

IP
c Prescrib
nes Admin
Will Hall
@ stgeorgeseppma
London

ePMA team at St Georges Hospital in south London. We aim to eliminate medication errors and improve system efficiency. Safer, Better and Smarter is our motto.



Item	Metric
Number of core facilities	3
Number of beds	1,100
Full Time Equivalent	7,173
Total Headcount	7,700
Number of IP admissions /year	107,976
Number of IP Day cases / year	26,925
Number of OP attendances / year	683,490
Number of ED attendances / year	163,810
Number of operating theatres	29
Number of births /year	5,118
Number of critical care beds	90

Safer

Better

SMARTER

Medication Safety: Long term global vision

To perfect the medication delivery system to be safe for every patient, every time, while making it easy for caregivers to do the right thing, and impossible to do the wrong thing.

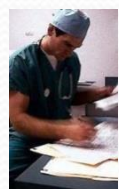
Source of preventable medication errors

Leape et al. JAMA 1995

Errors Occurring

Errors Resulting in harm

Intercepted



Prescribing

• 39%

28%

48%



Transcribing

• 12%

11%

22%



Dispensing

• 11%

10%

24%



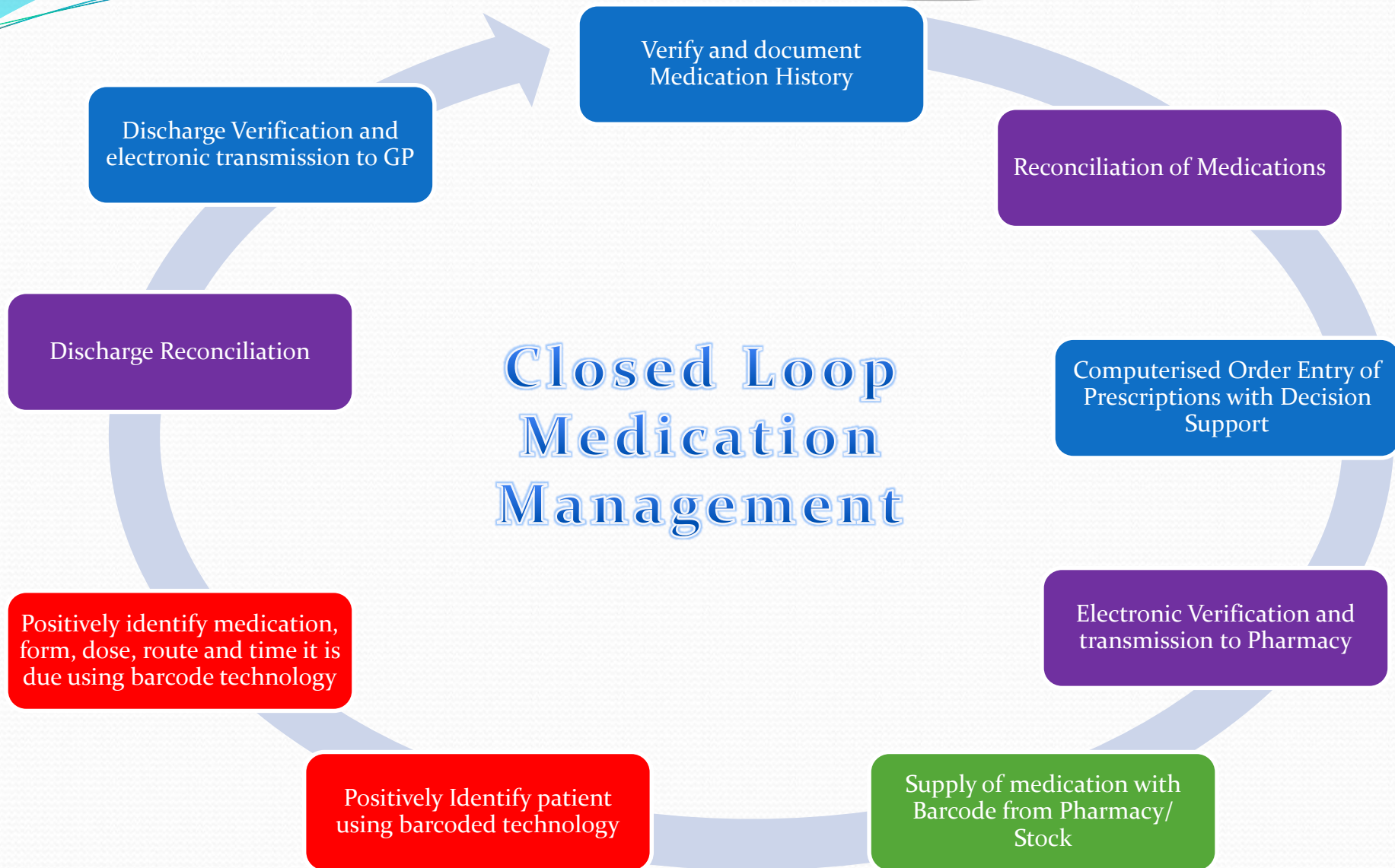
Administration

• 38%

51%

2%

Closed Loop Medication Management



Benefits



Will Hall

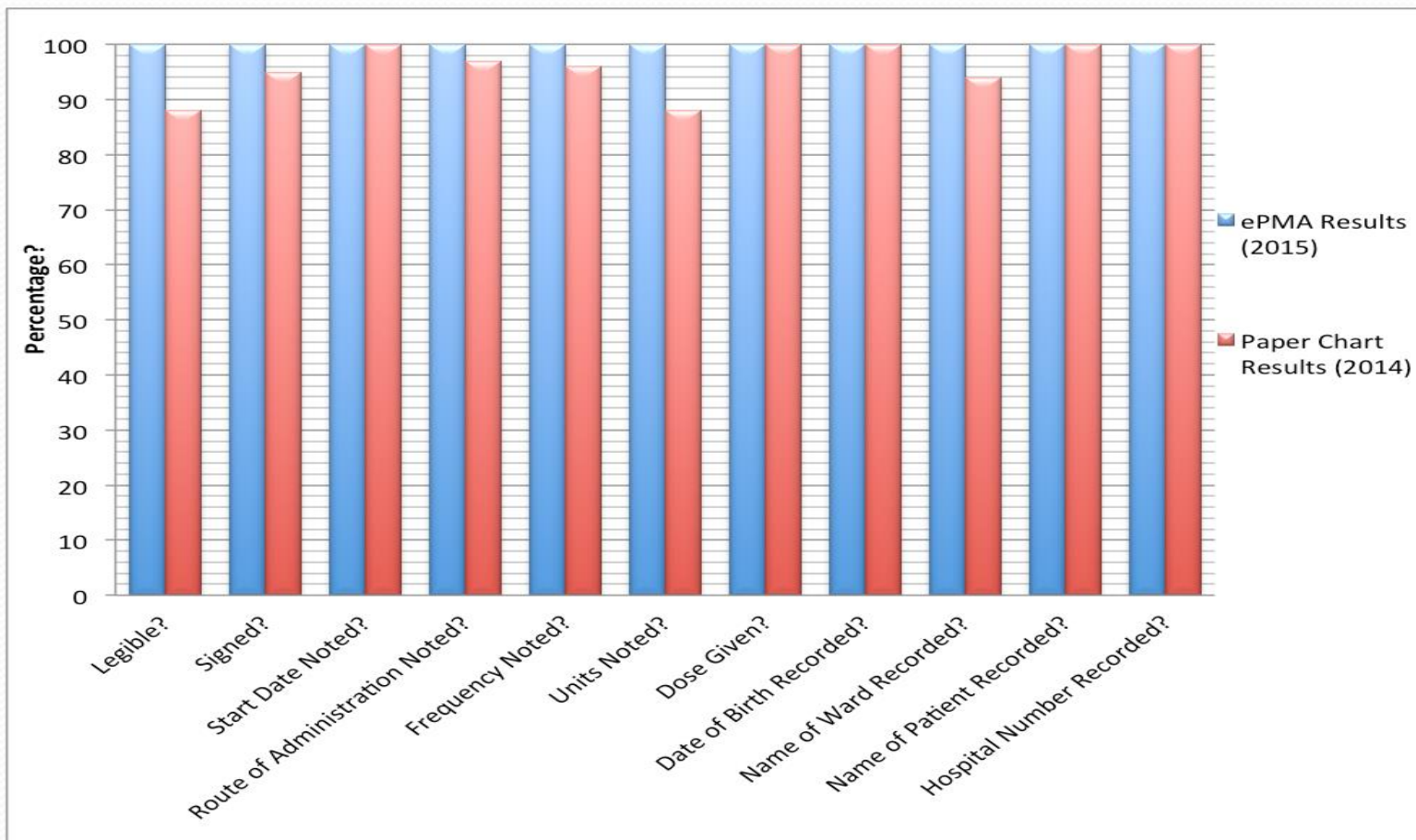
@ stgeorgeseppma
London

ePMA team at St Georges Hospital in south London. We aim to eliminate medication errors and improve system efficiency. Safer, Better and Smarter is our motto.

CPOE: Allergy Documentation

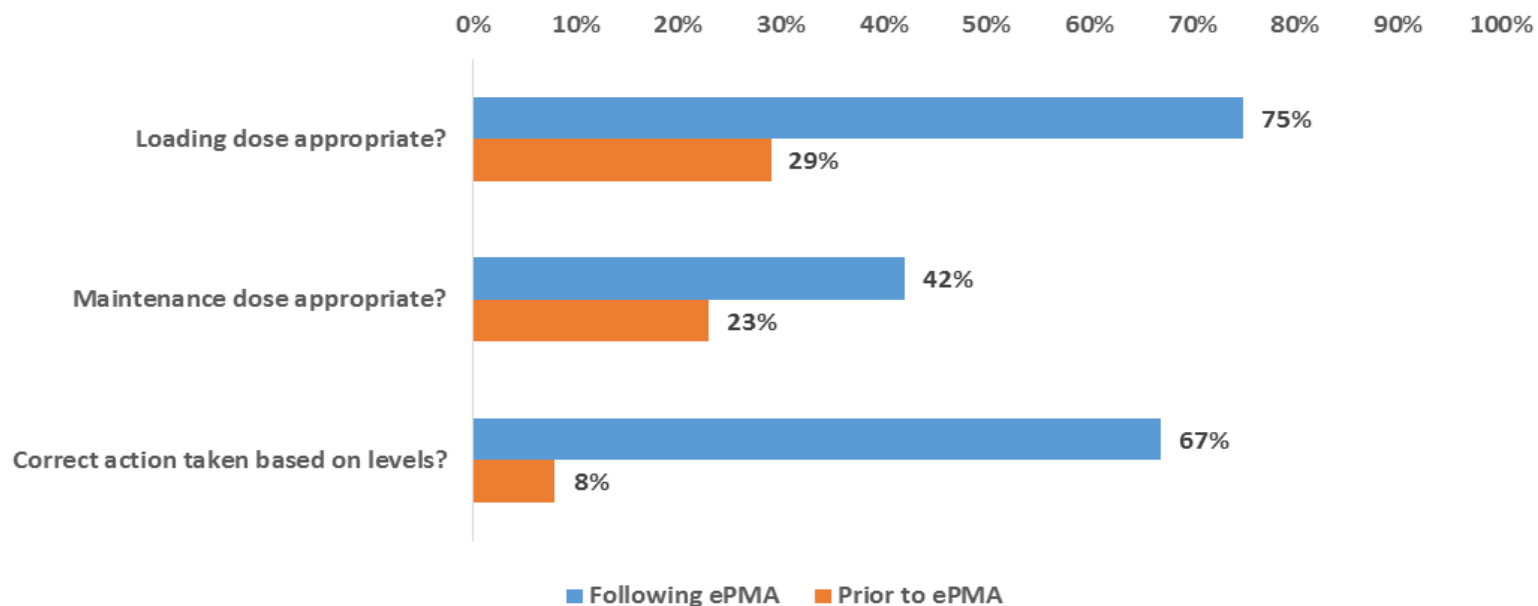
Jan 2015	Paper	ePMA
Documented	90%	100%
Nature	78%	86%
Signed	64%	100%
Allergy Alerts	-	189
Not Over-ridden		12

