IPS in Action

International Patient Summary

By:
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Agenda

- IPS Background and Generalities
- IPS on FHIR
- Experiences around the world
- Quick Hands On
- BPR and IPS

epsos
EUROPEAN PATIENTS
SMART OPEN SERVICES

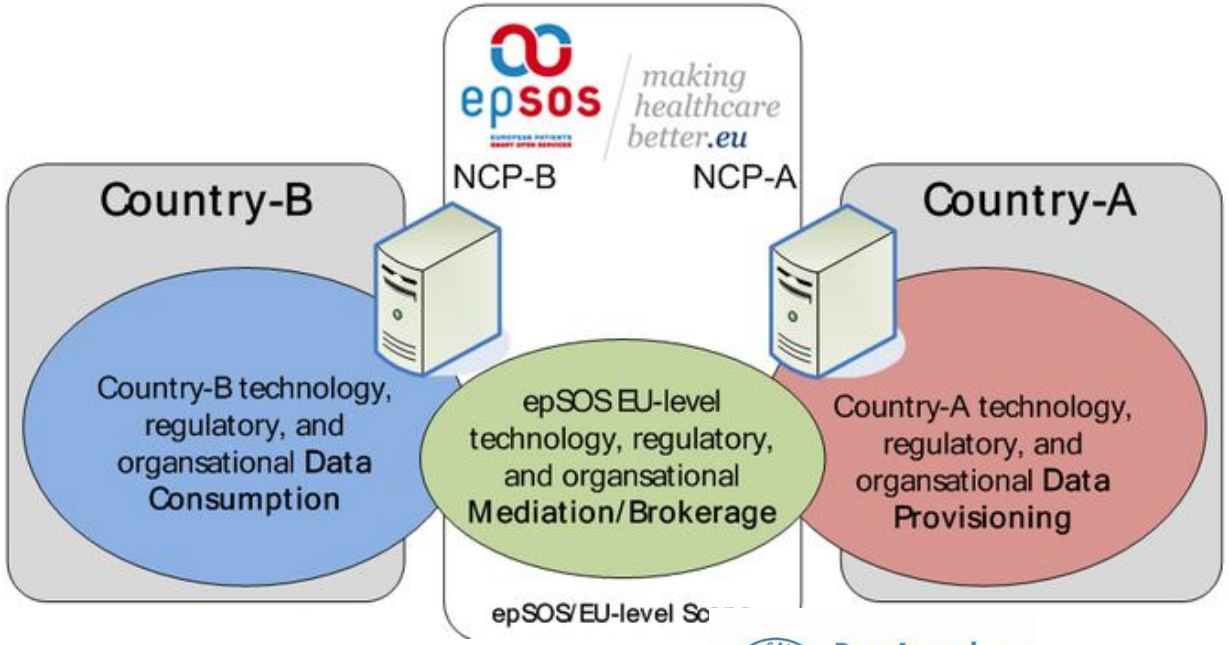
Start date	End date
1 July 2008	30 June 2014

The purpose was for the applications to “talk” to each other
Even with the problem of different languages.

Process pharmacy orders from
patients who move between
member states

HC summary

Prescription



REGIONAL PUBLIC GOODS

Pan American Health Organization

BID
Banco Interamericano de Desarrollo

Experiences
Spain

BOLETÍN OFICIAL DEL ESTADO
Núm. 225 Jueves 16 de septiembre de 2010 Sec. I. Pág. 78744

Artículo 3. *Documentos clínicos.*

1. Los documentos clínicos para los que se establecen un conjunto mínimo de datos son los siguientes:

a) Informe clínico de alta, detallado en el anexo I.
b) Informe clínico de consulta externa, detallado en el anexo II.
c) Informe clínico de urgencias, detallado en el anexo III.
d) Informe clínico de atención primaria, detallado en el anexo IV.
e) Informe de resultados de pruebas de laboratorio, detallado en el anexo V.
f) Informe de resultados de pruebas de imagen, detallado en el anexo VI.
g) Informe de cuidados de enfermería, detallado en el anexo VII.
h) Historia clínica resumida, detallada en el anexo VIII.

Sistema HCDSNS
Informe de Situación

Informes clínicos con autorización de emisión en HCDSNS

Fecha de actualización: **31/01/2021**

		Documentos													
Comunidad Autónoma	Versión HCDSNS	HCR	ICAP	ICU	ICA	ICC	IRPL	IRPI	ICE	IROPD	EUPS	Total	Máximo	Aportación	Previsiones
Andalucía	10	1			1						1	3	10	33%	
Aragón	9.5	1						1				2	10	22%	
Principado de Asturias	10	0	0	1	1	1			1			4	10	44%	ICAP + HCR en pruebas
Islas Baleares	9.5	1	1	1	1	1	1	1	1	1		9	10	100%	
Canarias	9.5	1		1	1	1						4	10	44%	ICAP + IRPL + IRPI + ICE
Cantabria	9.5	1										1	10	11%	
Castilla y León	9.5	1		1	1	1	1	1				6	10	67%	ICE
Castilla-La Mancha	10	1										1	10	11%	ICU + ICA
Cataluña	9.5	1										1	10	11%	
Comunidad Valenciana	10	1	1	1	1	1	1	1	1		1	9	10	100%	
Extremadura	9.5	1		1	1	1	1	1	1			7	10	78%	
Galicia	9.5	1										1	10	11%	ICU + ICA + ICC + ICE
Comunidad de Madrid	10	1	1	1	1	1	1	1	1	1		9	10	100%	
Región de Murcia	9.5	1		1	1	1				1		5	10	56%	
Navarra	9.5	1	1	1	1	1						5	10	56%	IRPL
País Vasco	10	1							1			2	10	22%	IRPL+ ICU
La Rioja	9.5	1	1	1	1	1	1	1	1			8	10	89%	
INGESA	9.5	1		1	1	1				1		5	10	56%	
Total:		17	5	11	12	11	6	7	7	4	2	82	180	46%	

