

Joint Health Overview and Scrutiny Panel

1 July 2015

Update on the urgent cardiology, emergency surgery and trauma assessment proposed reconfigurations

This paper provides an update to the Joint Overview and Scrutiny Committee on the urgent cardiology, emergency surgery and trauma assessment reconfiguration programme, being carried out by NHS Sandwell and West Birmingham Clinical Commissioning Group and Sandwell and West Birmingham Hospitals NHS Trust. The paper outlines the outcomes of the listening exercise, programme findings and recommendations.

1. Programme overview

1.1 Right Care Right Here

For over 10 years health and social care partners have worked together under the Right Care Right Here partnership to achieve major transformational change. The partnership is committed to improving people's health and the quality of health and social care services provided to them, by:

- Expanding the provision of services in community settings, bringing appropriate elements of care closer to home
- Ensuring that people have the opportunity to benefit from healthier lifestyles
- Ensuring that services are extensively redesigned to meet the needs of the local population
- Delivering Midland Met Hospital, a new specialist acute hospital in Smethwick by 2018.

1.2 Continued improvements to quality service proposals

NHS Sandwell and West Birmingham Hospitals NHS Trust and Sandwell and West Birmingham CCG are continually working to improve the quality of care for local patients. This involves reviewing the latest best practice, technologies and listening to patients to identify improvements. Two key specialities have so far been identified as needing transformation prior to the opening of Midland Met Hospital:

- Interventional cardiology
- Emergency surgery and trauma assessment.

Best practice shows that these services need to become specialist centres, which are able to deliver:

- Timely access to treatment
- Skilled care from specialist teams
- Quality and consistent care across both Sandwell and West Birmingham
- Consultant-led services 24 hours a day seven days a week.

In December 2014 the CCG Governing Body and Joint Overview and Scrutiny Committee approved the launch of a listening exercise to seek public and patient views on proposals to:

- Locate urgent cardiology services at City Hospital
- Locate emergency surgery and trauma assessment services at Sandwell Hospital, alongside the inpatient wards which are already based at Sandwell Hospital.

These proposals would be interim solutions, until the new Midland Met Hospital opens in autumn 2018. Outpatient services would still be based at both hospitals and at Rowley Regis Hospital.

The listening exercise was carried out between 12 January and 20 March 2015.

2. Clinical case for change

2.1 Urgent cardiology

When the Midland Met Hospital opens in 2018, all cardiology inpatients and interventional procedures including primary percutaneous coronary intervention (PPCI) and percutaneous coronary intervention (PCI) treatment for patients having a heart attack or at high risk of one (using specialist cardiac catheterisation laboratories) will be located on one site.

Currently cardiology inpatients and interventional procedures (including specialist cardiac catheterisation laboratories) are provided 24/7 on two sites, Birmingham City Hospital and Sandwell General Hospital. This means there are two cardiology departments (one at Sandwell and one at City Hospital), with the team of specialist doctors and nurses required to work across two sites.

Urgent cardiology hospital services are made up of two key areas:

- Cardiac catheterisation laboratories- specialist theatres where patients receive treatment. Cardiology departments need two of these laboratories and these are currently split across the two hospitals, which is not ideal
- Coronary care unit- cardiology wards for patients to receive specialist care and treatment.

Currently Sandwell and West Birmingham Hospitals NHS Trust, which runs the two hospitals, is recognised as a specialist cardiology centre. This is important for Sandwell and West Birmingham, which we know has a higher than average coronary heart disease rate and related deaths. We can only keep this specialist status if we continue to meet the expected national standards. To do this we need to adapt, by bringing services onto one site before 2018.

2.1.1 Cardiac catheterisation laboratory capacity and resilience

Each hospital has one cardiac catheterisation laboratory with a contingency plan that, if one is not operational (for example, requiring repairs), patients requiring emergency procedures are transferred to the other hospital. This further disrupts the elective sessions for planned interventional treatment. There is an urgent need to replace the cardiac catheterisation laboratory facility at City Hospital (last replaced in 2002), which has reached the end of its life and to link this investment to improve patient safety and patient flow. The Sandwell cardiac catheterisation laboratory is also due for replacement and is experiencing an increasing number of breakdowns. The proposal now is to replace both laboratories but on the same site.

The tables below summarise access times for PPCI and PCI. In relation to PPCI, the percentage of patients being treated within door-to-balloon target times has reduced slightly over the last couple of years particularly for patients presenting at City Hospital. This is primarily due to issues with the age of the catheterisation laboratory at City Hospital and the related frequency of breakdowns.

