EHR from US DoD* / 1 (encounter / location)

*DoD: US Department of Defense
EHR from US DoD / 2 (encounter / location)
EHR from US DoD / 3 (document)
EHR from US DoD / 4 (structured document)
EHR from US DoD / 5 (meds history)

Medications dispensed by DoD, VA* & retail pharmacies

VA: Veteran Affairs, the US federal hospital for military staff
EHR…. Connecting the dots
Supply Chain … connecting to EHR

- EHR differs from paper-based files
  - Data are stored electronically,
  - Preferrently in a structured format
  - Preferrently by referring to common agreed semantics, including images, lab results, etc.

- EHR belongs to the clinical IT

- Supply Chain data belong to an other “siloh”?
Supply Chain data in Hospital IT
Supply Chain meeting Clinical IT

- In warehouse
- Picking
- In ward
- Dispensation
- Administration

Delivery

Request / order
Supply Chain and Clinical IT

- Drugs, laboratory samples, etc, ...
- Care, acts, actions, ...

University hospitals of Geneva
Pediatry Dept, mai – october 2007 – 6’786 episodes, 93’294 medical acts

93’294 medical acts

2’900’000 nursing acts
Supply chain as bridging processes and silos
Supply Chain and EHR: different time scales?

<table>
<thead>
<tr>
<th>Reference</th>
<th>Year</th>
<th>Title</th>
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Monaghan JM, Sirisena LA.

A vaginal clear-cell adenocarcinoma developed in a young woman who had been exposed in utero to maternal stilboestrol treatment. During 1940-71 in the UK some 7500 women were given stilboestrol during pregnancy. Thus more cases are likely to appear and clinicians caring for young women should be alert to this possibility.
...over generations

**LE FIGARO·fr**

La victoire des «filles Distilbène» devant la justice

Delphine Chayet  
24/09/2009 | Mise à jour : 21:04

La décision rendue jeudi en cassation ouvre de nombreuses indemnisations pour les jeunes femmes exposées in utero à ce médicament nocif, pendant la grossesse de leur mère.

Dossier médical introuvable 40 ans après les faits

Le Distilbène, censé prévenir les fausses couches, a été commercialisé en France de 1947 à 1977. La molécule a été interdite aux États-Unis dès 1971 en raison
Supply Chain Data ... in clinical IT

- Supply Chain Data... As identification keys
- ...attributes for traceability
- Smooth linkage between two environments
- HL7 and GS1 collaborating to make this as interoperable as possible
HL7’s Mission

- HL7 is an international community of healthcare subject matter experts and information scientists collaborating to create standards for the exchange, management and integration of electronic healthcare information. HL7 promotes the use of such standards within and among healthcare organizations to increase the effectiveness and efficiency of healthcare delivery for the benefit of all.
- HL7’s **strategy** is innovation – both by ourselves and by our users.
Supply Chain Data ... into Clinical IT

GS1 xml message

GLN 7601001370500

Identifier Authority: EAN.UCC
Supply Chain Data … into Clinical IT

HL7 CDA message

GLN 7601001370500

OID : 1.3.88
ePrescription
**Dm+d and SNOMED CT**

- **Snomed CT drug core**
- **Beta-blocker drug**
- **Cardioselective beta-blocker**
- **Atenolol 50mg • Tablet • (COX) • X28**
- **Atenolol • 50mg • Tablet x28**

Source: Paul Frosdick, Bpharm, NHS, 2005
Added value in NCRS and systems

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Adapted* from: Paul Frosdick Bpharm, NHS, 2005
A tentative to visualise GS1 in HL7’s Model shape

Entity (GTIN, GLN, etc.)

Entity (Value, Transaction, involved parties)

Participation (attributes as serial #, dates,)

Entity

Role

Participation

Clinical Acts
Continue working in meeting Health IT requirements

GSMP « Patient & Caregiver ID »:
gap analyse and searching solutions

GSMP Business Case Document
GS1 Healthcare
Patient & Caregiver ID
July 2009
EHR and Supply Chain Standards ...