GREATER MANCHESTER JOINT HEALTH SCRUTINY COMMITTEE

Date: Wednesday 24th February 2016

Subject: Specialised Services Commissioning in Greater Manchester - The Case for Change for Oesophago-gastric (OG) Cancer Surgery, and Urological Cancer Surgery Services.

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PURPOSE OF REPORT

The purpose of this document is to present the Case for Change for the clinical service transformation of two specialised surgical services within Greater Manchester and adjacent areas:

- Oesophageal and gastric (OG / Upper Gastro-intestinal), and
- Urological Cancer (Bladder, Prostate and Kidney) Surgical services

RECOMMENDATIONS:

It is recommended that GM JHSC members:

1. Note the content of the report;
2. Disseminate information received to local Overview and Scrutiny Committees as appropriate;
3. Endorse the Case for Change for OG/Urology Cancer Surgery Transformation.

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BACKGROUND PAPERS:

The following papers are available for information/context:

- Specialised Oesophago-Gastric (OG) & Urology Cancer Surgery Service Transformation Update (December 2015)

TRACKING/PROCESS		
Does this report relate to a Key Decision, as set out in the GMCA Constitution or in the process agreed by the AGMA Executive Board		No
EXEMPTION FROM CALL IN		
Are there any aspects in this report which means it should be considered to be exempt from call in by the AGMA Scrutiny Pool on the grounds of urgency?		No
AGMA Commission	TfGMC	Scrutiny Pool
N/A	N/A	N/A

1. Executive Summary

This paper describes:

- The case for change for the transformation of GM Specialised OG and Urology Cancer Surgery services
- The opportunity presented by GM Devolution to improve Specialised services to achieve world-class outcomes for the GM population
- The challenges of the current service arrangements
- The key drivers for improvement including the need to achieve:
    - Evidence-based surgical volume thresholds to secure world-class patient outcomes;
    - Elimination of variation in service quality, patient outcomes and involvement in R&D;
    - Consistent high quality patient experience;
    - Concentration of services to ensure that specialist staff can be more easily recruited and their training and surgical competencies maintained;
    - More cost-effective service delivery through best use of limited resources such as specialist equipment and staff expertise;
    - Future-proofed services.

1.1 The principles which underpin the transformation process, anticipated outcomes and how it will address the key challenges to develop future service arrangements to achieve world class patient outcomes and experience.

2. Purpose of this Document

2.1 The purpose of this document is to present the Case for Change for the clinical service transformation of two specialised surgical services within Greater Manchester and adjacent areas (herein Greater Manchester catchment area):

- Oesophageal and gastric (OG / Upper Gastro-intestinal), and
- Urological Cancer (Bladder, Prostate and Kidney) Surgical services

2.2 For clarification, the GM OG cancer service serves the population of GM and East Cheshire. The GM urology cancer service serves the population of GM, East Cheshire, South Cheshire, Vale Royal and High Peak (North Derbyshire).

2.3 This Case for Change presents the current position within the Greater Manchester and adjacent catchment areas for these two specialised cancer services. It references available data relating to activity, outcomes and performance, in order to identify key challenges which will be addressed as part of the transformation process.

3. Introduction and Context

3.1 Specialised services for Oesophago-gastric and Urology Cancer Surgery are commissioned by NHS England. National guidance requires that specialist teams providing OG and urological cancer treatment serve a catchment population of more than one million people. It also sets standards relating to the minimum numbers of specialist operations that must be undertaken to maintain skills and achieve the best outcomes for patients.

3.2 These standards are based on clinical evidence which clearly demonstrates that outcomes are improved by increasing individual operator and institutional volumes in sites carrying out specialised cancer surgery. Concentrating services in this way also ensures that specialist staff can be more easily recruited and their training maintained. It also enhances research activity, is more cost-effective and makes the best use of resources such as specialist equipment and staff expertise.

3.3 Currently, specialised services for OG and Urological cancers that are provided within Greater Manchester do not comply with current national standards and guidance. Minimum populations and surgical volumes set out in the existing national standards have not been reached.

