Effective deployment of digital systems in healthcare: a toolkit for clinical staff: tools

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Tool 1: Template for digital systems rollout project plan

**Implementation workstreams**

**Project management activities**

- Establish project governance, create the project initiation document (PID), manage risks and co-ordinate project groups.
- Conduct stakeholder events with patients, staff and where necessary the public and other partners.
- Evaluate and test suppliers safety, benchmark areas that have undertaken the change and speak to the staff. Remember the training of agency and bank as well as existing own staff.
- Test hardware and software with staff, train staff and initiate new roles with protected time suggested titles as “floorwalkers, and “super-users.” continually hazard check hardware. Check security of personalized data.

**Clinical activities**

- Benefits realisation planning, and staff training needs analysis is required here current and future state business is required to be outline. Design and Deliver training in varied ways.

**Engagement**

- Undertake an initial infrastructure assessment, Test data migration

**Safety**

- Initiate and refine the benefits capture

**Hardware and software**

- Report ongoing benefits capture

**Business changes and activities**

- Ongoing service management

**Technical activities**

- Ensure all new roles are technically enabled and prepared
- Train and engage all existing and new staff on software updates.
- Have a capacity to make alterations as they occur.
- Ensure hardware is being calculated for costs for 12 months to three years ahead.

**Preliminary stage**

- Define the time of the “go live” stage
- Resolve issues and log them through your governance structures
- Feedback the data that is being generated in real time

**‘Go Live’ stage**

- Co-ordinate transition into new service, resolve go-live issues
- Initiate and refine the benefits capture

**Maintenance and support stage**

- Final safety sign off and BaU

**Milestones**

- Project Kick off/ Project PID Sign off
- Safety sign off and executive readiness
- Final safety sign off and BaU
Tool 2: Clinical governance framework for all

- Keep it simple. This at-a-glance timeline from University College London Hospitals (UCLH) is a good example of a structure that can be helpful for governance too.
- Everyone needs to know their role throughout the process.
- Use a structure tool.
- Ensure all senior clinical roles are represented on the timeline and aware of their roles.
- Consider blueprinting from the outset. There are great templates available that can mean you can share what you did afterwards more easily.
  https://www.digitalhealth.net/2018/06/the-gde-knowledge-sharing-challenge
- It is important to involve the relevant people and share that responsibility. The more of the executive team can get involved the more system interoperability opportunities will be explored. The framework can also be used as a learning example for senior managers.
Tool 3: Example trust board

**E-documentation programme board**
- **Chair:**
- **Frequency:** Monthly
- **Admin:** Programme support officer
- **Remit:** Overall responsibility for delivery of programme including delivery of benefits – assurance and scrutiny
- **Membership:** Trust executive (including non-executive director representative), project leadership, ICT company representatives, external assurance
- **Limitations of authority:** Decisions which will impact on delivery of the approved business case

**E-documentation programme group**
- **Chair:**
- **Frequency:** Fortnightly
- **Admin:** Programme support officer
- **Remit:** Accountable for delivery of the programme
- **Membership:** Project leads invited as required.
- **Limitations of authority:** Issues relevant to project build

**E-documentation ‘Go Live’ steering group**
- **Chair:**
- **Frequency:** Monthly – moving to fortnightly/weekly
- **Admin:** Operational Directorate
- **Remit:** Accountable for ensuring all appropriate ‘go live’ arrangements are in place – including command/control infrastructure, operational readiness, cutover, business continuity, performance/safety monitoring/metrics
- **Membership:**
- **Limitations of authority:** Issues relevant to ‘go live’

**E-documentation ‘Go Live’ project group**
- **Chair:**
- **Frequency:** Weekly
- **Admin:** Programme support officer
- **Remit:** Providing support and holding project managers to account for delivery, escalation point, communications to project managers
- **Membership:** Project leads, training manager

**E-documentation project group**
- **Chair:**
- **Frequency:** Monthly
- **Admin:** Programme support officer
- **Remit:** Accountable for agreeing build and workflow design specifications
- **Membership:** agreed clinical reps from trust
- **Limitations of authority:** issues relevant to build and workflow

**E-documentation learning group**
- **Chair:**
- **Frequency:** Monthly
- **Admin:** Operational Directorate
- **Remit:** Accountable for ensuring delivery of robust training programme
- **Membership:** Training Manager, ICT company Training Lead, Workforce lead, Education Centre lead, Training team, nursing pharmacy workforce manager, change manager, Medic, AHP rep and directorate manager

