Report on Imperial College Healthcare NHS Trust winter resilience planning, A&E performance and Cerner programme to the London Borough of Hammersmith & Fulham Health, Adult Social Care and Social Inclusion Policy and Accountability Committee

1. Background

This paper has been produced in response to a request from the Health, Adult Social Care and Social Inclusion Policy and Accountability Committee to provide a summary of the Trust's winter resilience planning, A&E performance and progress on the implementation of its Cerner programme.

2. Introduction

Imperial College Healthcare NHS Trust ('the Trust') provides acute and specialist healthcare for a population of nearly two million people in North West London, and more beyond. We have five hospitals – Charing Cross, Hammersmith, Queen Charlotte's & Chelsea, St Mary's and The Western Eye – as well as a growing number of community services.

With our academic partner, Imperial College London, we are one of the UK's seven academic health science centres, working to ensure the rapid translation of research for better patient care and excellence in education. We are also part of Imperial College Health Partners – the academic health science network for north west London – spreading innovation and best practice in healthcare more widely across our region.

3. Emergency departments and urgent care centres

Our accident and emergency (A&E) services include emergency departments, urgent care centres (UCC's) and specialist emergency centres.

Emergency departments are located at St Mary's and Charing Cross hospitals. UCC's are located at St Mary's, Charing Cross and Hammersmith hospitals.

Our hospitals are also the home to some of London's specialist acute medicine centres:

- major trauma centre at St Mary's Hospital
- hyper acute stroke unit at Charing Cross Hospital
- heart attack centre at Hammersmith Hospital
- 24 hour ophthalmic emergency service at the Western Eye Hospital

Emergency departments treat those with life-threatening injuries and illnesses. All emergency departments use a priority system where the most seriously ill patients are seen first. We treat a range of life-threatening injuries and illnesses, including loss of consciousness, persistent, severe chest pain, breathing difficulties and choking and severe bleeding that cannot be stopped.

UCCs can treat a range of urgent medical problems and minor injuries. Patients who need to be seen quickly, but who do not have life-threatening illnesses or injuries, can walk into one of our three UCCs.

UCCs treat a variety of conditions that are too urgent to wait for a GP appointment (usually 48 hours) but do not need emergency treatment at an A&E.

4. Winter resilience planning

On an annual basis we plan to maintain our commitment to delivering high quality care for our patients throughout the winter. The NHS however, has been facing a significant challenge again this winter. More very ill people - often frail, elderly people with multiple health problems – are in need of extensive hospital care and subsequent rehabilitation and integrated community-based support.

Given increasing and complex demand, the key to ensuring timely and high quality care is keeping the flow of patients through the whole health system, from early support to prevent deterioration, to A&E when necessary, through to discharge with the right package of follow-up care in place.

Our winter resilience work is cumulative with tried and tested measures introduced each year and in some cases permanently adopted as year round services.

The Trust's winter resilience plan aims to help manage the additional pressures on services anticipated over the period November-March. It seeks to optimise our urgent and emergency care pathways as well as to provide some additional capacity. As such, the focus is on activities that help:

- avoid unnecessary hospital admissions (including use of the community independence service and new frailty units)
- support fast access for patients who do need to be admitted
- make best use of our beds and capacity across all of our sites
- Facilitate best practice discharge processes (including support from a 7-day discharge team).

4.1 Community independence service

One key initiative is the community independence service (CIS) – developed in partnership with local commissioners, Central London Community Healthcare NHS Trust (CLCH) and adult social care across three boroughs (Hammersmith & Fulham, Kensington & Chelsea, and Westminster) to support people with complex needs in their own home, preventing them from reaching crisis point and what would often be lengthy hospital stays.

GPs can refer an individual to the service's multi-disciplinary rapid response team. The team will make a home visit within two hours to work out an urgent package of medical, nursing, social and rehabilitation care. The CIS team also operates an 'in-reach' service – supporting appropriate Emergency Department patients to be able to return home after treatment without needing to be admitted to hospital. If someone has had a stay in hospital, supporting their discharge home by providing up to a six-week home rehabilitation package.