CPOE: Prescribing Standards

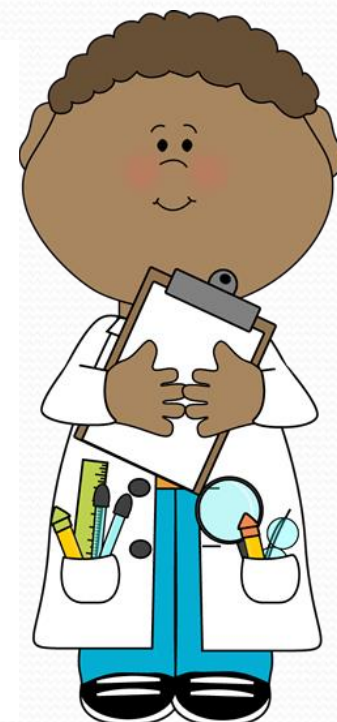
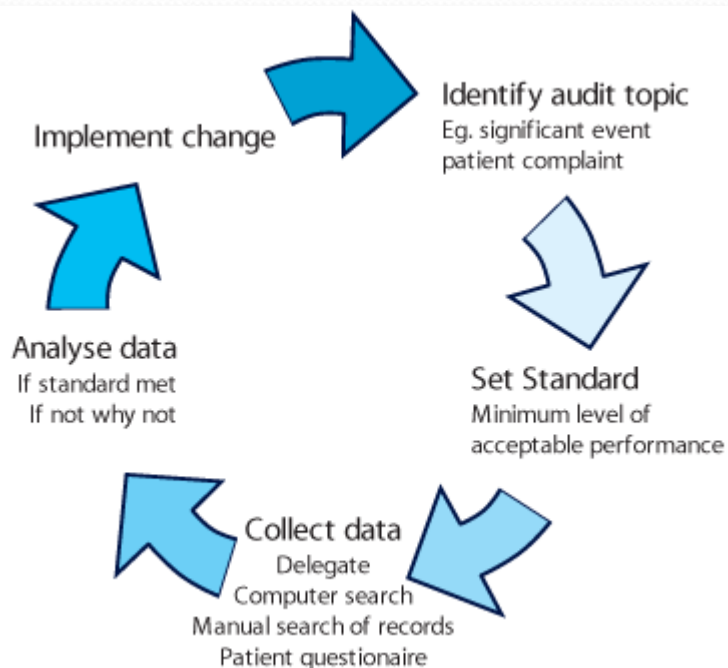


CPOE: Complex prescribing - Vancomycin

A comparison of loading and maintenance dosing accuracy, and correct action taken during therapy monitoring



