

Medicines Optimisation Closed Loop Medicines Management & Scan4Safety

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Chief Pharmacist & CCIO
Royal Cornwall Hospitals Trust
GDE Learning Network – July 17



Scan4Safety & GS1 explained



GSRN	GTIN	GLN
Global Service Relation Number	Global Trade Item Number	Global Location Number

			
Right Patient	Right Product	Right Place	Right Process
Setting standards to make sure we always have the right patient and know what product was used with which patient, when .	Setting standards to make sure our staff have what they need, when they need it.	Setting standards to make sure that patients and products are in the right place.	Setting standards and implementing common ways of working to deliver better and more easily repeatable patient care.

Objectives



Right Patient

Setting standards to make sure we always have the right patient and know **what** product was used with **which** patient, **when**.



Right Product

Setting standards to make sure our staff have **what** they need, **when** they need it.



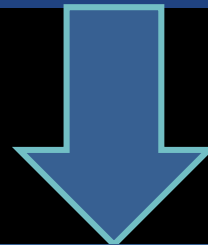
Right Place

Setting standards to make sure that patients and products are in the right place.



Right Process

Setting standards and implementing common ways of working to deliver better and more easily repeatable patient care.

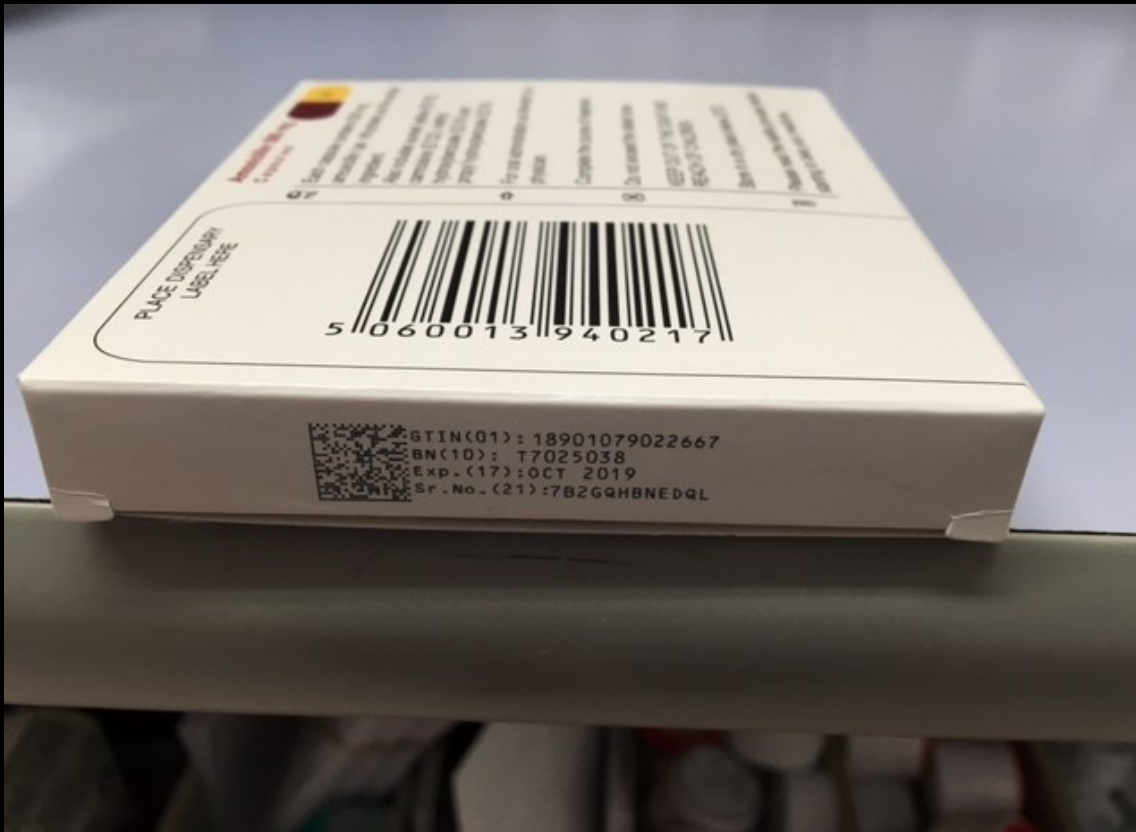


Improve Efficiency

Improve Patient Safety

Release Time to Care

GS1 explained



Background – barcoding in retail

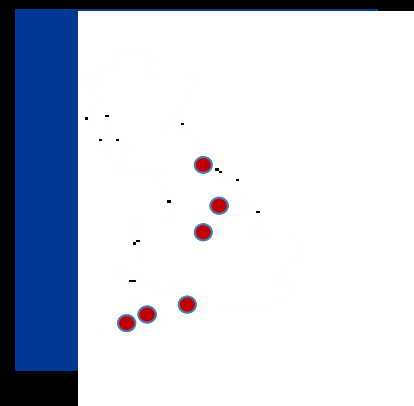


Background – not currently in healthcare



Six Demonstrator sites

TRUST
DERBY TEACHING HOSPITALS NHS FOUNDATION TRUST
LEEDS TEACHING HOSPITALS NHS TRUST
NORTH TEES AND HARTLEPOOL NHS FOUNDATION TRUST
PLYMOUTH HOSPITALS NHS TRUST
ROYAL CORNWALL HOSPITALS NHS TRUST
SALISBURY NHS FOUNDATION TRUST





SCAN  SAFETY

Medicines- The Case for Change

DISP - Dispenser

Location: Royal Cornwall Combined Store Retain Cost Centre for next Patient

JAC PHM

Patient **FOUR JAC TEST**

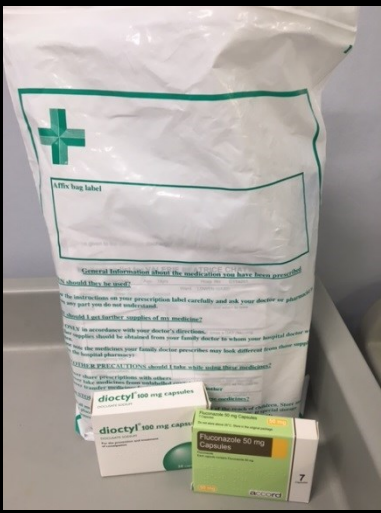
Hospital No: 0124728 National No: Date of Birth: 31-Mar-1938

Consultant: MR BOOK CHOOSE Ward: BOTOX WARD

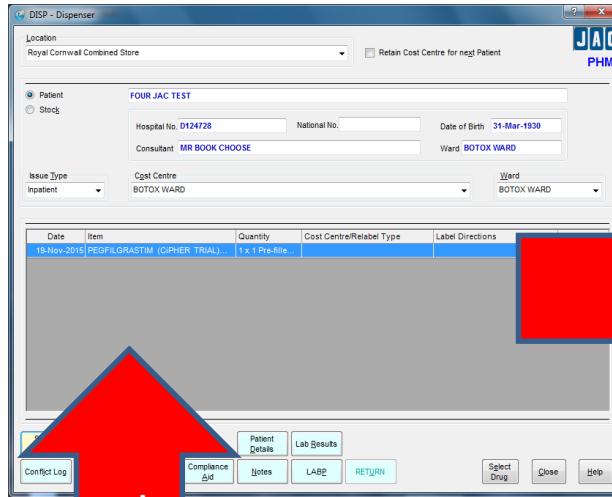
Issue Type: Inpatient Cptl Centre: BOTOX WARD Ward: BOTOX WARD

Date	Item	Quantity	Cost Centre/Relabel Type	Label Directions	Time
18-Nov-2015	PEGFILGRASTIM (CIPHER TRIAL)	1 x 1 Pre-File			16:57:47