**E-documentation operational readiness**
- **Chair:**
- **Frequency:** Monthly/bi weekly/weekly/daily
- **Admin:** Operational Directorate
- **Remit:** Accountable for ensuring trust is operationally prepared for go live including activity, training take up, superusers deployment, safety/quality, 90/60/30 day checkpoint
- **Membership:** Training manager, general managers, nursing leadership, governance, ICT rep

**E-documentation design authority**
- **Chair:**
- **Frequency:** Monthly
- **Admin:** Operational Directorate
- **Remit:** Accountable for agreeing build and workflow design specifications
- **Membership:** agreed clinical reps from trust
- **Limitations of authority:** issues relevant to build and workflow

**E-documentation stakeholder engagement advisory group**
- **Chair:**
- **Frequency:** Monthly
- **Admin:** Project support officer
- **Remit:** Accountable for development and delivery of communications and engagement plan – external and internal
- **Membership:**

**E-documentation benefits realisation steering group**
- **Chair:**
- **Frequency:** Monthly
- **Admin:** Operational Directorate
- **Remit:** Leadership of trust wide transformation

**Range of sub groups for each agreed key work stream, ie outpatients A&E, paediatrics**

**Key:**
- Transformation board
- Steering group
- Operational groups
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<tbody>
<tr>
<td><strong>Tool 4: Preliminary stages checklist</strong></td>
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<tr>
<td>1</td>
<td>The whole executive board need to be engaged in all stages from preliminary all the way through. All executives need to consider how this affects their agenda and patient safety.</td>
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<tr>
<td>2</td>
<td>Identify lead clinical roles such as chief medical information officer (CMIO), chief nursing information officer (CNIO) or chief information officer (CIO) in the operational team; also, e-documentation nurses and allied health professional (AHP) digital leads. Ideally they are best placed working to their professional lead director and being the link into the information computing technology (ICT) department. Ensure they join a digital network, such as the Digital Academy: <a href="http://www.england.nhs.uk/digitaltechnology/info-revolution/nhs-digital-academy">www.england.nhs.uk/digitaltechnology/info-revolution/nhs-digital-academy</a></td>
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<tr>
<td>3</td>
<td>These roles need to benchmark by visiting NHS England’s global digital exemplars (GDE) or fast follower sites throughout the UK so that they can see the hardware and ask questions on the software.</td>
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<td>4</td>
<td>Establish an organisation-wide clinical governance framework from ward/ community team to board.</td>
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<tr>
<td>6</td>
<td>Establish an inter-professional documentation group. This group needs to be established and link with professional standards. The group needs to consider how to place agreed documentation on a computer and generate data by linking closely with clinical information leads and ICT departments.</td>
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<tr>
<td>7</td>
<td>Host internal earlier adopter events for clinical staff (these staff may be your floor walkers when it comes to roll-out). You will need to co-opt staff, such as practice educators, senior nurses and some healthcare support workers to help in the roll-out phase as they can troubleshoot and answer technical questions. This cannot just be done by ICT staff.</td>
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<tr>
<td>8</td>
<td>Appoint a programme manager and a maintenance and support manager. It is important that you consider the time beyond implementation while still in the early stages.</td>
</tr>
<tr>
<td>9</td>
<td>Appoint a finance lead and make a collaborative bid for the hardware you will need. Take into account the maintenance and support stages.</td>
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<tr>
<td>10</td>
<td>Training: organisations may decide to use on-line resources but face to face is still best of all. This will encourage staff to develop skills in work that will be transferrable in other areas in their lives.</td>
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<tr>
<td>11</td>
<td>Build standard operating procedures that align with quick reference guides, eLearning and pocket books.</td>
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<td>12</td>
<td>Develop a communication strategy that encompasses patients/ carers the public, staff executive teams</td>
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<td>13</td>
<td>To help staff engage with moving to a more digital future you may want to make opportunities available for them to use a self-assessment tool</td>
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### Tool 4: Intermediate ‘Go live’ checklist

