Hospitals implementing GS1 standards – why?

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https://www.youtube.com/watch?v=gh5xu35bAxA

Agenda

- The obvious
- The blindingly obvious
- How to make it obvious?
- You can help…obviously!!

The obvious

Standards improve patient safety…

By protecting from counterfeiting…

Counterfeit Drugs Lab

The end product

GS1 Standards

- Random serialisation

- GDSN

- EPCIS

- Reduce counterfeit opportunities and detect fake products

The blindingly obvious!

Medicines are supposed to save lives…

Dying from a disease is sometimes unavoidable; dying from a medicine is unacceptable.
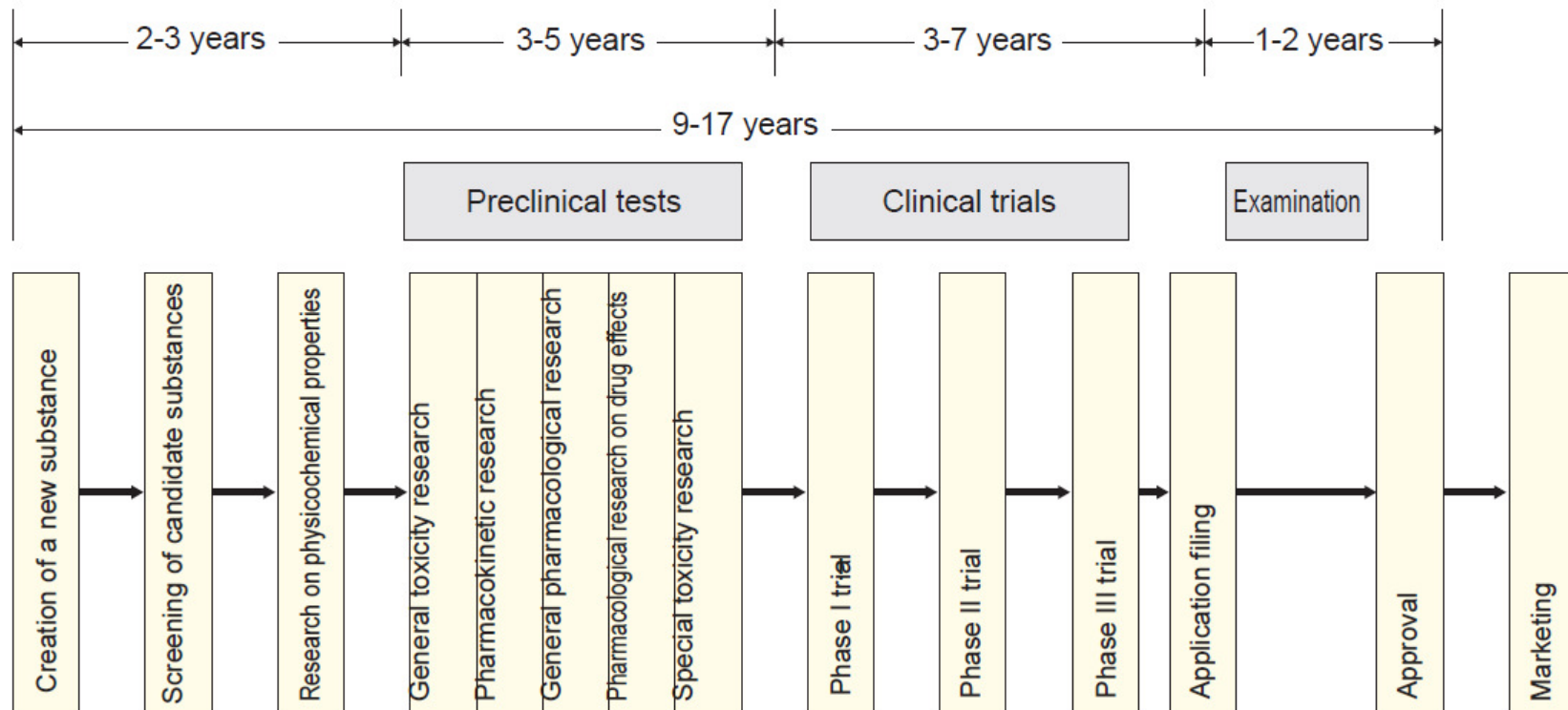
(Lepakhin V. Geneva 2005)

Pharma Drug manufacturing

Overview | **Process and Period of New Drug Development**

It is considered that 9-17 years and ¥50 billion are required to develop a new drug.

