



New Health Deal for Trafford: Report regarding Transport Implications

12th December 2012

Executive Summary

Following concerns raised by members of the public, and others, in the pre-consultation and consultation engagement process work has been undertaken to answer the following questions:

- Which hospital would Trafford residents, who currently use TGH attend if full A&E services were not available at Trafford General Hospital
- How many patients are likely to experience longer journeys to hospital as a result of New Health Deal proposals and how long will these journeys be?
- How many visitors are likely to experience longer journeys to hospital as a result of New Health Deal proposals and how long will these journeys be?
- Of those affected how many would need a public/community transport solution?
- What are the key transport issues that need to be addressed?

The work to answer these questions has been overseen by the Transport project group and the results are presented in this paper. Work to outline solutions to the transport issues raised is presented in the associated document 'Are we there yet? The social needs transport implications of proposed changes to hospital services'.

This paper identifies that around 6,700 patients per year will experience a longer journey to hospital that will not be made by emergency transport (ie ambulance), as a result of these changes and that the additional journey length will vary from between 2-10km. The associated number of visitors is expected to be in the region of 23,000 per year. It is anticipated that the majority of these journeys will be undertaken by private transport.

Concerns exist around residents who live in the M31 postcode (Partington/Carrington). This population may currently experience difficulties accessing hospital services and may have to travel up to 16km to access certain emergency hospital services under New Health Deal proposals.

It is thought that around 7,500 patients/visitors per year will require community/public transport solutions to help them access alternative hospital services. These include patients and visitors travelling from Trafford to central Manchester, south Manchester and Salford and patients/visitors travelling from central Manchester to Trafford.

Key issues that need to be addressed include car parking capacity and cost, improved communications regarding community/public transport services currently available and a 'sign-posting' service to help those who need to access public/community transport. The latter of these two issues are discussed in the associated paper 'Are we there yet?'. Assurance regarding additional car park capacity has been provided by local hospital trusts. In addition, work undertaken in focus groups highlighted that many local people are not aware of the car park cost concession schemes that are available at local hospital Trusts. It is recommended that more is done to communicate these arrangements.

1.0 Introduction

The New Health Deal for Trafford proposes changes to the way that hospital services are provided in Trafford and the way that planned orthopaedic services are provided at Manchester Royal Infirmary. Pre-consultation engagement highlighted public concerns regarding the travel implications for patients and visitors who may need to travel to alternative hospital sites as a result of these proposed changes.

Public concerns were voiced regarding two main areas:

- The impact of longer ambulance journeys and the impact this might have on patient safety/outcomes
- The impact on patients and visitors who have to travel, by means other than transport, to access hospital services that may no longer by available at Trafford General Hospital and Manchester Royal Infirmary. This impact includes: the number of people affected, the availability of public/community transport, associated cost of longer journeys and availability/cost of car parking (car parking at Trafford General Hospital is currently free).

To respond to these concerns a transport sub-group of the Strategic Programme Board was established. It was agreed that clinical issues relating to ambulance journeys would not be considered by this group but that other transport issues would be addressed. The results of the work, overseen by the transport group, are outlined in this report. A supplementary report entitled 'Are we there yet? The social needs transport implications of proposed changes to hospital services' makes suggestions for how transport services might be changed, to respond to the changes outlined in the New Health Deal proposals.

2.0 Workstreams

Work, regarding transport issues, has focussed around three main areas: data collection; data analysis and proposed solutions. Further detail regarding each of these work areas is provided below in Table 1.

Table 1: Further detail regarding transport work areas

Data collection	 Data, produced by Transport for Greater Manchester (TfGM) regarding private and public transport travel times for Trafford residents to hospitals other than TGH. Data, produced by Transport for Greater Manchester (TfGM) regarding public transport travel times for Manchester residents to Trafford General Hospital. Data, produced by NWAS, regarding ambulance travel times, for Trafford residents, to TGH and other local A&E departments. Data, produced by MottMacDonald, regarding road distance travelled by those who used TGH A&E in 11/12 and road.
	travelled by those who used TGH A&E in 11/12 and road distance travelled if they went to 'next nearest' A&E

	 Data, produced by NHS Greater Manchester, regarding road distance travelled by those who used planned orthopaedic services at MRI in 11/12 and road distance travelled if they went to TGH instead. Validation of travel distance/times by 'mystery shoppers' Survey of patients attending TGH A&E regarding transport use and preference for alternative hospital Feedback from focus groups/other engagement regarding transport use and issues.
Data analysis	 Which hospital would Trafford residents, who currently use TGH, attend if full A&E services were not available at Trafford General Hospital? How many patients are likely to experience longer journeys to hospital as a result of New Health Deal proposals and how long would these journeys be? How many visitors are likely to experience longer journeys as a result of New Health Deal proposals and how long will these journeys be? Of those affected how many would need a public/community transport solution? What are the key transport issues that need to be addressed?
Proposed solutions	Stakeholder events with public/community transport providers to devise solutions to address need and respond to issues raised in focus groups

The outcomes of the work to collect and analyse data, and the engagement work undertaken will be described in this report. The proposed solutions are the outlined in a supplementary report entitled 'Are we there yet? The social needs transport implications of proposed changes to hospital services'.

3.0 Data collection

3.1 Transport for Greater Manchester data (March 2012)

Travel times data was commissioned from Transport for Greater Manchester (TfGM) to support the development of the pre-consultation business case and the appraisal of different options for the New Health Deal for Trafford work. This analysis was undertaken to obtain a high level understanding of the travel implications.