4.2 Frailty units

Sometimes older people do need a short hospital stay and the Trust has recently opened frailty units at Charing Cross and St Mary's hospitals. The units provide dedicated bed space for older people requiring a short stay in hospital. A specialist team including doctors, nurses and therapists help older patients manage new and existing problems such as falls, poor memory, weight loss and mobility problems.

Patients can be referred to the frailty units and rapid access clinic by their GP, specialist consultant or community nurse. Patients may also be transferred from A&E.

5. A&E performance and additional measures

Like the majority of NHS providers in London, we have been unable, for some months, to meet the national waiting time standard for 95 per cent of people attending A&E to be assessed, treated and admitted or discharged, within four hours.

We are continuing to provide a safe and effective A&E service. All patients are assessed as soon as they arrive in A&E and those with the highest need are prioritised for treatment. We have increased the number of consultants working in St Mary's and Charing Cross hospital A&Es as well as the number of consultants available to make decisions about specialist treatment when required.

A&E waiting time standard and patient types:

Total waiting time in the A&E department: measured from the time of arrival and registration on the hospital information system to the time that the patient leaves the department to return home or to be admitted to the ward bed (including the A&E department observation beds)
National waiting time standard: national minimum threshold is 95 per cent of All Types of A&E patients assessed, treated, admitted or discharged within four hours
Patient categories:

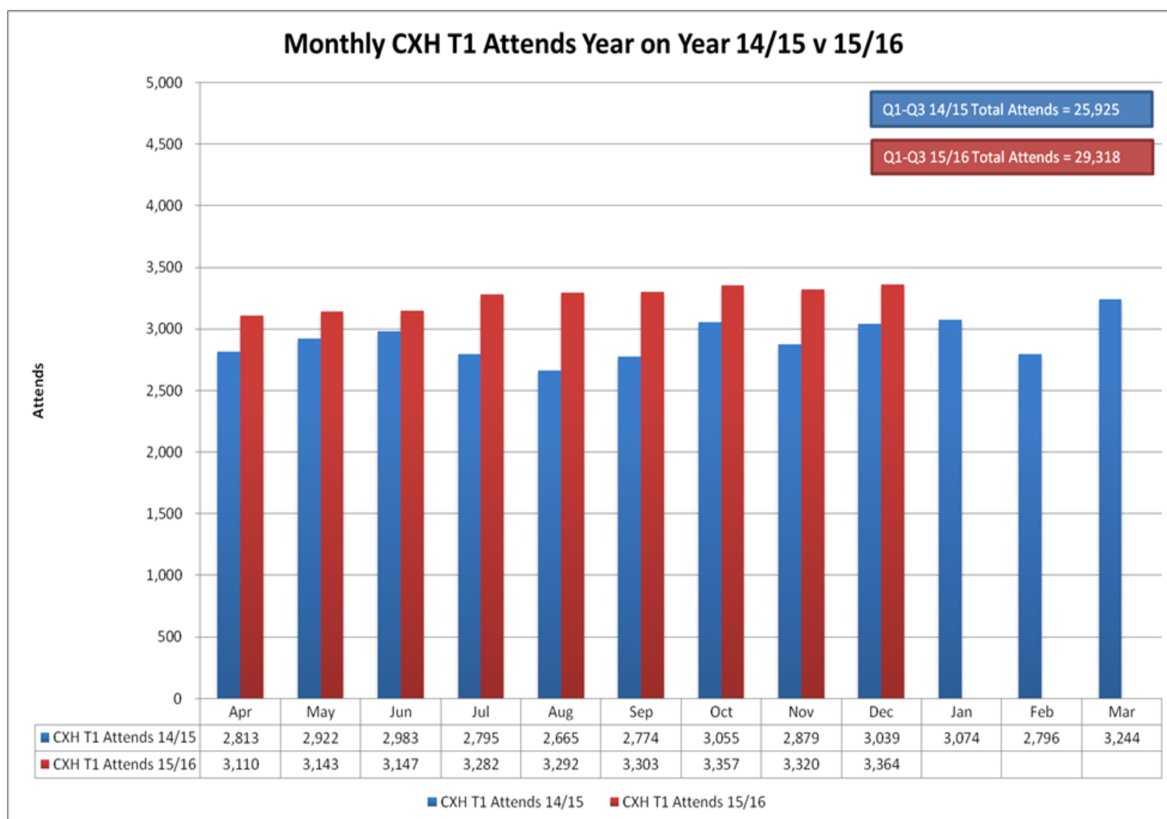
- **Type 1** A consultant-led 24-hour service with full resuscitation facilities; applies to emergency departments at Charing Cross and St Mary's hospitals.
- **Type 2** A consultant-led single specialty A&E service (eg ophthalmology); applies to emergency department at Western Eye Hospital.
- **Type 3** Minor injury units/Urgent care centres: applies to UCCs at Charing Cross, Hammersmith and St Mary's Hospitals.

