Ashford and St. Peter's Hospitals NHS
NHS Foundation Trust

Council of Governors
4th March 2014

TITLE	**Strategic Focus: Implementation of Electronic Patient Records**
EXECUTIVE SUMMARY	At the request of the Governor the strategic focus at the March Council is on the Trust's strategy to implement Electronic Patient Records.
The council of Governors is asked to:	Note and discuss the presentation.
Submitted by:	Simon Marshall, Director of Finance and Information
Date:	24th February 2014
Decision	For Discussion

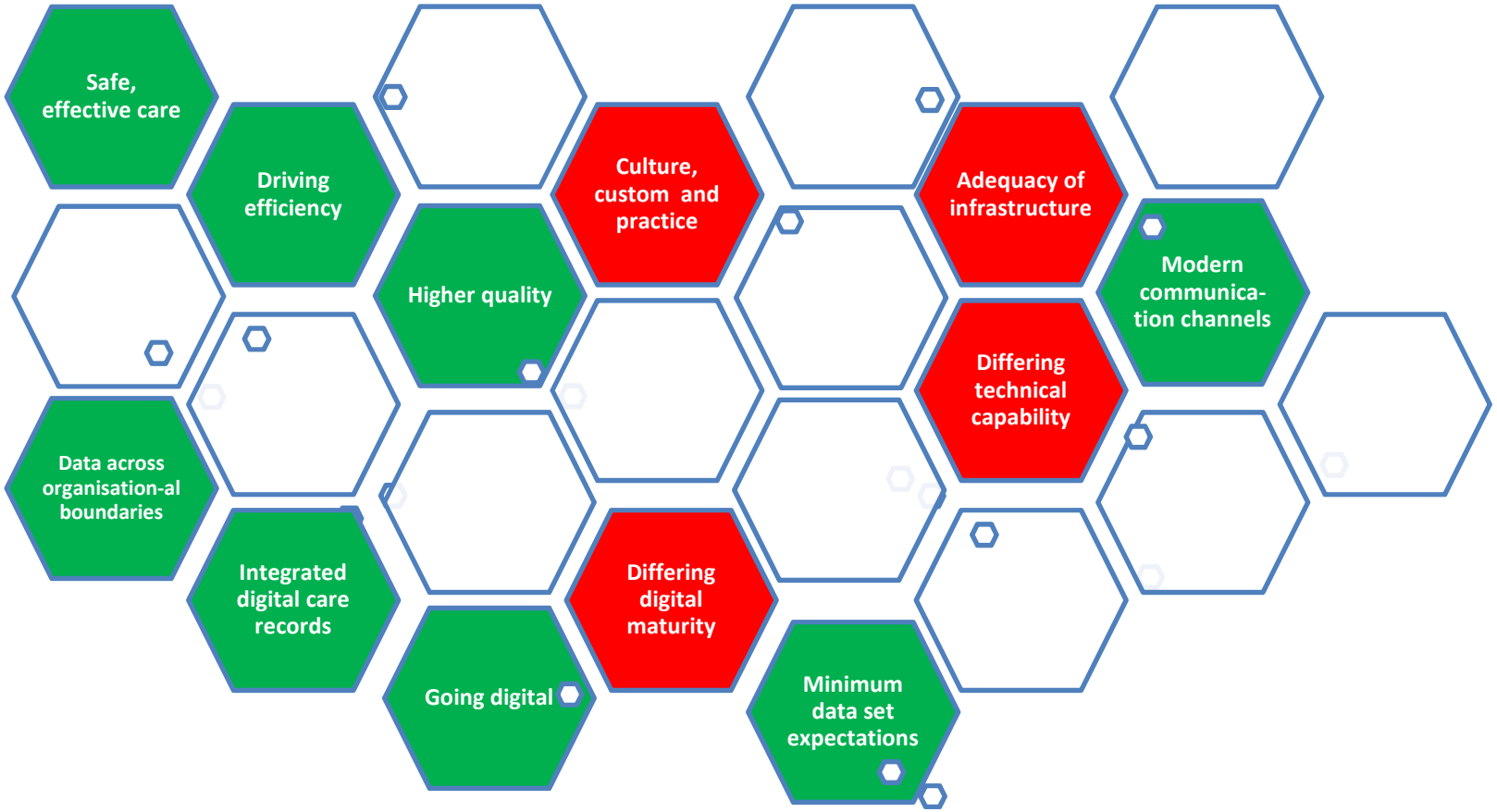
Ashford and St. Peter's Hospitals NHS
NHS Foundation Trust