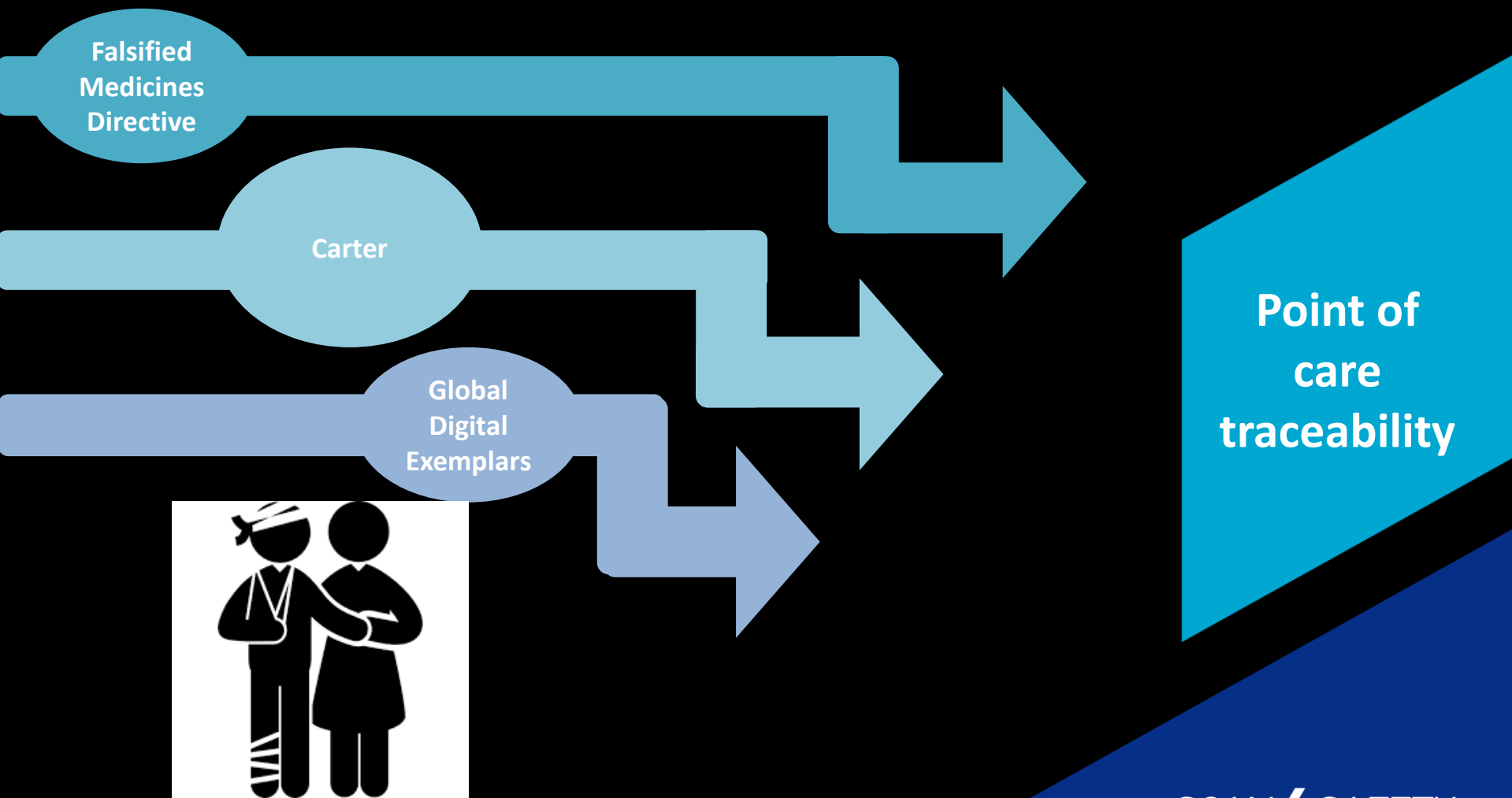
Select Patient Patient Alert Patient Allergies Patient Details Lab Results
Conflict Log Clinical Info Reprint a Label Compliance List Notes LABEL RETURN Select Drug Close Help



Medicines- The Case for Change



Key Drivers





Digital Global Exemplars



...employed
...they will choose
...the same system,
...changes that are

1.

Key Drivers

Falsified Medicines Directive

Global Digital Examples

Carter



GS1 is the Key Enabler

Point of care traceability

Use Cases

GTIN- Product name- link to dm+d

- Closed loop administration
- Closed loop supply
- Scanning at meds rec
- Advanced shipping notices
- Accurate non-robot dispensing