The data included, for all Trafford residents (postcodes covered by NHS Trafford) travel times by private and public transport to local hospitals including:

- Trafford General Hospital (CMFT) for comparison purposes
- Salford Royal Infirmary (SRFT)
- Manchester Royal Infirmary (CMFT)
- Wythenshawe Hospital (UHSM)

In addition, similar data was completed for all residents who live in postcodes covered by NHS Greater Manchester regarding their travel times to Trafford General Hospital.

For private transport, travel bands/isochrones of the following intervals were applied for travel between 08.00-09.00, 10.00-16.00 and 17.00-18.00, covering busy morning and evening rush hours and quieter day time hours:

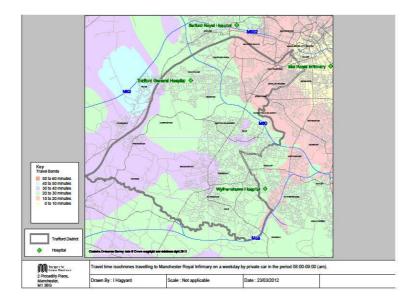
- o 50-60 mins
- o 40-50 mins
- o 30-40 mins
- o 20-30 mins
- o 10-20 mins
- 0-10 mins

Similarly, for public transport travel bands/isochrones of the following intervals were applied for travel between 07.00-09.00, 14.00-16.00, 18.0-20.00 and 20.00-22.00, covering busy morning and evening rush hours, quieter day time hours and visiting times:

- o 60-75 mins
- o 45-60 mins
- o 30-45 mins
- o 20-30 mins
- o 15-20 mins
- o 10-15 mins

This data, provided a series of isochrone maps. All maps are provided in Appendix I, however, an example, below in Figure One, shown the results for private transport for Trafford residents to Manchester Royal Infirmary between 8.00-9.00.

Figure One: Isochrone map: private transport for Trafford residents to Manchester Royal Infirmary 8-9am



Based on these maps a summary of the results from the private transport analysis is provided below:

Travel to Manchester Royal Infirmary (MRI)/CMFT (all Trafford residents: private car)

- For peak times of the day including 08:00-09:00 and 17:00-18:00 the majority of Trafford residents would be able to access MRI within 30 minutes, with the exception of residents in Broadheath, Partington, Dunham and parts of Sale, for which the journey would take up to 40 minutes; and
- For off-peak times of day 10:00-16:00 all Trafford residents would be able to access MRI within 30 minutes, many within 10-20 minutes.

Travel to Wythenshawe/ UHSM (all Trafford residents: private car)

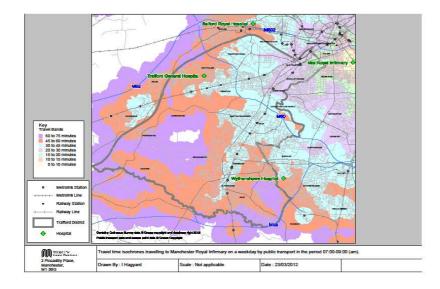
- For peak times of the day including 08:00-09:00 and 17:00-18:00, the majority of Trafford residents would be able to access Wythenshawe within 20 minutes, with the exception of a small number of residents in the West and North of the borough for which the journey would take 30 minutes; and
- For off-peak times of day 10:00-16:00, all Trafford residents would be able to access Wythenshawe within 20 minutes.

Travel to Salford Royal/ SRFT (all Trafford residents: private car)

- For peak times of the day including 08:00-09:00 and 17:00-18:00, the majority of Trafford residents would be able to access Salford Royal within 30 minutes, many within 20 minutes; and
- For off-peak times of day 10:00-16:00, the majority of Trafford residents would be able to access Salford Royal within 20 minutes, or 30 minutes for some residents in the south of the borough.

A further example, Figure Two, shows the results for public transport for Trafford residents to Manchester Royal Infirmary between 07.00-09.00.





This analysis indicates that the majority of Trafford residents can access a hospital, other than Trafford General Hospital, by public transport within 45 minutes of their residence. However, some residents in the M31 postcode may experience a journey that take up to 75 minutes.

For Manchester residents, who may have to travel to Trafford General Hospital, many will be able to travel, by public transport, and will experience a journey of up to 45 minutes. A number will also experience a journey of around 75 minutes. Patients who travel to Trafford General Hospital as part of their orthopaedic treatment will only need to do so to receive their surgical procedure; their outpatient/diagnostic tests will continue to be delivered at Manchester Royal Infirmary.

The number of patients who are likely to use public transport to access hospital services will be discussed further in section 4.0.

3.2 Analysis undertaken by North West Ambulance Service (March and July 2012)

Although this report does not consider the clinical implications of increased journey length for those patients who are taken to hospital by ambulance it is necessary to understand where patients might be taken and to have an indication of the journey times involved.

North West Ambulance service undertook, in March 2012, a piece of data analysis in order to determine where patients may be conveyed, by ambulance, if they were not taken to Trafford General Hospital Accident and Emergency Department. This work was originally used to aid in the activity and financial planning work undertaken within the pre-consultation business case. NWAS used a 10/11 data set of all patients who were conveyed to Trafford General Hospital, by ambulance, and considered the 3 digit postcode of ambulance 'pick-up'. Using travel time data, and the local knowledge of ambulance crews NWAS were able to estimate the % of patients that would be transferred to Salford Royal Infirmary, Manchester Royal Infirmary and University Hospital South Manchester. Estimates regarding the additional travel times of these journeys were also provided.