| 2-3 years | 3-5 years | 3-7 years | 1-2 years |

9-17 years

| | Preclinical tests | Clinical trials | Examination |

- Creation of a new substance
- Screening of candidate substances
- Research on physicochemical properties
- General toxicity research
- Pharmacokinetic research
- General pharmacological research
- Pharmacological research on drug effects
- Special toxicity research
- Phase I trial
- Phase II trial
- Phase III trial
- Application filing
- Approval
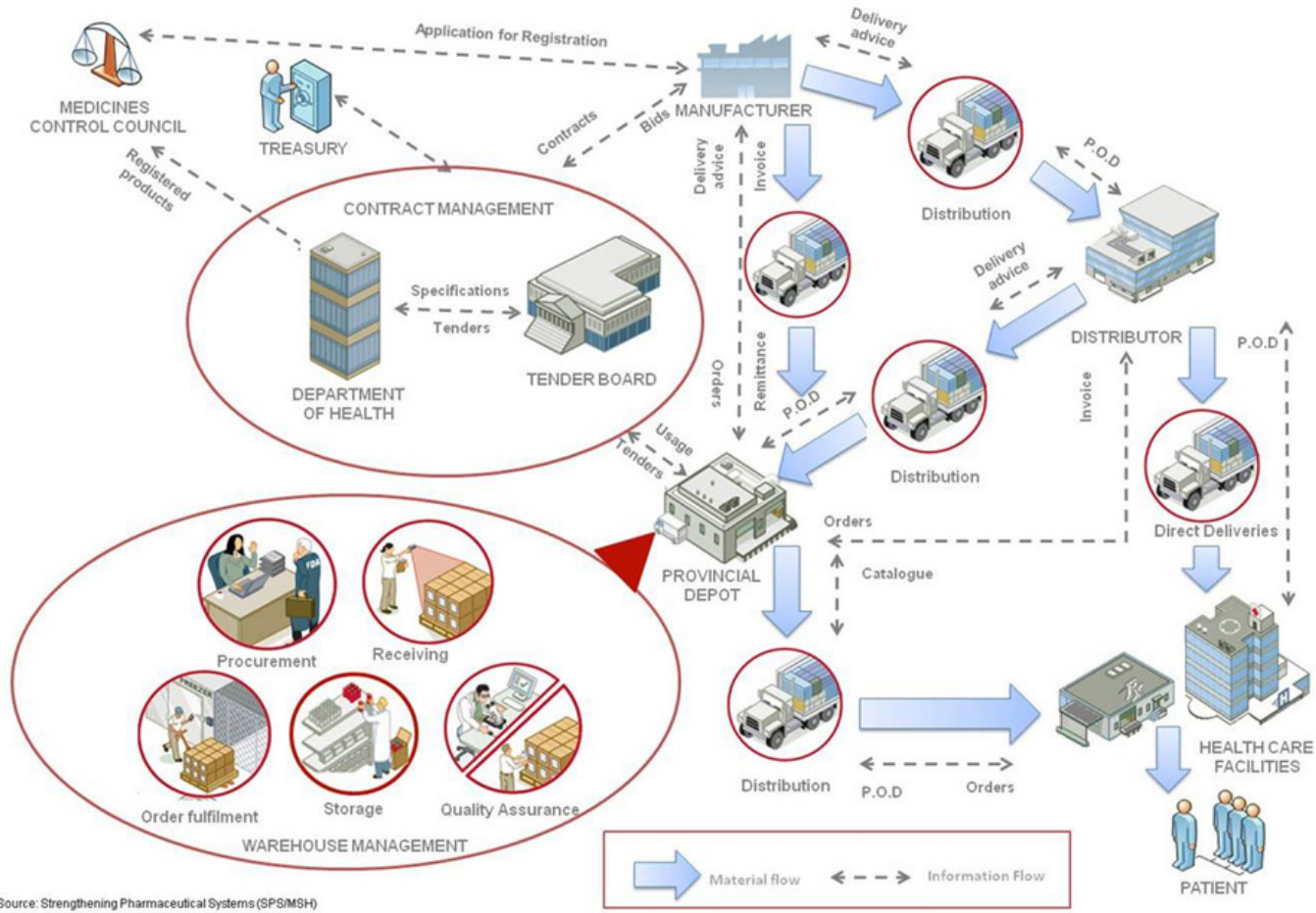- Marketing

Drug development….excellent!

Quality and Validation…excellent!

Pharma Supply Chain… excellent!