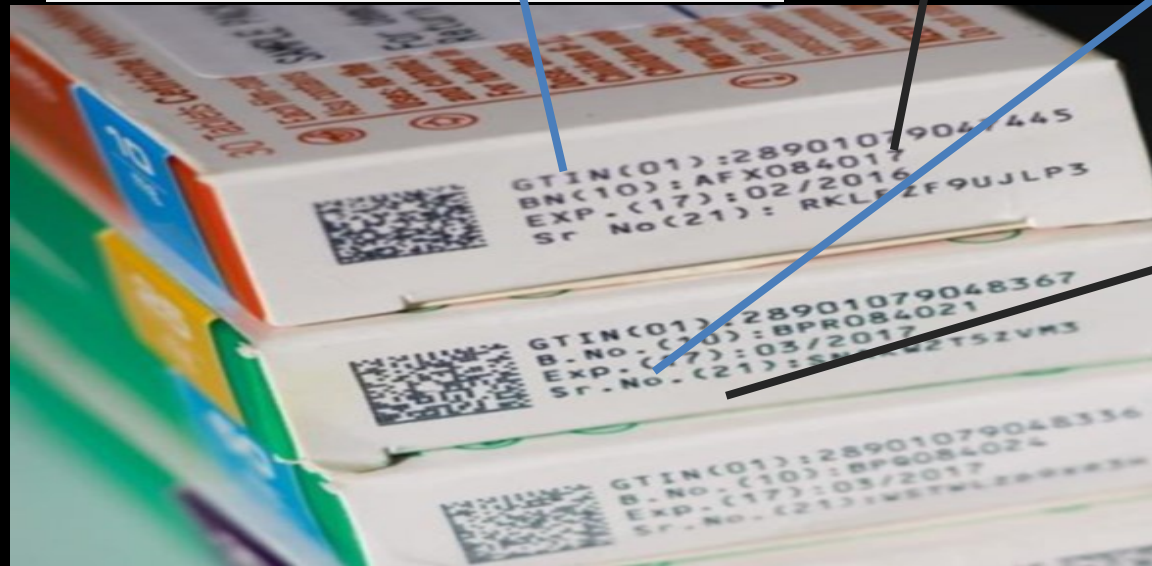
Batch Number-

- Support Product Recall throughout the Supply Chain

Expiry date-

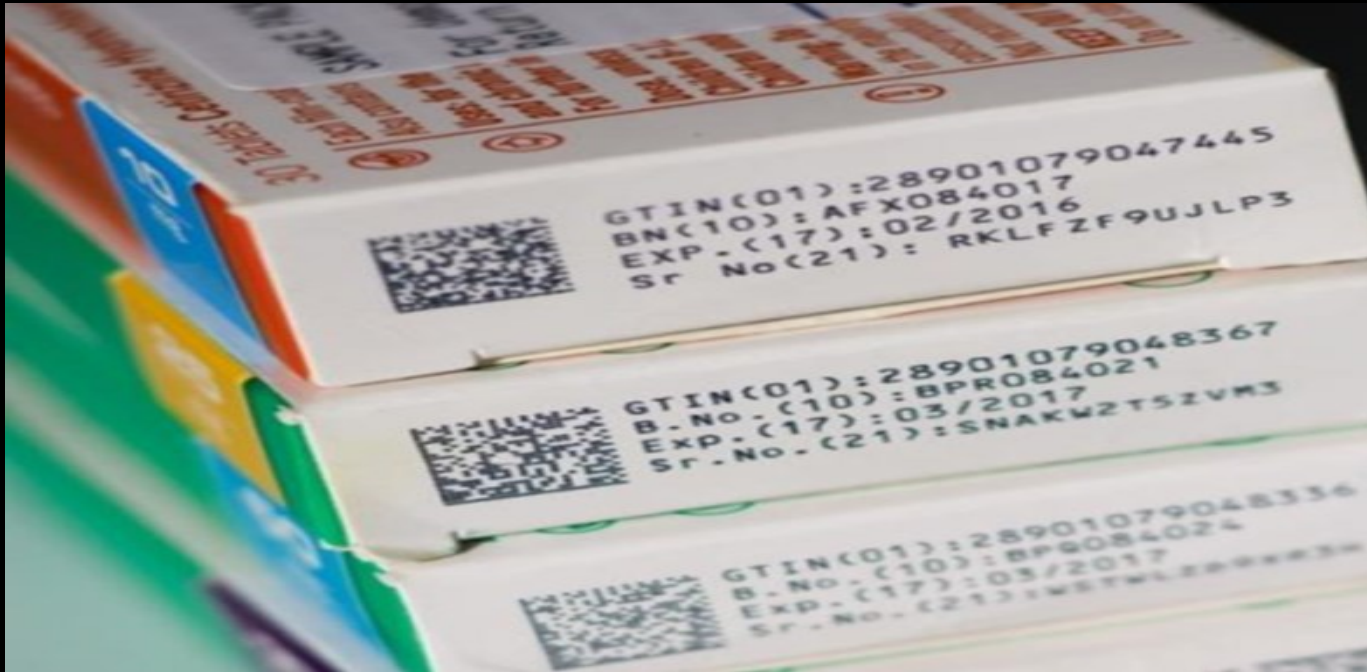
- Support stock control and patient safety

- Serialisation Number- required for Falsified Medicines Directive
- Patient level costing