ASPH Strategy to Implement Electronic Patient Records (EPR)

Taking the hassle out of healthcare

http://www.youtube.com/watch?v=p2eiiBujIv4

Informatics Challenges & Journey



Maturity Assessment – Infrastructure & EPR

EPR –Score of 49 on NHS Digital Clinical Maturity Index

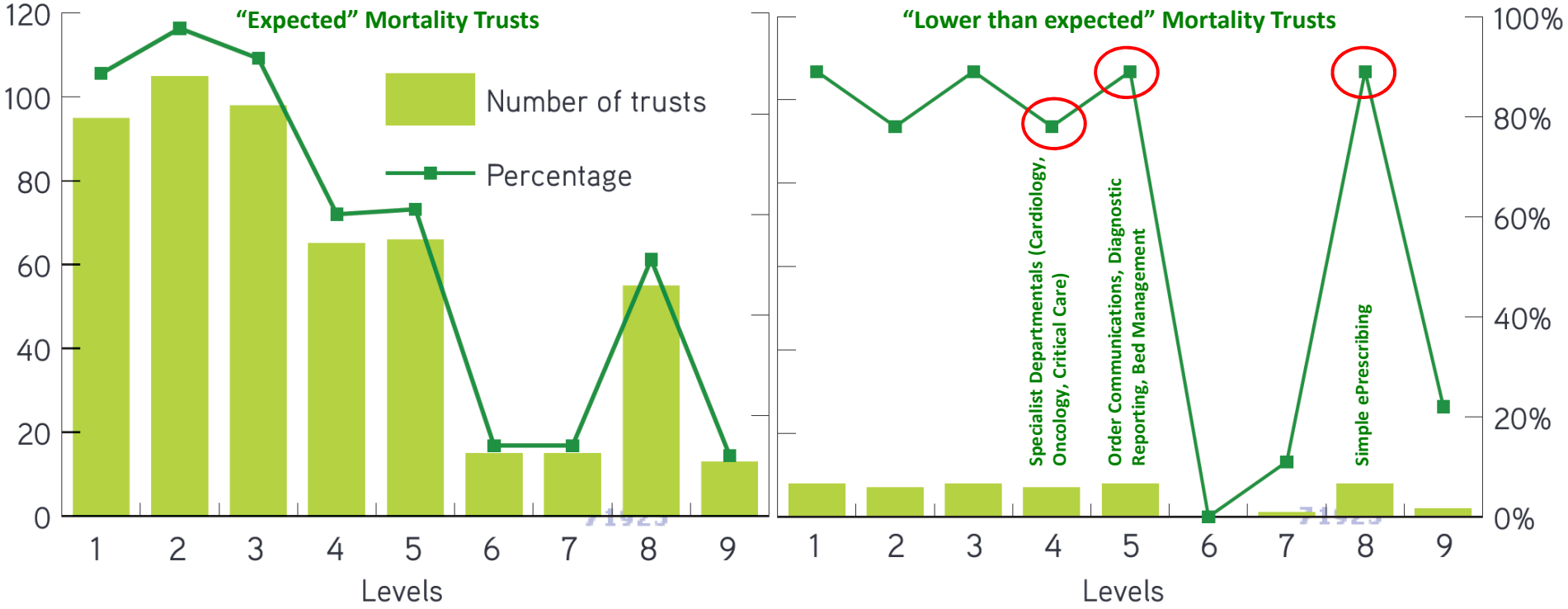
Caveat: only measures presence of systems, not integration, effectiveness or benefit

US EMR Adoption Model[SM]