Tipos de documentos en emisión:	82	documentos x agentes
De un total de:	180	tipos autorizados posibles
Cobertura de emisión:	45,56%	

Documentos	
HCR	Historia Clinica Resumida
ICAP	Informe Clínico de Atención Primaria
ICU	Informe Clínico de Urgencias
ICA	Informe Clínico de Alta
ICC	Informe Clínico de Consulta
IRPL	Informe de Resultados de Pruebas de Laboratorio
IRPI	Informe de Resultados de Pruebas de Imagen
ICE	Informe de Cuidados de Enfermería
IROPD	Informe de Resultados de Otras Pruebas Diagnosticas*
EUPS	EU Patient Summary**

Notas: ** No incluido en RD 1093/2010 - CMDIC*
*** En desarrollo*

Estados	
	Servicio activado, para Ciudadano y Profesional
	Documento en pruebas
	Sin servicios
	Esta versión cambiará próximamente

DIRECTIVE 2011/24/EU OF THE EUROPEAN PARLIAMENT March 9, 2011

Article 14

eHealth

1. The Union shall support and facilitate cooperation and the exchange of information among Member States working within a voluntary network connecting national authorities responsible for eHealth designated by the Member States.

2. The objectives of the eHealth network shall be to:

(a) work towards delivering sustainable economic and social benefits of European eHealth systems and services and interoperable applications, with a view to achieving a high level of trust and security, enhancing continuity of care and ensuring access to safe and high-quality healthcare;