3.4 In addition, in the intervening period since the current national standards were written, research evidence has led to a clinical consensus that more challenging standards are required to achieve world-class outcomes. As a result specialised cancer services in Greater Manchester are falling behind those in other parts of England and in Europe where compliant models of care are well established.

3.5 In recent years there have been a number of attempts to reconfigure these non-compliant specialised services in order to achieve service compliance and best outcomes for patients; however this has not been possible for a wide range of reasons.

4. GM Devolution – the opportunity to achieve world-class patient outcomes and experience

4.1 The advent of Greater Manchester Health and Social Care Devolution brings new impetus for the improvement of services. Alongside the wider Devolution agreement for Greater Manchester, the region has also been given new powers to take control of all health and social care services for local people.

4.2 As a result, for the first time local leaders and clinicians will be able to design bespoke services to meet the needs of local communities. It is an exciting opportunity to improve services and address many of the health issues facing our region. The vision is to deliver the greatest and fastest improvement in the health and wellbeing of c.3 million people who live in the region. A memorandum of understanding (MOU) has been signed between GM and NHS England, the scope of which includes the commissioning of specialised services.

4.3 From October 2015 new decision-making bodies have begun to take responsibility for making important decisions that affect our health and social care needs. These bodies, made up of representatives from GM NHS organisations and Local Authorities, will gradually be given more powers.

4.4 From April 2016, local decision-makers will be given control of the £6 billion budget that is currently spent on services such as hospitals, GP surgeries, mental health and social care. This also means that commissioners will assume responsibility for the commissioning of specialised services on a Greater Manchester basis.

4.5 Greater Manchester Devolution Programme Board has identified OG and Urology Cancer Surgery as the two service priorities for rapid service transformation in 2016. Devolution provides an opportunity to set standards for Greater Manchester which go beyond NHS England national service specifications. These standards will inform the design and

implementation of bespoke services which will achieve "world-class" patient outcomes and experience, be future proofed, support consistent involvement in R&D and be able to attract and retain a specialised workforce to meet the need of patients within Greater Manchester.

4.6 A transformation commissioning process has been initiated, based on clinically and patient developed and independently validated "world-class" standards. This process also provides an opportunity to influence the future development of standards across the whole pathway to ensure patients receive best possible care and treatment at all stages of their pathway.

5. Current Service Arrangements

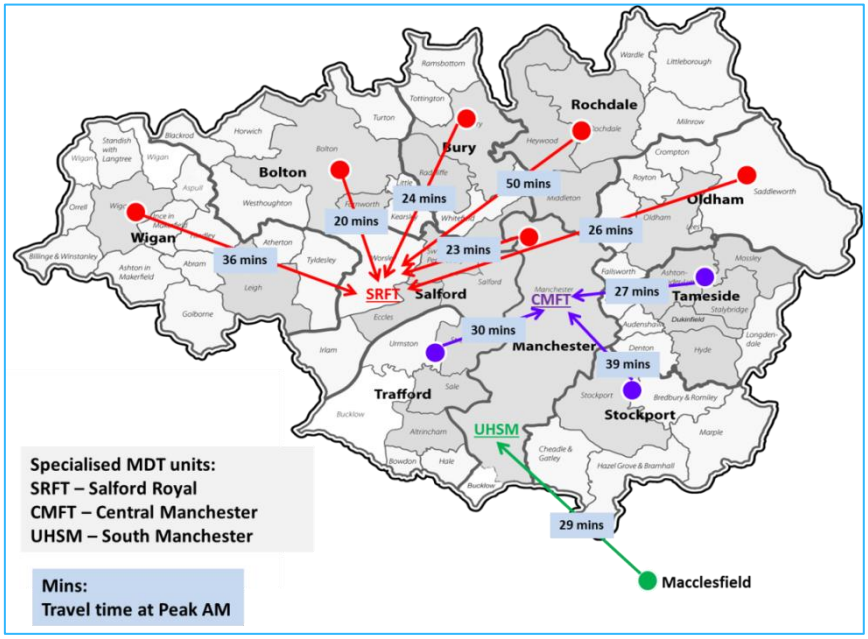
5.1 Oesophago-Gastric Cancer (OG) Services in Greater Manchester