Sandwell and West Birmingham Hospitals Trust PPCI Data 2013/14 (April 13-end of March 14)

	PPCI	% Door to Balloon < 90 mins	% Call to Balloon < 150 mins
City	104	75%	84%*
Sandwell	115	90%	91%**
Trust	219	83%	88%

*11 patients self- presented

** 18 patients self-presented

Source: Trust MINAP data

With regard to PCI, the current door to angiogram time remains a concern on both sites but especially at City Hospital. This is partly due to each site only having one catheterisation laboratory, with delays occurring to PCI and other non-emergency work as a result of PPCI cases. It is also a result of the age of the catheterisation laboratory at City Hospital with breakdowns resulting in cancellations of PCI cases at City and transfer of PPCI cases from City impacting on PCI waits at Sandwell Hospital.

Table 3: SWBH PCI Data – excluding PPCI - 2013/14 (April 13-end of March 14)

	PCI	% Door to Angio. < 96 hours
City	361	73%
Sandwell	282	89%
Trust	643	80%

Source: Trust MINAP data

2.1.2 The NHS Standard Contract for Cardiology: PPCI – NHS England 2013 and the national British Cardiac Intervention Society (BCIS) guidance require a minimum of 400 PCI cases and two cardiac catheterisation laboratories per centre. Whilst Sandwell and West Birmingham Hospitals NHS Trust currently meets these standards on a trust basis, the service consolidated on a single site would be in a better position to meet the standards on an ongoing basis.

2.1.3 Maintaining specialist services: A loss of PPCI services from the trust would have a significant negative impact on the provision of all cardiac services. In addition it would result in the local population having to travel further for at least the emergency interventional cardiology service and possibly a wider range of cardiology services. Other Black Country acute cardiology providers have reconfigured services so that all PPCI is delivered at New Cross Hospital (in order to achieve a critical mass of activity) and so for the Sandwell population, the nearest alternative provider would be New Cross Hospital in Wolverhampton. This would potentially create capacity issues for other providers.

2.1.4 Independent clinical review: This was also endorsed by the Royal College of Physicians, which the trust commissioned to undertake a cardiology service review (24-26 September 2014). This service review looked at a wide range of aspects of cardiology but the report of the invited service review to Sandwell and West Birmingham Hospitals NHS Trust made the following comments in relation to the proposed reconfiguration:

“The new hospital and an interim reconfiguration at City Hospital should be good for patients both in terms of service delivery and safety, and although travel seems to be an issue for some patients we believe the potential improvements in quality and sustainability of the services delivered outweigh these concerns.”

(Royal College of Physicians, 2015, pg 18)

2.1.5 Benefits of moving services to one site:

- a) Improves treatment times for patients who have a ST segment Elevation Myocardial Infarction (STEMI) (which is a type of heart attack), improving direct access to specialist cardiac catheterisation laboratories
- b) Develops an infrastructure consistent with the NHS Standard Contract for Cardiology: PPCI – NHS England 2013 and fulfils national British Cardiac Intervention Society (BCIS) guidance of a minimum of 400 PCI cases and two cardiac catheterisation laboratories per centre
- c) Improves access times for non-STEMI patients (who require urgent PCI treatment)
- d) Improves consistency in practice (reducing current variation across multiple sites)
- e) Ensures recruitment and retention of specialist staff
- f) Supports the future development of interventional procedures (utilising latest technologies and best practice).

It is important to note that cardiology outpatient clinics will continue to be provided at both hospitals, as well as at Rowley Regis Hospital. This is in line with the Right Care Right Here principles of bringing care closer to home.

In developing the proposal a number of options were explored including continuing with the current two hospital model and locating the service at Sandwell Hospital. After a review it was felt that the existing two site model would not address the drivers for change. The Sandwell Hospital option was not considered feasible as locating two cardiac catheterisation laboratories at Sandwell Hospital, in close proximity to each other, and the Coronary Care Unit (CCU) would not be possible without:

- Relocating both cardiac catheterisation laboratories and the CCU to another location in the hospital requiring major refurbishment /new build and displacement of another service along with moving the service further away from the emergency department and blue light ambulance entrance or
- Placing the second cardiac catheterisation laboratory in another location away from the existing one and the CCU.

