BLUEPRINTING:
THE UHB APPROACH

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What is Blueprinting?
The UHB Journey
Patient Portal Blueprint
Incorporating Key Decisions and Lessons Learnt
Contact Us

• Not a dry presentation
• Designed to prompt thinking and debate
• Interrupt us and ask questions
Who are we?

- University Hospitals Birmingham NHS Foundation Trust (UHB): university teaching hospital.
- Staff of 10,000; 40 disciplines
- Global Digital Exemplar
- 1200+ beds, 100 critical care beds, 32 theatres,
- Circa 762,000 outpatients, 135,000 inpatients; 115,000 ED attendances
- Merger by Acquisition with Heart of England Foundation Trust
Dictionary Definition:

- plan that describes how to do or achieve something in the future:
- establish/draw up/draft a blueprint Establishing the right blueprint is a challenge unique to each organization.
- provide a blueprint The rules provide a vital blueprint for what the state may look like for years to come.

Cambridge e-Dictionary 2018
Developing the Digital Footprint:

- The journey begins with an objective:
  - Burning Platform
  - New building
  - New models of care
  - Joining the digital revolution

- Where do you start?
  - What order do you need to do stuff??
  - What are the Key Questions?
  - What are the Key Decisions?
  - Help!!
KEY QUESTIONS

• Governance Framework
  • Strong leadership – Clinically Owned/Clinically Led

• Organisational Culture – Rooted in paper
  • “Paper works why would I want to change its what I know best”

• How/Where are you going to store everything you need to?

• What makes an effective electronic patient record?

• Paper Medical Record - To scan or not to scan?

• Methodology for data capture – how are we going to do this?

• What order do we need to do things in – where do we start?

• How do we train everyone?

• How am I going to make informed decisions about all of these questions – what’s my Communications Strategy ?????

CLINICAL TRANSFORMATION – NOT AN IT PROJECT
KEY DECISIONS

- Governance Framework – Leadership from Medical Director and high profile clinical champions
  - By Clinicians for Clinicians
  - Nurses, AHPs, Pharmacists

- Get the infrastructure right
  - Invest in a good document management solution - provide consolidated data storage
  - Hardware – laptops, tablets, computers on wheels, mobile working

- Clinical Engagement
  - Spread the word
  - Attend consultant meetings – take the news to them – share the vision
  - Agree minimum dataset for reviewing patients safely and making informed decisions

- Order in which to do things
  - What does the project plan look like
  - Where do we start – in-patients? Out-patients? Big Bang ??

- Legacy record – to scan or not to scan?
  - Leverage existing electronic data silos and consolidate into one electronic record within Portal

- Training model – mixed mode of delivery – not classroom based sessions

- Business Change – overcoming fear and prejudices
  - Changing clinicians relationship with data
  - Mitigate risk by ensuring electronic record is more robust than paper record
  - Data input – agree methodology for data capture
  - Data output – change how we review data
  - Accessibility – needs to be available EVERYWHERE

- Consensus - Authority to Proceed
A Journey from this – to this
And this....

Main Wait 4

Queen Elizabeth Hospital Birmingham
Part of University Hospitals Birmingham
NHS Foundation Trust

When your name is displayed, please proceed to the Area shown below:

<table>
<thead>
<tr>
<th>Patient</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Patient 1</td>
<td>Outpatients Area 4 Reception</td>
</tr>
<tr>
<td>Test Patient 2</td>
<td>Outpatient Area 3 Reception 3</td>
</tr>
<tr>
<td>Test Patient 3</td>
<td>Outpatients Area 4 Reception</td>
</tr>
<tr>
<td>Test Patient 4</td>
<td>Outpatients Area 4 Reception</td>
</tr>
<tr>
<td>Test Patient 5</td>
<td>Outpatient Area 3 Reception 3</td>
</tr>
<tr>
<td>Test Patient 6</td>
<td>Outpatient Area 3 Reception 3</td>
</tr>
</tbody>
</table>

Page 1 of 2

14:04
And this – Data Retrieval – Clinical Portal
## Data for Operational efficiency