5.2 Oesophago-gastric Cancer services are provided by both local and specialist teams within Greater Manchester and Eastern Cheshire. Local oesophago-gastric teams provide local care for their own catchment area and collaborate on clinical decisions within sector-based specialist multi-disciplinary teams (SMDTs) with a full core complement of specialists. Patients who require specialised treatment are treated by SMDT members.

5.3 For patients requiring radical surgery, there are three specialist centres for OG surgery:

- Central Manchester University Hospitals NHS Foundation Trust (CMFT), (Manchester Royal Infirmary);
- Salford Royal NHS Foundation Trust (SRFT) (Salford Royal Hospital), and
- University Hospital of South Manchester NHS Foundation Trust (UHSM) (Wythenshawe Hospital).

OG Surgical Centres in Greater Manchester



5.4 The three sites serve a catchment population of approximately 3.1 million; with approximately 150-170 patients undergoing OG resection surgery each year. Each centre operates its own specialist multi-disciplinary team (SMDT) which includes clinicians specialised in OG surgery, oncology, pathology and radiology as well as nursing and dietetics.

Catchment Populations

Specialist OG Cancer Site	Referring MDTs	Catchment Population
Central Manchester University Hospitals NHS Foundation Trust	Central Manchester (inc. Trafford) Stockport Tameside **Total**	452,291 301,096 241,875 **995,262**
Salford Royal Hospitals NHS Foundation Trust	Salford Pennine (Bury, Rochdale, Oldham, and North Manchester) Bolton Wigan **Total**	253,112 856,830 297,958 321,084 **1,728,984**
University Hospital of South Manchester NHS Foundation Trust	South Manchester East Cheshire (Macclesfield) **Total**	168,678 204,353 **373,031**
	Grand Total	**3,097,277**

Source: ***http://www.england.nhs.uk/wp-content/uploads/2013/12/ccg-allocation-big-table-v2.pdf***

Surgical Volumes over a 2 year period (No. resections for patients diagnosed between 01/04/11 and 31/03/13)

Specialist OG Cancer Site	No. of Resections (2 Years)	No. of Surgeons	Avg. No. Ops per Surgeon*	Length of Stay (days)
Central Manchester University Hospitals NHS Foundation Trust	83	5	16.6	14
Salford Royal Hospitals NHS Foundation Trust	182	6	30.3	13
University Hospital of South Manchester NHS Foundation Trust	42	3	14	13
TOTAL	**307**	**14**	**21.9**	**13.5 (Avg.)**

Source: http://www.augis.org/surgical-outcomes-2014/outcomes-data-2
*Average by surgeon does not take into account operations which are 'doubled up' i.e. two surgeons; IoG Compliance requirements are min 60 per site, min 15-20 resections per surgeon and between 4-6 surgeons.

5.5 Non-compliance of Oesophago and Gastric Cancer Surgery with existing national standards and future GM standards

5.6 The NHS England current national specification *(B11/S/a 2013/14 NHS standard contract for cancer: oesophageal and gastric (adult), 2013/14)* states that:

- the oesophago-gastric (OG) cancer service should serve a population of one million people or more.

- operations should be undertaken in a centre where the surgical team carries out a minimum of 60 oesophageal and gastric resections per year.
- an individual specialist surgeon should undertake a minimum of 15 to 20 resections per year *(working within centres comprising 4-6 surgeons*).

5.7 The OG Cancer service within Greater Manchester catchment area is collectively non-compliant against these standards. As shown below, of the three surgical sites, two are non-compliant in relation to catchment population, one is non-compliant in relation to centre volumes and two are non-compliant for individual surgeon volumes.

