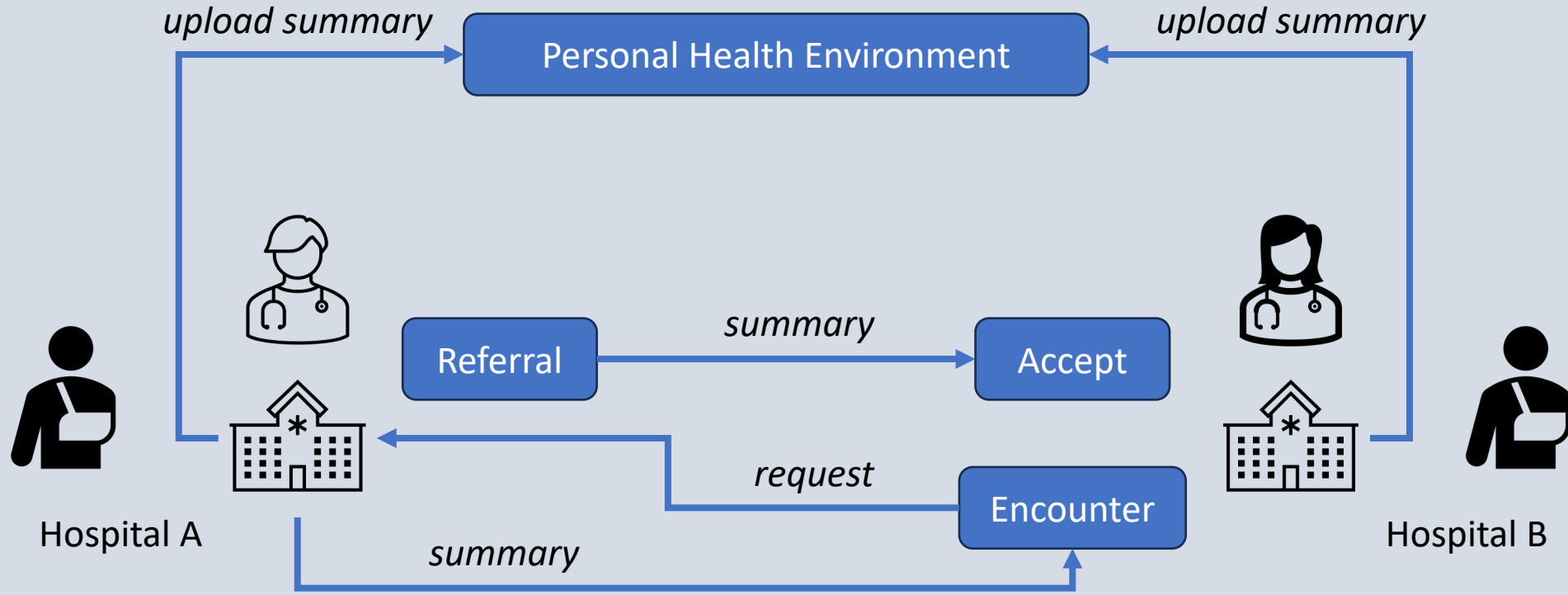
# What is in the Emergency care summary?

Elements in the GP Summary	Additions in the Emergency care summary	In Call Centre Summary
Episodes of care (0..*)	Any unprocessed reports from previous emergencies	✓
	Plan of care for each episode	✓
Encounters ((0..*))		
Journal entry (0..*)		(10 days)
Prescriptions (0..*)	Current medication and medication history (instead of prescriptions)	✓
Results (0..*)	Summary of correspondence over last 4 months	(10 days)
Conditions (0..*)	Current contraindications	
	Current intolerances	
Transition of care information (0..*)	Advance treatment directives	✓
	Treatments	✓
	Profylaxis	
	Social data	✓
	Additional contact information	





# Basic care dataset





# Basic care dataset

Adopted by the Health Information Council in 2018

- Origin in hospital care – data capture at the source
- Shared dataset across specialties/departments/hospitals
- Independent of specialty, condition, or profession
- Variants: acute care, mental care, long-term care, ...
- Inspired by the European Guideline on the Patient Summary and the IPS
- Shared with the patient's personal health environment (PHR-S)