2.1.6 Future activity proposals

Emergency department and acute medical unit at City Hospital: During 2013/14 the trust undertook 862 percutaneous procedures of which 219 were PPCI with 115 of these PPCI being at Sandwell Hospital. In the proposed pathway these patients would be treated at City. The majority arrived by ambulance and so in the new pathway West Midlands Ambulance Service (WMAS) would take patients with ST elevation directly to City Hospital. The ambulance service would pre-alert the cardiology team at City of any patient with ST elevation. The Cardiology team would meet the patient at the emergency department ambulance entrance on arrival for a rapid initial assessment and then if PPCI is appropriate, accompany the patient and ambulance crew directly to the cardiac cath lab suite. The volume of patients with symptoms of heart attack presenting at City emergency

department by ambulance will increase but the new pathway will mean they are rapidly assessed by the cardiology team and those with STEMI appropriate for PPCI taken directly to the cardiac catheterisation laboratory without further assessment or treatment in emergency department. Patients not found on rapid initial assessment to be appropriate for PPCI would be transferred directly to emergency department for further assessment and onward referral to the most appropriate clinical team. If 50% false positives are assumed and therefore these patients then need further assessment or treatment in emergency department and/or the acute medical unit this is only likely to equate to an additional 50-60 patients a year and so is within the capacity of City emergency department and acute medical unit. This will be at a time that a greater number of surgical and trauma patients are redirected to Sandwell Hospital rather than City.

Patients who self present at Sandwell emergency department and on examination are found to have ST elevation will be transferred by blue light WMAS ambulance to City Hospital with a pre-alert to the Cardiology team who will meet the patient on arrival.

Patients with other chest pain would still present at Sandwell Hospital and be assessed in the emergency department there. If appropriate these patients would be referred to the Acute Medical Unit (AMU) at Sandwell under the care of a Consultant in Acute Medicine. If the patient was assessed as having a cardiac condition they would be seen by a cardiology consultant. Where appropriate for the patient's condition the patient would remain at Sandwell under the Consultant in Acute Medicine but with review and advice from the cardiology team. If the patient's condition required admission under a Cardiologist and treatment in coronary care or in the cardiac catheterisation laboratory (e.g. PCI, pacemaker, device) they would be transferred by the trust's patient transport service (with appropriate escort) to the cardiology service at City Hospital. It is estimated that this may result in around a further 300- 400 patient transfers a year.

2.1.7 Why do services need to be at City Hospital?

After working with clinical specialists we propose that cardiology services should be based at City Hospital. There are a number of reasons for this:

- **Direct access** - ambulance crews will have direct access to the cardiology services at City Hospital, avoiding the need for them to be admitted to the emergency department first. It is also possible for the new cardiac catheterisation laboratory unit to stay closer to the cardiology wards, emergency department and ambulance entrance
- **Safety** - there is enough room for a second laboratory to be installed which would also be close to the first
- **Achievable**- as an interim option, City Hospital requires less refurbishment for the service to be delivered. It will cause the least disruption to other services and represents better value for money. This means we can deliver better care for patients sooner.

There will still be facilities for initial assessment; monitoring and short inpatient stays for non-heart attack cardiology patients at Sandwell Hospital. This would take place in the acute medical unit at Sandwell Hospital. Specialist cardiology doctors will be present on the Sandwell site to review/provide advice and minor treatment to these patients on a daily basis and will also arrange appropriate transfer to the specialist cardiology unit at City Hospital if appropriate.

2.2 Emergency surgery and trauma assessment

2.2.1 Current model

The trust previously identified the need to consolidate its inpatient surgery, trauma and orthopaedic services on one site ahead of opening the new Midland Met Hospital. This centred on a need to ensure that the trust's surgical specialties were large enough to be able to continue to develop high quality patient services whilst continuing to provide appropriate support to the trust's two accident and emergency departments in the management of emergency patients. Public consultation on the proposed changes *Shaping Hospital Services for the Future*, took place between November 2006 and end of March 2007.

In 2007, an Independent Review Panel endorsed the trust's proposals and recommended that emergency surgery and orthopaedics trauma should be provided at a single acute surgical centre. The reconfiguration was implemented in 2009.

The current service model is:

- General surgery and trauma and orthopaedic inpatient wards are all located at Sandwell Hospital
- Ophthalmology, urology, ear nose throat, breast surgery and gynaecology inpatient wards are all located at City Hospital
- The trust's current surgical assessment model consists of two separate surgical assessment units (SAU), one based at City Hospital and one at Sandwell Hospital. Patients requiring a longer hospital stay are transferred from the SAU to the appropriate inpatient specialist ward.

Subsequent to this, a number of other service reconfigurations have taken place within Birmingham and as a result, all vascular surgery emergency services are concentrated at the Queen Elizabeth Hospital Birmingham along with the major trauma centre, with ambulances taking patients meeting the criteria for these services directly to the Queen Elizabeth Hospital. This has reduced the volume, and therefore critical mass, of patients requiring immediate surgery who present to the trust overall but, in particular, the volume to each site.

