Our blueprinting journey
A&E patient flow management & beyond
Blueprinting process
Top performing organization

A&E Attendances + 4hr Performance

- Green bars represent attendances.
- Red line represents 4hr KPI.

Years: 2003 to 2016

Values:
- Attendances: 75,000 to 140,000
- 4hr KPI: 75% to 100%
No longer an A&E target
### Visibility of Capacity & Demand

<table>
<thead>
<tr>
<th></th>
<th>Medicine Wards</th>
<th>Surgery Wards</th>
<th>Other Systems</th>
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<td>Ambulatory Care</td>
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<td>Transport</td>
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</table>
Controlling Capacity & Demand

07:00 AM

11:30 A.M. Control Meeting w/Medical Director w/Matron w/General Managers

13:00 PM

16:00 PM

20:00 PM

Trust Triggers

- Is there a delay of 1 hour or more to access paediatric bed/PAU space
- Staffing
- Does it
- Are the

Trust Triggers

- Are we able to achieve 95-98% of 4 hour ED standard
- Have we had 15-20 attendances on 2 consecutive hours and do we have 100% ED Utilisation
- Have we got the Max ED Utilisation of 95-97%
- Are there positive dispositions
- Has the
- Are the

Trust Triggers

- Are we short on ED Senior Medical/Staffing (ST3+)
- Are we short of Registered Nurses in ED
- Are paeds using mini-majors?
- Is there a delay to be seen in ED > 2hr
- Is there a delay in Specialty Review of patients in ED > 1hr
- Do we have > than 16 contingency beds open
- Are there > 12 medical outliers in surgical beds
- ITU – is there a minimum of 2 spaces available
- HDU – is there a minimum of 4 spaces available
- CCU – are there patients suitable to step down

CLINICAL EXCELLENCE, QUALITY & SAFETY
Any given day starts like this...

325 A&E attendances

265 discharged

25 Medical / 15 Surgical

75 Medical / 25 Surgical

CLINICAL EXCELLENCE, QUALITY & SAFETY
Potential issues affecting discharge: waiting for transport, TTA drugs, equipment, etc.

Team can contact the relevant team to get those issues sorted. Clear escalation procedures.
<table>
<thead>
<tr>
<th>Age</th>
<th>Arrived</th>
<th>Mode</th>
<th>Facility</th>
<th>SICU/ICU</th>
<th>Pred Time</th>
<th>Status</th>
<th>Admission</th>
<th>Discharge</th>
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**Number of patients with a ‘predicted 4hr outcome’ of admission**

**Team has 4 hours to find or create space in the wards.**
Snapshot 3: Ambulances

Number of patients who are going to hit the A&E department in the next minutes

Team can proactively create space in Majors & Resus
GDE - Strategic Fit

- Underpin the delivery of high quality, safe and sustainable care with the use of state-of-the-art Information Technology.
- Play a key role in leading the local health community towards sustainability and transformation.
- Use digital processes to break-down traditional barriers between disciplines, areas and teams within the hospital through clear visibility of real-time capacity and demand.
- Take our clinical services to the next level of excellence for our patients.
Best of Breed IT strategy
Exemplar Programme Overview

Increase the capabilities of our existing unified communications platform to run video consultations, virtual clinics, etc.

Use our electronic document management system to support e-Referrals, e-Forms and facilitate access to information

Better patient experience and improved efficiency in outpatient clinics reducing reliance on staff to navigate patients through the clinic

Harness the power of business intelligence & predictive analytics to implement advanced clinical decision support & capacity planning

Enable access to health records outside the acute setting to ensure better continuity of care to deliver the right care in the right place.

Capability & technology to underpin all GDE schemes through the delivery of a robust, reliable, Innovative & secure IT service.

Optimized use of medicines with GS1, Scan4Safety and automatic cabinets to reduce prescription and medicines administration errors

Integration of the fragmented inpatient management system currently in use into a State-of-the-art clinical coordination Centre.
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**GDE Milestones Plan & Blueprints**

- **Underpinning platform for all other GDE schemes**

- **Tranche (1)**
- **Tranche (2)**
- **Tranche (3)**
- **Tranche (4)**

**Key Milestones**

- **LDUH Blueprints**
- **Clinical Excellence, Quality & Safety**

**Scheme Details**

1. **Inpatient Care C.**
   - 2017-18 Q2
   - 2017-18 Q3
   - 2018-19 Q1
   - New E-Obs.
   - eTake & eHandover
   - Hospital @ Night
   - Alert & Escalation
   - Integrated
   - Inpatient Care

2. **e-DRMS**
   - E-Referrals
   - SMART Indexing
   - Indexing Hist. Notes
   - E-Forms
   - HR Digital Images
   - Speech/Voice Recognition

3. **e-Pharmacy**
   - Compliance
   - Closed Loop (GS1+Scan4S.)
   - Automatic Cabinets
   - Ref. to ComPh

4. **Outpatient Clinic**
   - Proof of Concept (Orthopaedics)
   - Fully Integrated Solution (i.PM)
   - Second Speciality
   - Third Speciality

5. **Patient Portal**
   - Infrastructure
   - LDUH Portal
   - GP Integrated Portal
   - Clinical & Patient Portal

6. **Communications**
   - Virtual Wards
   - Virtual Clinics
   - Alarm & Response
   - Patient Engagement Ctr.

7. **Infrastructure**
   - WIFI all areas
   - VDI assurance
   - Cloud based IaaS platform
   - Enhanced Security

**CLINICAL EXCELLENCE, QUALITY & SAFETY**
The new LDUH innovation hub
Thank You!
Check internal systems (Acute)

Paper Handover

Paper Consent

E-PMA Manual Entry

Patient & Drug

No single view of patient status (E-Obs./Bed Mgmt.)

Improvements driven by paper audits & silo analytics

Paper based patient flow. Poor patient experience

Electronic referrals on ICE, but clinical history on Evolve

Face-to-face follow-up visits

Inconvenience for patients

Electronic Handover

Electronic Consent

Integrated Inpatient Care

Alert & Escalation

Efficient patient flow mgmt.

Better patient experience

Virtual consultations, remote obs. & portal

Patient Portal

Comms & TeleHealth

eDRMS

DASH Clinic

Analytics

Inpatient Care Coord.

BI collects data in real time & supports decision making

Electronic referrals on Evolve

Along with rest of clinical doc

Luton & Dunstable - 2022

Luton & Dunstable Hospital Global Digital Exemplar

CLINICAL EXCELLENCE, QUALITY & SAFETY
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Electronic Handover
Electronic Consent

Paper Handover
Paper Consent

E-PMA Manual Entry
Patient & Drug

Closed Loop Meds. Admin. & Portable devices

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2022

Integrated Inpatient Care Alert & Escalation

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Electronic Handover
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Luton & Dunstable - 2017 to 2022

Continuous improvement of patient experience

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