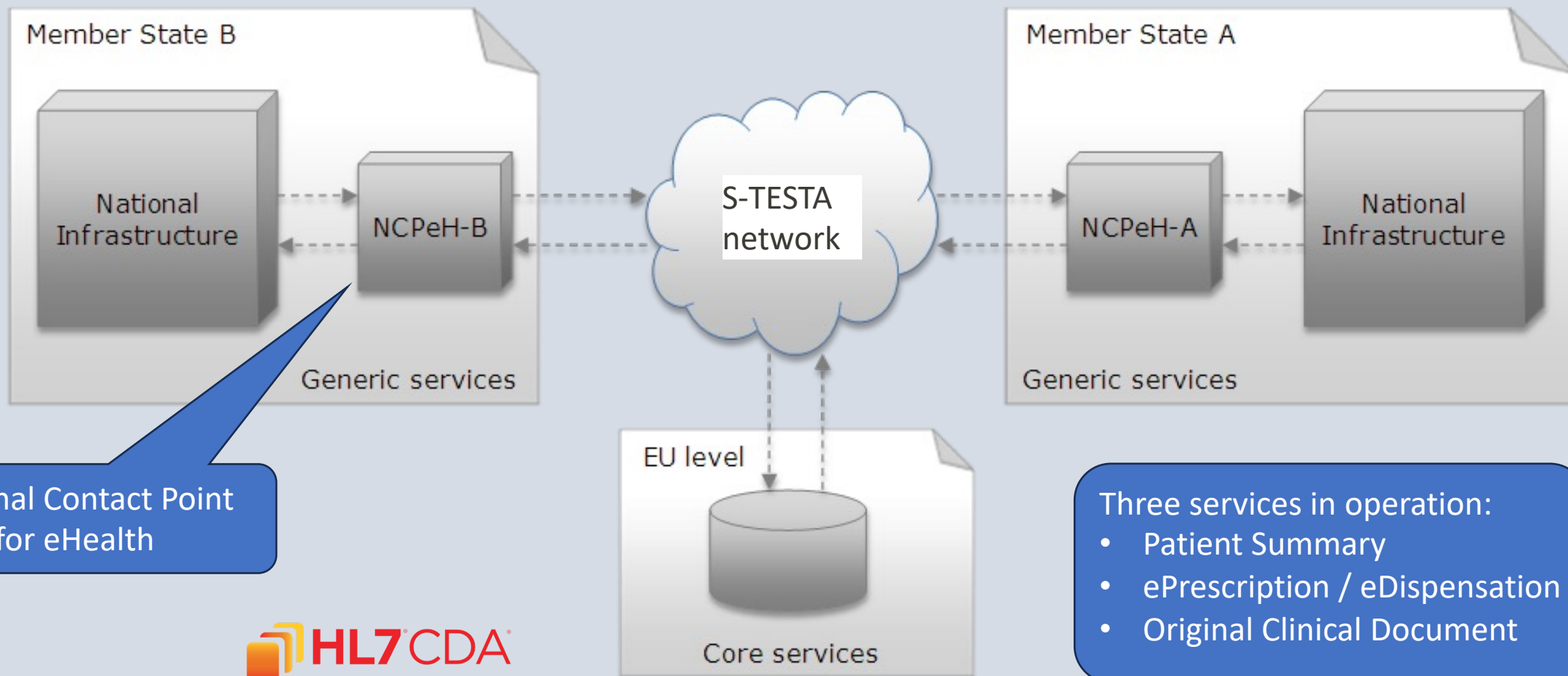
# What is in the Basic care dataset?

Identification and demographics *	Financial information *
Advance treatment directives	Contact persons
Functional status *	Problems and diagnoses
Social anamnesis	Alerts
Allergies	Medication
Medical devices *	Immunizations *
Vital functions	Results
Procedures	Contacts
Care plan	Care providers *

In addition to really new elements, the basic care dataset also restructures some of the data



# MyHealth@EU – cross border services





# What is in the European Patient Summary

## EU-PS basic elements

Allergies / intolerances / alerts

Medical problems / diagnosis

Medical devices

Procedures

Medication summary

Transnational characteristics of the EU-PS:

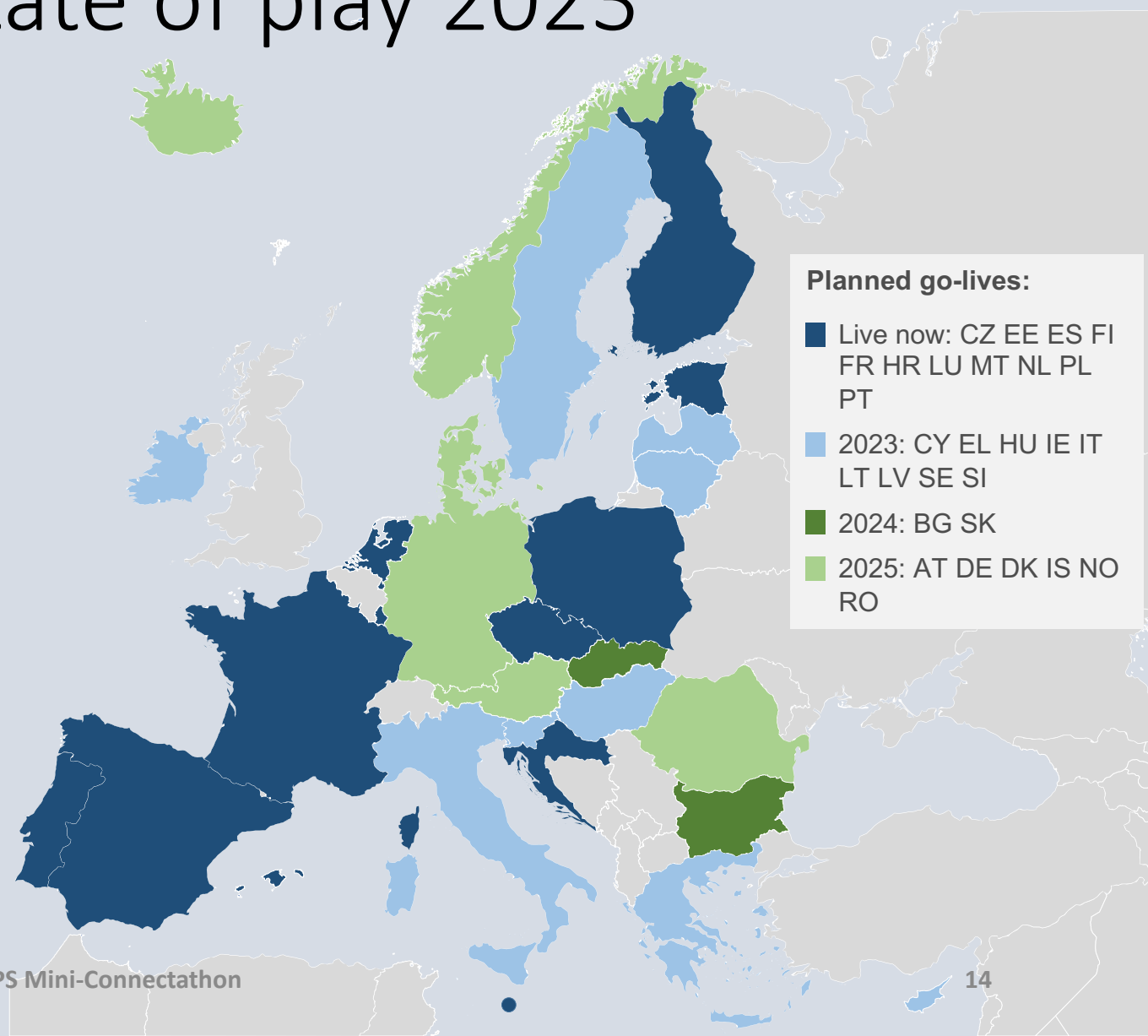
- One (compiled) dataset per country
- Includes source text and codes
- NCPeH at source transforms codes to agreed codes from the Master Valueset Catalogue to create a pivot document
- NCPeH at destination transforms pivot document in a locally coded and translated document, retaining source text and codes
- Tests are done on a country-by-country basis

The evolution of eHealth Network guidelines on Patient Summary and its implementations will take in consideration the ISO 27269:2021 Health informatics — International Patient Summary and ensure compatibility, whenever applicable.



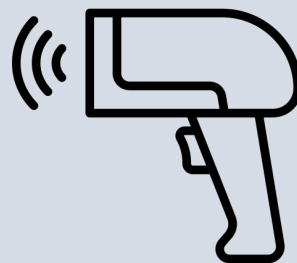
# MyHealth@EU state of play 2023

- NL can now request and receive an EU-PS
- Preparations to connect NCPeH to national infrastructure to provide an EU-PS as well
- Which summary?





# The International Patient Summary

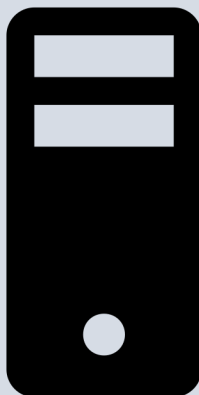
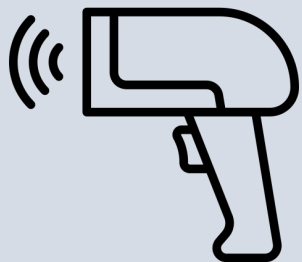


Patient-mediated  
scenario as proposed  
by the GDHP





# Services for the health care professional



International Patient Summary  
Global Codes with Original Codes  
and Original Text