Source: Strengthening Pharmaceutical Systems (SPS/MSH)

When the drug gets to the patient…. not so excellent!
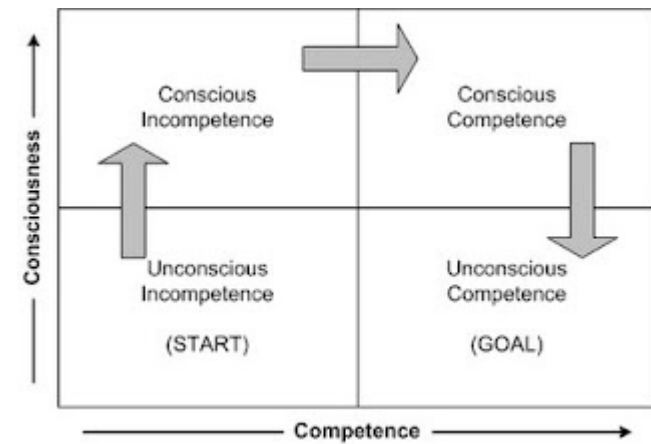# Not counterfeit but just as dangerous!

Would barcode scanning have prevented this? Absolutely!

How do we make standards obvious?

4 Stages of Competence

1. Unconscious Incompetence
2. Conscious Incompetence
3. Conscious Competence
4. Unconscious Competence

(Noel Birch 1970)

HPAC Slide Deck for Hospital C-suite

- Many Hospitals are unconsciously incompetent (Stage 1)

- Use the slide deck to make them consciously incompetent (Stage 2)

- GS1 offer advice and support to achieve conscious competence (Stage 3)

- GS1 standards become a "given" for all tenders and suppliers (unconscious competence (Stage 4))

Examples from C-Suite Slide Deck

- Surgical Instruments
- Medication
- Implants
- EHR
- Supply chain efficiency

Each Case study outlines

- Issue
- Solution
- Implementation costs
- Results (including Return on Investment (ROI))

A few examples…

GS1 Standards help save 7% in medication purchasing and packaging in North York General (2006)

North York General Hospital - a 434-bed hospital in Toronto, Canada

Issue(s)
- Risk of medication errors at the point-of-care due to insufficient product identification
- Lack of unit-dose bar coding of medication

Solution
- Installation of an automated repackager and bar coding station
- Implementation of a point-of-care bar code verification system to ensure the five patient rights
- Implementation of GS1 Standards, incl. GTIN and GS1 BarCodes

Results

Reduced medication errors at the point-of-care
Cost savings of 7-8% each year in terms of its medication purchasing and packaging activities
- Estimated cost to implement system in the hospital: €248k
- Efficiently affixing bar codes to unit doses
- Efficient bedside verification

GS1 Standards help enable traceability of surgical instruments at CHI Robert Ballanger (2009)

CHI Robert Ballanger - a 690-bed hospital in Aulnay-sous-Bois, France

Issue(s)
- Ineffective tracability of 22,000 surgical instruments during sterilization process

Solution
- Implementation of a traceability system
- Lasermarking of surgical instruments with GS1 DataMatrix 2D bar code
- Implementation of GS1 Standards, including GTIN, GLN and Global Traceability Standard

Results

Effective traceability of surgical instruments during sterilization process
- Increased inventory management
- Increased traceability down to the individual instrument level
- Migration of instruments between boxes now traced

GS1 Standards help save €5 million worth of stock at St. James's Hospital (2010)

St James's Hospital, Dublin (Ireland) – manages the National Centre for Hereditary Coagulation Disorders (NCHCD)

Issue(s)
- Infected medication remained in the supply chain after recall in 2001-leading to subsequent infection and over 80 deaths
- Lack of standardised bar codes on haemophilia medication and ineffecitve traceability

Solution
- Deployment of multi-location Electronic Patient Record system
- Deployment of medication delivery traceability system
- Implementation of GS1 Standards, including GTIN, GLN, GS1 DataMatrix

Results

Over € 5 million worth of medication stock has been removed from the supply chain
- Product wastage reduced from €90,216 to zero in the year post service implementation
- Documentation errors reduced from 12 to zero in the year post service implementation
Mock recall identified location of all (100%) medication within 10 minutes

You can help…obviously!!

- **Healthcare providers**
  - … Join HPAC
  - … Share your successes

- **GS1 MO's**
  - … Encourage Healthcare providers to join HPAC
  - … Visit Hospital C-suite and use the slide deck

- **ALL Healthcare Stakeholders**
  - … Share the McKinsey White Paper with anyone and everyone!

A bit of humour…

http://www.youtube.com/watch?v=VgNHM0eLWzA

Hospital Plenary – our next speaker…

"Improve patient safety and efficiency in the OR"

Justin Bitter

Head of OR, University Medical Centre
Nijmegen, Netherlands