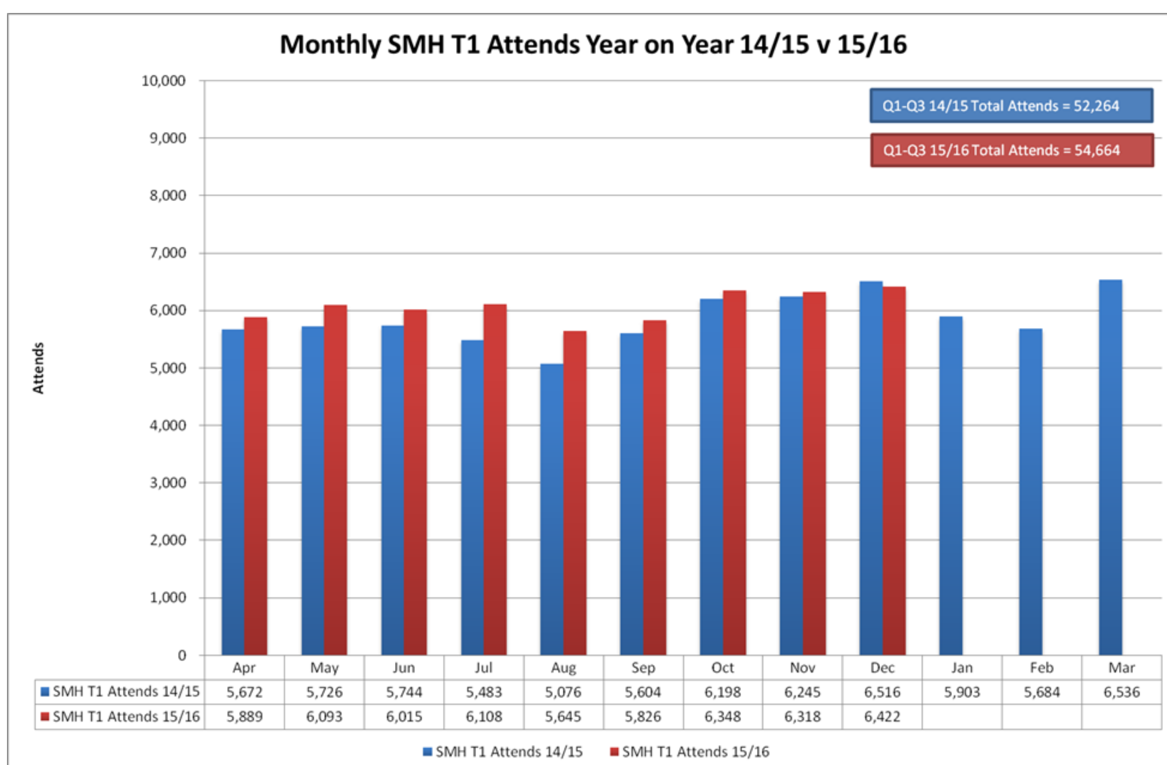
The following set of tables provides a year on year comparison of year to date (April-December) A&E attendances for 2014/15 and 2015/16.