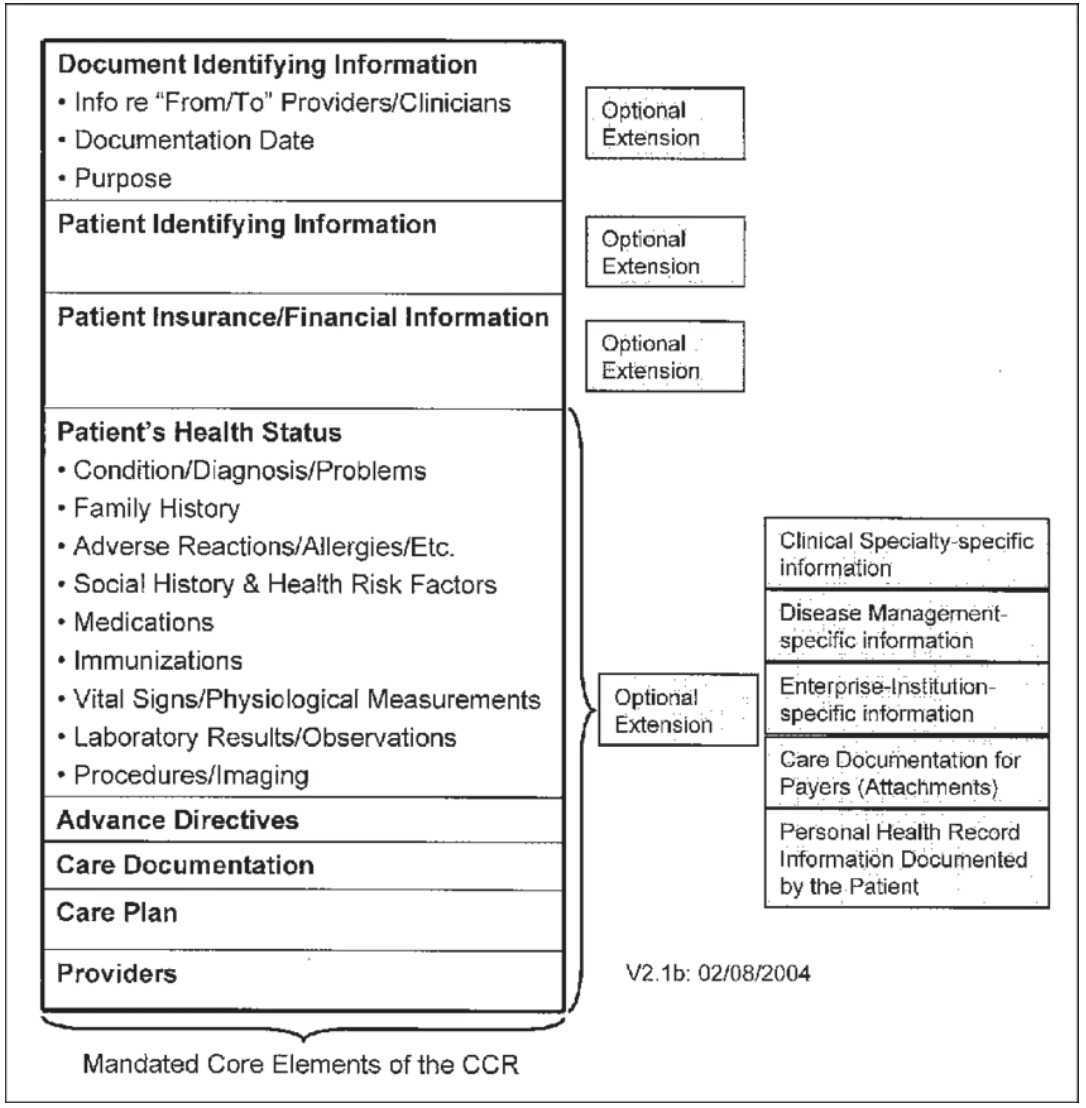
eHealth Network Guideline

https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32011L0024&from=EN

https://ec.europa.eu/health/sites/health/files/ehealth/docs/ev_20161121_co10_en.pdf

ASTM : CCR
Continuity of Care Record is a registry standard specification in health care jointly developed by ASTM, HIMSS, MMS, AAFP, AAP

CCR + CDA = CCD



Experiences
USA C-CDA

HL7 Implementation Guide for CDA R2: IHE Health Story Consolidation, DSTU Release 1.1 (US Realm) July 2012

Document Templates: 9

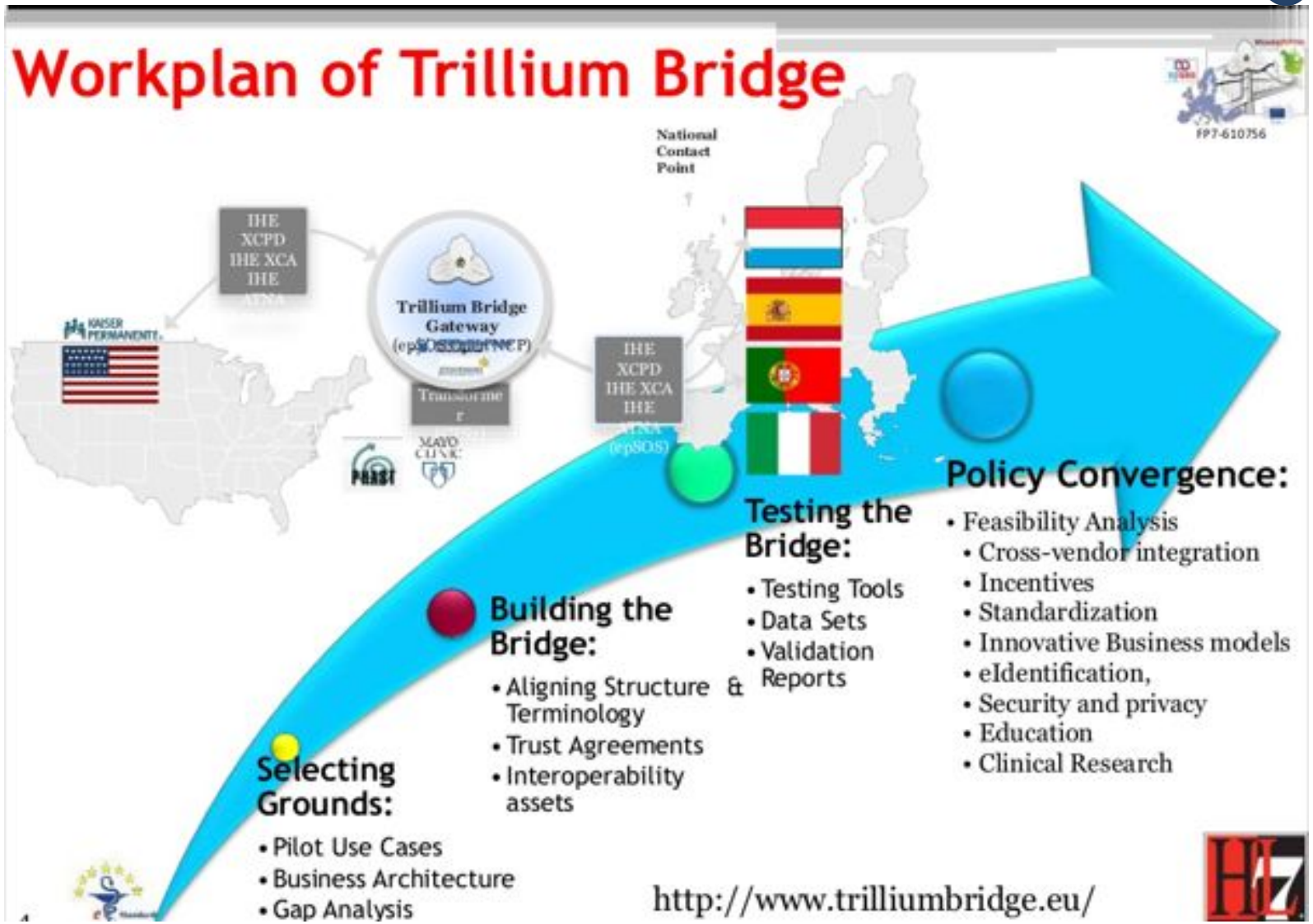
- Continuity of Care Document (CCD)
- Consultation Note
- Diagnostic Imaging Report (DIR)
- Discharge Summary
- History and Physical (H&P)
- Operative Note
- Procedure Note
- Progress Note
- Unstructured Document

