



# STAKEHOLDER INFORMATION PACK

## Sizing the future hospital

West Hertfordshire Hospitals Trust

March 2019

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# STATUS OF THIS REPORT

This information pack has been produced to share summary information from analysis which has been used in determining the potential options for the acute reconfiguration of West Hertfordshire Hospital Trust (WHHT) estate. The options appraisal is to support the refresh of the acute reconfiguration Strategic Outline Case during 2018/19.

The analysis summarised in these packs is based on data and assumptions provided by WHHT, Hertfordshire and West Essex Sustainability and Transformation Partnership, and professional advisors. Publicly available data was also gathered from Office of National Statistics. These data and assumptions were gathered during or before December 2018, and analysis has been conducted over the period from December 2018 through to February 2019.

The analysis included in this document does not indicate a preferred option or pre-suppose the outcome of the current shortlisting process. No decisions have yet been made regarding any preferred solution(s).

# SIZING THE FUTURE HOSPITAL

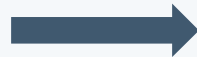
To determine how big our hospitals need to be in the future, we must forecast how demand for our services is likely to change:

*We must account of all the reasons why demand may change over time*

*We must also account for the changing ways in which we will meet that demand*

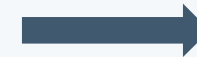
## Current Activity

*Split by types of patient and services being used*



## Future Activity

*Split by types of patient and services being used*



## Future Capacity

*Split by types of space required, e.g. beds and theatres*

### Demographic Growth

*The population is increasing and getting older*

### Non-Demographic Growth

*The profile of health needs across the population is changing*

### Demand Management

*More preventative actions and care is delivered closer to home*

### Resource Usage

#### e.g. Length of Stay (LOS)

*Patients are staying in hospital for shorter periods of time*

### Resource Utilisation

#### e.g. Bed Occupancy

*We are becoming more efficient at using our resources*

### Resource Availability

#### e.g. Opening Hours

*We plan to increase the availability of some of our services*

# SUMMARY OF KEY ASSUMPTIONS

Assumption	Source	Notes
<b>Demographic growth (DG)</b>	Office for National Statistics (ONS) – population projections 2016-based [by age cohort].	This has changed slightly from 2014-based population projections used in STP* Medium Term Financial Plan (MTFP) dated October 2018. [1% vs 1.3%].
<b>Non-demographic growth (NDG)</b>	Six years past activity data from WHHT [by activity type – known as point of delivery (POD)].	This shows average NDG of 1.3% (vs 1% in STP MTFP). Total annual growth is on average 2.3% in both STP MTFP and this analysis.
<b>Demand management (DM or ADM)</b>	As per STP Medium Term Financial Plan (MTFP), dated October 2018.	Latest STP wide assumptions, which assume growth is managed via demand management interventions and service transformation. Different scenarios are tested and the impact of 75% and 50% achievement shown in this pack.
<b>Resource Usage</b>	Length of Stay (LOS) benchmarked against national averages.	Improvement to the nearest quartile assumed. This is mainly to median, and sometimes to upper quartile.
<b>Resource Utilisation and Availability</b>	Taken from monthly WHHT occupancy reports.	Bed occupancy moves from 92% to 85%. Theatre capacity moves from 70% to 75%. These were developed in discussion with divisional managers and the Trust's performance team.
<b>Estates baseline</b>	920 beds; 13.5 theatres. Taken from monthly occupancy reports.	Total bed numbers include intermediate care beds, delivery suites, endoscopy beds, assessment beds.
<b>Estates planning</b>	Health Building Notes (HBN) and Health Technical Memorandum (HTM)	New buildings planned to NHS guidelines but with 15% derogation recognising potential space efficiencies with a detailed design brief.

\* STP = Hertfordshire and West Essex Sustainability and Transformation Partnership

# CHANGE IN DEMAND – GROWTH ASSUMPTIONS

The table below sets out the headline growth assumptions assumed over the next 20 years to calculate the overall change in demand for different types of service:

Point of Delivery (POD)	Baseline Activity	Demographic Growth	Non-Demographic Growth	Demand Management	Overall Change
Accident & Emergency (A&E)	140,000	15%	27%	-31%	1%
Non-Elective (NEL)	56,000	20%	26%	-37%	-4%
Elective (EL)	8,000	20%	27%	-24%	16%
Day Case (DC)	40,000	21%	34%	-24%	23%
Outpatients (OP)	473,000	19%	35%	-36%	3%

- *Baseline Activity* – based on 3 years activity data, adjusted for historic growth (rounded to nearest 1,000 in this table)
- *Demographic Growth* – based on Office National Statistics Population Projections 2016-base (released May 2018)
- *Non Demographic Growth* – based on 6 years activity data from 12/13 to 17/18
- *Demand Management* – based on Hertfordshire and West Essex STP Medium Term Financial Plan (October 2018)
- *A&E activity includes both Type 1 (WGH) and Type 3 (SACH & HHH)*

# CHANGE IN CAPACITY – LENGTH OF STAY

The table below outlines the change in average length of stay that it is assumed can be achieved. This is based on a comparison with national benchmarks.