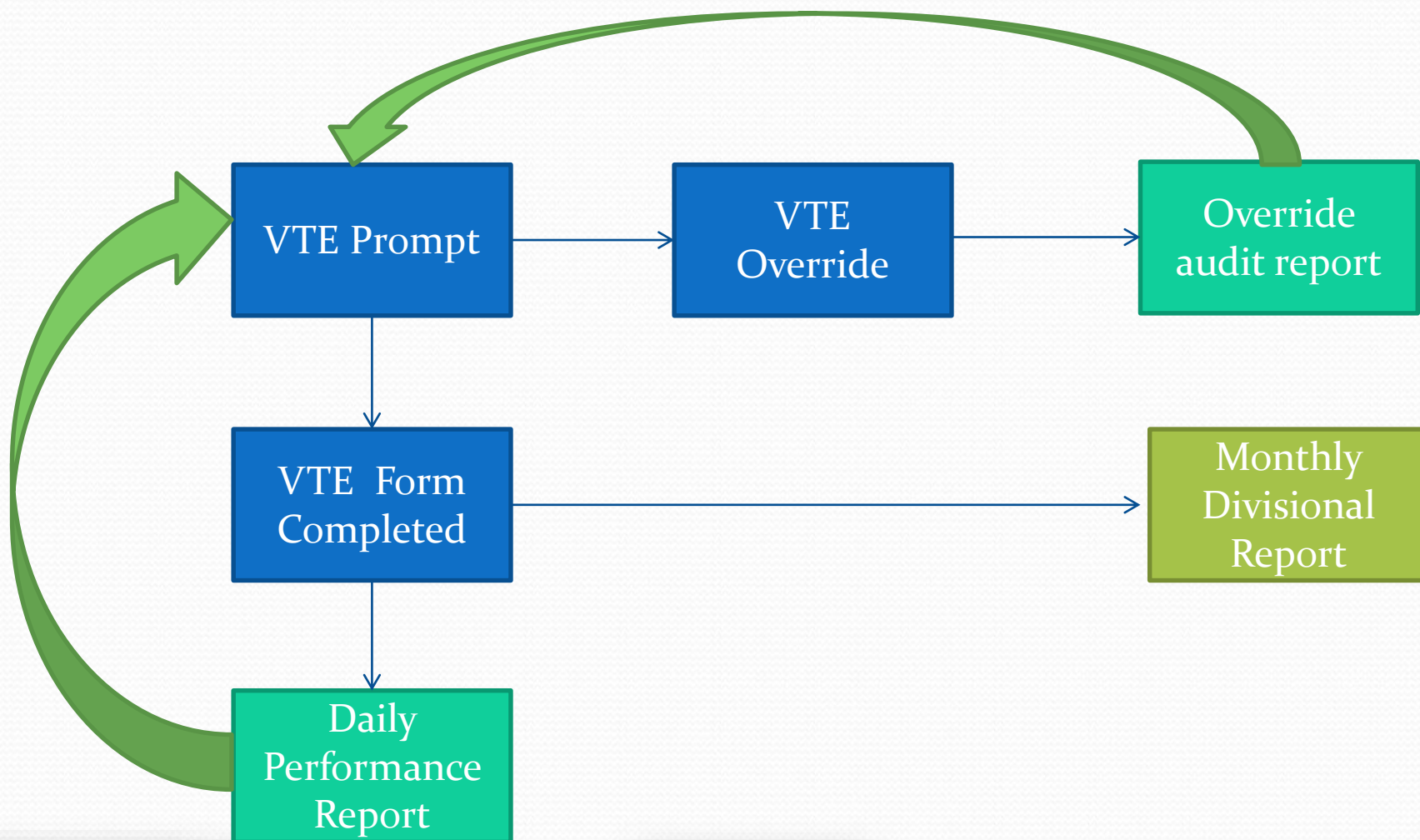
Audits



CPOE: Antimicrobial Stewardship

Q4 2013/14 – Q3 2014/15	Paper	ePMA
Indication on drug chart	87%	100%
Stop/Review date on chart	74%	100%

Venous Thromboembolism



Clinical Pharmacy

Activity category	ePMA activities (n = 967)		Paper based activities (n = 901)	
Chart review	259	26.8%	144	16.0%
Clinical review	89	9.2%	55	6.1%
Walking	67	6.9%	82	9.1%
Discussion	243	25.1%	178	19.8%
Medicines information	14	1.4%	13	1.4%
Looking/retrieving/returning	49	5.1%	67	7.4%
Medicines reconciliation	73	7.5%	78	8.7%
Supply	49	5.1%	114	12.7%
Social activity	32	3.3%	3	0.3%
Transcription check	1	0.1%	10	1.1%
Documentation	43	4.4%	31	3.4%
Administrative	48	5.0%	126	14.0%