Section Templates: 60

Entry Templates: 82

Document Template	Section Template(s)		
Continuity Of Care Document (CCD)	Allergies Medications Problem List Procedures Results Advance Directives Encounters	Family History Functional Status Immunizations Medical Equipment Payers Plan of Care	Section templates in GREEN demonstrate CDA's interoperability and reusability.
History & Physical (H&P)	Allergies Medications Problem List Procedures Results Family History Immunizations Assessments	Assessment and Plan Plan of Care Social History Vital Signs History of Present Illness History of Present Illness	Chief Complaint Reason for Visit Review of Systems Physical Exam General Status

Source: ONC


Workplan of Trillium Bridge
FP7-610756
National Contact Point
IHE XCPD IHE XCA IHE
Trillium Bridge Gateway
Transformer
KAISER PERMANENTE
MAYO CLINIC
IHE XCPD IHE XCA IHE
(epSOS)
Policy Convergence:
• Feasibility Analysis
• Cross-vendor integration
• Incentives
• Standardization
• Innovative Business models
• eIdentification,
• Security and privacy
• Education
• Clinical Research
Testing the Bridge:
• Testing Tools
• Data Sets
• Validation Reports
Building the Bridge:
• Aligning Structure & Terminology
• Trust Agreements
• Interoperability assets
Selecting Grounds:
• Pilot Use Cases
• Business Architecture
• Gap Analysis
http://www.trilliumbridge.eu/

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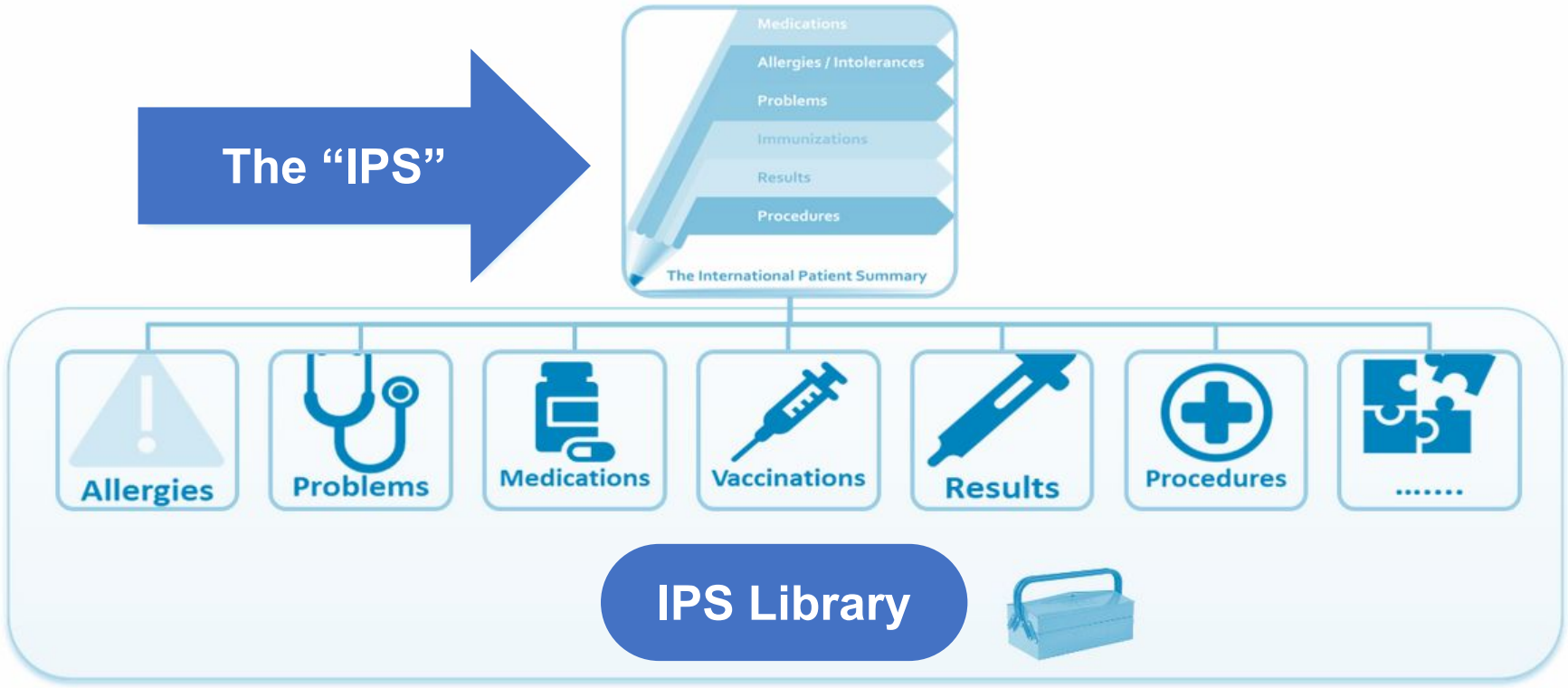
eHealth Network Guideline

- CEN 17269
  - IPS FHIR
  - IPS CDA
- CEN 17288 — Technical Specification

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0024

https://ec.europa.eu/health/sites/health/files/ehealth/docs/ev_20161121_co10_en.pdf

IPS Profile (International Patient Summary)



The **International Patient Summary** is a minimal and non-exhaustive set of basic clinical data of a patient, specialty-agnostic, condition-independent, but readily usable by all clinicians for the unscheduled (cross-border) patient care.