The SAU model on both sites has been regularly monitored and there is evidence of inconsistencies between sites. The timing and frequency of consultant review of patients on the SAU at City Hospital can be longer if the on call consultant for City Hospital is required to support the emergency consultant at Sandwell Hospital at peak times of emergency activity. Transfer times from the SAU at City Hospital to the inpatient wards at Sandwell Hospital, and therefore at times to surgery, can also take longer because of the need to transfer the patient across the site and balancing this with, as far as possible, not transferring the patient overnight in order not to disrupt the patient's sleep. Use of agency nursing staff can also be high on both SAUs. Consolidation of assessment services on one site would allow concentration of staffing resources for a larger group of patients, which would facilitate delivery of improved, consistent care pathways (including access to diagnostics) and concentration of expertise leading to more frequent consultant review and decision-making about patients on SAU and quicker transfer from SAU to an inpatient ward if required.

Concentration of the service on one site is also expected to make it more attractive to staff, assisting with recruitment and retention of specialist staff and reducing reliance on agency staff. The national reduction in middle grade training posts in surgery also makes sustaining two resident middle grade rotas difficult without increased use of locums.

The Right Care Right Here partnership recognises that continuing to work across two sites is resulting in delays for patients getting the assessment and treatment they need. The current two site model is therefore not considered equitable or sustainable until the opening of the Midland Met Hospital.

2.2.2 Proposed change

The proposals are seeking to transfer the nursing expertise onto a single site and expand the scale of care at Sandwell Hospital. This reflects the growth in demand at Sandwell for complex surgery, which makes supporting a dual site model more difficult than seven years ago, despite investments in staffing including consultant numbers.

It is important to note that all major trauma cases are already taken directly or transferred to the major trauma centre at the Queen Elizabeth Hospital (QEH). Both emergency departments in the trust currently have trauma unit status, where immediate treatment may be given prior to safe onward transfer to the major trauma centre. As a result, the number of major trauma cases presenting directly to City or Sandwell emergency departments are relatively small and so maintaining the required experience and expertise on both sites is increasingly difficult.

The challenges in summary are:

- A lack of timely access to senior clinical input, which is dependent on how often they are asked to assess patients in two emergency departments at both City and Sandwell hospitals
- Inability to meet required staffing levels (middle grade doctors) 52 weeks a year, as surgical trainee numbers reduce nationally
- Reliance on agency nursing to staff the SAU and other surgical wards, with the general surgical ward at City Hospital isolated from the wider specialty bed base.

2.2.3 Future model

The Trust is proposing to create a single surgical assessment unit, based on the Sandwell Hospital site alongside inpatient services.

Sandwell and West Birmingham Hospitals NHS Trust's proposed surgery and trauma service configuration

Sandwell Hospital	City Hospital
24/7 emergency department (ED) with trauma unit status-transfer surgical patients to SAU. Major trauma transferred to major trauma centre (QEH) as per trauma network criteria	24/7 ED transfer surgical patients to SAU at Sandwell. Major trauma transferred to major trauma centre (QEH) as per trauma network criteria
24/7 SAU (chairs and trolleys) with a maximum 24 hour length of stay before discharge or transfer to an inpatient bed	No SAU
Gynaecology, ear nose throat (ENT), urology, breast and plastic surgery, emergency referrals transfer to City Hospital specialty wards	ENT, urology, gynaecology, breast and plastic surgery inpatient beds
Trauma and orthopaedic (T&O) inpatient beds	
General surgery inpatient beds	

Female patients with abdominal pain, who are pregnant or have vaginal bleeding, would be referred to gynaecology at City Hospital and transferred to the EGAU as appropriate	24/7 emergency gynaecology assessment unit (EGAU)
Revised head injury pathway including patients without bone damage or intracranial bleeding referred to acute medicine on site and other patients referred to critical care or T&O depending on clinical need	Head injury patients without bone damage or intracranial bleeding referred to acute medicine on site and other patients referred to critical care (on site) or T&O (and transferred to Sandwell Hospital) depending on clinical need
Critical care	Critical care
Surgical and T&O day case procedures including 'patch and plan' surgery	Surgical and T&O day case procedures including 'patch and plan' surgery
Surgical and T&O outpatients including fracture clinic	Surgical and T&O outpatients including fracture clinic

This new service model enables:

- A critical mass of expertise and an increase in clinical expert control over assessment and admission process with consolidation of imaging service and dedicated imaging capacity
- Rapid multidisciplinary assessment/diagnosis within six hours
- The majority of patients to be seen/have a working diagnosis and be admitted/transferred or discharged within 12 hours of arrival to the surgical assessment unit; a small number of patients may require a stay of up to 24 hours maximum according to clinical need as defined by the specialist
- Ambulance patients with surgical or trauma conditions to be taken directly to Sandwell's emergency department with the exception of women with abdominal pain, who are known to be pregnant or reporting vaginal bleeding, who will be taken directly to City Hospital's emergency department to be assessed by gynaecology in the first instance
- GP emergency referrals to general surgery, trauma and orthopaedics to be directed to Sandwell Hospital's SAU with a timed appointment. GP emergency referrals to gynaecology, urology and ENT to be directed to the appropriate ward at City Hospital. GP emergency referrals are made through a telephone call from the GP to the appropriate clinical team
- Self-presenting patients to the City Hospital's emergency department with a surgical condition or trauma will be seen at City and transferred to Sandwell Hospital's emergency department or SAU if surgical or trauma specialist assessment is required.