NWAS replicated this work in July 2012 but used the more up to date, 11/12, data set . This analysis allowed the % of patients that would be transferred to Salford Royal, Manchester Royal Infirmary and University Hospital South Manchester to be re-estimated and additional travel times for these journeys to be calculated.

The outcome of this work is shown below in Table Two. It is important to note that the travel times provided by NWAS reflect 'standard' travel times rather than 'blue light' travel times which are likely to be substantially shorter.

Table Two: NWAS analysis

NWAS Analysis 11/12							
Trafford	NWAS	Average	Next nearest	Average travel	Difference		
Postcode	activity from	travel time	A&E	time to next	(mins)		
	post code	to TGH		nearest (mins)			
	(taken to	(mins)					
	TGH)						
M17	236	9.22	SRFT	8	-1.22		
M16	473	16.25	CMFT	7	-9.25		
M32	2048	10	UHSM	12	2		
M41	3396	4.59	SRFT	13	8.41		
M31	754	11.5	UHSM	20	8.5		
M33	1544	12.32	UHSM	13	0.68		
WA13	9	14.32	UHSM	17	2.68		
WA14	129	22.46	UHSM	12	-10.46		
WA15	65	23.24	UHSM	5	-18.24		

Total	8654		
IUlai	0034		

3.3 Analysis undertaken by Mott Macdonald (July 2012)

In order to obtain a greater understanding of where patients, and their visitors, might go to access hospital services, if they were not able to use Trafford General Hospital, and the impact this would have on journey length, Mott MacDonald were commissioned to undertake a separate piece of data analysis.

This work considered the full 6 digit postcode of patient residency for all those who used Trafford General Hospital Accident and Emergency Department in 2011/2012 and calculated the distance, in road km, travelled by each patient to use this service. The same cohort of patients was then used to determine the travelling distance, for each patient, from their postcode to residence of University Hospital South Manchester, Salford Royal Infirmary and Manchester Royal Infirmary. Doing this analysis allowed the 'next nearest' hospital to be calculated, based on road distance. The outcome of this work is shown below in Table Three.

Table Three: Mott Macdonald Analysis

Mott Mad	Mott Mac Analysis 11/12							
Trafford	TGH A&E	Average	Next nearest	Average	Difference	Number	Number	Max km
Postcode	Activity	road km	A&E	road km to	(km)	of	of	Distance
	from post	from		next		patients	patients	from
	code	TGH		nearest		over	over	A&E
						10km	10km	
						from TGH	from next	
							nearest	
							A&E	
M17	2	6.5	SRFT	5.5	-1	0	0	6
M16	2120	8.76	CMFT	5.03	-3.73	7	0	6
M32	8401	5.45	SRFT/CMFT	7.01	1.56	0	0	8
M41	13570	2.78	SRFT	7.77	4.99	0	62	12
M31	3163	7.91	SRFT/UHSM	13.1	5.19	0	3058	16
M33	5001	7.98	UHSM	7.26	-0.72	51	0	10
WA13	113	13.14	UHSM	15.65	2.51	106	113	14
WA14	619	11.29	UHSM	7.09	-4.2	599	13	13
WA15	465	12.21	UHSM	4.8	-7.41	1	1	11

Total	33454			764	3247	

3.4 Analysis undertaken by NHS Greater Manchester (August 2012)

In order to obtain an understanding of the current distance travelled by patients who use planned orthopaedic services at Manchester Royal Infirmary, and how this might change under New Health Deal proposals, a piece of analysis was undertaken by NHS Greater Manchester.

This work considered the full 6 digit postcode of patient residency for all those who used planned inpatient orthopaedic surgical services at Manchester Royal Infirmary in 2011/2012 and calculated the distance, in road km, travelled by each patient to use this service. The same cohort of patients was then used to determine the travelling distance, for each patient, from their postcode to residence of Trafford General Hospital. The outcome of this work is shown below in Table Four.

Table Four: Orthopaedic surgery data

Distances for orthopaedic IP surgery						
Mncr Postcode	Activity from post code	Average road km from MRI	Average road km to TGH	Difference (km)		
M1	22	2.34	12.36	10.02		
M11	113	5.98	15.96	9.98		
M12	82	2.75	10.28	7.53		
M13	90	1.42	9.01	7.59		
M14	212	2.35	9.32	6.97		
M15	80	2.36	8.57	6.21		
M16	81	3.42	9.38	5.96		
M18	200	4.9	14.79	9.89		
M19	199	3.66	7.15	3.49		
M20	124	4.43	9.5	5.07		
M21	94	6.52	8.82	2.3		
M22	27	7.63	9.43	1.8		
M23	20	12	12.6	0.6		
M3	9	2.85	8.15	5.3		
M33	1	13.8	9.2	-4.6		
M4	28	2.96	11.76	8.8		
M40	30	7.06	14.58	7.52		
M8	12	6	14.15	8.15		
M9	17	11.1	18.67	7.57		
Total	1441					

3.5 Validation of travel times/distances

The travel times/distances outlined above provide a good indication of the alternative journey length/times that patients may have to make if New Health Deal proposals are accepted. However, they are based on a paper based exercise and may not reflect the private/public transport situation that could be faced by patients/visitors who make these journeys. In order to test whether the data above was reasonable a number of validation exercises were undertaken.