IPS Profile (International Patient Summary)

Header

- Subject
- Author
- Attester
- Custodian

Required

- Medication summary
- Allergies and intolerances
- Problem list

Recommended

- Immunizations
- History of procedures
- Medical devices
- Diagnostic results

Optional

- Vital signs
- Functional status
- Past history of illness
- Plan of care
- Pregnancy
- Advance directives
- Social history

Header

Mandatory

Recommended

Optional

Name	Flags	Card.	Type	Description & Constraints
Composition		0..*	Clinical Document	International Patient Summary composition
text	S	0..1	Narrative	Text summary of the resource, for human interpretation
identifier	S	0..1	Identifier	Version-independent identifier for the Composition
status	S	1..1	code	preliminary | final | amended | entered-in-error
type	S	1..1	CodeableConceptIPS	Kind of composition ("Patient Summary") **Required Pattern:** At least the following
coding		1..*	Coding	Code defined by a terminology system **Fixed Value:** (complex)
system		1..1	uri	Identity of the terminology system **Fixed Value:** http://loinc.org
code		1..1	code	Symbol in syntax defined by the system **Fixed Value:** 60591-5
subject	S	1..1	Reference(Patient (IPS))	Who and/or what the composition is about
reference	S	1..1	string	Literal reference, Relative, internal or absolute URL
encounter		0..1	Reference(Encounter)	Context of the Composition
date	S	1..1	dateTime	Composition editing time
author	S	1..*	Reference(Practitioner | PractitionerRole | Device | Patient | RelatedPerson |	Who and/or what authored the IPS
custodian	S	0..1	Reference(Organization)	Organization which maintains the composition
relatesTo		0..*	BackboneElement	Relationships to other compositions/documents
code		1..1	code	replaces | transforms | signs | appends
target[x]		1..1		Target of the relationship
targetIdentifier			Identifier	
targetReference			Reference(Composition | Composition (IPS))	
Slices for event		0..*	*BackboneElement*	*The clinical service(s) being documented* ***Slice:*** *Unordered, Open by pattern:code*
event:careProvisioningEvent	S	0..1	BackboneElement	The care provisioning being documented
code	S	1..1	CodeableConcept	Code(s) that apply to the event being documented **Required Pattern:** At least the following
coding		1..*	Coding	Code defined by a terminology system **Fixed Value:** (complex)
system		1..1	uri	Identity of the terminology system **Fixed Value:** http://terminology.hl7.org/CodeSystem/v3-ActClass
code		1..1	code	Symbol in syntax defined by the system **Fixed Value:** PCPR
period	S	0..1	Period	The period covered by the documentation

Header

Subject

Author

Attester

Custodian

Source:http://hl7.org/fhir/uv/ips/index.html

IPS sections:

Required

- **Medication summary**
- **Allergies and intolerances**
- **Problem list**

Contains a description of the patient's medications relevant for the scope of the patient summary. Currently active medications; the patient prescriptions or dispensations.	Medication Statement (IPS) | Medication Request (IPS) | Medication (IPS)
Kind of reaction (e.g. rash, anaphylaxis,..); preferably the agents that cause it; and optionally the criticality and the certainty of the allergy. List currently active and any relevant historical allergies and adverse reactions.	Allergy Intolerance (IPS)
Lists and describes clinical problems or conditions currently being monitored for the patient.	Condition (IPS)

IPS sections:

Recommended

- **Immunizations**
- **History of procedures**
- **Medical devices**
- **Diagnostic results**

Current immunization status and pertinent immunization history.	Immunization (IPS)
Description of the patient past procedures. May be invasive diagnostic procedure, e.g. cardiac catheterization; therapeutic procedure: e.g. dialysis; surgical procedure: e.g. appendectomy.	Procedure (IPS) | Organization (IPS) | Device (performer, observer)
Narrative text and coded entries describing the patient history of medical device use.	Device Use Statement (IPS) | Device (IPS)
Different types of observation results collected on the patient. Some of these results may be laboratory results, others may be anatomic pathology results, and others, radiology results.	Observation (Results: laboratory) | Specimen (IPS) | Media observation (Results: laboratory, media)

Source:http://hl7.org/fhir/uv/ips/index.html

IPS sections:

Optional

- Vital signs
- Past history of illness
- Pregnancy
- Social history

Includes blood pressure, body temperature, heart rate, and respiratory rate. It may also include other clinical findings, such as height, weight, body mass index, head circumference, and pulse oximetry.	Vital Signs
Contains a description of the conditions the patient suffered in the past.	Condition (IPS)
Contains observation of the pregnancy status, and optionally, a member Observation of the Estimated Delivery Date or Observation of the pregnancy history (summary).	Observation (Pregnancy: EDD) | Observation (Pregnancy: outcome) | Observation (Pregnancy: status)
Tobacco or alcohol use.	Observation (SH: alcohol use) | Observation (SH: tobacco use)

