# HIMSS Colombia Bogotá, 27–28 November 2017

# The journey to HIMSS Stage 7

Vicent Moncho Mas

CIO, Marina Salud (Spain)

# HİMSS Colombia

### Bogotá, 27–28 November 2017

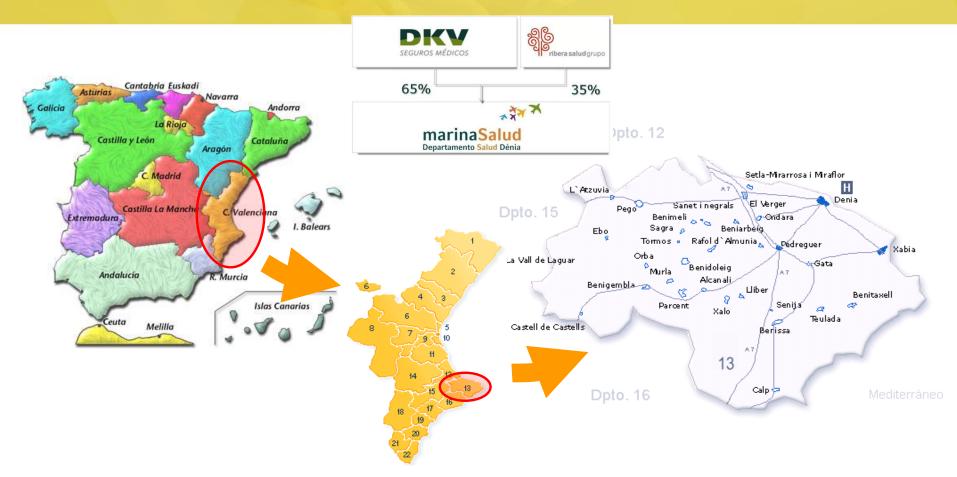
#### About me...



- Degree in Mathematics
- Computer Engineering
- Master Degree on the IKS
- CPHIMSS
- CHCIO
- Vice Chair of HIMSS Governing Council

1997 - 1999 2000 - 2004 2004 - 2005 2005 - 2006 Since 2006 Analyst – Hospital Marina Alta Head of IT Department - Primary Care

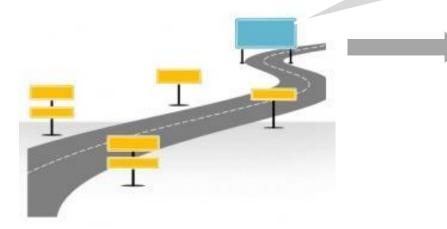
- Head of IT Department Integrated Care Department
- Project Manager Valencia Healthcare Authority
  - Chief Information Officer Marina Salud



- Population: More than 150,000 residents (financed mainly per capita)
- Tourism: From March to October
- Municipality: 34 towns [ Dénia: approximately 40,000 Vall d'Alcalà: around 200 ]
- Total area : 297 square miles (759 km<sup>2</sup>) Population density: 635 people per square mile (245 hab/km<sup>2</sup>)