Specialist OG Cancer Site	Compliance with *current* national standards (Y/N)		
	(a) Catchment Population of 1m+	(b) Centre Surgical Volumes 60p/a	(c) Individual Surgeon Volumes 15-20p/a
Central Manchester University Hospitals NHS Foundation Trust	No	No	No
Salford Royal Hospitals NHS Foundation Trust	Yes	Yes	Yes
University Hospital of South Manchester NHS Foundation Trust	No	No	No

5.8 Furthermore, the work done to date on the development of GM standards to achieve world-class patient outcomes and experience further increases these threshold standards in the light of recent research evidence which links increased operator volumes to improved outcomes [See below].

5.9 Urological Cancer services in Greater Manchester

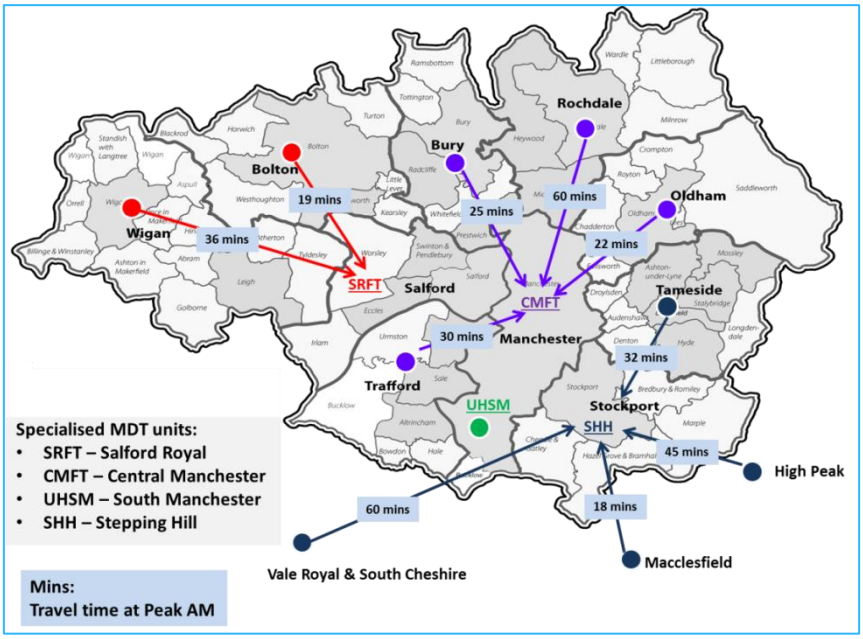
5.10 Urological Cancer services are provided by both local and specialist teams within Greater Manchester, Cheshire and High Peak. Within Greater Manchester, four specialist multi-disciplinary teams (SMDT) currently provide specialist urological care for prostate, bladder and kidney cancer patients, covering a population of 3.2m. These are hosted at the following acute trusts:

- Central Manchester University Hospitals NHS Foundation Trust (Manchester Royal Infirmary);
- Salford Royal NHS Foundation Trust (Salford Royal Hospital);
- Stockport Acute NHS Foundation Trust (Stepping Hill Hospital)
- University Hospital South Manchester NHS Foundation Trust (Wythenshawe Hospital)

5.11 The Christie Hospital NHS Foundation Trust is the non-surgical oncology centre for Greater Manchester, Central and East Cheshire and hosts the supra-network penile and testicular SMDT. Radiotherapy is delivered at The Christie Hospital and the satellite radiotherapy units at Royal Oldham Hospital and Salford Royal. Chemotherapy is delivered from The Christie Hospital.

5.12 Specialist surgery is also undertaken at The Christie Hospital including complex cases undertaken by the pelvic surgery team and robotic assisted prostatectomy. Members of the UHSM and SRFT teams also work in the supra-network team at The Christie.

Urology SMDTs in Greater Manchester



*NB. The above map excludes The Christie as it does not serve a local population but receives referrals from other specialist MDTs.