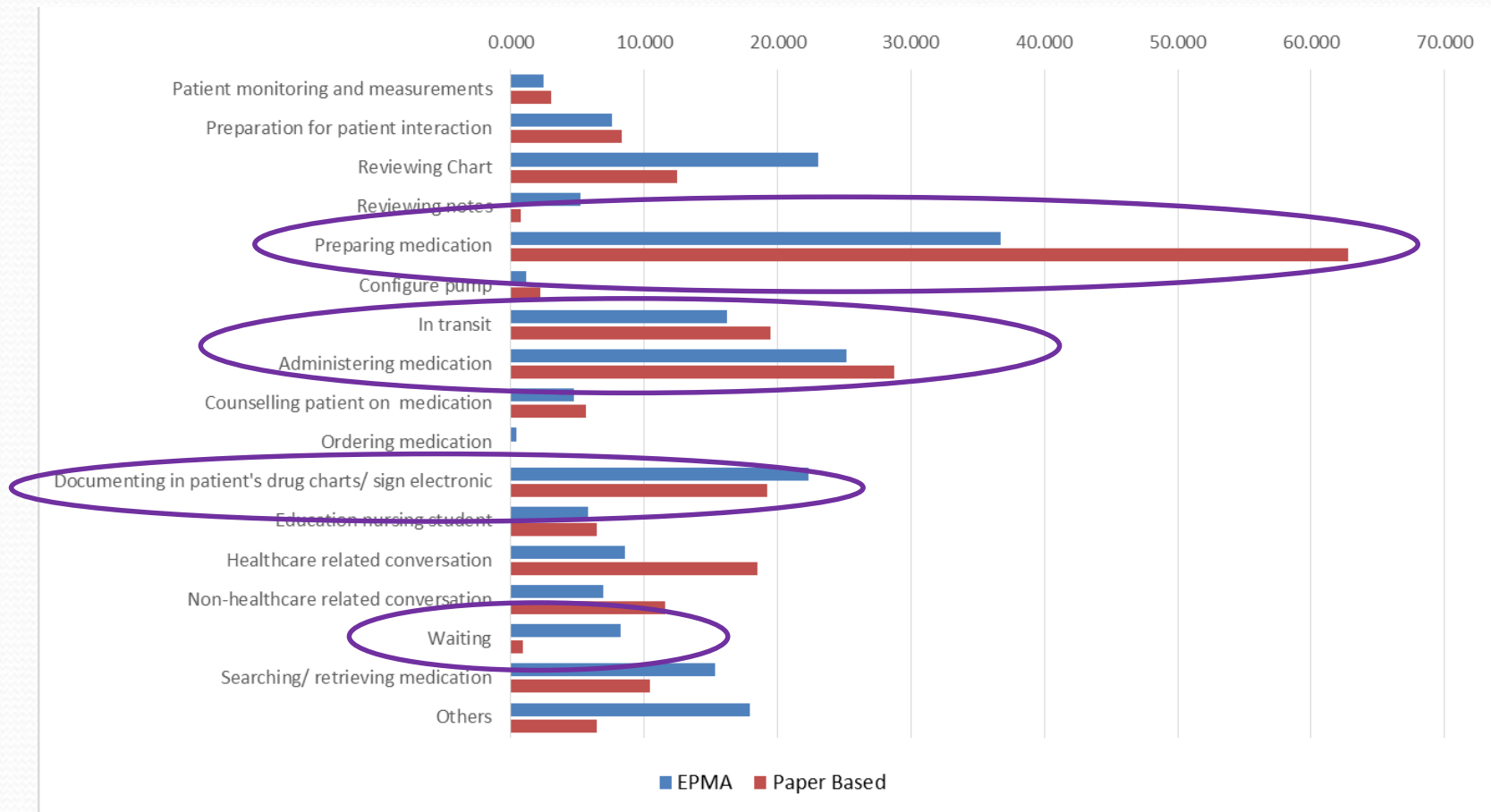
Clinical Pharmacy

Activity category	ePMA activities (n = 967)		Paper based activities (n = 901)	
Chart review	259	26.8%	144	16.0%
Clinical review	89	9.2%	55	6.1%
Walking	67	6.9%	82	9.1%
Discussion	243	25.1%	178	19.8%
Medicines information	14	1.4%	13	1.4%
Looking/retrieving/returning	49	5.1%	67	7.4%
Medicines reconciliation	73	7.5%	78	8.7%
Supply	49	5.1%	114	12.7%
Social activity	32	3.3%	3	0.3%
Transcription check	1	0.1%	10	1.1%
Documentation	43	4.4%	31	3.4%
Administrative	48	5.0%	126	14.0%

