Integrated EHR’s in Belgian hospitals

And what about Antwerp?
INTEGRATED

ELECTRONIC HEALTH RECORD
Electronic Health Record

• Patient-related data stored in a database
• Data is required for
  • Diagnosis
  • Treatment/Therapy
  • Proof of quality of care
  • Logistics
  • Finance
  • Research
  • Education
  • …

• Mostly unstructured data
• Mostly created for a specific pathology, few platforms for general purposes
• Set of different systems or one single platform
The double meaning of “Integrated”

• All relevant data available for all people that require access to it
  • IC & therapeutic relationship are required
  • Something to say about psychiatric, genetics and fertility records
  • Structured or unstructured, not defined today but tendancy to structured
  • Focus on unique data elements (register once, use multiple times)

• Supports hospitalwide workflows and patient journeys
  • Engine for the careteam and multidisciplinary approach
  • Ensures end-to-end aligned intramuros careprovisioning, careplans and carepathways
The enduser aversion to the EHR

Feeling intense empathy for an unknown colleague after finding this punched out monitor in the Doctor’s Lounge #EHR #Epic #EpicFail #burnout #medtwitter

Sad, that is how many users feel...helpless & frustrated. The bones of the #EHR must be good, the training, education, and support ever better. #hldr

People
Process
Workflow
Tech

Must all work together or the system fails to deliver. #HIMSS19 cc: @wareFLO

For my friends who work w an #EHR everyday, this is what I keep hearing from u. 😞 #hldr twitter.com/edvaldez8888/s...
BELGIUM

THE EHR TRAIN MOVES

SLOWLY
CARE2015

• A program developed by e-trinity in 2010

• Detailed roadmap to bring Belgian hospitals in 5 years time to full integrated EHR, hospitalwide

• Mapped to evolution in neighbouring countries at the time

• CARE2025 would have been better
Belgian Meaningful Use criteria

- Set by Belgian government to push hospitals towards adoption of integrated EHR’s

- Goal: have all Belgian hospitals adopt the BMUC phase 1 by 1/07/2020. No timing for subsequent phases

- Criteria with phase 1 goals:
  - Unique patient identification (80%)
  - Problem list and medical history (20%)
  - List of allergies and intolerances (30%)
  - Prescription of medication (inpatient only) (30%)
  - Medication interactions (suspended, national database not available)
  - Careplans (5%)
  - Management of appointments (>0)
  - Electronic order communication for radiology, lab and consults (50% for one of the three)
  - Discharge letter (80%)
  - Registration of vitalsigns (50%)
  - Informed consent registration (30%)
  - DNR registration (>0)
  - Resultsserver (80%)
  - Automated communication with ehealth hubs and other services (80%)
Belgian Meaningful Use criteria

• “Nice to have” modules can replace one or more of the actual criteria to be eligible for government funding

• Modules with phase 1 goal if being used:
  • OR planning module (80%)
  • (N)ICU module (80%)
  • ER module (80%)
  • Clinical Decision Support (80%)
  • Prescription of chemotherapy (80%)
  • Functional location of patient (80%)
  • Genetic information (80%)
  • Mobile services (ao. for telemonitoring) (80%)
  • Closed loop medication (80%)
Belgian Meaningful Use criteria

• Too much focus on the collection of single data elements in a database. Not enough focus on integrated part.

• 95% of hospitals realized phase 1 already in 2018

• In 2018, practically all hospitals were even early adopter
  • Bar was raised significantly higher for 2019
Belgian integrated EHR landscape

**Nexuzhealth**
- For years developed and rolled out by UZ Leuven. Since 2016 commercialized by NexuzHealth (Cegeka + UZL)
- 50% of Flemish hospitals use it in some way (UZ Leuven remains only university hospital)

**Xperthis**
- Different systems
- 95% of the Walloon hospitals use one the Xperthis platforms in some way

**Chipsoft**
- Marketleader in the Netherlands
- Two full operational hospitals in Belgium (ZOL and AZ Delta)
- Some hospitals with partial installation (ao. AZ Klina, AZ Dimpna)

**Primuz**
- Developed and commercialized by UZ Brussel. CTG is implementation partner.
- 12 hospitals on roadmap. Besides UZ Brussel, only ADT active in AZ Sint Elisabeth

**Cerner**
- Global Marketleader
- 4 hospitals on roadmap (UZA, AZ Sint Lucas, AZ Klina and AZ Monica)

**Epic**
- One hospital is implementing it, CHU Saint Luc

Other (partial) EHR’s on the market
- Infohos, Orbis, M2M, Clinicom
- AZ Maria Middelares’s inhouse developed EHR (also active in Waregem and Tielt) are bound to be replaced by one of the above at some point
THE ANTWERP SITUATION
The vision

• One integrated EHR for all Antwerp hospitals

• One database, one datamodel, one record

• Respect for operational individuality of each hospital

• Accessible for and integrated in firstline environment

• Interactive engagement role for the patient
The challenges... are thousandfold
UZA’s approach

• Choose a high-end integrated EHR platform
  • UZA has chosen Cerner Millenium after detailed market analysis and tender process

• Get the first partnerhospitals on board
  • AZ Klina and AZ Monica from Helix network committed to join

• Build together a multihospital integrated EHR
  • One datamodel, one record, respect for operational individuality

• Proof that it works
  • UZA go-live planned for May 2020, AZ Klina and AZ Monica to follow

• Convince other partners to join
  • Will be a longterm goal.
  • Intermediate alternatives can already help
Firstline integration

either

• Access the record through a collaboration portal
  • Possibility to tighten integration through interfacing

or

• Join the platform and work directly on the same record
  • One integrated EHR for all careteams in Antwerp
Patient Engagement

• Patient is no longer a passive participant, a direct object of healthcare

• Our patients want to interact, want to be involved and want to be educated

• Providing a patient engagement platform that covers these needs and allows full engagement
  • Extramuros carepathways with telemonitoring
  • Tailormade interactive education
  • Direct interaction with careteam
WHY NOT A NATIONAL INTEGRATED EHR?
Realistic approach

• National datawarehouse with structured datamodel ≈ non integrated EHR

• Careteams/facilities can consult and update information through trusted interfacing

• Governmental push required to get things moving or regional initiatives to lead by example.
Thank you

Questions?

Discussion via UA app

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