5.13 The four specialised MDT units serve a catchment population of approximately 3.3 million; with approximately 740 patients undergoing surgery in 2013/14. Each centre operates its own specialist multi-disciplinary team (SMDT) which includes clinicians specialised in OG surgery, oncology, pathology and radiology as well as nursing and dietetics.

Urology SMDT Catchment Populations

Specialist Urology Cancer Sites	Referring MDTs	Catchment Population*
Central Manchester University Hospitals NHS Foundation Trust (operating site Manchester Royal Infirmary)	Pennine (Bury, Rochdale, Oldham and North Manchester) Central Manchester Trafford **Total**	856,830 215,295 236,996 **1,309,121**
Salford Royal Hospitals NHS Foundation Trust (operating site Salford Royal Hospital)	Wrightington, Wigan & Leigh Salford Bolton **Total**	321,084 253,112 297,958 **872,154**
Stockport Foundation Trust (operating site Stepping Hill Hospital)	High Peak (out of Network) Stockport East Cheshire (Macclesfield) Mid Cheshire Trust (Leighton) Tameside **Total**	50,000 301,096 204,353 305,709 241,875 **1,103,033**
University Hospital of South Manchester NHS Foundation Trust (operating site Wythenshawe Hospital)	South Manchester **Total**	168,678 **168,678**
	Grand Total	**3,147,277**

Source: http://www.england.nhs.uk/wp-content/uploads/2013/12/ccg-allocation-big-table-v2.pdf

Surgical Volumes by site over one year period (No. resections for patients diagnosed between 2013/14)

Trust	No. Resections by Tumour Group			
	Bladder	Kidney	Prostate	TOTAL
Central Manchester University Hospitals NHS Foundation Trust	25	57	74	**156**
Christie Hospital NHS Foundation Trust	5	16	105	**126**
Salford Royal Hospitals NHS Foundation Trust	34	98	4	**136**
Stockport NHS Foundation Trust	32	99	93	**224**
University Hospital of South Manchester NHS Foundation Trust	7	80*	11	**98**
TOTAL	**103**	**350**	**287**	**740**

Source: *Resection volumes based on Trust validated data for 2013/14; NB. Christie prostate number includes robotic activity.*

5.14 Non-compliance of Urological Surgery with existing national standards and future GM standards

5.15 The current NHS England national specification national specification *(B14/S/a 2013/14 NHS standard contract for cancer: Specialised Kidney, Bladder and Prostate Cancer Services (adult),* states that the specialist urological cancer multidisciplinary team should:

- should cover a population of more than one million,
- undertake a combined total of at least 50 radical prostatectomies (prostate) and/or total cystectomies (bladder) per year.

5.16 The Urological Cancer service within the Greater Manchester catchment area is collectively non-compliant against these guidelines. As shown below, only two of the four centres are currently serving a population of over one million, and three of five centres are meeting surgical volumes for prostate/bladder tumours.

Site	Compliant (Y/N)	
	(a) Catchment Population of 1m+	(b) Centre Surgical Volumes 50+ p/a
Central Manchester University Hospitals NHS Foundation Trust	Yes	Yes
Christie Hospital NHS Foundation Trust	-	Yes
Salford Royal Hospitals NHS Foundation Trust	No	No
Stockport NHS Foundation Trust	Yes	Yes
University Hospital of South Manchester NHS Foundation Trust	No	No

5.17 Furthermore, the work done to date on the development of GM standards to achieve world-class patient outcomes and experience further increases these threshold standards in the light of recent research evidence which links increased operator volumes to improved outcomes. The

transformation process will therefore need to identify the optimum service models which will achieve future compliance with the new GM threshold standards. [See Section 5 below]

6. A Case for Change – Why change is needed

Overview

6.1 In order to achieve world-class patient outcomes and experience GM needs to address the following challenges in relation to its OG and Urology Cancer surgery specialised services:

1) **Achievement of evidence-based surgical volume thresholds**
2) **Elimination of variation in service quality, patient outcomes and involvement in R&D**
3) **Consistent high quality patient experience**
4) **Optimising use of limited resources**
5) **Future-proofing of services**

6.2 The transformation of these specialised cancer services is required to improve patient outcomes, enhance patients' experience and ensure safe, efficient, sustainable and future-proofed services are provided within Greater Manchester and catchment area.