Year on Year A&E Attendances Comparision 2014/15 v 2015/16 April-December:

	2014/15	2015/16	Change YoY %
ICH Total Attends	213,832	208,119	-2.7%
ICH T1 Attends	87,427*	83,982	-3.9%
CXH T1&T3 Attends	58,017	60,095	+3.6%
SMH T1&T3 Attends	90,828	90,628	-0.2%
CXH T1 Attends	25,925	29,318	+13.1%
SMH T1 Attends	52,264	54,664	+4.6%

ICH: Imperial College Healthcare CXH: Charing Cross Hospital SMH: St Mary's Hospital
* Includes Hammersmith Hospital up to 10 September 2014



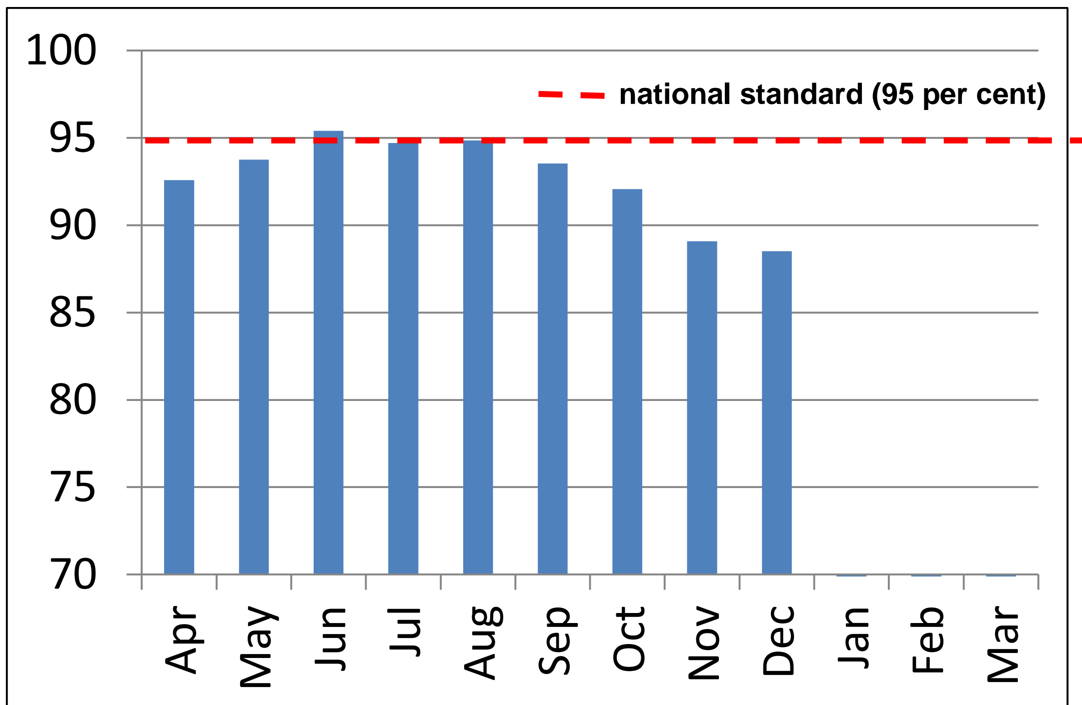


Trust-wide performance in the last four months of 2015 against the monthly 4-hour A&E waiting time standard for All Types (with 2014 performance in brackets) has been as follows:

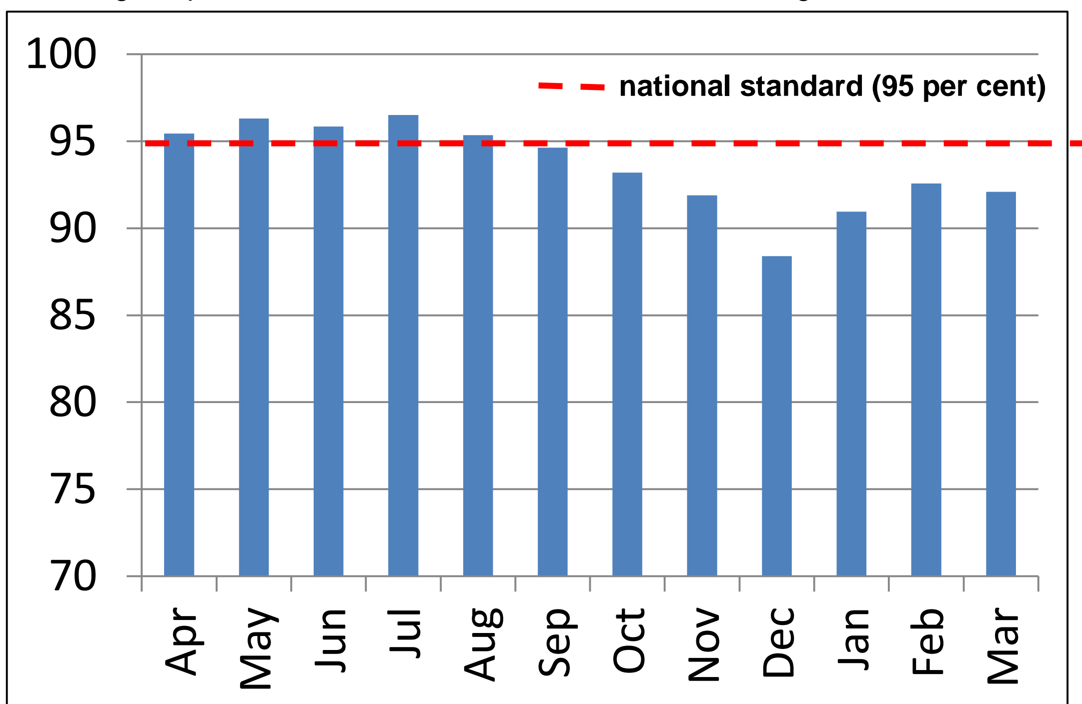
- September: 93.54 per cent (94.64 per cent)
- October: 92.07 per cent (93.20 per cent)
- November: 89.09 per cent (91.89 per cent)
- December: provisional figure 88.52 per cent (88.39 per cent)