Source:http://hl7.org/fhir/uv/ips/index.html

IPS sections:

Optional

Functional status

Plan of care

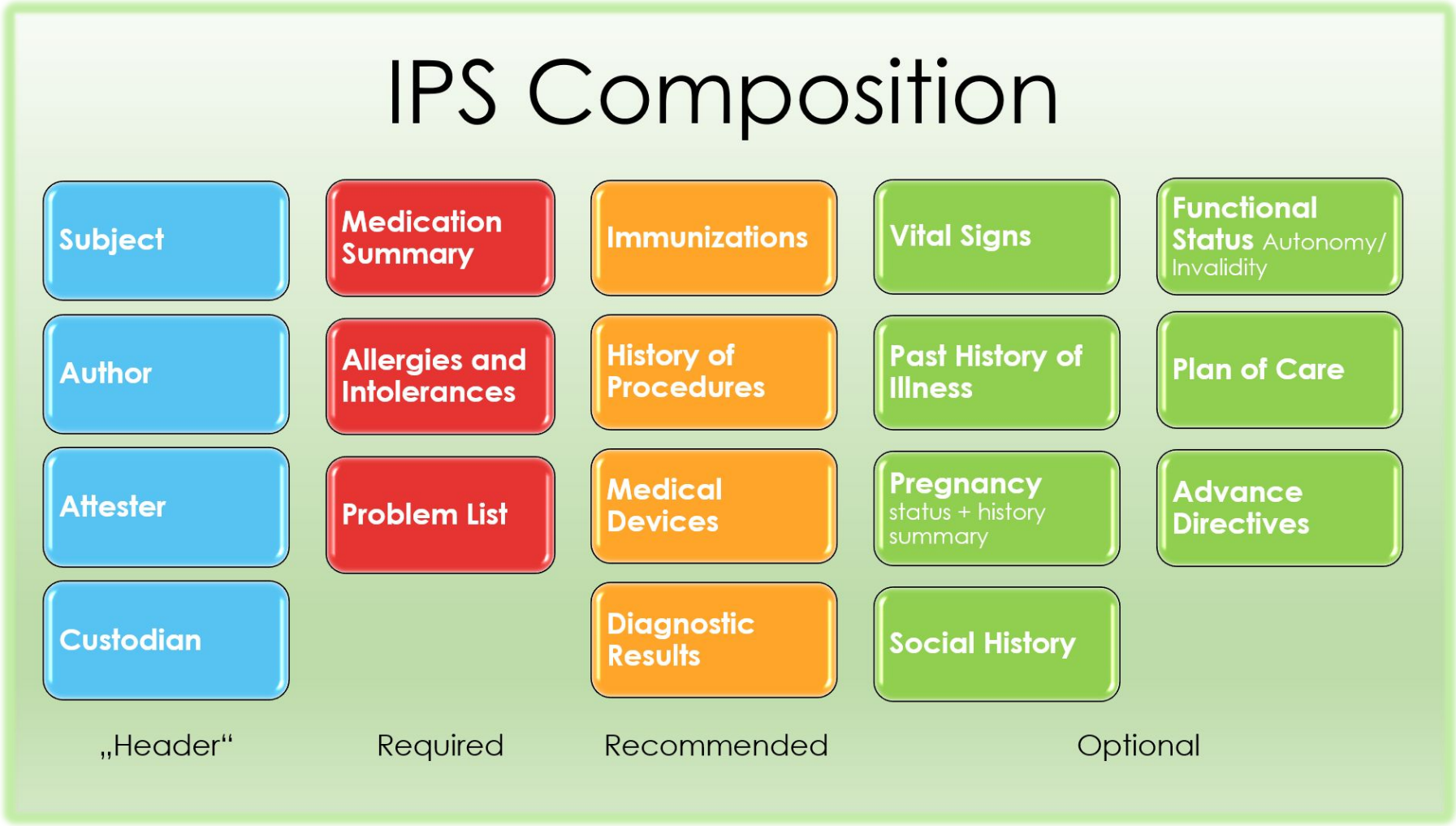
Advance directives

Description of capability of the patient to perform acts of daily living, including possible needs of the patient to be continuously assessed by third parties.	Condition (IPS) | Clinical Impression
Expectations for care including proposals, goals, and order requests for monitoring, tracking, or improving the condition of the patient.	Care Plan
Narrative description of patient's advance directives.	Consent