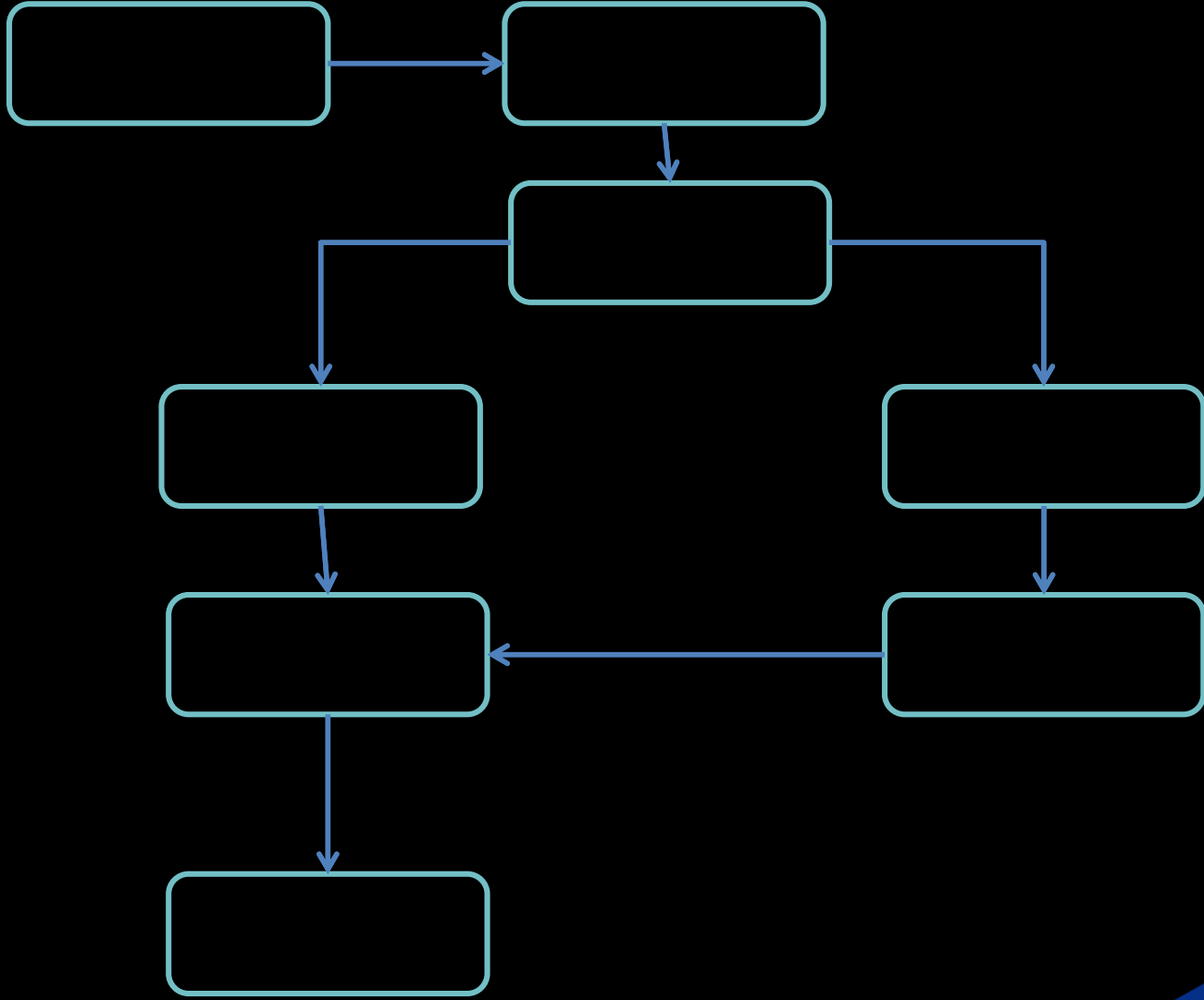




SCAN  SAFETY



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ata



POJAR, Cosmin (Mr)Born **14-Jul-1991 (23y)** Gender **Male**National No. **123 456 7890**Address **Strada Cometi Nr. 340, 70123, Cluj-Napoca, CJ, Romania**Hospital No. **567898E**Allergy Status **Recorded Allergies**Consultant **Chandrasekhar**Ward **Admissions**Body Surface Area **2.1 sqm (e)**Weight **81 kg (e)**Height **188 cm**

Communication Zone

[Patient List](#) [Clinical Drug Information](#) [Patient Notes](#) [Help](#)

Dispensing Requests

Inpatient Rx

Discharge Rx

STL Rx

Chemo Rx

Outpatient Rx

Monitoring & Assessment

Conflict Log

Intervention Requests

Automatically Supplied Requests

Denied Requests

Amoxicillin 250 mg capsules

Sodium Chloride 1000 mL 0.9% intravenous infusion

Salmeterol 100 micrograms / actuation inhaler

Piperacillin 2 g Tazobactam 0.25mg in Sodium Chlor ...