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<tr>
<td><strong>1</strong></td>
<td>Set a ‘Go Live’ date. Make it exciting, like a clock counting down that is visible in staff areas and on the front page of your website so that patients and relatives can see it. Pick a relatively quiet date to go live. Some organisations use a Friday or Saturday to introduce a new system into secondary care settings and then on Monday go live in an outpatients department. Maybe choose a ward or directorate to go live first as a reward for good work.</td>
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<tr>
<td><strong>2</strong></td>
<td>Once a date is determined organise patient and carer events. These should be open events outlining the cost, the perceived benefits, the pace this will move at and the benefits realisation date after the launch.</td>
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<td><strong>3</strong></td>
<td>Ensure the executive team are all on board and present around the go live phase. In the areas affected you might want to run clinical huddles and regular meetings to make sure issues can be ironed out quickly.</td>
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<td><strong>4</strong></td>
<td>Log the real-time data that you are gleaning along the way that would demonstrate patient safety.</td>
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### Tool 4: Maintenance and support checklist

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<th>Yes</th>
<th>No</th>
<th>Partial</th>
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<tbody>
<tr>
<td>1</td>
<td>The project management office (PMO) team needs to hand over to the maintenance and support team. The maintenance support teams need to be well established from early on so that they are ready for hand over. The team may need a greater resource and/or increased workforce depending on the system being rolled-out.</td>
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<td>2</td>
<td>Create some form of 24-hour contact system for mistakes, queries and general useful information.</td>
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<td>3</td>
<td>After the Go-live stage all clinical staff job descriptions will need to a digital competency section added as the expectation of all staff appointed is that they would have to engage in digital technology to undertake their roles. WOD needs to be involved with making these changes.</td>
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<td>4</td>
<td>The maintenance and support team need to evaluate and modify the system as users identify the issues. This can be managed quicker locally. Managing the timeframe around modifications is needed locally to ensure staff feel listened to and that the system can be flexible to their needs. If the modification cannot happen that also needs to be fed back nationally.</td>
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<td>5</td>
<td>Ensure the staff, executive team, patients and carers are shown the benefits through the data generated of having the digital system. That they also understand the implications of this advancement.</td>
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<tr>
<td>6</td>
<td>A final patient and carer stakeholder meeting is required to conclude any issues. Share experiences nationally.</td>
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These checklists are based on observations of many GDE sites and collaborative working with NHS Digital, Health Education England, NHS England, The King’s Fund, the Royal College of Nursing and Right Health (a Canadian technology healthcare provider).
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<tr>
<th>Role</th>
<th>Covers</th>
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<tbody>
<tr>
<td>Board sponsor</td>
<td>• Overall board leadership</td>
</tr>
<tr>
<td>Executive lead and NED</td>
<td>• Overall responsibility for project delivery including benefits realisation</td>
</tr>
<tr>
<td>Programme lead</td>
<td>• Accountable for delivery of overall project plan for all technical elements (software, hardware and migration)</td>
</tr>
<tr>
<td></td>
<td>• E-care budget holder</td>
</tr>
<tr>
<td>Patient representative</td>
<td>• Where possible the individual will be helpful in considering the patients journey and experience of having their care delivered in a different way.</td>
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</tbody>
</table>
| Medical lead                                  | • Overall clinical leadership to programme  
• Clinical engagement                                                                                 |
| AHP/Pharmacy lead                             | • Responsible for sign off of clinical information being inputted  
• Leadership and engagement                                                                      |
| Nursing lead                                  | • Nursing/AHP leadership and engagement                                                                                                                                                               |
| Safety lead                                   | • Assuring all safety elements of programme (including safety monitoring during go live and GDPR has been considered at every stage)                                                              |
| Go Live lead Transformation lead              | • Go live preparations (including business continuity, operational readiness, SuperUser recruitment/deployment, training  
• Transformation and benefits realisation                                                         |
| Communications and engagement lead            | • Communications and engagement (internal and external)  
• Stakeholder engagement                                                                          |
Tool 6: Making the timeframe clear to staff, patients and public

Length of time

Preliminary activities and timeframe for staff, patients and the public to view at a glance.
This phase needs both a beginning and an end date.

Go live

This needs to be a short period with a beginning and an end date so that everyone involved can know what is happening with the clinical setting. You will need extra support in areas that are going live to ensure people know where to go with queries about the system.

Maintenance and support

This is a crucial phase and also needs to quickly become 'business as usual' for a clinical setting.
Here it is important for people to know who will now be answering queries.