A number of private transport and public transport journeys between various locations in Trafford and one of the 'alternative' local hospitals were undertaken by either NHS staff or members of the public. For each journey details regarding the time of day that the journey was undertaken, the amount of time the journey took and any associated cost were recorded. This work largely validated the analysis outlined above.

3.6 A&E survey

The data collected goes some way to help understand where patients, who currently use Trafford General Hospital, might choose to go if certain services were not available on this site. However, given that this data is based on road distance/travel time it does not necessarily reflect public perception and therefore behaviour. To try and understand where patients would choose to take themselves, and to understand how they currently access services at Trafford, a transport survey was undertaken at Trafford General Hospital Accident and Emergency Department. This survey took place for two weeks in September 2012. All patients attending A&E, who did not arrive via emergency ambulance, were given a short paper survey and were asked to complete and post into a box located on the reception desk. Completion of the survey was therefore voluntary.

Two hundred and eighty one responses were received. The questions asked, and corresponding results, are shown below.

How did you get to A&E today?					
Answer Options	Response Percent	Response Count			
Public transport (please state below):	5.9%	16			
Car	81.2%	220			
Taxi	4.1%	11			
Ambulance	2.2%	6			
Other (please specify)	6.6%	18			
a	nswered question	271			
	skipped question	10			

If the proposal to change Trafford General Hospital's A&E department to an urgent care centre is agreed, which hospital would you travel to if you had a medical emergency between midnight and 8am?

Answer Options	Response Percent	Response Count
A Central Manchester Hospital (Manchester Royal Infirmary, Royal Manchester Childrens Hospital, St Marys Hospital)	25.5%	70
Salford Royal Hospital (Hope Hospital)	25.5%	70
Wythenshawe Hospital	42.2%	116
Other (please specify)	6.9%	19
ans	swered question	275
s	kipped question	5

Can you explain why you would make this choice?

Answer provided (free text)	Response Percentage	Response Count
Local hospital/Closest to home	60%	151
Easiest to get to/quickest to get to	10%	25
Know how to get there	7%	18
Good hospital reputation/previous experience	10%	25
Would not like to go to other hospital	8%	21
Other	4%	11
	answered question	251
	skipped question	29

3.7 Focused Engagement work

To further understand the concerns regarding transport that were raised within the pre-consultation engagement and consultation process focussed engagement work, regarding transport, took place. This took the form of two focus groups that took place in Urmston and Partington. These locations were selected because it was recognised that residents in Urmston and Partington were likely to be among those most disadvantaged, in terms of travel implications. Residents in Urmston currently live closest to Trafford General Hospital and so will have the longest additional journey to an alternative hospital; residents in Partington currently live furthest from any hospital and so will have the longest overall journey.

A further focus group in Manchester to understand the issues for residents who may need to travel to TGH to receive planned orthopaedic surgery is planned for the 12th December 2012.

Full results of the focus groups are available in Appendix 2. A summary of the themes provided in each is shown below in Table Five.

Table Five: Themes from Focus groups

	Partington	Urmston
Current	Travel by car to hospital but have family	Most people travel to hospital by car but
transport	members who use public transport.	know others who use public transport.
use		
	Public transport is unreliable and	Getting home from hospital via public
	journeys to hospital involve 1 or more	transport is often problematic
	changes	
		Lots of people walk to TGH
	The 1 local taxi driver is no longer in	
	operation and so getting taxis might be	Travel times are affected by whether
	a problem.	football/cricket matches are on and busy
		times at the Trafford Centre.
	Community transport used to be really	
	good but there seem to be issues with	Some people currently use other hospitals
	the new provider.	and after they found their way there the 1st

		time the journey became easier.
		Community transport is generally good, PTS is more unreliable and often arrives late.
Car Parking	Free parking at TGH is great and costs at other sites might be an issue for	Parking at TGH is really good and free
	some	It can take lots of time to find a parking space at an alternative hospital
	Weren't aware of parking concession	
	schemes and feel they could be better	Weren't aware of parking concession
	promoted	schemes and feel they could be better promoted.
Concerns	Public transport not reliable	UHSM is difficult to get to, SRFT and CMFT are easier
	Increased cost of travelling/parking	
		People might not know how to get to
	People might not know how to get to alternative hospital	alternative hosptial
Suggestions	Could people from Partington have later appointments to allow them to	Improve signage to other hospitals
	travel to hospital for reduced cost (after 10am)	Fixed price taxi fares for trips to hospital
		Need quality communications regarding
	Would consider using Warrington General – might be nearer	how to get to alternative hospitals including maps/travel instructions etc
	Could maps/travel directions/travel instructions be more available ie in appointment letters, health centres, libraries etc	Provide shuttle buses on large hospital sites so people are easily able to find their way from parking space to place of appointment
	Improved signage to hospitals	

4.0 Data Analysis

The data outlined in section 3.0 was collected to attempt to answer the following questions

- Which hospital would Trafford residents, who currently use TGH, attend if full A&E services were not available at Trafford General Hospital?
- How many patients are likely to experience longer journeys to hospital as a result of New Health Deal proposals and how long will these journeys be?
- How many visitors are likely to experience longer journeys as a result of New Health Deal proposals and how long will these journeys be?
- Of those affected how many would need a public/community transport solutions?
- What are the key transport issues that need to be addressed?

To answer some of the questions above further information was needed and a certain degree of assumption had to be made. The details of this are provided below.