Salbutamol 0.9 micrograms / actuation inhaler

Aspirin 75 mg entric coated tablets

Codeine Phosphate 30 mg tablets

Oramorph 10 mg/5mL sugar-free oral suspension

Citalopram 10 mg tablets

Dose mg tabletFrequency Start on First Admin Days of treatment Doses of treatment Last Admin

Medicines Management

- Admitted on this drug
 Own medication supply
 Self administer

Status

- Verified
 Not Verified
 Verification on hold

[Verification History](#)

NOTE: This dose is based on an estimated age of XX years

NOTE: This order was prescribed as part of a protocol: Protocol Description

NOTE: This order is non-for mulary. The rationale: Non For mulary Reason Description

Product [Advanced](#) [Clear](#)

Directions

[Advanced](#)Quantity Dose Units ContainersLabel Format Container LabelsUnits Labels

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[Dispensing Profile](#) [Clinical Drug Information](#) [Help](#)

Technical Check

Patient Medication Record

Amoxicillin 500 mg Capsules x 28 Bendroflumethazide 5 mg Tablets x 28 Bendroflumethazide 5 mg Tablets x 28 Dose mg tabletFrequency Start on First Admin Days of treatment Doses of treatment Last Admin

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Communication Zone

[Dispensing Profile](#) [Clinical Drug Information](#) [Help](#)**Technical Check****Patient Medication Record**

Status: Pending Release Technical Check: 28-MAY-2017 @ 15:30

Amoxicillin 500mg Capsules x 28

Dose mg

Bendroflumethazide 5mg Tab

Bendroflumethazide 5mg Tabl

Enalapril 5mg Tablets x 28

Do you want to release ALL stock now?

Yes, release ALL now

No, release PARTIAL now

Medicines Management

-
- Admitted on this drug
-
-
- Own medication supply
-
-
- Self administer

Status

-
- Verified
-
-
- Not Verified
-
-
- Verification on hold

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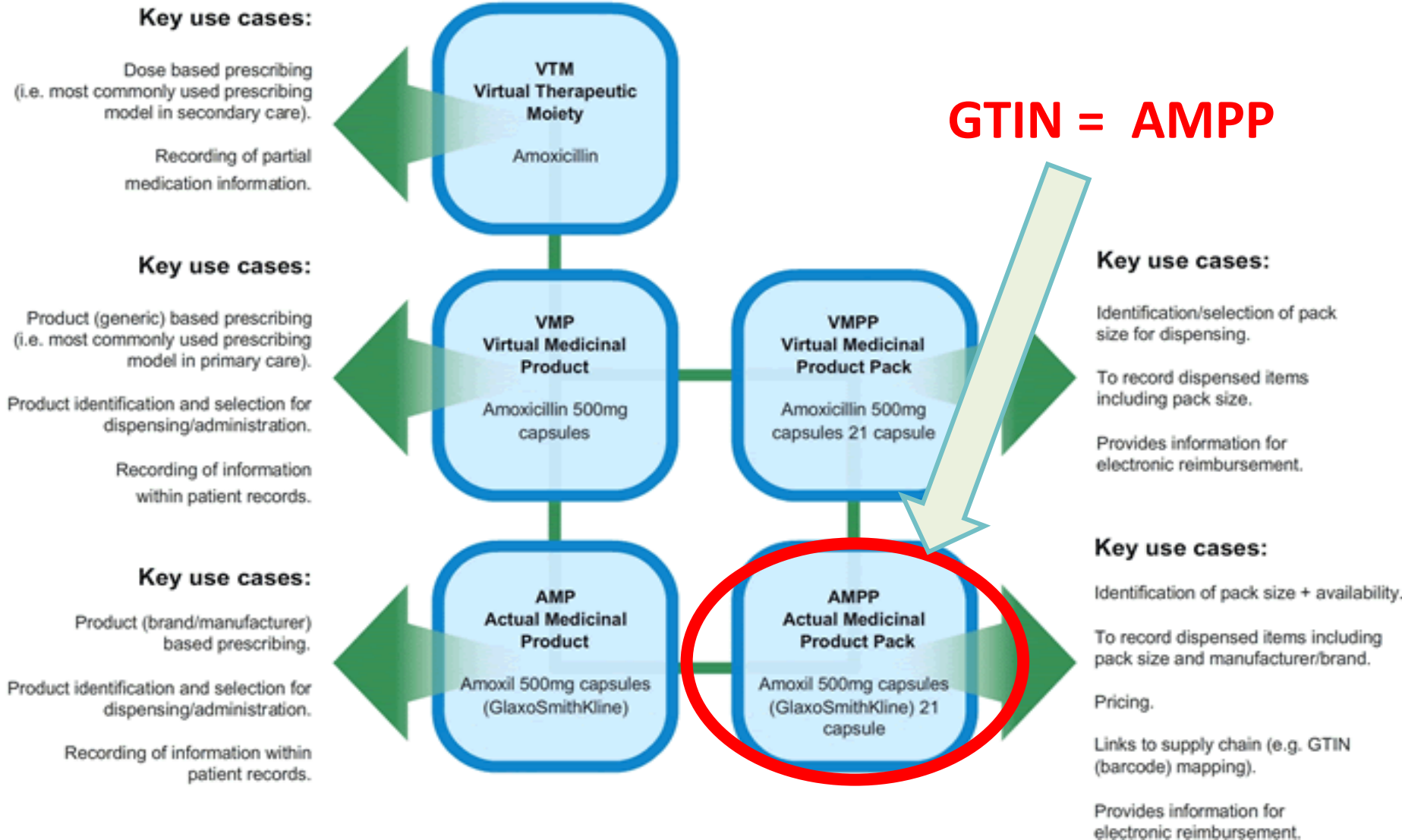


