Clinical service improvements - proposed new pathways for acute medicine and chest pain patients

Report from Imperial College Healthcare NHS Trust to the London Borough of Hammersmith & Fulham Health, Adult Social Care and Social Inclusion Policy and Accountability Committee

1. Introduction

This report to the Health, Adult Social Care and Social Inclusion Policy and Accountability Committee from Imperial College Healthcare NHS Trust ('the Trust') sets out the case for change and the proposals developed by Trust clinicians for improving the current acute medicine and chest pain patient pathways.

The Trust wishes to engage as widely as possible on the proposals during a planned engagement period.

The July public meeting of the Trust Board will receive a report on the feedback from the engagement process before making a final decision on implementation of the new pathways. from August 2016.

2. Imperial College Healthcare NHS Trust overview

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 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. Clinical strategy

The publication of the Trust's clinical strategy in July 2014 was a major milestone, kick-starting a long-term programme of clinical transformation to ensure we are able to meet future health needs and enabling our current services and models of care to respond to more immediate pressures. It reflected the wider healthcare strategy for North West London, led by our local commissioners, in the form of the 'Shaping a healthier future' transformation programme.

The clinical strategy is designed to improve clinical outcomes and patient experience, to help people stay as healthy as possible and to increase access to the most effective specialist

care. It also responds to changing needs, with more of us living with multiple, long-term conditions like diabetes, heart disease, asthma and dementia.

The clinical strategy focuses on:

- creating more local and integrated services, to improve access and help keep people healthy and out of hospital
- concentrating specialist services where necessary, to increase quality and safety
- ensuring better organised care, to improve patient experience as well as clinical outcomes
- developing more personalised medicine, capitalising on advances in genetics and molecular medicine.

The Trust's Clinical Strategy sees our three main hospital sites building on their own distinctive, but interdependent, focus:

- **Charing Cross Hospital**: evolving to become a new type of local hospital, with planned, integrated and rehabilitation care
- **Hammersmith Hospital and Queen Charlotte's & Chelsea Hospital**: extending their role as specialist hospitals
- **St Mary's Hospital with a co-located Western Eye Hospital**: being the major acute hospital for the area.

4. Clinical Strategy Implementation Programme

The Trust has established the Clinical Strategy Implementation Programme (CSIP) to develop the detailed plans to deliver end state on each site, leading a core of changes every year to 2020 and beyond. It will also help shape redevelopments on each site, help set out how we achieve standards for seven day services, the workforce strategy for the Trust and our approach to achieving financial sustainability.

Four work-streams were developed in September 2015 as 'phase one' of CSIP. These were selected by the Trust's Executive Committee with the aim of addressing the issue of in-patient capacity at St Mary's Hospital and stabilising acute medical services, whilst continuing to support the overall aims of the Clinical Strategy, through the identification of new clinical models, service changes and efficiencies.

The CSIP phase one work-streams were as follows:

- Developing the ambulatory care strategy
- Review of Vascular Surgical services
- Streamlining the pathway for non-elective patients presenting with chest pain
- Review of Acute Medical Services.

Strategic Outline Cases followed by Full Business Cases for acute medicine and chest pain patients' pathways were developed and approved within the Trust in the first half of 2016. These presented the case for change and preferred options for both these work-streams, as the proposals are interlinked and need to be considered together.

At its public meeting in May 2016, the Trust Board agreed to proceed with communication and engagement on the proposals for acute medicine and chest pain pathways followed by a further report for consideration by the Board in July on the outcomes of this process before making a final decision on implementation of the new pathways.

5. Patient pathway

'Patient pathway' is a term which hospitals use to describe the route that a patient will take from their first contact with the NHS – usually starting with an appointment with their GP, or presenting themselves to an urgent care centre or emergency department or being conveyed by ambulance to hospital - through referral, to the completion of their treatment and discharge.

It can be thought of as a timeline - on which every event relating to an individual patient's care can be entered. Events such as consultations, diagnosis, treatment, medication, assessment, and preparing for discharge from the hospital can all be mapped on this timeline.

6. The case for change

Our Clinical Strategy Implementation Programme includes two work streams to improve the quality and efficiency of pathways for patients who need urgent specialist assessment and care or who present with chest pain.

Both these related service change proposals aim to ensure patients see the right physician and receive the right care and treatment in the right facilities, first time.

6.1 Acute medicine pathway

Acute medicine is the part of general medicine concerned with the immediate and early specialist management of adult patients who present to, or from within, hospitals as urgent cases or emergencies. Acute medical emergencies are the most common reason for admission to an acute hospital.

Acute medicine hospital services see patients presenting with a wide range of acute medical problems, but common problems treated include:

- heart problems
- asthma, chest infection and other respiratory conditions
- gastrointestinal bleeding
- drug and alcohol problems
- acute illness in the elderly
- diabetic complications
- acute infections and sepsis

Acute medicine is closely linked to emergency medicine and critical care. Acute physicians manage the hospital intake of adult medical patients and lead the development of acute care pathways for a wide variety of clinical conditions.