Stage	Cumulative Capabilities	2013 Q2	2013 Q3
Stage 7	Complete EMR; CCD transactions to share data; Data warehousing; Data continuity with ED, ambulatory, OP	2.1%	2.2%
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS	10.0%	11.1%
Stage 5	Closed loop medication administration	18.7%	20.9%
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	14.6%	15.1%
Stage 3	Nursing/clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology	34.5%	31.9%
Stage 2	CDR, Controlled Medical Vocabulary, CDS, may have Document Imaging; HIE capable	9.0%	8.4%
Stage 1	Ancillaries - Lab, Rad, Pharmacy - All Installed	3.8%	3.5%
Stage 0	All Three Ancillaries Not Installed	7.2%	6.9%
	Data from HIMSS Analytics[TM] Database © 2014	N = 5,439	N = 5,437

ASPH currently @ Stage 1

EPR Maturity has been correlated* to lower mortality



"Levels four, five and eight – specialist departmentals, order communications and diagnostic reporting and simple e-prescribing – have strong positive correlations to mortality rates …There is a particularly strong correlation between the presence of a simple e-prescribing system and a trust's mortality rate."

The Clinical Digital Maturity Index, ehi Intelligence & NHS England, November 2013.

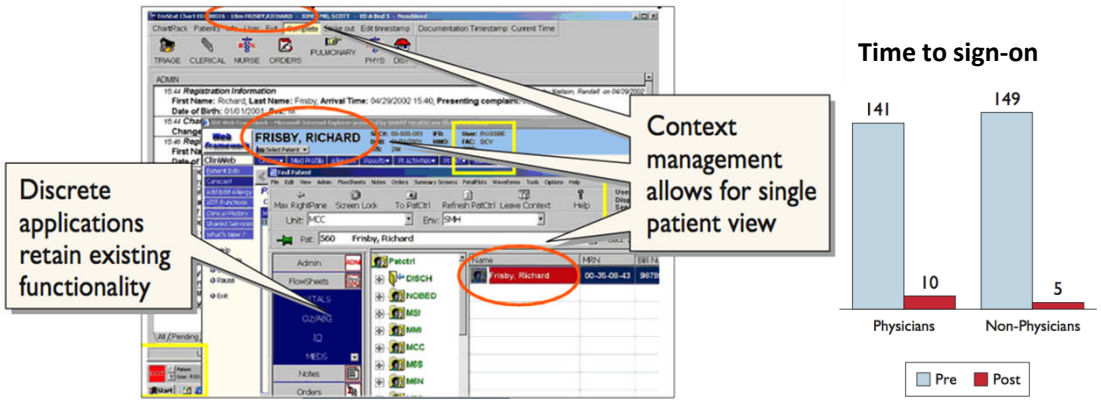
**Note correlation does not prove causation. It could be that these systems are resulting in lower mortality, but it could be that lower mortality results from a safety culture that also leads to investment in these systems. However we do know that (for example), ePrescribing reduces drug errors and drug errors increase mortality.*

Enabling Clinical Transformation with EPR

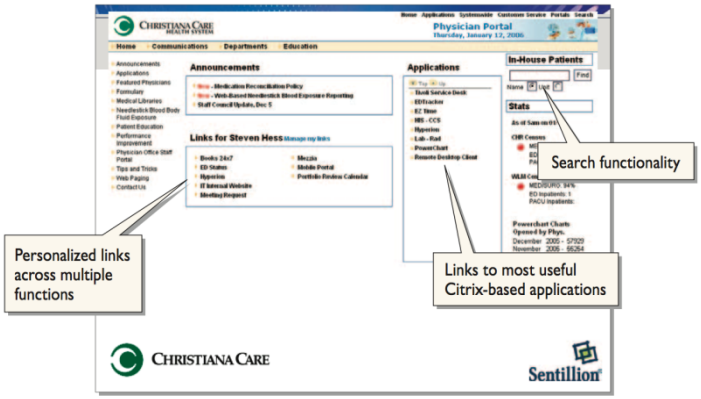
- Benefits of replacing paper with Electronic Patient Record
  - Eliminating problems of handwriting
  - Access to patient records anywhere at any time
  - Simplify processes, forms and templates to reduce waste
- Other benefits of EPR systems
  - Schedule visibility across departments, Trusts, Primary and Social Care – improve 'right 1st time appointments, asset utilisation cross trust, less need for outsourced clinical services
  - Clinical data, information, intelligence => decision making
  - Clinical decision support – warnings & guidance
  - Integration between departments
  - More timely & less labour intensive communication, e.g. letters to GPs, Social Care, internal forms
  - Automatic collection of data from medical devices into record

High-end EPR can enable Clinical Transformation, enhance patient experience, job satisfaction, productivity, & revenue collection.