SCAN  SAFETY

dm+d data model



dm+d data model



GTIN Datapool

GTIN Datapool

FMD Database

Retrieves GTIN & linked data attributes.

Populates PSC and Robot drug files

New Product

Verify/Decommission

Product Arrives in Pharmacy

Manual/ Robot scan of product

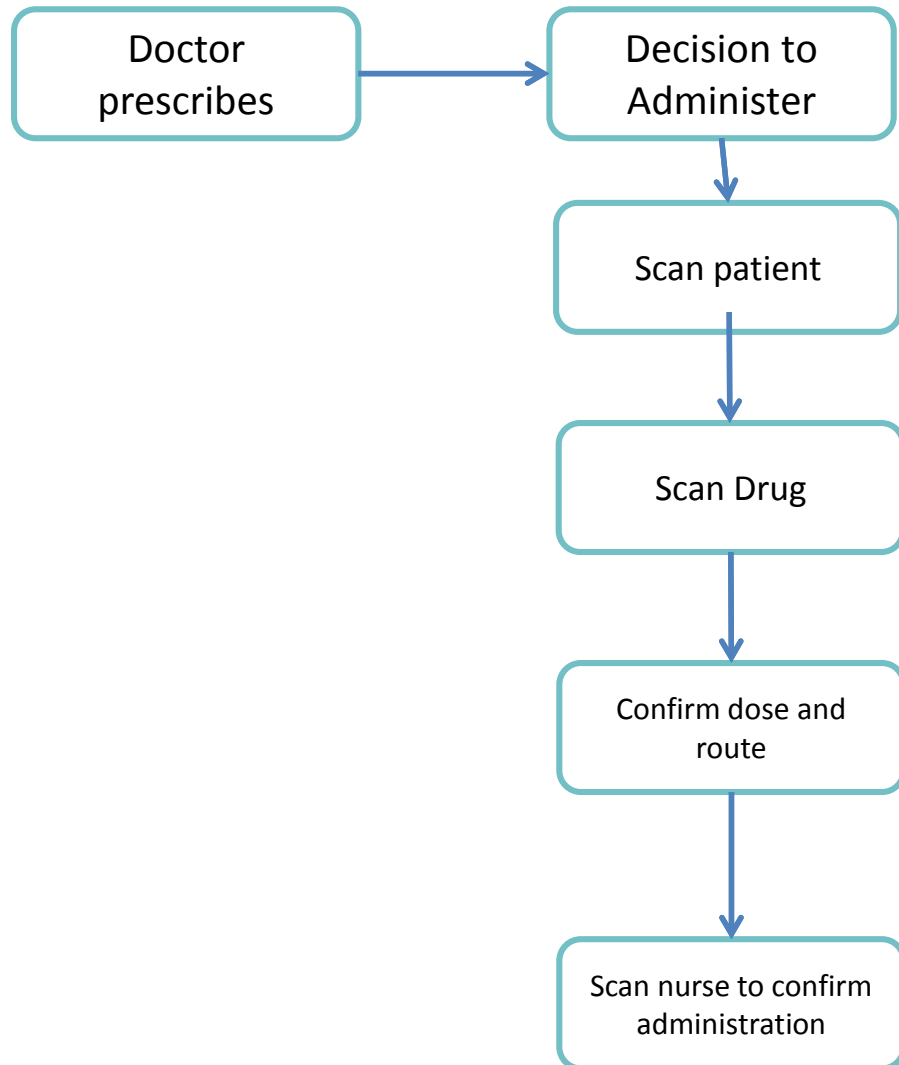
Dispense Medicine

Final check and release

Co-ordinated Specification

- Pharmacy S4S working group
- We've done a specification
- Processed mapped all the main workflows
- Engaged with EMIS and JAC
- Engaged with BD and Omnicell
- Engaged with the ABPI

Closed Loop Administration



The Five Rights

1. Patient
2. Drug
3. Dose
4. Time
5. Route

Some Essentials

- dm+d
- GTIN datapool
- A co-ordinated specification

dm+d- Hierarchy is key

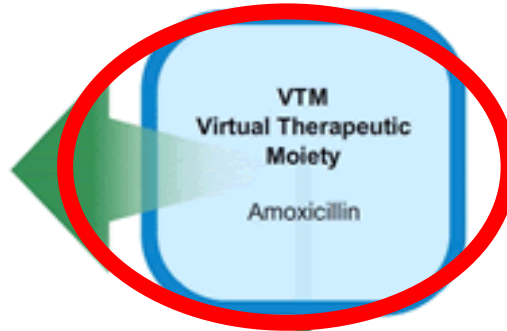
dm+d data model

**GTIN link to
AMPP through
to VTM**

Key use cases:

Dose based prescribing
(i.e. most commonly used prescribing
model in secondary care).