4.1 Which hospital would Trafford residents, who currently use TGH, attend if full A&E services were not available at Trafford General Hospital and how long will these journeys be?

New Health Deal proposals outline that the current A&E at TGH would change to become and Urgent Care Centre that would be open 8am-midnight. It is thought that 75%¹ of patients who currently use TGH A&E can continue to use the Urgent Care Centre. However, ambulance crews will take certain categories of patients directly to an alternative A&E and a certain number of patients will decide to take themselves to an alternative A&E. To determine where patients will travel to the Strategic Programme Board considered a range of scenarios and agreed that the most sensible one to use, for planning purposes, incorporated both the NWAS analysis outlined in section 3.2 and the A&E survey outlined in section 3.6. A full list of all scenarios is provided in Appendix 3. The agreed scenario shows the following percentage split

Trust receiving TGH Deflected activity	% deflection
UHSM	50% ambulance, 42% self presenters
CMFT	8% ambulance, 26% self presenters
SRFT	42% ambulance, 26% self presenters

Using 10/11 TGH A&E activity data² and assuming 75% will continue to be seen at Trafford, this corresponds to the following, daily, A&E activity deflection

Trust receiving TGH Deflected activity	Daily A&E deflection
UHSM	12
CMFT	5
SRFT	8

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¹ New Health Deal for Trafford Pre-consultation business case

² TGH A&E attendances 10/11

4.2 How many patients are likely to experience longer journeys to hospital as a result of New Health Deal proposals?

In order to answer this question each of the New Health Deal proposals will be considered separately and the totality addressed at the end of this section.

4.2.1 Accident and Emergency, Acute Medicine, Acute Surgery, Critical Care Level 3

Previous work indicates that around 25% of 10/11 TGH A&E attendances will transfer to an alternative hospital site. Around 44% of these will be conveyed by ambulance. The majority of non-elective admissions at TGH are as a result of an A&E attendance (there were relatively few direct admissions) and so admission to an acute surgical, acute medical or critical care level 3 service is likely to be incorporated within these numbers.

Using the postcode analysis outlined in section 3.3, and the assumptions outlined above, the transport implications for users of these services are shown below in Table Six.

Table Six: Implications for A&E service users

Postcode	% use of TGH A&E service	Approx. No attendances that will transfer to alternative hospital*	Approx. No attendances that will travel to alternative hospital by nonemergency transport**	Additional average travel distance to next nearest A&E (km)
M17	0.01	1	0	-1
M16	5.50	530	297	-3.73
M32	21.81	2100	1176	1.56
M41	35.24	3393	1900	4.99
M31	8.21	791	443	5.19
M33	12.99	1250	700	-0.72
WA13	0.29	28	16	2.51
WA14	1.61	155	87	-4.2
WA15	1.21	116	65	-7.41

Total	8364	4684	
TOLAI	0304	4004	

^{*} based on assumption that TGH will retain 75% current attendances

This data shows that only residents in postcode areas M32, M41, M31 and WA13 will experience longer journey distances by having to attend a hospital other than Trafford General Hospital. These postcode areas are highlighted in the table above. The total number of patients from these areas is 6284 although only 3535 will make this journey 'themselves' (ie will not be taken by emergency

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^{**} based on current assumption that 44% TGH A&E attendances are conveyed by ambulance

³ New Health Deal for Trafford,pre-consultation business case

⁴ NWAS activity analysis 11/12

ambulance). The additional journey distance that might be travelled varies from an average of an additional 1.56km for those living in M32 to around 5km for those living in M41 and M31. However, residents living in M31 will have the longest overall journey to travel to an alternative hospital with the maximum being around 16km⁵. Travel time information indicates that the longest travel time, by means other than public transport/foot, to a hospital other than TGH is likely to be around 20 minutes⁶, based on 'standard' travelling conditions . This relates to patients living in the M31 postcode area. Those living in other parts of the borough can access alternative hospitals in shorter times with the average journey taking around 12 minutes. It is important to note that these travel times do not reflect an ambulance travelling under 'blue light' conditions which is likely to encounter a shorter journey time. The 'mystery shopper' information largely supports this data although any significant traffic issue such as an accident on the M60 motorway may cause private transport journeys to be longer. Rush hour travel times may also be longer.

The analysis of public transport travel times indicates that the longest journey for people in Trafford to access emergency hospital care, by public transport, is likely to be 60-75 minutes with much of the population able to make the journey within 45 minutes. This is reflected in the 'mystery shopper' experience although issues relating to the number of changes that have to be made, and the reliability of public transport should not be discounted. However, results of the A&E survey indicate that the number of people who use public transport to access emergency hospital services is relatively low (around 6%), this view is shared by local clinicians.

It is interesting to note the range of factors that influence where members of the public would choose to go in the event that services changes at TGH. The majority (60%) of responders indicated that the location of the hospital, in terms of the one nearest to them, would be the biggest contributing factor in deciding where they would choose to present. However, 10% reported that the reputation of a local hospital and/or having a previous positive experience at that hospital would be the biggest factor in their decision making process.

4.2.2 Planned Inpatient Surgery

Under New Health Deal proposals all planned inpatient surgery (except orthopaedics) that currently takes place at Trafford General Hospital is proposed to transfer to Manchester Royal Infirmary. Currently there are around 800 Trafford patients who receive these services at Trafford General Hospital. Outpatient services will remain at TGH and so any patient who continues to be referred to TGH will have their surgery performed at MRI. Therefore patients may choose to do one of two things:

- Continue to be referred to TGH in the knowledge that their outpatient appointment will be undertaken at TGH but their surgery will be undertaken at MRI.
- Choose to be referred to their next nearest hospital that performs a range of IP surgical procedures (UHSM/MRI/SRFT/NMGH/Stepping Hill Hospital) for an outpatient appointment knowing their surgery is likely to take place at the same hospital.