Key Challenges

Achievement of evidence-based surgical volume thresholds

6.3 The correlation between surgical volumes and improved outcomes is well documented. There is clear evidence that surgeons performing high volumes of surgery achieve better patient outcomes[1][2][3] . In addition, all patients benefit from being looked after by a 'high volume' team, even if they don't have surgery.

OG Cancer Surgery - Optimal surgical centre and individual operator volumes

- Analysis of the latest Association of Upper Gastrointestinal Surgeons for Great Britain and Ireland (AUGIS) data set for 2012-14 for OG Cancer Surgery shows that of the 41 centres undertaking OG surgery nationally, the 3 GM centres rank 5th (SRFT), 27th (CMFT) and 37th (UHSM) by centre surgical volumes.
- For OG, 10 of the 15 surgeons performing OG surgery are below the AUGIS recommended 15-20 resections per year. This compares unfavorably to the more challenging GM standards and Trusts such as Guy's and St. Thomas (30 per surgeon, per year), and Newcastle upon Tyne and Imperial College (both 24 per surgeon, per year) ranked 1, 2 and 3 nationally.

Urological Cancer Surgery - Optimal surgical centre and individual operator volumes

- A systematic review of the volume-outcome relationship for radical prostatectomy from 2013[4] asserted that there is very clear evidence that increasing volume improves outcomes. In the same systematic review the quoted evidence showed that length of stay was about 10% lower and that costs were approximately 15% lower for high volume centres when compared with low volume centres.
- For Urology, while centre volumes for radical prostatectomies and/or total cystectomies have been achieved across the 5 sites, individual surgeon activity has not been consistently high, with some surgeons performing single figure numbers of either radical prostatectomies and/or total cystectomies per year.

[1] The effect of centralisation on the outcomes of oesophagastric surgery – a fifteen year audit. Boddy, Williamson & Vipond. International journal of surgery 10 (2012) 360 – 363
[2] Guidelines for the management of oesophageal and gastric cancer. Allum, Blazeby et al. Gut (2011):60; 1449-1472
[3] Quoc-Dien Trinh et alA Systematic Review of the Volume–Outcome Relationship for Radical Prostatectomy European Urology, Volume 64 Issue 5, November 2013, Pages 786-798
[4] Ibid.

6.4 For both OG and Urological cancer services there are too many providers in GM to achieve evidence-based surgical volume thresholds. The transformation process will result in the consolidation of complex surgery into fewer specialised centres in order to provide the necessary concentration of surgical expertise to achieve the best outcomes for patients.

Elimination of variation in service quality, patient outcomes and involvement in R&D

6.5 For both OG and Urology cancer services, there is variation in quality resulting from:

- **Inconsistent access to treatment options** – patients do not have equal access to different treatment options such as non-surgical treatment, laparoscopic procedures or robotic assisted surgery. The transformation process will lead to a GM Single Service working to common guidelines, protocols and pathways for all patients.

- **Inconsistent access to clinical trials** – Recruitment of patients into clinical trials is not consistent across GM. Patient involvement in trials is linked with improved outcomes. Surgical centres which are active in R&D are also able to enhance their recruitment potential, implement innovations and optimise ongoing education and training opportunities.

The transformation process will address the above issues through the creation of a Single Service model for both OG and Urology cancer surgery. This will ultimately deliver measurable improvements in the health and wellbeing outcomes of the population.