### General Surgery & GI Medicine - Operation Notes

**Hospital No.:** 6  
**NHS Number:** 6  
**Patient's Name:** 7  
**Department:**  

**Performed procedures:** Other soft tissue excision (primary) | Indirect left | Left | 
**Date performed:** Friday 02 Nov 2012  
**Surgical team:**  
**Main surgeon:** General Surgeon | Assistant: |  
**Laparoscopy approach:** N/E | 

**Procedural:**  
- Left upper abdomen I/II quadrant, transverse incision.  
- Laparoscopy performed, grasper-guided and forceps excised the tissue.  
- Three small areas of the mesentery were excised due to dense adhesions.  
- The area was then mobilised and incised.  

**Closure:**  
- FCBS was sutured and secured securely.  
- Section contains one sheet of photographs.

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**Post-op instructions:**  
- Fluids and diet as tolerated but start slow.  
- Check phone prior to discharge.  
- The client is sutured to the catheter - when the catheter is removed the client will follow M.B.  

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**Notes:**

- Client: 0.014  
- Hand: 0.14  
- Initials: SF  
- Initials: LTR  
- Date: 2012-11-02  
- Name: SF  
- Date: 2012-11-02  
- Name: LTR

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**Hospital No.:** 6 | Page 5 of 5

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Clinical Portal Outcomes
## OPD PICS Electronic Clinical Data Capture

- Consultation workflow
- Co-Morbidities (Quick Pick)
- Drug History & Prescribing
- Clinical Noting
- Clinical Observations (BP, Height/Weight/BMI/Urinalysis)
- Concept of face-to-face or non-face-to-face consultation
- Integrated digital pen technology
- Integrated with WinScribe
Note free offices, digital dictation and digital pens
Interlink information in EPR

- Urinalysis Charts
- Laboratory Flow Sheets
- Fluid Balance
- Infection Control
- Operation Noting
- Clinical Flags
- Physiological Observations
Informing and Transforming

Business intelligence and bespoke development

Clinical Dashboard

myhealth@QEHB
unlocking your own health records
Myhealth – the Patient Portal

- Personal Health Record - developed in-house by IT and Informatics
- Close involvement and collaboration with both clinicians and patients
- Initial pilot of 12 patients with liver disease (2011)
- Over 9200 patients actively use the system (as of May 2018)
- Over 17,800 patients signed up (as of May 18)
- Age range of active users 50 – 70 years old
Lessons Learnt

- **Clinical Engagement**
  - You can never do too much
  - Tap into existing meetings
  - Do not overlook your nurses and AHPs

- **Support model at go-live** – don’t under estimate this effort!

- **Training**
  - Core PICS trainers are all nurses
  - Classroom sessions for busy doctors don’t work …. Don’t do them!

- **Parallel running/provisioning** of paper records for an agreed period of time – need to: maintaining confidence in the data support the clinicians through a difficult change

- **Scanning data** = destroying data
  - If you scan it – bin it (confidentially of course!)

- **Testing**
  - Robust test model for all upgrades mirrors operational workflows

- **Retaining confidence** and credibility by maintaining usability and data/product integrity

- **Business Continuity** – robust downtime planning
What went well?

- Clinical Leadership
- Executive buy-in
- Clinical Engagement
- User interface and usability
- Business Change
- Training

What could we have done better?

- Reference site visits
- Hardware
- Error handling
  - electronic mis-files
  - data captured into wrong patient record
Summary – Blueprint for success

1. Strong leadership and governance model - Mandate across whole organisation
2. Inclusive clinical engagement model
3. Clinically led – by clinicians for clinicians
4. Robust Infrastructure
5. Getting the hardware right
6. Minimum dataset – accessible information – informed decisions at point of care
7. Methodology for data capture and content management
8. Business Change model – transforming the culture
9. Consensus and agreement on how to proceed
10. Strong project management – credible team meeting the agreed deadlines!
How to blueprint what you’ve done

Blueprint approach

• Take a timeline approach

• Think about the planning, the design, the development, the testing, the implementation, the sustainability.
Questions are guaranteed in life; Answers aren't.