In comparison with the same four-month period of 2014, there is a similar trend in A&E performance year-on-year, as can also be seen in the following tables.

A&E 4-hour wait standard 2015/16:
Percentage of patients assessed, treated, admitted or discharged within four hours



A&E 4-hour wait standard 2014/15:
Percentage of patients assessed, treated, admitted or discharged within four hours



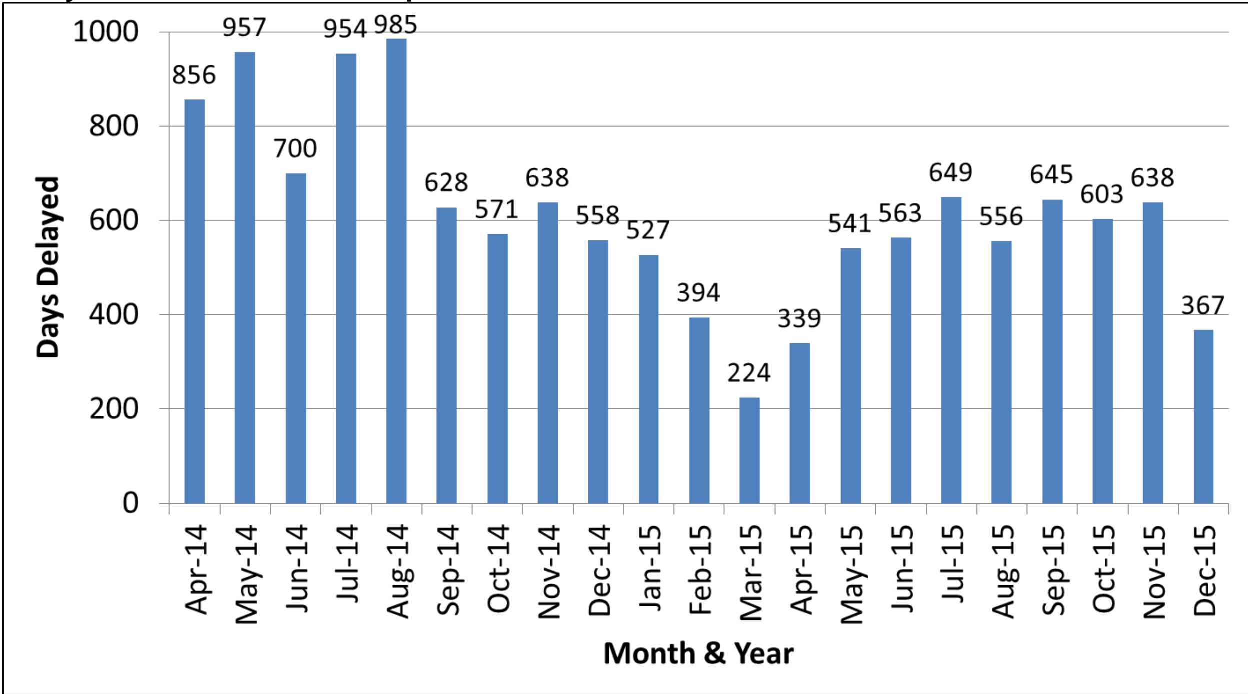
The root cause of the pressure on our urgent and emergency services is complex and multi-factored:

- There has been an increase in the acuity of patients attending our A&E departments at both St Mary's and Charing Cross hospitals and, while attendances at St Mary's A&E are not significantly higher this year than last, we are seeing higher numbers at Charing Cross A&E which is impacting on our total capacity across the Trust and having a significant knock-on to our patient flow through St Mary's Hospital in particular.
- We continue to experience delays in transferring patients, when ready, into community-based care and, if they have been receiving specialist – or tertiary services, to their local general hospitals.
- More generally, we have not been able to achieve an efficient flow of patients through the hospital. We need to achieve a larger proportion of discharges from hospital before noon so that we can make use of the beds for patients who need to be admitted for urgent or emergency care.

A 'delayed transfer of care' occurs when an adult inpatient in hospital is ready to go home or move to a less acute stage of care but is prevented from doing so. Delayed transfers of care are a problem for the NHS as they reduce the number of beds available to other patients who need them, as well as causing unnecessarily long stays in hospital for patients. Delays can occur when patients are being discharged home or to a supported care facility such as a residential or nursing home, or require further, less intensive care and are awaiting transfer to a local hospital or hospice.

The following table shows the number of bed days delayed each month due to delayed transfers of care from April 2014 to December 2015.

Delayed Transfers of Care: April 2014 – December 2015:



Given this complexity, we are working with partners in the wider health and social care system to make improvements as well as improving our own capacity and systems. This includes:

- Opening additional beds at St Mary's Hospital and at Charing Cross Hospital.
- Extending our discharge team service to seven days a week from the 30 November 2015, and expanding the direct support they are able to provide to wards in terms of securing community-based care packages for patients ready to leave hospital.

- Working across the sector to improve transfer of care back to local general hospitals and to community-based care. We are also making use of the tri-borough community independence service wherever possible.
- Expanding the opening times for our ambulatory emergency care services since August 2015 so that we can care for more urgent and emergency patients on a day-basis so that they do not have to be admitted to hospital. We are currently in the process of running a trial of weekend opening.
- Focusing on improving our own discharge processes so that we ensure patients are able to leave hospital promptly when they are clinically ready to do so.
- Introducing an 'escalation' policy that sets out how the whole Trust has to respond to provide additional support at times of very high pressure on A&E services.

Meeting the 95 per cent 4-hour A&E waiting time standard is one of our top priorities, together with ensuring we provide, above all, a safe service. While performance is expected to improve, it is not our forecast that the Trust will achieve the standard at the St Mary's Hospital site within the 2015/16 financial year. However, it is projected that the Charing Cross Hospital site will get back to meeting the standard by March 2016.

6. Cerner programme

6.1 Summary of the Cerner programme

The first major phase of the Cerner programme, which included a new Patient Administration System for managing patient registrations, outpatient appointments and inpatient admissions, was successfully implemented in April 2014. The Cerner Patient Administration System gave the Trust the foundation for moving to electronic patient records.

As anticipated, with such a major change, the new system required a period of bedding in. We are confident that our data now is at least as accurate as before the switchover and in many areas, more accurate.

Detailed plans were developed for the rollout of the next significant phase of Cerner, including digitising patient records and enabling electronic prescribing and administration of medications. The implementation across the Trust began in September 2015 and will be completed by March 2016.

The move to the Cerner system has allowed our Trust to make significant progress towards a fully digital system, so that current patient information is available in real-time wherever needed.

6.2 Cerner Patient Administration System

Following the implementation of the Cerner module for electronic ordering and reporting of pathology and radiology tests in August 2011, detailed planning began for the implementation of the new Cerner Patient Administration System. The system would manage patient registrations, outpatient appointments and inpatient admissions. In most services, clinical notes for patients would continue to be recorded predominantly on paper. The exception to this was the maternity service as this phase also included the Cerner module for maternity.