⁵ See table Three

⁶ See table Two

The transport implications for the latter of these two options is likely to be broadly similar to those outlined in section 4.1.1 in that those living in postcode areas M32, M41 and M31 are likely to experience longer travelling distances. The total number of patients from these areas is likely to be in the region of 400 patients and it is assumed the vast majority of these will make their own arrangements for this journey (ie none will be the result of emergency ambulance transfer). The former of these will have travel implications as outlined below in Table Seven.

Table Seven: Implications for Planned IP services

Postcode	% use of TGH planned IP surgical service	Approx. Number of attendances that will transfer to an alternative hospital*	Additional average travel distance to MRI
M17	0.00	0	-0.5
M16	5.24	48	-3.71
M32	13.43	123	2.84
M41	29.91	274	9.34
M31	5.35	49	10.71
M33	24.78	227	3.82
WA13	0.55	5	10.46
WA14	3.82	35	3.71
WA15	4.59	42	1.79

Total 803	
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^{*} based on assumption all activity except Orthopaedics will transfer

For residents who choose to receive an outpatient appointment at TGH, and therefore have surgery at MRI, nearly all will experience an increased travel distance. The biggest additional journey will be in the region of 10km. It is estimated that these patients will have a total journey of around 27km.

Patients who make this journey by public transport will experience a journey time within 60 minutes except for those living in Partington/Carrington and Broadheath who may experience a journey that takes over 75 minutes. Residents in these areas may be especially keen to exercise their right to choose to attend a closer hospital in which case the public transport travel times are likely to be the same as those outlined in section 4.2.1.

4.2.3 Planned Orthopaedic Surgery

Under New Health Deal proposals the majority of all planned orthopaedic surgery that currently takes place at Manchester Royal Infirmary will transfer to Trafford General Hospital. Currently there are around 2500 patients who receive these services at Manchester Royal Infirmary. Outpatient services will remain at MRI and so any patient who continues to be referred to MRI will have their surgery performed at TGH. Therefore patients may choose to do one of two things:

- Continue to be referred to MRI in the knowledge that their outpatient/diagnostic tests will be undertaken at MRI but their *surgery* will be undertaken at TGH.
- Choose to be referred to their next nearest hospital that performs orthopaedic surgery (UHSM/PAHT/SRFT) for an outpatient appointment knowing their surgery is likely to take place at the same hospital.

The former of these will have transport implications, for Manchester residents, as outlined below in Table Eight.

Table Eight: Implications for patients who use planned orthopaedic surgical services

Postcode	% use of MRI Orthopaedic service	Approx. Number of attendances that will transfer to an alternative hospital*	Additional average travel distance to TGH
M1	1.48	37	10.02
M11	7.62	190	9.98
M12	5.53	138	7.53
M13	6.07	152	7.59
M14	14.30	357	6.97
M15	5.39	135	6.21
M16	5.46	137	5.96
M18	13.49	337	9.89
M19	13.42	335	3.49
M20	8.36	209	5.07
M21	6.34	158	2.3
M22	1.82	46	1.8
M23	1.35	34	0.6
M3	0.61	15	5.3
M33	0.07	2	-4.6
M4	1.89	47	8.8
M40	2.02	51	7.52
M8	0.81	20	8.15
M9	1.15	29	7.57

Total	2429	
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^{*} based on assumption total activity (IP &DC) 2,500 and all will transfer

For residents who live in central Manchester, and choose to receive an outpatient appointment at MRI, and therefore planned orthopaedic surgery at TGH, all will experience an increased travel distance. The biggest additional journeys will be in the region of 10km with the longest journeys being around 19km for those patients who live in the M9 postcode.

Many of these residents will be able to complete this journey, by public transport, within 45 minutes. However, for some, the journey may take up to 75 minutes.

4.2.4 Total number of patients who will experience longer journeys

The total number of patients who will experience longer journeys, by means other than emergency transport, are outlined below in Table Nine.

Table Nine: Total number of patients affected

Clinical Area	Total number of Trafford/Manchester patients who will experience longer journeys
A&E	3535
IP Surgery (except orthop)	755
Planned Orthopaedics	2429

Total	6719
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The total number of patients who will experience longer journeys as a result of New Health Deal proposals is approximately 6,700 per year which equates to around 18 patients per day.

However, this calculation assumes all patients who currently use planned surgical services at TGH/MRI will choose to access services in the same way and do not exercise choice to use a potentially closer, alternative, hospital site in Greater Manchester. In addition, a large number of these patients currently use private transport to access some of the services outlined above. There is no reason to assume that this behaviour will change. The number of patients that are likely to require public/community transport to access services on alternative hospital sites will be discussed in section 4.4.

The additional journey length varies from 2km to around 10km. The longest journey to receive emergency care is thought to be around 16km (when TGH is not open) and the longest journey to receive planned care is around 27km (if patients choose to access services according to current flow rather than nearest hospital)

4.3 How many visitors are likely to experience longer journeys to hospital as a result of New Health Deal proposals and how long will these journeys be?