Clinical Pharmacy

Activity category	ePMA activities (n = 967)		Paper based activities (n = 901)	
Chart review	259	26.8%	144	16.0%
Clinical review	89	9.2%	55	6.1%
Walking	67	6.9%	82	9.1%
Discussion	243	25.1%	178	19.8%
Medicines information	14	1.4%	13	1.4%
Looking/retrieving/returning	49	5.1%	67	7.4%
Medicines reconciliation	73	7.5%	78	8.7%
Supply	49	5.1%	114	12.7%
Social activity	32	3.3%	3	0.3%
Transcription check	1	0.1%	10	1.1%
Documentation	43	4.4%	31	3.4%
Administrative	48	5.0%	126	14.0%

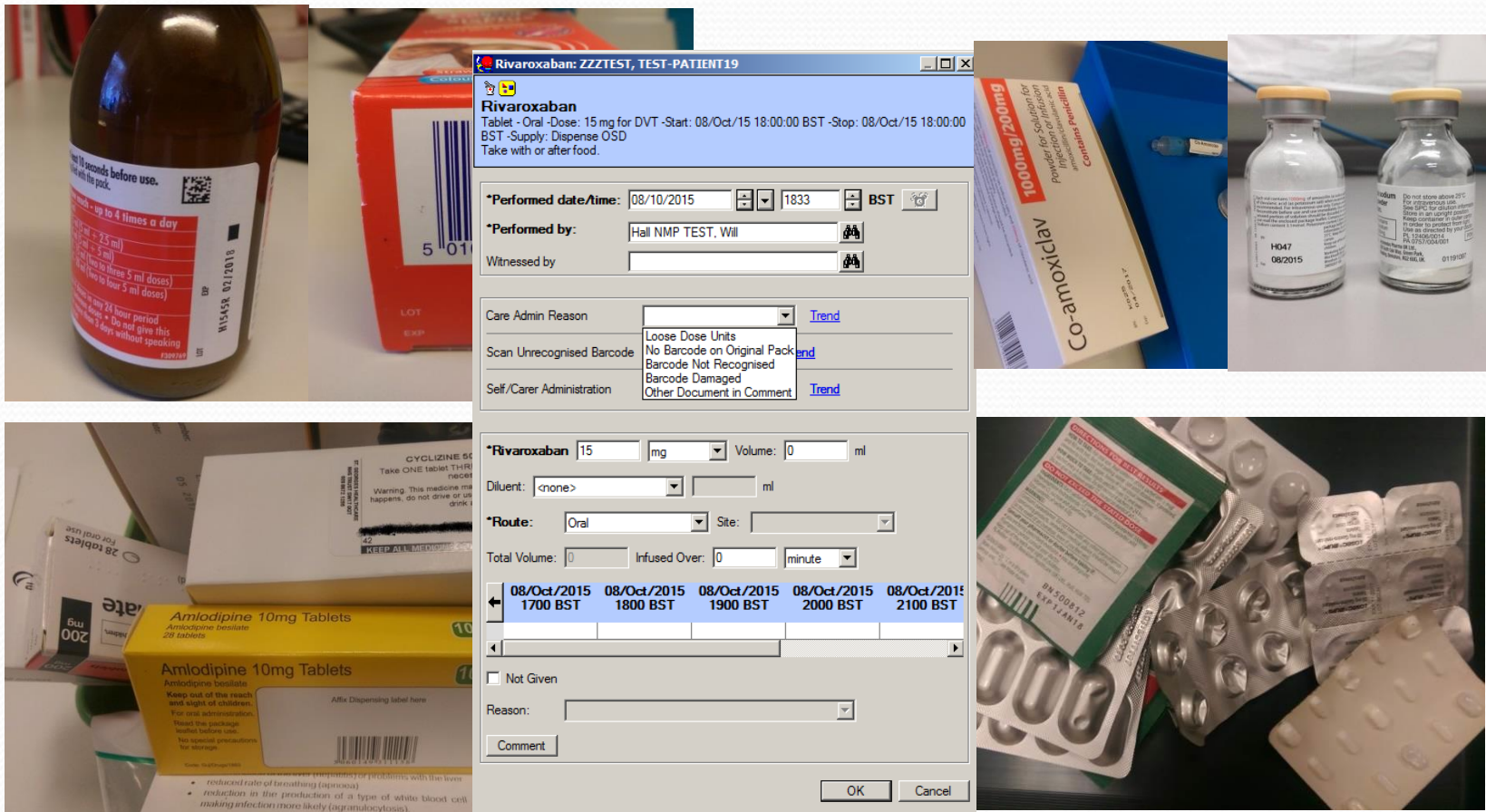
Medication Administration



Barcode Scanning

Measure	Total
Medications Administered	937,118
Patient Mismatches	813
Medication Mismatches	4515

Scanning Failures



HIMMS Level 6



EMR Adoption Model SM	
Stage	Cumulative Capabilities
Stage 7	Complete EMR integrates all clinical areas (e.g. ICU, ED, Outpatient) displacing all (medical) paper records in the hospital; Continuity of Care standards to exchange data; Data Warehouse used as basis for clinical and business analytics
Stage 6	Clinical Documentation interacts with advanced Decision Support (based on discrete data elements) AND Closed Loop Medication Administration
Stage 5	Integrated Image Management Solution (e.g. PACS) displaces all film-based images throughout the hospital
Stage 4	Electronic Ordering provides Clinical Decision Support (based on rules engines) in at least one clinical service area and/or for medication
Stage 3	Clinical Documentation as well as Electronic Ordering of Physician and/or Nursing Care services; includes tracking of Medication Administration (eMAR)
Stage 2	Clinical Data Repository / Electronic Patient Record allows collection and normalization of data from disparate clinical sources throughout the hospital
Stage 1	Information Systems for major ancillary departments (Laboratory, Radiology, Pharmacy) are installed or data output from external service providers are processed electronically