Implementation of any new patient administration system always presents organisations with significant challenges. The Trust put in place a rigorous approach to provide assurance that the system was ready to be taken into live operation. We rigorously tested the system and took learning from the experience of other trusts.

The change affected both clinical and non-clinical staff across the Trust and a significant change and communication programme was undertaken to ensure our staff were prepared. A very high percentage of staff were trained; a wide range of support materials were made available including standard operating procedures, quick reference guides and crib sheets;

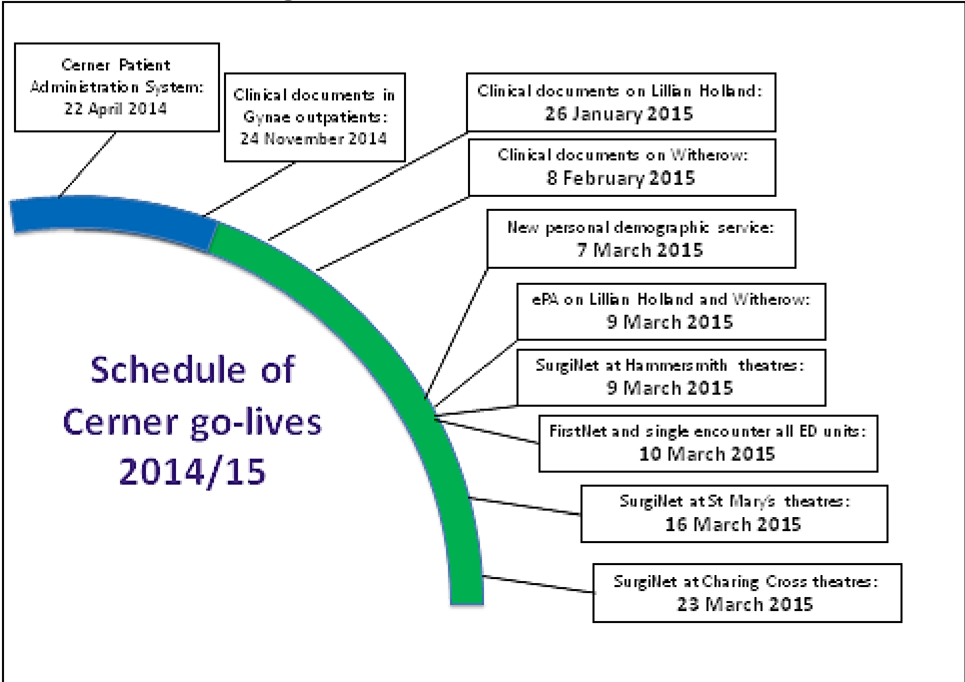
and staff were supported through a network of Cerner champions and floorwalkers. In addition, a wide range of data quality performance indicators were produced and actively managed to ensure that data quality was maintained.

After the necessary careful preparations, Cerner replaced our previous Trust-wide patient administration system from 22 April 2014. The transfer took place over the Easter period to take advantage of a lower level of planned activity during the holiday period. Overall, the switchover to the new system was successful and demonstrated an enormous team effort by our staff. After the system went live, as expected given the scale and complexity of the change, there were some teething problems. The two main issues related to data quality and outpatient clinics. We put in place a set of actions to address both these issues including using extra staff and additional training to improve the situation.

One of the goals in introducing the new Cerner Patient Administration System was to improve the collection and quality of our activity data, making it easier for data to be entered right first time. Cerner has provided the assurance that our data is substantially improved and we are able to more properly plan our resources as well as have confidence in discussions with our commissioners and stakeholders that we are presenting an accurate reflection of the work that we do in treating and caring for our patients.

After the new Cerner Patient Administration System went live across the Trust, we had a series of ‘go-lives’ that included small pilots for clinical documentation and medications management and the implementation of Cerner’ SurgiNet’ in our operating theatres and ‘FirstNet’ in our A&E units. Together these rollouts represented a significant expansion of the system involving nearly 1,000 additional users.

Schedule of Cerner go-lives 2014/15



6.3 Cerner clinical documents and electronic prescribing and administration

The next major phase of our Cerner programme was the Trust-wide implementation of clinical documentation - which means that clinical staff record interactions with patients in the Cerner digital record rather than the paper medical record - and of electronic prescribing and administration of medications.