Clinical Transformation with EPR – examples



Single sign-on, enhancing workflow by aggregating information



User-customisable portal

Raising the standard of care

Benefiting from a Sophisticated System

Three Key Elements to EMR

EMR

Guided Documentation

- System indicates new information to clinician
- Can require fields to be completed for reimbursement purposes

Guided Data Interpretation

- Will inform clinician if lab result within set guidelines for patient
- Can alert clinician to underlying drug-induced pathology

Guided Ordering

- Recommends appropriate next steps based on test results and clinical findings
- Advanced decision support modifies orders based on renal function and age

Improving Accuracy of Treatment

Patient comes in for back pain

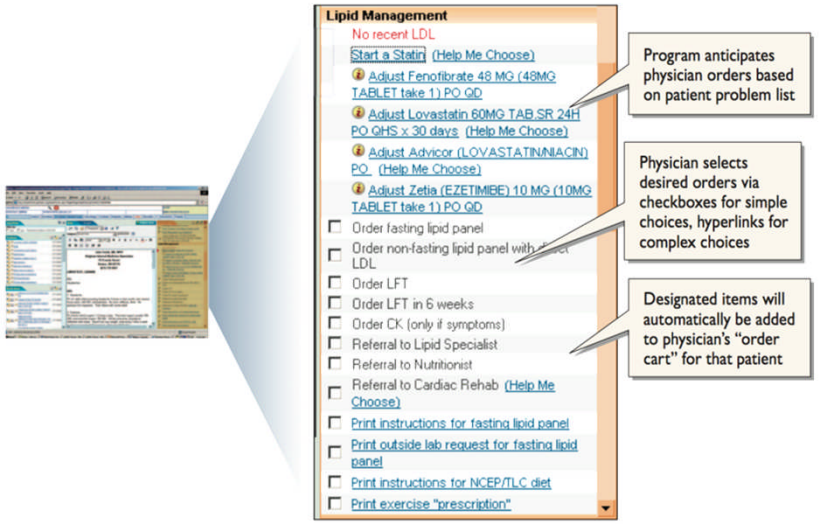
Before SmartForms

- Physician evaluates, writes prescription for analgesics
- Patient leaves with pain medication

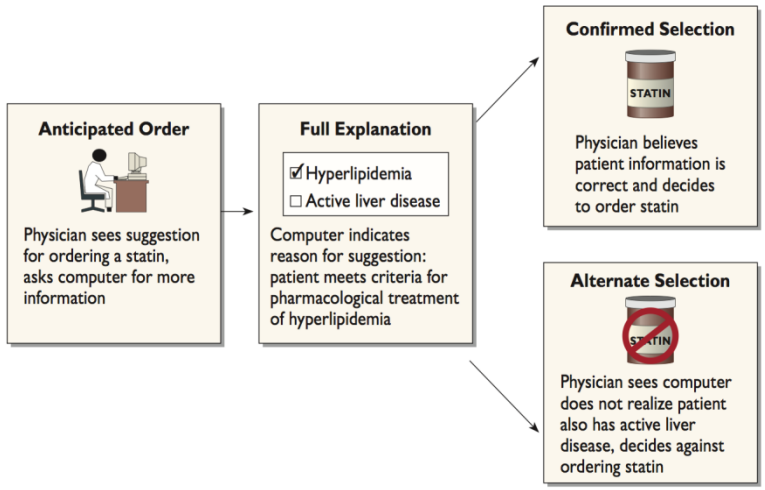
After SmartForms

- Physician evaluates, writes prescription for analgesics
- Checks hemoglobin A1C
- Encourages smoking cessation
- Patient leaves with pain medication