Stage 0	Information Systems for major ancillary departments (Laboratory, Radiology, Pharmacy) are not installed or data output from external service providers cannot be processed electronically

St George's becomes largest UK hospital to receive HIMSS digital maturity award

St George's University Hospital NHS Foundation Trust awarded with HIMSS Stage 6 EMRAM for progress on its journey towards a paperless NHS

St George's University Hospital NHS Foundation Trust in London has become the second and largest trust in the UK to be validated at Stage 6 of the international acute Electronic Medical Record Adoption Model (EMRAM). The trust, which has more than 1000 beds and serves a population of two million people, is the first site to be accredited following an onsite visit by HIMSS inspectors.

John Rayner, Director of Professional Development HIMSS UK said: "HIMSS feels that the trust has made exceptional progress towards healthcare automation in the last 2 years."

‘The error of one
moment becomes the
sorrow of whole life.’

A Chinese Proverb

Copyright

The material in this document is subject to copyright protection of St Georges University NHS Hospitals Foundation Trust unless otherwise indicated. The St Georges University NHS Hospitals Foundation Trust copyright protected material (other than the Royal Arms and departmental or agency logos) may be reproduced free of charge in any format or medium for research, private study or for internal circulation within an organisation. This is subject to the material being reproduced accurately and not used in a misleading context. Where any of the St Georges University NHS Hospitals Foundation Trust copyright items in this document are being republished or copied to others, the source of the material must be identified and the copyright status acknowledged.

The permission to reproduce St Georges University NHS Hospitals Foundation Trust protected material does not extend to any material in this document that is identified as being the copyright of a third party. Authorisation to reproduce such material must be obtained from the copyright holders.