2.2.4 Future activity proposals

Based on the number of surgical admissions to SAU at City Hospital from the emergency department at City Hospital, this equates to 1,323 trauma and orthopaedic patients and 1,677 general surgical patients. These patients would need to be either diverted by West Midlands Ambulance Service or transferred across to Sandwell Hospital SAU (approximately 3,000 patients per year).

Of those 3000 patients approximately:

- 60% arrive by ambulance (around 1,800 patients per year)
- 40% (around 1,200 patients per year) would self-present and therefore require transfer across to the SAU at Sandwell. For the majority of those patients who self-present this is likely to be managed by the Hospital Trust's internal transport

- A percentage of the self- presenters between 10-25% (120-300 patients) may require West Midlands Ambulance Service paramedic transfer.

2.2.5 What are the benefits of working on one site?

Locating the assessment services onto the Sandwell Hospital site, alongside inpatient care, would further improve care, by:

- ***Maintaining clinical knowledge***; clinicians and staff would be treating enough patients to maintain their skills
- ***Recruit and maintain skilled staff***; working on one site would be more attractive to clinicians and staff, and will help us be less reliant on agency staff
- ***Timely access to assessment and treatment***; patients would have a rapid assessment as all members of the emergency team are now working together on one site
- ***Consolidated capacity***; locating the surgical assessment unit on one site allows greater flexibility to meet peaks in demand
- ***Faster access for GP referrals***; patients can be given a timed appointment for urgent referrals direct to the surgical assessment unit from their GP.

3. Equality Impact Assessment key findings

The programme undertook an Equality Impact Assessment (EQIA), which identified the proposed service changes as potentially impacting on:

- Patients at risk of cardiovascular disease
- Older people
- Sandwell and West Birmingham has higher levels of deprivation, which highlights that increased travel costs could have an impact
- People with pre-existing disabilities particularly in terms of understanding the new service model and reasons for this in terms of travel times and ease for relatives
- Race: ethnic groups who may be more prone to cardiovascular disease and associated conditions, including some black and minority ethnic groups (South Asian men are 50% more likely to have a heart attack or angina, diabetes prevalence is five times higher amongst Bangladeshi and Pakistani population groups, young south Asian men are at high relative risk of coronary heart disease at a younger age
- Carers: possible impact on time and travel costs
- Some pregnant women with abdominal pain may require a transfer between sites after initial assessment to rule out gynaecology pathology before referral to general surgeons.

The findings of the Equality Impact Assessment were used to target key groups within the listening exercise.

If the recommendations are approved, the following mitigating actions will be taken in response to the EQIA findings:

- Monitoring of service provision to ensure appropriate engagement and access to information and language services
- Pre-Post intervention quality of life measures
- Monitoring of service provision to ensure equitable access, experience and outcomes
- Monitor patient/carers experience
- Monitoring of service provision to ensure equitable access and outcomes for all groups

- Travel and transport analysis undertaken to support decision-making
- Post-implementation EQIA will be carried out to monitor impact of changes.

The potential impact on travel times and ease for relatives is recognised but the benefits to patients, in terms of quicker treatment times for emergencies, shorter stays in hospital and the improved skills of specialist staff treating a critical mass of patients, mitigate this impact. The implementation phase will be monitored closely especially for the areas outlined above to ensure that any impact is highlighted in real-time and acted upon.

4. Travel analysis

A key theme arising from the engagement activity has been the impact on travel both from the perspective of ambulance journey times and from the perspective of visitor travel times. The programme has undertaken several areas of work around these issues:

4.1 West Midlands Ambulance Service (WMAS)

For both urgent cardiology, emergency surgery and trauma pathways all patients requiring emergency assessment and admission either through a 999 call or transfer between sites would be transferred via a 'blue light' pathway.