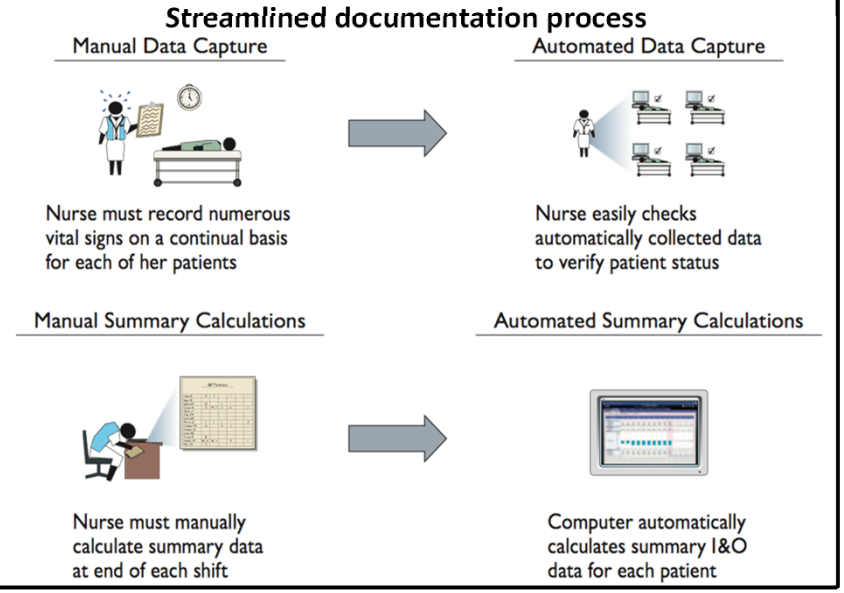
Clinical Transformation with EPR – examples

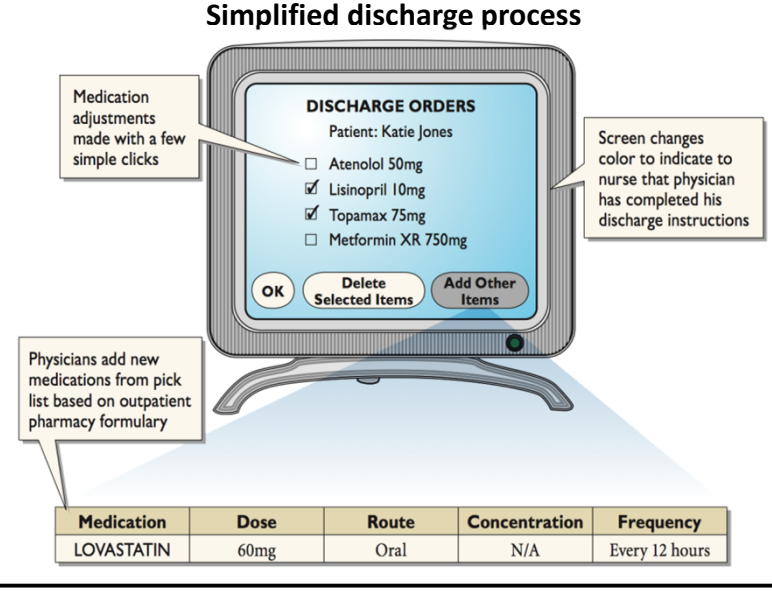


Proactive, customised, decision support



System makes its logic transparent, clinician makes *decision*





ASPH Vision

- Integrated access across our multiple systems
- Systems which support clinical quality and safety
- Information available anytime, anywhere
- Access across organisational boundaries
- One password
- Paperless transactions
- Secure, resilient infrastructure
- Responsive, effective informatics service to staff, partners and patients.