Source:http://hl7.org/fhir/uv/ips/index.html

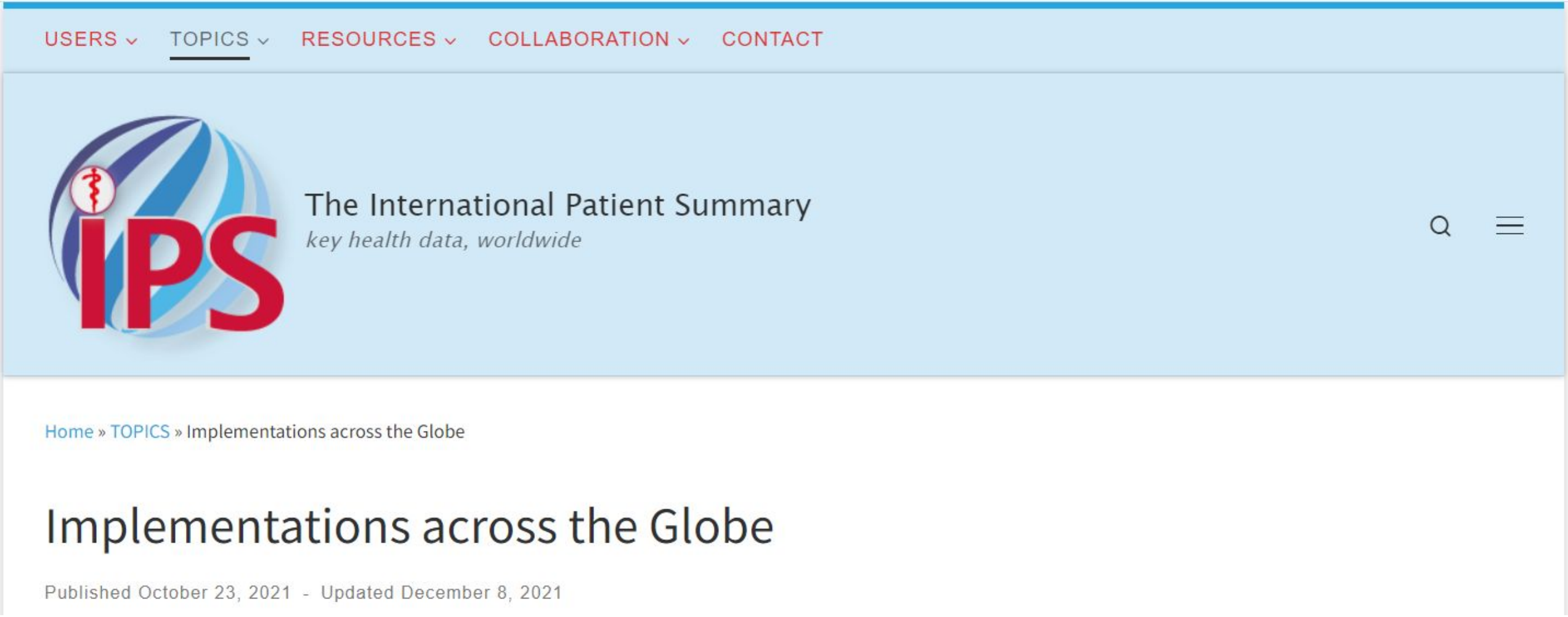
CEN EN 17269 ISO/DIS 27269
IPS
International Patient Summary

IPS on FHIR



https://build.fhir.org/ig/HL7/fhir-ips/ipsStructure.html

Experiences around the world...



https://international-patient-summary.net/implementations-across-the-globe/

COLOMBIA :

Resolution 866 from 2021

Identification of the person

Contact between the person and the health service

Health technologies

Clinical assessment and laboratory results



RDA Ver1.0
Resumen Digital de Atención (Digital attention summary)

Patient

Encounter

Medications

Allergies

Diagnoses

Implementation guide

Hands On: Vulcano

- RDA Implementation guide
  - https://vulcano.sispropreprod.gov.co/guias
- Vulcano FHIR server for testing
  - https://vulcano.sispropreprod.gov.co/
- IPS Visor
  - https://www.ipsviewer.com/

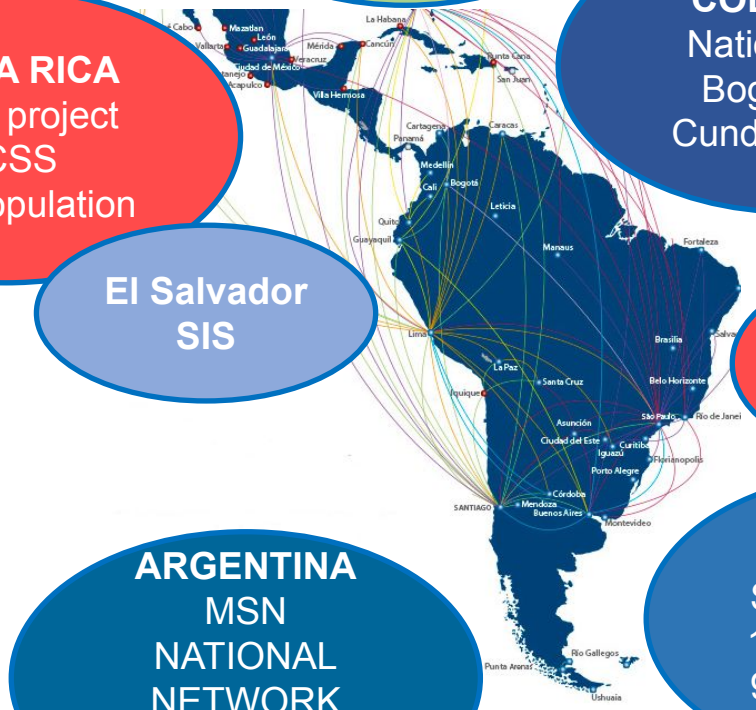
How do we do in the region?