The Trust provides acute medicine services for adult patients at its three main sites: Charing Cross, Hammersmith and St Mary's hospitals.

The current acute medicine service at Hammersmith Hospital was reviewed and re-organised as part of the arrangements to manage the safe closure of the emergency unit and the expansion of the urgent care centre to a 24/7 service in September 2014.

Acute medicine at Hammersmith Hospital is provided through the Specialist Medical Assessment Centre and Acute Medical Ward C8. The patient case mix is mainly cardiology,

renal and haematology and short-stay acute medicine. A telephone-based resource staffed by nurses offers advice and referral assistance for local GPs.

The proposed change to the way acute medical services are delivered has a number of drivers, high among which are patient safety, improved quality of clinical care and experience, and the need to train within the specialty.

As Hammersmith Hospital builds its role as a specialist hospital further, it has become clear that the acute medical pathway is not providing the quick and seamless access to specialist teams which it was intended to, and, for many patients, can act as an additional, unnecessary stage in their care pathway.

Acutely ill patients require rapid access to the right senior clinical decision makers who can provide clinical assessment and illness management.

Currently, patients can wait for a significant amount of time for a specialist care bed which delays their diagnosis, treatment, transfer or discharge.

Too many patients are simply waiting for a specialist bed which is something these proposals are set to change by providing direct access to specialties.

There is therefore a clear need to improve how our acute medicine services are organised to provide more effective and efficient patient access to acute care - whenever that need arises.

6.2 Chest pain pathway

Currently, patients in West London who the London Ambulance Service suspects are having a heart attack are conveyed directly to the Heart Assessment Centre at Hammersmith Hospital. These proposals are not related to this patient pathway which will remain unchanged.

Many other patients who need specialist chest pain expertise will first be admitted for assessment to Charing Cross or St Mary's hospitals through their emergency departments before being transferred to the Heart Assessment Centre at Hammersmith Hospital. This way of working adds an additional, unnecessary stage to the patient's care pathway.

These patients frequently comment on the number of different hospitals and wards they visit before arriving at the Heart Assessment Centre at Hammersmith Hospital and do not understand why this happens.

After being assessed at Charing Cross or St Mary's hospitals, patients must wait for a bed to become available in the Heart Assessment Centre and then for transport to be arranged to Hammersmith Hospital. Upon arrival at the Heart Assessment Centre, patients are then assessed again.

Our data shows that 73 per cent of patients requiring a cardiology procedure directly admitted to Hammersmith Hospital have their procedure within 72 hours - while only 49 per cent of those coming from other hospitals - including St Mary's and Charing Cross hospitals - have their procedure within 72 hours.

These 'bottlenecks' in the flow of chest pain patients have led to prolonged admission times, longer average length of hospital stays, reduced quality of care and unsatisfactory patient and staff experience.

The bottlenecks also result in a number of beds being unnecessarily occupied on our St Mary's and Charing Cross hospital sites, which is not best for patients and reduces available beds for new urgent cases or emergencies.

7. Proposed improvements to acute medicine and chest pain pathways

7.1 Proposal for acute medicine pathway

Our clinicians have worked up a detailed proposal for enabling faster direct access to specialist services at Hammersmith Hospital for long-term patients - primarily renal, haematology and cardiology services - when required, while boosting acute medicine provision for patients using our emergency departments at Charing Cross and St Mary's hospitals.

The Specialist Medical Assessment Centre and Acute Medical Ward C8 at Hammersmith Hospital are often used for patients waiting for a bed on a specialist ward. These proposals would provide direct access to specialist wards, for both patients admitted through our emergency departments or for long-term patients with whom we have established protocols for managing any deterioration in their conditions.

The proposal includes the following developments:

- new arrangements for receiving emergency renal and haematology patients through a specialist unit, providing a safe direct access pathway for patients into these specialties and a reduction in inter-hospital transfers
- expansion of acute medicine services at Charing Cross Hospital and St Mary's Hospital
- introduction of an improved chest pain patient pathway - see below.

Also supporting the further development of Hammersmith Hospital as a centre for excellence for specialist services, a Planned Investigation Unit (PIU) for endocrinology, gastroenterology, interventional radiology, respiratory and rheumatology would become the central hub for patients to be referred and cared for by these specialities. The current PIU services provided at Charing Cross Hospital and Hammersmith Hospital would be combined on the Hammersmith site, allowing the Charing Cross site to expand its acute medical services.

This proposal is also designed to help us continue to make improvements in junior doctor training and staffing.

It has been increasingly difficult over recent years to staff the junior doctor rotas that provide the acute medicine service at Hammersmith Hospital, especially out-of-hours. Our doctors in training need to have a good breadth of experience on their acute medicine rotation and the specialist focus of the Hammersmith Hospital site means that is difficult to provide.

Consolidating our acute medicine rotas at Charing Cross and St Mary's hospitals will provide junior doctors with a better training experience and reduce reliance on expensive locum staff.