Bogotá, 27–28 November 2017

# PAPERLESS DAY 1



# Big bang go-live

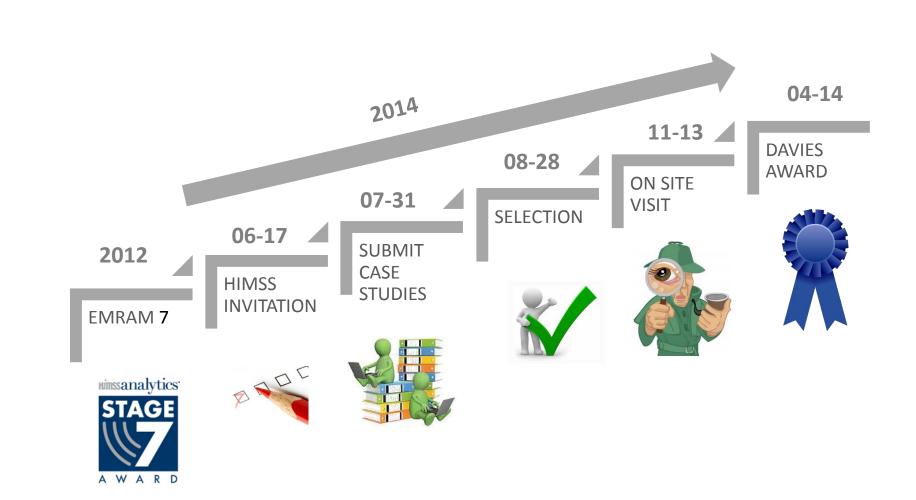
16 months project

**On-site working team** 









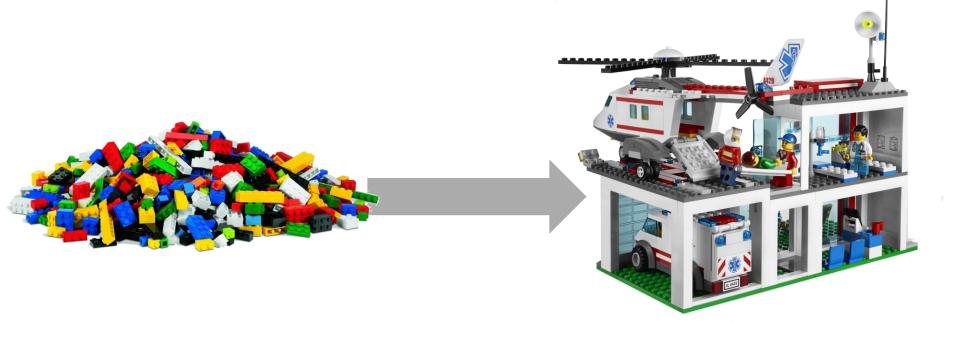
### Bogotá, 27–28 November 2017



# Is this the end of the journey? Final step?

Bogotá, 27–28 November 2017

# Stage 7 means



### Bogotá, 27–28 November 2017

# **Clinical decision support**

# systems

European EMR Adoption Model <sup>5M</sup>	
Stage	Cumulative Capabilities
Stage 7	Complete EMR, CCD transactions to share data; Data warehousing fee- ding outcomes reports, quality assurance, and business intelligence; Data continuity with ED, ambulatory, OP.
Stage 6	Physician documentation interaction with full CDSS (structured temp- lates related to clinical protocols trigger variance & compliance alerts) and Closed loop medication administration.
Stage 5	Full complement of PACS displaces all film-based images.
Stage 4	CPOE in at least one clinical service area and/or for medication (i.e. e-Prescribing); may have Clinical Decision Support based on clinical protocols.
Stage 3	Nursing/clinical documentation (flow sheets); may have Clinical Decis- ion Support for error checking during order entry and/or PACS availa- ble outside Radiology.
Stage 2	Clnical Data Repository (CDR) / Electronic Patient Record; may have Controlled Medical Vocabulary. Clnical Decision Support (CDS) for ru- dimentary conflict, checking, Document imaging and health informati- on exchange (HIL) capability.
Stage 1	Ancillaries - Lab, Radiology, Pharmacy - Ail Installed OR processing LIS, RIS, PHIS data output online from external service providers.
Stage 0	All Three Ancillaries (LIS, RIS, PHIS) Not Installed OR Not processing Lab, Radiology, Pharmacy data output online from external service providers.

#### Stage 2

• CDSS for rudimentary conflict checking

#### Stage 3

CDSS for error checking during order entry

#### Stage 4

CDSS based on clinical protocols

#### Stage 6

- Full CDSS (structured templates related to clinical protocols trigger variance & compliance alerts)
- Closed loop medication administration

#### Stage 7

- DW feeding outcomes reports
- Business intelligence

# Smart EMR

### Bogotá, 27–28 November 2017

# **Clinical workflows**

- Usability
- Standard
- Safety
- Quality

Information

Consents

Appointments

Orders Reports

Guided EMR

### Bogotá, 27–28 November 2017

# Pathology protocols

- Standard process
- State of the art
- Best decisions



Medication

Kind of care

Test

Patient information

### Bogotá, 27–28 November 2017

# Patient management

- Chronic disease
- Cancer screening
- Post surgical



Medication

Kind of care

Test

Patient information

Control

### Bogotá, 27–28 November 2017

# Information management

- Activity
- Quality
- Financial
- Health results



Could be better

What we do

# How we do

Bogotá, 27–28 November 2017

# Conclusions

# Healthcare revolution vs evolution

IT investment is not enough in ...

Paying for content, knowledge



Bogotá, 27–28 November 2017

# Thank you very much

Vicent Moncho Mas vicent.moncho@marinasalud.es