Clinical Portal -2014

- Tailored clinical view brings together our disparate systems
- Platform to integrate clinical systems
- We can keep all our best of breed systems
- Access to electronic records
- Order tests / view results
- Mobile – support clinicians on the move
- Facilitate Patient / Partner access

Single Sign On & Follow Me Persistence - 2014

- Accelerating logon speeds and session persistence, regardless of location or device
- Enable BYOD and development of mobile strategies
- Provide a user-centric application and desktop delivery from the datacentre
- Deliver a “follow me” clinical desktop including single sign on and patient context
- Enable desktop transformation from traditional “thick client” to a more agile optimised desktop estate
- Enhance and simplify desktop management Trust wide.

Electronic Document Management – 2014/16

- Sophisticated, integrated workflow, e-forms and reporting platform capable of accelerating critical healthcare processes

- Patient status management, through the use of a visual dashboard which prompts next actions as part of a patient's treatment regime

- Mobile access to critical systems for clinicians on the ward and out in the community.

- Supported through transition by forward / on demand scanning of paper records.

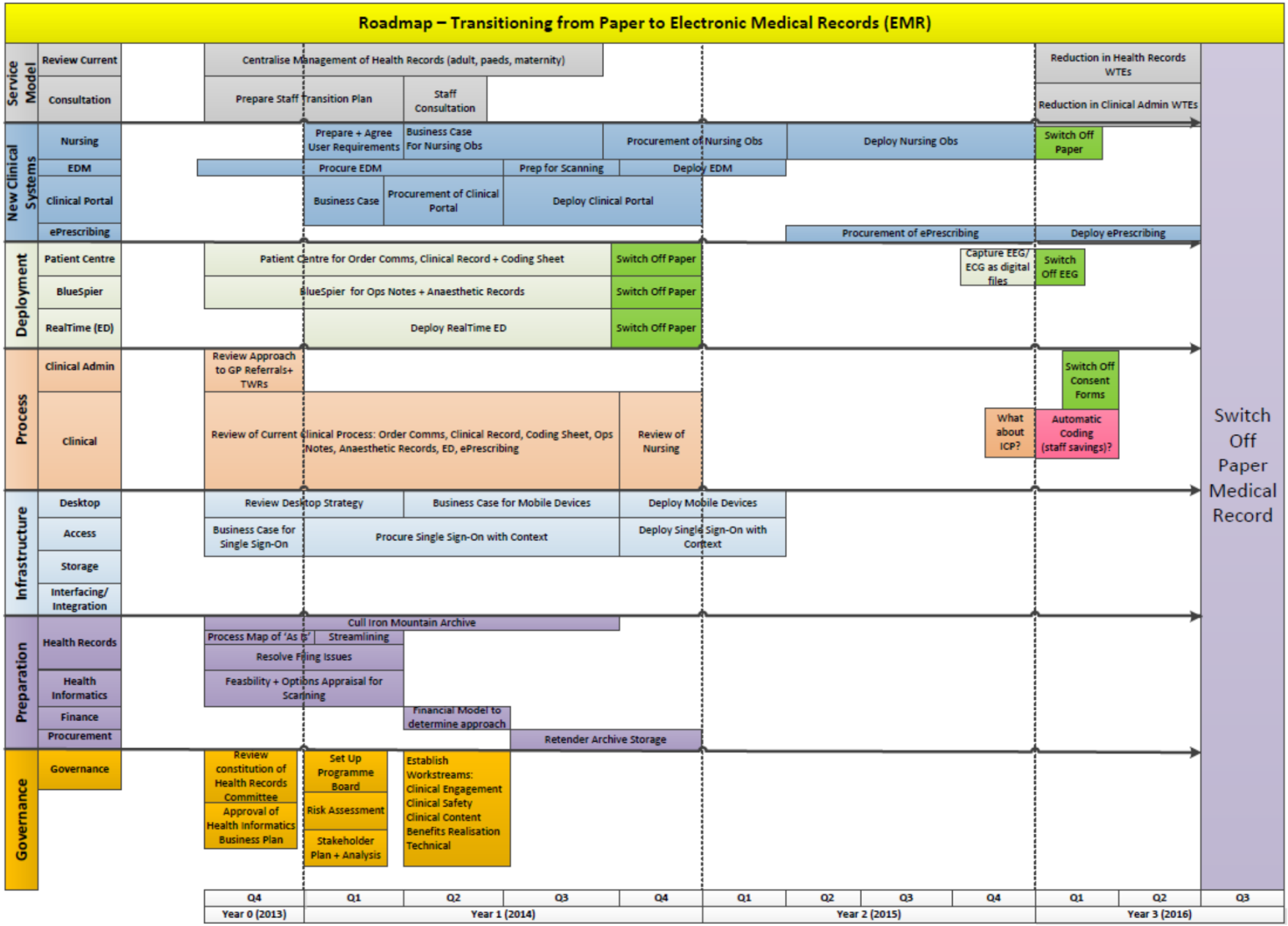
E-prescribing – 2014/15

Electronic Prescribing and Medicines Administration (ePMA) systems:

- close the loop around medicines management leading to increased safety, faster discharge turnaround and tighter control of drug budgets.
- enable complex regimens to be prescribed with a single click and support UK best practice - Independent prescribing, Supplementary prescribing and Patient Group directions. Drug supply requests are instantly communicated for faster turnaround.
- are designed to follow the workflow of clinicians and nurses for prescribing and administration.
- have in-built Medicines Reconciliation and support clinical screening by pharmacists.
- support the use of Patient's own medication and drug administration can be recorded via touchscreen devices.
- provides an end-to-end integrated process with no transcription.

Communications - TBC

- Complete communications solution allowing us to message and talk to colleagues by the method that best suits our staff.