Terminology Server  
Translate Global Codes in Target  
Codes en Target Text

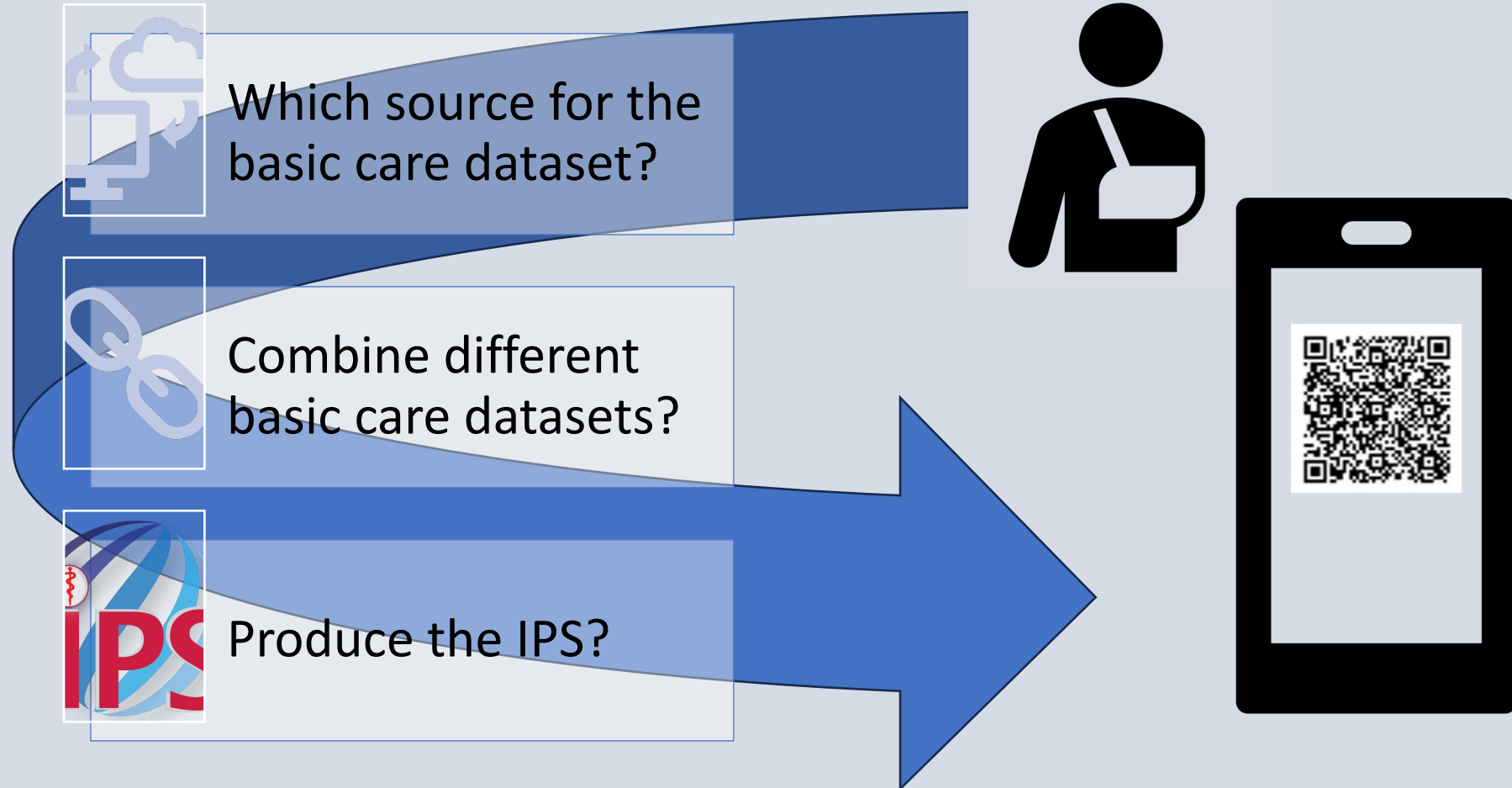


Basic care dataset  
With access to Original Codes and  
Original Text





# What services does the patient need?





# A possible role for the PHR-S



Personal Health Environment initiative





# A possible role for the PHR-S

HL7 News



*A Conversation with Arnold Breukhoven, Founder and CEO, Drimpy: "Don't wait. Just do it!"*

## **Drimpy Realizes the World's First International Personal Health Data Exchange**



# Conclusions and question on PS in NL

- Different types of patient summaries are available in different systems across healthcare providers in The Netherlands
- For persons with access to a PGO (PHR-S) a natural choice is to control the content of their patient summary themselves; this can then be used for both the EU-PS and the IPS
- Use of the National Terminology Server is essential to provide translation services from Dutch summaries to both the EU-PS and IPS, as well as patient friendly terms
- Do we need a central service to transform a national patient summary into an EU-PS and/or IPS?



Questions?