Chest pain patients with an ST elevation on an electrocardiogram or ECG (STEMI) (a type of heart attack) will be taken by ambulance directly to City Hospital. Following discussions with WMAS, there may be a very small impact for Sandwell residents whose nearest location for emergency interventional cardiology post- reconfiguration would be New Cross Hospital. It is estimated that about 2% of patients within the Sandwell Hospital catchment area having a STEMI heart attack would be taken by ambulance to New Cross Hospital (as the nearest hospital offering PPCI) rather than City Hospital. This should have minimal impact on the trust's catchment area and the commissioned boundary for WMAS pathways would remain the same.

All other patients having a STEMI heart attack will be taken by ambulance to City Hospital as, for all other areas of the trust's catchment population, City Hospital will be the closest location and the impact on blue light ambulance journey times would be minimal. The additional number of redirections from the Sandwell Hospital catchment area is estimated to be circa 120 cases per year, with an additional 60 hours of work for WMAS.

Both City and Sandwell hospitals currently have trauma unit status. In the proposed new service model only Sandwell would have trauma unit status and City Hospital would become a local emergency hospital. As a result, any trauma patients in the City Hospital catchment area, meeting trauma unit criteria at the scene, would be taken by ambulance to Sandwell Hospital as would any trauma case with a strong likelihood of surgery being required. Currently some redirection to Sandwell Hospital already takes place for patients with a strongly suspected fractured neck of femur injury. The additional redirection is estimated to be around 120 cases per year, with an additional 60 hours of work.

For general surgery cases, the main patient category from the City Hospital catchment area that would need redirection to Sandwell Hospital would be patients with abdominal pain. The current 'worst case scenario' is circa 1,800 cases per year. Further work is required to clarify the pathways.

This flow of patients will be closely monitored throughout the implementation phase to ensure that any greater catchment loss (or catchment increase) or adverse impact on WMAS is identified early and acted upon in real-time.

Throughout the programme the team have worked closely with West Midlands Ambulance Service to seek assurance that patients can continue to be transferred and treated within the recommended times. To support the West Midlands Ambulance Service, the Clinical Commissioning Group Governing Body will be considering additional funding to support the change in activity, until the Midland Met Hospital opens.

The Hospital Trust and West Midlands Ambulance Service already have experience in ensuring patients are transferred to single sites, through the stroke reconfiguration. As a result, both organisations are confident that patients can be seen within the recommended times.

4.2 Public transport

The programme commissioned an analysis of public transport (PT) accessibility to the Sandwell and City hospital sites. Accessibility is defined as the extent to which individuals and households can access everyday services such as healthcare. The modes of public transport considered included: rail, metro and bus. Car ownership is an important consideration in accessibility studies because where there is a level of car ownership much lower than average, then good public transport opportunities need to exist in order for people to access education, employment, local facilities and health services.

Setting an optimum travel time of 30 minutes or less for access to main hospitals is supported by the accessibility statistics (taken from National Travel Survey data) reported by the Department for Transport in 2014. The report provides information on the services available to local communities by public transport/walking, cycling and car modes. For each destination type (employment, primary schools, secondary schools, further education, GPs, hospitals, food stores, town centres) statistics have been produced showing the percentage of the population that can reach the nearest location providing that service within specific time thresholds. The time thresholds vary depending on the type of destination.

In relation to access to hospitals, the percentage of households able to access them within 30 minutes by each mode is shown below:

- Public transport / walking: 66%
- Cycle: 79%
- Car: 99%

The percentages suggest that the level of service (accessibility) achievable by private car should also be achieved for public transport users. This should therefore be a consideration for transport and healthcare providers in relation to the location of healthcare services.

Sandwell has traditionally had a low level of car ownership compared to the West Midlands and country-wide averages. The former Heart of Birmingham PCT area (HoB) average is relatively high compared with the West Midlands and Sandwell averages because it is an area of mostly high deprivation. Some areas in Sandwell also have car ownership levels that are around the average for HoB. Although this situation, particularly in HoB, suggests that accessibility could be relatively poor, the availability of a large number of high frequency public transport services could mean that access to education, employment, local facilities and health services can prove otherwise, assuming that all public services and other facilities are available / located within 30 minutes' travel time.

Key

Hospital

 **Sandwell & West Birmingham CCG**

Public transport journey time

 **0 to 10 minutes**

 **10 to 20 minutes**

 **20 to 30 minutes**

 **30 to 40 minutes**

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, MRCAN, IGN, IGN, Esri, Swisstopo, Ordnance Survey, Esri, Japan, METI, Esri, China (Hong Kong), Swisstopo, Mapbox, © OpenStreetMap contributors, and the GIS User Community

Sandwell and West Birmingham Public Transport
Accessibility Map

e. These populations currently primarily access and are likely to continue to do so.

g. All hospital sites would help to ensure local access and that patients arrive at hospital by ambulance. Transport times would be on the visitors of the City Hospital. Many of these patients would be exploring options to provide assistance to bus service between the City and Sandwell

Plan was developed, which enabled the training exercise and to undertake targeted groups.

les, including that the engagement process was s with best practice and legislation.