MEXICO
CDMX DF
SAMIH
31 Hospitals
Public network

PANAMA
SEIS

COLOMBIA
National IHC
Bogota DC
Cundinamarca

COSTA RICA
EDUS project
CCSS
78% Population



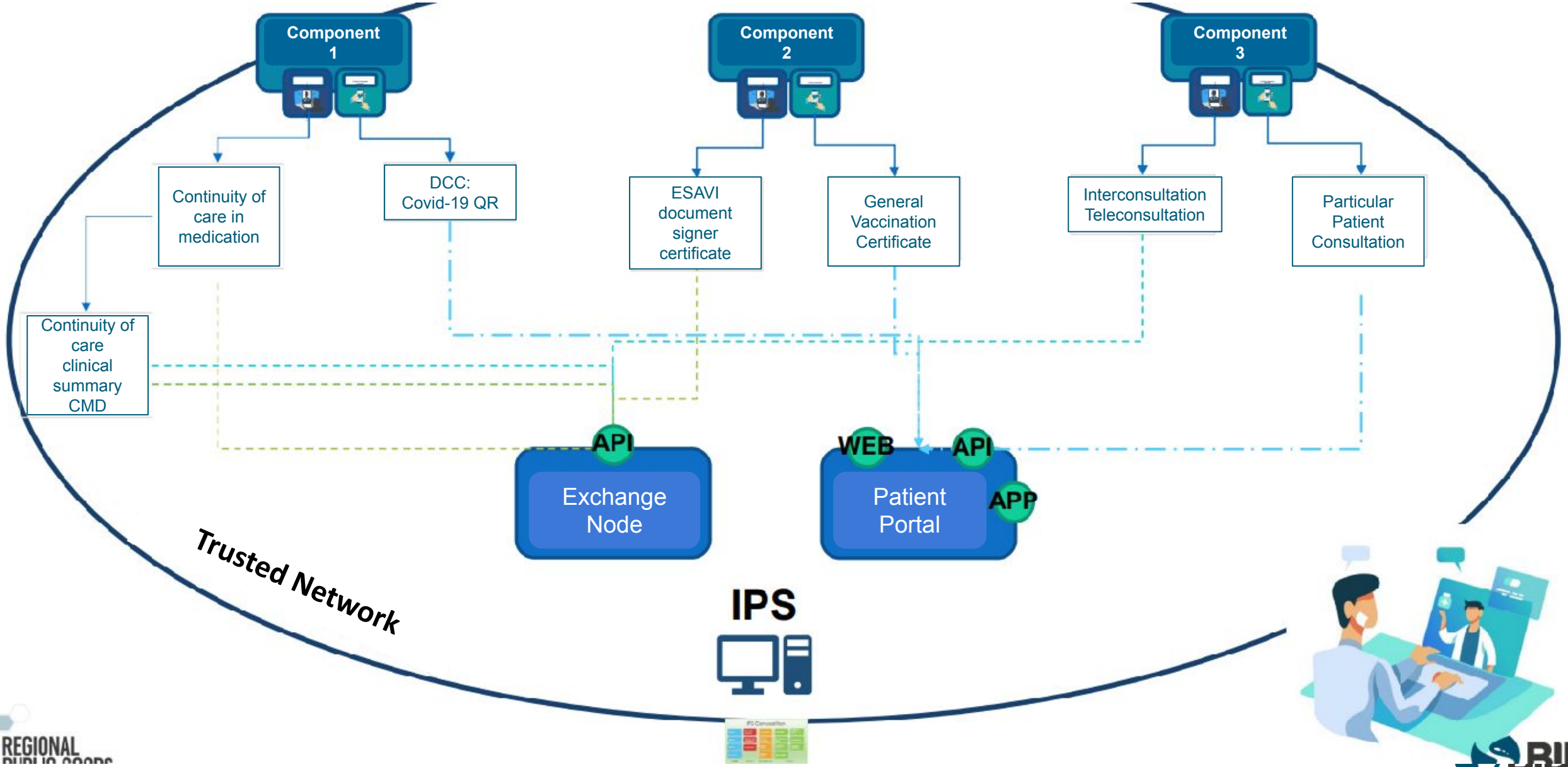
El Salvador
SIS

Paraguay
HIS

ARGENTINA
MSN
NATIONAL
NETWORK
DIGITAL
HEALTH

URUGUAY
Salud.uy HCEN
150 Million CDA
90% Population

IPS LAC


Component 1
Component 2
Component 3
Continuity of care in medication
DCC: Covid-19 QR
ESAVI document signer certificate
General Vaccination Certificate
Interconsultation Teleconsultation
Particular Patient Consultation
Continuity of care clinical summary CMD
API
Exchange Node
WEB
API
Patient Portal
APP
Trusted Network
IPS

CENS
CENTRO NACIONAL EN SISTEMAS DE INFORMACIÓN EN SALUD

BID
Banco Interamericano de Desarrollo

RACSEL
RED AMERICANA DE COOPERACIÓN SOBRE SALUD ELECTRÓNICA

REGIONAL PUBLIC GOODS

Pan American Health Organization

Thank you!!!