7.2 Proposal for chest pain pathway

The second related proposal developed by Trust clinicians is designed to improve care for patients with chest pain, building on the major advances in outcomes achieved by consolidating care for patients with suspected heart attacks and other very serious, acute heart conditions at the Heart Assessment Centre at Hammersmith Hospital.

There are many potential causes of chest pain which is not always caused by a problem with the heart, but it can sometimes be a symptom of:

- angina – where the blood supply to the muscles of the heart is restricted
- heart attack – where the blood supply to part of the heart is suddenly blocked

Most chest pain is not heart-related and is not a sign of a life-threatening problem. Some common causes of chest pain include:

- Gastro-oesophageal reflux disease
- Bone or muscle problems
- Anxiety and panic attacks
- Lung conditions

Other possible causes include:

- shingles
- mastitis
- acute cholecystitis
- stomach ulcers
- a pulmonary embolism
- pericarditis

The appropriate hospital specialty or service which will eventually provide patient care and treatment therefore depends on the outcome of the diagnosis of an individual patient's chest pain.

Our clinicians have been working with London Ambulance Service and other partners to explore how we could build capacity and pathways at Hammersmith Hospital so that more patients with chest pain are able to go to the Heart Assessment Centre directly.

The proposal includes the following developments:

- phase 1 - patients presenting at St Mary's or Charing Cross hospitals' emergency departments with chest pain presumed to be of cardiac origin (i.e not respiratory or gastro-related) to be transferred directly to the Heart Assessment Centre at Hammersmith Hospital
- phase 2 - patients who present to London Ambulance Service with chest pain which is presumed to be of cardiac origin (i.e. not respiratory or gastro-related) and who previously would have been conveyed to Charing Cross or St Mary's hospitals' emergency departments, to be conveyed directly to the Heart Assessment Centre at Hammersmith Hospital
- improved facilities at the Heart Assessment Centre to create a better, more private environment for patients
- an additional 10-15 cardiology beds at Hammersmith Hospital where patients can recuperate after their treatment in the Heart Assessment Centre and provide the capacity to accept patients more quickly

- closer working between cardiology and other clinical teams - such as medicine for the elderly - to ensure patients who, post assessment and/or procedure, do not require further specialist cardiology care are either quickly referred to another specialist service, if required, or safely discharged.

As stated above, patients in West London who the London Ambulance Service suspect are having a heart attack are currently conveyed directly to the Heart Assessment Centre at Hammersmith Hospital. These proposals are not related to this patient pathway which will remain unchanged.

7.3 Potential timescales

The proposal is for these changes to take place in the second half of 2016 before the winter period, subject to the outcomes of the engagement process and further consideration of these by the Trust Board before reaching a decision.

8. Benefits of the proposed changes

The Trust believes that the proposed changes will bring significant benefits for patients, their families and carers, and our staff, through:

- Patients seeing the right physician and receiving the right care and treatment in the right facilities, first time
- Improved outcomes for patients
- Reduced patient transfers between hospitals
- Better patient experience
- Reduced average length of stay for patients
- Patients who need specialist chest pain expertise being able to directly access our cardiology team at the Heart Assessment Centre at Hammersmith Hospital
- Improved facilities at the Heart Assessment Centre to create a better, more private environment for patients and improve patient flow through the department
- Additional 10-15 cardiology beds at Hammersmith Hospital where patients can recuperate after their treatment in the Heart Assessment Centre
- Improved, direct access to specialist renal and haematology services at Hammersmith Hospital
- Expanded acute medicine services at Charing Cross Hospital and St Mary's Hospital
- Supporting Hammersmith Hospital as the centre of excellence for specialist services, focused on meeting the needs of patients with cardiac, cancer, renal and haematological disease
- Improved way of working delivering efficiency savings.

9. Engagement and next steps

These clinician-led proposals are the first main outputs from our Clinical Strategy Implementation Programme and are intended to improve clinical outcomes and patient experience while delivering efficiency savings.

Gathering and listening to feedback on these proposals is an important part of the process for achieving effective service change and delivering benefits to patients.

The proposals would have an impact on how urgent and emergency patients are assessed and admitted to our hospitals, particularly on how urgent GP referrals are managed and how London Ambulance Service makes future decisions on where to convey patients. Now that we have considered our processes and patient flows in detail and worked up the proposals, we want to engage with GPs, patients, user groups, local authorities and commissioners, and local people more widely on how to take this work forward.

The Trust Board asked for an engagement programme lasting at least four weeks in the June/July period to explain the plans and to seek feedback from local residents and patients, local authorities, GPs and commissioners, and other stakeholders.

The engagement period features a publication setting out the case for change and the proposals to explain why and how the Trust wants to improve the acute medicine and chest pain patient pathways. The proposals document clearly states that the Trust wishes to engage as widely as possible on the proposals and how comments and feedback can be provided during the engagement period.

The July public meeting of the Trust Board will receive a report on the feedback from the engagement process before making a final decision on implementation of the new pathways in the second half of 2016 before the winter period.