A range of communication channels were used to ensure that effective communications with different stakeholders took place. Examples included:

- The Internet - websites
- Internal communications – existing staff, clinician and member channels
- Social media – Twitter
- The media – local newspapers, radio
- External communications – stakeholder bulletins and a listening document used to ensure that all our stakeholders had the opportunity to read and understand the proposals being talked about.

In respect of our approach to engagement, it is helpful to see different levels of involvement as a continuum from just giving information to full 'meaningful' involvement.

- **Giving information** - documentation, media, social media
- **Obtaining information** - semi-structured interviews, self-completed questionnaires, telephone interviews, face-to-face interviews, open surgeries and radio interviews
- **Forums for debate** - public meetings, focus groups, attendance at local forums.

5.2 Feedback from the listening exercise

A ten week listening exercise was conducted from 12 January to 20 March 2015 to ensure that patients and stakeholders were effectively engaged and the CCG and trust board could reach the right decision for their local population regarding the proposed reconfiguration of urgent cardiology services and emergency general surgery and trauma assessment.

At least 17,810 people were reached through electronic/ postal mailings and the distribution of materials within local communities. Discussions took place at 74 engagement activities with approximately 1,274 attendees.

179 survey responses were received and further anecdotal feedback was captured during wider discussions at the various meetings attended.

Feedback revealed:

- Mixed levels of awareness in relation to the Right Care Right Here programme, but more people had some level of awareness
- In relation to understanding the need for change, 64% agreed that change was needed
- Single site working was supported by three quarters of survey respondents, predominantly based on faster access to treatment, a belief that the changes would lead to better outcomes for patients and the benefits of more concentrated expertise. However, some concerns were raised around increased distances for some patients according to where they live and potential travel delays
- Agreement with the proposed venues for each service was rated on a scale of 1-5:
 - In terms of locating urgent cardiology at City Hospital, 64% gave a positive score
 - In terms of locating emergency surgery and trauma assessment at Sandwell Hospital, 69% gave a positive score.

However, additional comments through the survey and engagement activities revealed concerns raised by many, largely around increased distances and journey times for some relatives and visitors and the impact on the patient (in other words chances of survival for cardiology patients).

Despite survey scores, the comments seemed to suggest a general preference for services to be at the nearest hospital. Traffic congestion around City Hospital and the impact on patient choice were also frequent concerns.

- When we asked how we could support people through these proposed changes, the strongest theme by far for both services was about communication and information, mentioned in 68% of comments for urgent cardiology and 82% of comments for emergency surgery and trauma assessment. People want to be kept informed in an honest and transparent manner.

Transport issues were also raised for both proposals, either relating to journey time or transport routes for visitors, and these were mentioned by around 16% of respondents.

Smaller percentages stressed the need for patients and relatives to be listened to and also talked about costs both for parking and travel (by public transport, taxi and car), which will be more expensive for some who have further distances to travel.

- When respondents were asked to rank five criteria in relation to their importance, the top two included:
 - Treatment by expert clinicians
 - Direct (faster access) to specialist teams.

The feedback has been used to shape the key performance indicators to ensure that the service change demonstrates improvement in access to specialist treatment. The programme team will work closely with West Midlands Ambulance Service to ensure there are no delays or adverse impacts on journey times. We have also used the feedback to ensure that communication and engagement remains a key focus during the implementation phase and that it shapes the implementation plan.

5.3 Listening exercise recommendations

The following section describes the recommendations following the listening exercise: priority should be given to:

1. Working closely with WMAS to ensure there are no delays or adverse impacts on journey times, particularly for those living on the border of the catchment area, and also ensuring that capacity will meet demand
2. Working with transport providers of hospital to hospital transfers to ensure that there are no delays or adverse impacts on journey times and also to ensure that capacity will meet demand
3. Working with public transport providers to ensure that there is good accessibility to both Sandwell and City hospital sites
4. Using the feedback to help shape the key performance indicators (measures) that should be put in place to ensure that the proposed service changes can demonstrate improvements in access to specialist treatment and patient outcomes
5. Keeping all participants, stakeholders, patients and the general public informed by:
 - Sharing the outcome of the listening exercise and/ or copies of the report
 - Sharing the final decision taken as to whether the proposals will be implemented, and all factors considered as part of the decision- making process
 - Ensuring that if the proposals are implemented, engagement remains a key focus during the implementation phase and feedback is provided on any further improvements that are implemented as a direct result of engagement, including the listening exercise.