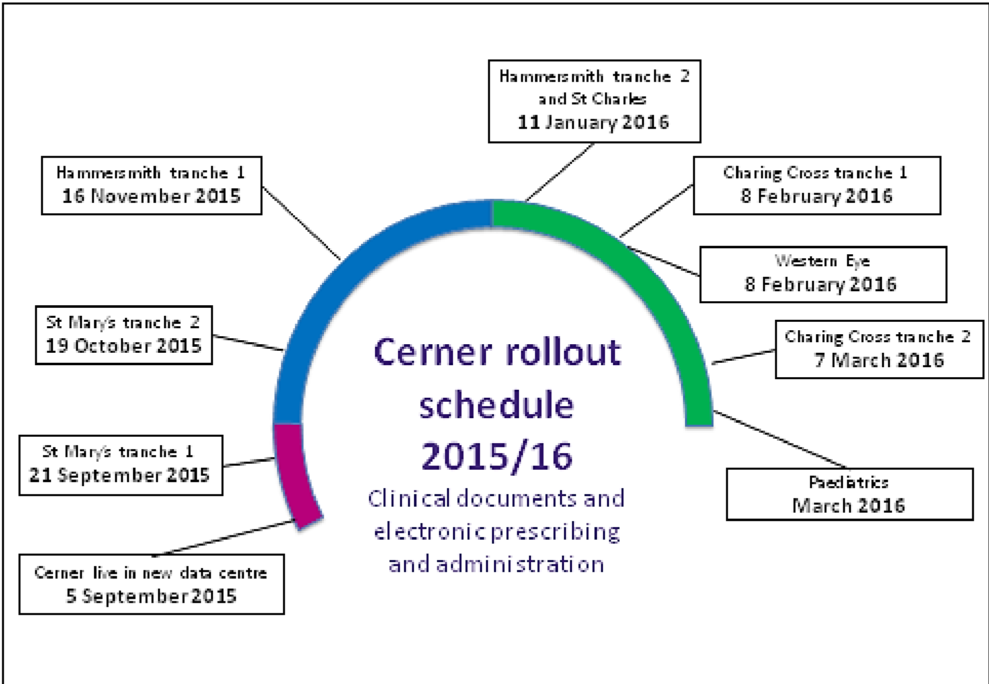
Pilots at St Mary's Hospital in gynaecology and elderly care for inpatients and outpatients in late 2014 and early 2015 went well. Building on the lessons learned from these pilot areas, detailed plans for rollout across the whole organisation were developed.

The implementation across the whole Trust is being delivered in a series of tranches between September 2015 and March 2016 and the approach using gateway criteria, which has been applied successfully across previous phases, is being utilised again. We continue to apply all the learning we have from other organisations and from our own experience with the Patient Administration System, maternity, emergency departments and theatres go-lives and from our pilots of clinical documents, and electronic prescribing and administration.

The rollout programme started at St Mary's Hospital first, followed by Hammersmith and Queen Charlotte's and Chelsea hospitals next, and will finish with Charing Cross Hospital and Western Eye Hospital. The implementation is currently on schedule and 50 per cent complete.

Implementing Cerner clinical documentation and medications management is a significant step towards recording much more information electronically and reducing our reliance on paper health records. Although for existing patients clinical history will remain in the paper record, this implementation will significantly shift the balance in favour of electronic.

Cerner rollout schedule 2015/16



6.4 Next steps following the implementation of the Cerner digital patient record

Bedside medical device integration will follow quickly after the Cerner rollout and will mean that measurements from patient monitoring devices can go direct into the patient's Cerner electronic record, saving time and improving patient safety. This is already live at one St Mary's Hospital ward and at Charing Cross Hospital Emergency Department and will be rolled out this year to 26 other clinical areas.

The Care Information Exchange is a programme funded by Imperial College Healthcare Charity that will provide a web application for viewing and discussing information about individuals' care from different organisations, with consent controlled by the individual. In the long term it will:

- give individuals a single view of information about their care held by a range of health and social care providers

- allow individuals to share relevant aspects of that information with health and social care professionals, and to record and monitor information about their own health and care
- providing tools for communication between individuals and health and social care professionals, such as secure messaging

The programme is currently in a pilot phase with six projects across North West London preparing to go live.