Recording of partial
medication information.

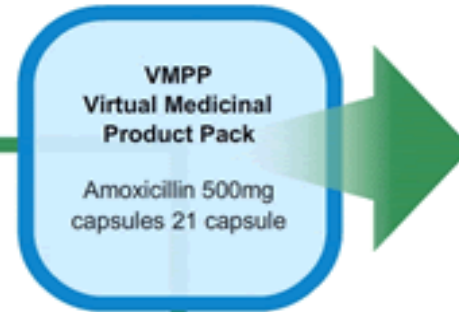
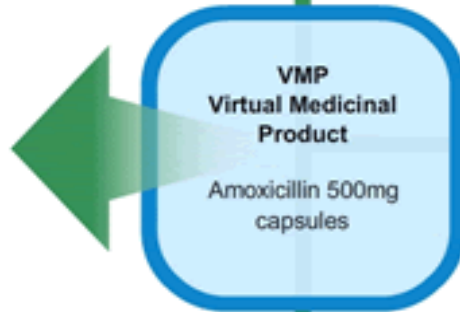


Key use cases:

Product (generic) based prescribing
(i.e. most commonly used prescribing
model in primary care).

Product identification and selection for
dispensing/administration.

Recording of information
within patient records.



Key use cases:

Identification/selection of pack
size for dispensing.

To record dispensed items
including pack size.

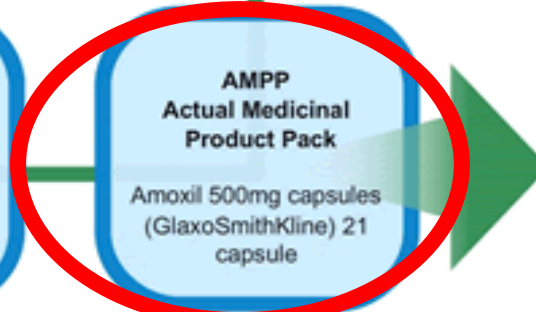
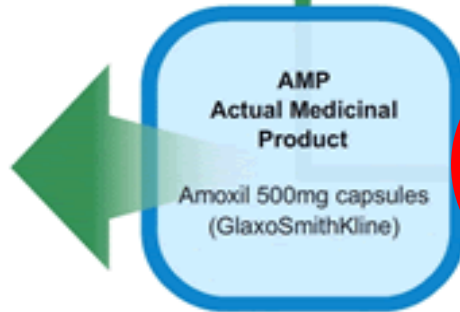
Provides information for
electronic reimbursement.

Key use cases:

Product (brand/manufacturer)
based prescribing.

Product identification and selection for
dispensing/administration.

Recording of information within
patient records.



Key use cases:

Identification of pack size + availability.

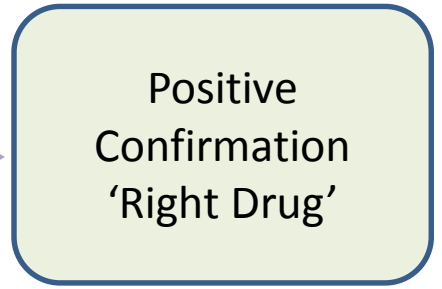
To record dispensed items including
pack size and manufacturer/brand.

Pricing.

Links to supply chain (e.g. GTIN
(barcode) mapping).

Provides information for
electronic reimbursement.

GTIN Datapool



Retrieves GTIN &
linked data attributes.



Retrieves GTIN &
linked data attributes.

Co-ordinated Specification

- EPMA is not a 'primary use case' for S4S demo sites.
- In theory not covered by the £2m
- Minimal engagement with EPMA vendors (though EMIS and JAC have integrated solutions).
- Covered in specification and process maps

PharmaTRAC®

JAC partnership with
BIQ for bedside
scanning technology



Objectives



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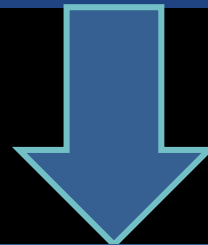
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Improve Patient Safety

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