- Ensuring that if the proposals are implemented, services are monitored regularly to measure the success of the service change, and that the findings are communicated.

6. Programme assurance

Benefits and key performance indicators have been developed for both proposals in partnership with clinical, programme, equality, public health and patient representatives. The metrics have also taken into account the feedback from the listening exercise. These metrics have been presented to NHS England's Quality and Surveillance Group to seek assurance on the proposed reconfigurations. NHS England's Quality and Surveillance Group endorsed the proposals with a recommendation to inform the British Cardiac Intervention Society.

7. Financial considerations

The trust has carried out a detailed analysis of the financial resource required to support the selection of the viable models and this has supported the quality recommendations. It is important to note that the cost of service change will be supported by the national Payment by Result Tariff.

The impact of the redirection of ambulances on West Midlands Ambulance Service would need to be funded by the CCG at a cost of £25,200 per annum for urgent cardiology and trauma until the Midland Met Hospital opens. Changes to activity flows would be monitored on a monthly basis.

For general surgery cases, the main patient category from within the City Hospital catchment area that would need redirection to Sandwell Hospital is patients with abdominal pain. The current 'worst case scenario' is circa 1,800 cases per year. Further work is required to clarify pathways. The impact on WMAS for the redirection of emergency surgery patients could lead to an impact of £189,000.

8. Next steps

The programme findings and recommendations are being taken to the CCG's Governing Body on 1 July and the Hospital Trust's Board on 2 July for approval, subject to approval by the Joint Health Overview and Scrutiny Committee.

If the recommendations are approved, clinicians and staff will be working to implement the changes by:

- A single site interventional cardiology model at City Hospital with an implementation date of early August 2015
- A single site emergency surgery and trauma assessment model at Sandwell Hospital, alongside the inpatient beds, with an implementation date of Autumn 2015 (tbc.)

A detailed implementation plan has been developed, working with clinicians and West Midlands Ambulance Service, to support the safe transfer of services. The trust is keen to implement the changes for cardiology in August 2015, to align with the new intake of clinicians.

Throughout the implementation patients and the public will be kept informed of the changes.

9. Conclusion

This paper has provided an update on the listening exercise and programme recommendations to reconfigure:

- A single site interventional cardiology model at City Hospital with an implementation date of early August 2015
- A single site emergency surgery and trauma assessment model at Sandwell Hospital, alongside the inpatient beds, with an implementation date of Autumn 2015 (tbc.)

These reconfigurations are required ahead of the opening of the Midland Met Hospital in order to ensure safe, high quality care and a sustainable service. In both services the proposals will further improve care by:

- **Maintaining clinical knowledge;** clinicians and staff would be treating enough patients to maintain their skills
- **Recruit and maintain skilled staff;** working on one site would be more attractive to clinicians and staff, and would help us be less reliant on agency staff
- **Timely access to assessment and treatment;** patients would have a rapid assessment and start of treatment as all members of the emergency team would work together on one site
- **Consolidated capacity;** locating specialist capacity on one site in other words, the Surgical Assessment Unit (SAU) at Sandwell Hospital and the cardiac catheterisation laboratories at City Hospital would allow greater flexibility to meet peaks in demand.

Feedback from the listening exercise demonstrates that the local population understands the reasons for change and supports single site working. Predominantly their reasoning was based on faster access to treatment and a belief that the changes would lead to better outcomes for patients and the benefits of more concentrated expertise. Some concerns were, however, raised around increased distances for some patients and visitors, according to where they live and potential travel delays. For visitors, a key issue is public transport routes as our local population has lower than average car ownership and the Equality Impact Assessment demonstrated higher than average levels of deprivation in the population. The trust will continue to explore options for supporting visitor travel arrangements. The EQIA also identified the ethnic diversity of our population and the need to monitor any adverse impacts resulting from the proposed changes on this section of the population. It also identified the potential for the emergency surgery assessment reconfiguration to impact on pregnant women but the agreed pathways for women with abdominal pain and who are pregnant should reduce any adverse impact by directing these women to City Hospital for an initial assessment by the gynaecology or obstetric team.

Further work is required to finalise the detailed implementation plan for emergency surgery and trauma assessment especially around transport for transfers between sites and implementation dates, which are likely to be in autumn 2015 for emergency surgery and possibly earlier (August) for trauma assessment.

10. Recommendations

After considering the clinical case for change, feedback from the listening exercise and the travel analysis, the Joint Health Overview and Scrutiny Committee is asked to endorse the recommendations to reconfigure :

- Single site interventional cardiology service at City Hospital with an implementation date of early August 2015
- Single site emergency surgery and trauma assessment service at Sandwell Hospital with a likely implementation date in the autumn of 2015.

11. Paper presented by:

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