Consistent high quality patient experience

6.6 From discussions with GM patients through a range of forums, including individual meetings, Cancer support groups, Healthwatch groups, the GM Cancer Summit as well as analysis of patient complaints data/feedback mechanisms, it is evident that patient feedback indicates that their experience is not always positive. Feedback received to date focusses on four key themes:

1) Access to the service
2) Communication
3) Treatment options
4) Environment

6.7 The diagram below illustrates some of the key points that are important to GM patients when accessing OG and Urology cancer services:

6.8 The transformation process will be informed by ongoing patient and carer engagement so that the resulting service is based on experience standards which have been developed by the patients of the services.

Optimising use of limited resources

6.9 Delivering cancer surgical services from a 'large' number of GM hospitals leads to challenges in relation to optimising the use of the skills of the workforce and use of infrastructure:

- Recruiting and retaining specialist staff particularly in the context of staff shortages and limited numbers of consultants and trainees nationally in key specialties;
- Maintaining sustainable rotas e.g. emergency out-of-hours rotas for those few cases requiring emergency surgery;
- Maintenance of required levels of activity for surgical training and achievement and maintenance of clinical competency;
- The current organisation of specialised cancer surgical services also results in additional time and cost associated with running a number of SMDTs across GM.

6.10 The aim of the transformation process is to build on the "best of the best" and to optimise the use of GM resources.

Future proofing GM Specialised Services

6.12 In order to maintain world-class outcomes and high quality patient experience, GM needs to systematically collect, review and analyse data from audits and R&D to keep pace with technological improvements and clinical advances. Consistent active involvement in R&D, audit and ongoing links with the GM Academic Health Sciences Network and the Manchester Academic Health Science Centre (MAHSC) will be crucial to the achievement of this aim.

6.13 As part of the transformation process, it will be necessary to ensure that the future service model is developed and appropriately supported to undertake ongoing data collection to support robust audit and benchmarking of outcomes, be agile and able to respond rapidly to future service requirements.

7. Future service arrangements to achieve world class patient outcomes and experience

7.1 The challenges identified in the case for change will be addressed through the transformation of services. It will be informed by the development of world class standards and will identify optimum future models of care to support the achievement of world-class patient outcomes and experience. It will also ensure that the OG and Urology cancer Surgery services will meet the current and future needs of the Greater Manchester and wider catchment population.

7.2 The new service model will be based on the agreed GM 'Single Service' model for the delivery of OG and Urology cancer Surgery. The Single Service model is underpinned by:

- Single clinical leadership and governance arrangements;
- Combined medical and senior nursing workforce;
- Consistent standards, guidelines, protocols and operating procedures;
- A single GM research and audit strategy (Clinical Trials);
- Combined training and education arrangements;
- Consolidation of services to optimise scale and improve efficiency, where required;
- A single performance management framework.

7.3 The implementation of the future service delivery models will result in achievement of the following:

- Improved patient outcomes and experience of care;

- Equity of access and choice of treatment modalities for the GM Population;
- All agreed GM standards and other requirements identified in the GM Service Specification;
- Build on existing established examples of best practice so that the model builds on “the best of the best”;
- Optimise care for patients and access to clinical expertise in all cases, including patients with co-morbidities;
- Secure excellent clinical leadership, team working and real job satisfaction and maximise opportunities for education, surgical training, research and innovation in order to deliver excellent services;
- Support the recruitment and retention of specialist staff;
- Lead to controlled and consistent adoption of evidence-based innovation including use of technology;
- Support the active management of referral and treatment thresholds and streamlining patient pathways;
- A future-proofed service;
- Demonstrate the most effective use of Greater Manchester NHS and Social Care funding and optimise the use of existing resources and infrastructure.

7.4 The transformation process will be designed and implemented on the basis of the following principles: ongoing patient, clinical and stakeholder engagement, transparency and openness, co-design of evidence-based standards, collaboration and ongoing communication. It will inform the evidence-based commissioning decision on future GM service provision.

7.5 The outcome from the transformation process will ensure that the proposed optimal service configuration is capable of delivering the desired world class service – delivering the highest international standards in clinical outcomes, patient experience, training, research and education for patients and the next generation of cancer clinicians.