The impact on visitors is particularly hard to assess as no data exists that captures the postcode of residence for those visiting others in hospital. In addition, no single patient receives a 'standard' number of visitors and so the volume of visitors is also difficult to determine. However, in order to form an estimate of the impact the New Health Deal proposals might have on visitor journeys the following, high level, assumptions have been used:

- Visitors originate from the same postcode area as the patient
- Each patient receives one visitor, from this postcode, per day for their stay in hospital

- Average length of stay for patients who are admitted to hospital with an emergency medical/surgical condition will have an average Length of Stay of 6 days. Approximately 4,000 non-elective admissions will transfer from TGH under New Health Deal proposals.⁷
- Average length of stay for patients who are admitted to hospital for planned (non-orthopaedic) surgery will have an average Length of Stay of around 3 days
- Average length of stay for patients who are admitted to hospital for planned inpatient orthopaedic surgery will have an average Length of Stay of 4 days. Approximately 50% of all planned orthopaedic surgery will require an overnight stay.

The number of visitors, according to these assumptions, who will be affected, by clinical area, is shown below in Tables Ten-Twelve.

Table Ten: Visitors to Emergency Admissions

Visitors to I	Emergency Admis	sions		
Postcode	% use of TGH A&E service	Approx. No admissions that will transfer to alternative hospital*	Approx. Number of additional visitors affected**	Additional average travel distance to next nearest A&E (km)
M17	0.01	0	2	-1
M16	5.50	220	1320	-3.73
M32	21.81	872	5234	1.56
M41	35.24	1410	8458	4.99
M31	8.21	328	1970	5.19
M33	12.99	520	3118	-0.72
WA13	0.29	12	70	2.51
WA14	1.61	64	386	-4.2
WA15	1.21	48	290	-7.41

Total 3475 20849

^{*} based on assumption 4,000 total admissions will transfer

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^{**} based on 1 visitor per day average LoS 6 days

⁷ New Health Deal for Trafford Pre-consultation business case

Table Eleven: visitors to planned IP surgical procedures

Visitors to Planned IP Surgery (except orthopaedics)				
Postcode	% use of TGH planned IP surgical service	Approx. Number of attendances that will transfer to an alternative hospital*	Approx. Number additional visitors affected **	Additional average travel distance to MRI
M17	0.00	0	0	-0.5
M16	5.24	48	144	-3.71
M32	13.43	123	369	2.84
M41	29.91	274	822	9.34
M31	5.35	49	147	10.71
M33	24.78	227	681	3.82
WA13	0.55	5	15	10.46
WA14	3.82	35	105	3.71
WA15	4.59	42	126	1.79

Total	803	2409	

^{*} based on assumption all activity except Orthopaedics will transfer

^{**} based on assumption that all activity will transfer with ALOS 3 days and 1 visit per day

Table Twelve: visitors to planned orthopaedic services

Visitors to Planned Orthopaedic Surgery				
Postcode	% use of MRI Orthopaedic service	Approx. Number of attendances that will transfer to an alternative hospital*	Approx. Number additional visitors affected**	Additional average travel distance to TGH
M1	1.48	37	74	10.02
M11	7.62	190	381	9.98
M12	5.53	138	276	7.53
M13	6.07	152	303	7.59
M14	14.30	357	715	6.97
M15	5.39	135	270	6.21
M16	5.46	137	273	5.96
M18	13.49	337	674	9.89
M19	13.42	335	671	3.49
M20	8.36	209	418	5.07
M21	6.34	158	317	2.3
M22	1.82	46	91	1.8
M23	1.35	34	67	0.6
M3	0.61	15	30	5.3
M33	0.07	2	3	-4.6
M4	1.89	47	94	8.8
M40	2.02	51	101	7.52
M8	0.81	20	40	8.15
M9	1.15	29	57	7.57

Total	2429	4858	
1 Otal		1050	

^{*} based on assumption total activity (IP &DC) 2,500 and all will transfer

The travel implications, in terms of additional distance and/or journey time is the same for visitors as for patients and is outlined, above in section 4.2. The indicative number of visitors patients who will experience longer journeys as a result of New Health Deal proposals is therefore shown below

^{**} based on assumption that all 50% is IP activity with ALOS 4 days and 1 visit per day

Clinical Area	Total number of Trafford/Manchester visitors who will experience longer journeys
A&E	15732
IP Surgery (except orthop)	2265
Planned Orthopaedics	4855

Total	22852
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The estimated number of visitors who will experience longer journeys as a result of New Health Deal proposals is approximately 23,000 per year which equates to around 60 visitors per day. However, this calculation is based on a great deal of assumption and should be subject to further sensitivity analysis once the results of the New Health Deal consultation is known. The number of visitors that are likely to require public/community transport to visit patients on alternative hospital sites will be discussed in section 4.4.2.

The additional journey length varies from 2km to around 10km. The longest total journey length for those visiting patients who have been admitted non-electively seems to be around 16km, the longest total journey length for those visting patients who are admitted electively is in the region of 27km (if patients choose to access services according to current flow rather than nearest hospital).

4.4 Of those adversely affected how many will need community/public transport solutions?Sections 4.2 and 4.3 indicate the number of patients and visitors that may experience longer travelling distances/times as a result of the New Health Deal proposals. However, in order to ensure appropriate transport solutions are put in place for these two groups it is necessary to understand how many of these patients/visitors would require a public/community transport solution in order to access alternative hospital sites. This is considered, for each of the two groups separately, below.