Admission Type	Speciality Group	Current (17/18)	National Benchmark*	Modelled Improvement**
Non Elective	Medical	5.7	5.1*	10%
Non Elective	Surgical	3.8	3.6	10%
Non Elective	Paediatrics	2.0	1.7*	10%
Non Elective	Maternity	1.7	1.5	20%
Elective	Medical	5.4	4.9	10%
Elective	Surgical	2.8	2.6	10%
Elective	Paediatrics***	-	2.2	10%
Elective	Maternity	2.0	1.9	5%

\* Benchmark is national median except for Medical Non-Elective and Paediatric Non-Elective, which is national upper quartile.

\*\* Agreed with Trust performance team as appropriate for including in Long Term Forecasts. Rounded to nearest 5%

\*\*\* Reporting of Day Case and Electives for paediatrics currently under review. So assume similar improvement to adult electives.

# CHANGE IN CAPACITY – OCCUPANCY & AVAILABILITY

The table below outlines the change in occupancy or capacity that could potentially be achieved. These assumptions were developed alongside divisional managers and performance leads

Resource	Site/Specialty	Current	Planned
Inpatient Bed (Elective)	WGH site	92%	85%
Inpatient Bed (Elective)	Planned Care site	50%	75%
Inpatient Bed (Non-Elective)	Medical & Surgical	92%	85%
Inpatient Bed (Non-Elective)	Paediatric	50%	60%
Inpatient Bed (Non-Elective)	Maternity	75%	75%
Day Case Bed	Medical & Surgical	40%	40%
Day Case Bed	Paediatric & Maternity	20%	30%
Theatre (Elective)	All	70%	75%
Theatre (Non-Elective)	All	65%	65%
Theatre (Day Case)	All	65%	75%
Outpatient Rooms	All	4.5-day week*	6-day week

\* This is an average across the week, less clinics are run on Fridays.

# CAPACITY REQUIREMENTS

Combining the assumptions outlined in the previous slides generates capacity requirements for our future hospital services. These are then run through scenarios to look at the impact of different levels of Demand Management and Operational Efficiency being achieved – two of which are shown in the table below.

Resource	Current 2018	Future 2038 (100% DM) (100% efficiencies)	Scenario 1 (75% DM) (50% efficiencies)	Scenario 2 (50% DM) (0% efficiencies)
<b>Beds *</b>	<b>880</b>	<b>950</b>	<b>1040</b>	<b>1130</b>
<b>Theatres **</b>	<b>13</b>	<b>15</b>	<b>17</b>	<b>19</b>
<b>Consulting Rooms ***</b>	<b>100</b>	<b>80</b>	<b>110</b>	<b>140</b>

\* Includes Delivery Suites, Day Care beds, ICU beds/cots, HDU beds. Excludes some Assessment/Observation areas and Intermediate care beds at Hemel Hospital which are provided by the CCG.

\*\* Current theatres assumes 4.5 (General Watford) 3 (Obstetrics & Gynaecology Watford), 5.5 (General SACH)

\*\*\* Includes Consulting and Examination rooms. Excludes Treatment and Interview rooms.



# ESTATES REQUIRMENTS

A full schedule of accommodation is then produced to meet the future capacity requirements. This is produced in line with Health Building Notes and Health Technical Memorandum.

We have sized the hospital footprint required for each option, based on a schedule of accommodation for each of our clinical models, and assessed whether there is space for them to be accommodated within our existing sites:

Model	Site	Size*	WGH	SACH	HHH
One site	Emergency and planned care	c.75,000m <sup>2</sup>	✓	✗	✗
Two sites	Emergency care	c.64,000m <sup>2</sup>	✓	✗	✗
	Planned care	c.17,000m <sup>2</sup>	✓	✓**	✓
Three sites	Emergency care	c.64,000m <sup>2</sup>	✓	✗	✗
	Planned surgery	c.15,000m <sup>2</sup>	✓	✓	✓
	Planned medicine	c.5,000m <sup>2</sup>	✓	✓	✓

\* Approximate m<sup>2</sup> based on indicative Schedules of accommodation. This excludes 2,000m<sup>2</sup> per Urgent Treatment Centre

\*\* Off site car parking would have to be provided for staff and visitors