- Whether staff carry a smartphone, mobile phone, tablet, pager or cordless telephone we need to be able to communicate via voice or messaging anywhere around the organisation.
- Should be capable of coordinating staff and monitoring essential tasks / processes.


Roadmap – Transitioning from Paper to Electronic Medical Records (EMR)
Service Model
Review Current
Consultation
Centralise Management of Health Records (adult, paeds, maternity)
Prepare Staff Transition Plan
Staff Consultation
Reduction in Health Records WTEs
Reduction in Clinical Admin WTEs
New Clinical Systems
Nursing
EDM
Clinical Portal
ePrescribing
Prepare + Agree User Requirements
Business Case For Nursing Obs
Procurement of Nursing Obs
Deploy Nursing Obs
Switch Off Paper
Procure EDM
Prep for Scanning
Deploy EDM
Business Case
Procurement of Clinical Portal
Deploy Clinical Portal
Procurement of ePrescribing
Deploy ePrescribing
Deployment
Patient Centre
BlueSpier
RealTime (ED)
Patient Centre for Order Comms, Clinical Record + Coding Sheet
BlueSpier for Ops Notes + Anaesthetic Records
Deploy RealTime ED
Switch Off Paper
Capture EEG/ ECG as digital files
Switch Off EEG
Process
Clinical Admin
Clinical
Review Approach to GP Referrals+ TWRs
Review of Current Clinical Process: Order Comms, Clinical Record, Coding Sheet, Ops Notes, Anaesthetic Records, ED, ePrescribing
Review of Nursing
Switch Off Consent Forms
What about ICP?
Automatic Coding (staff savings)?
Infrastructure
Desktop
Access
Storage
Interfacing/ Integration
Review Desktop Strategy
Business Case for Mobile Devices
Deploy Mobile Devices
Business Case for Single Sign-On
Procure Single Sign-On with Context
Deploy Single Sign-On with Context
Preparation
Health Records
Health Informatics
Finance
Procurement
Cull Iron Mountain Archive
Process Map of 'As is'
Streamlining
Resolve Filing Issues
Feasbility + Options Appraisal for Scanning
Financial Model to determine approach
Retender Archive Storage
Governance
Governance
Review constitution of Health Records Committee
Approval of Health Informatics Business Plan
Set Up Programme Board
Risk Assessment
Stakeholder Plan + Analysis
Establish Workstreams:
Clinical Engagement
Clinical Safety
Clinical Content
Benefits Realisation
Technical
Switch Off Paper Medical Record
Q4
Q1
Q2
Q3
Q4
Q1
Q2
Q3
Q4
Q1
Q2
Q3
Year 0 (2013)
Year 1 (2014)
Year 2 (2015)
Year 3 (2016)