4.4.1 Patients

Section 4.2.4 estimates that around 6,700 patients will experience a longer journey to an alternative hospital and will not make this journey by emergency ambulance. However, the survey conducted in Accident and Emergency indicates that, of all the patients who did not arrive by emergency transport, around 81% arrived by car. According to the 2001 census car ownership in Trafford is in the region of 75% although this falls to 65% in areas such as Partington (post code area M31) and falls further in eastern areas of Central Manchester to around 50%. However, for the purposes of this document it is assumed that around 75% of journeys made to hospital (and not made by emergency ambulance) will be made by car. This means that around 5,025 of the 6,700 patients who will experience longer travelling journeys will undertake this journey by car. This is likely to have an impact on car parking capacity and costs for those making the journey. **This leaves around**

1675 patients per year, 5 patients per day, who will need to access an alternative method of transport. This transport could include PTS, public transport, private taxi, or community transport.

4.4.2 Visitors

Using similar assumptions to those outlined in section 4.4.1 around 75% of the 23,000 visitors who will experience longer travelling journeys will undertake this journey by car. This equates to around 17,250 visitors. This also leaves around 5,759 visitors per year, or 16 per day, who will need to access an alternative method of transport. This transport could include public transport, private taxi or community transport. The additional impact on car parking capacity/cost should not be forgotten.

4.4.3 Total

Combining the calculations reached in sections 4.4.1 and 4.4.2 around **7434 people** will need a transport solution, other than the use of a private car, in order to access an alternative hospital to the one they currently use. This equates to around **20 people per day**. However, this figure encompasses a wide range of two way journeys including:

Various locations in Trafford – Manchester Royal Infirmary
Various locations in Trafford – Wythenshawe hospital (UHSM)
Various locations in Trafford - Salford Royal (SRFT)
Various locations in Central Manchester – Trafford General Hospital

Using the results of the A&E survey as representative of transport use around 2332 (6 per day) will use public transport, 1603 (4 per day) will use a |Taxi and around 3498 (9 per day) will use another form of transport (PTS/community transport/hospital booked transport etc).

4.5 What issues need to be addressed regarding the impact that New Health Deal proposals will have on transport?

According to the results of the survey undertaken in A&E, the responses obtained in the transport focus groups and the work conducted above there are a number of transport issues that need to be addressed as part of the New Health Deal for Trafford decision making process. These are outlined below

Increased journey lengths

It is evident that the New Health Deal proposals will increase the journey length of some patients who live in Trafford and nearly all patients who use Orthopaedic services at Manchester Royal Infirmary. However, it is thought that additional journey lengths are relatively small (between 2-10km) and that overall travel distances are still acceptable (largely under 20km). In addition, the choice of providers that patients can access within Greater Manchester is still large (currently eight acute trusts over twelve hospital sites). It is also thought that, existing community/public transport services could be better utilised to improve access to hospital services.

However, there are a number of geographical areas within Trafford where the impact of increased journey lengths needs special consideration. This is especially in the Partington/Carrington M31 postcode area. This area experiences a high level of deprivation and it is thought that residents in this area currently experience problems with accessing transport services. The New Health Deal proposals are likely to mean that patients living in this area will have the longest journey, of all Trafford residents, to access an alternative hospital which may well exacerbate current issues with transport access. Consideration should be given to this population and appropriate transport solutions identified.

Number of patients/visitors affected

The number of patients who will experience a longer journey to access appropriate hospital services is approximately 6,700 per year. The associated number of visitors who will be affected is in the region of 23,000 per year. However, the vast majority of these residents currently use private transport to access hospital services and there is no reason to suppose this will change.

The remaining number of people who will require alternative transport solutions is thought to be in the region of 7,500 per year which equates to around 20 people per day. Given that these people will be making a variety of journeys around the region it is thought that a dedicated transport service (for example additional bus routes) is unlikely to be a feasible, or cost effective solution. However, it is important that transport solutions are identified which ensure local people, especially those without transport to private transport, are still able to easily access hospital services.

Car Parking

The New Health Deal proposals may increase the number of car journeys that are made to UHSM/CMFT and SRFT which is likely to mean that the number of cars that need to be parked at these hospital sites is also likely to increase.

Assurance is required from UHSM/CMFT and SRFT that they have sufficient capacity to accommodate this additional demand in order to ensure patients and visitors are able to quickly find a car parking space and access the services they require. An indication of the work that has been done/is underway by these organisations, to address car parking issues is shown in Appendix 4.

Consideration should be given to the perceived cost associated with parking at alternative hospital sites. Improved communication regarding concession schemes for car parking charges is required. A list of concessions currently available is shown in Appendix 5. However, it is thought that few patients are aware of these schemes, and therefore of the money that can be saved.

Improved Communications

The New Health Deal proposals will mean some patients and visitors will have to access hospital services on a site that they are not currently familiar with. In order to help patients/visitors access alternative hospital sites many feel work needs to be done to improve understanding of hospital locations and how they might be accessed.

Consideration should be given to the development of a communications strategy and implementation plan which seeks to improve signage to hospitals and the provision of maps and

travel directions/instruction to residents who may not currently be familiar with the location of alternative hospitals. Such material should be available and distributed via a variety of mechanisms suggestions include: online instructions, instructions with appointment letters, maps in libraries, GP practices, health centres etc.

Better 'sign-posting' for services that currently exist

The work undertaken with the focus groups and others indicate that there are lots of transport services that currently exist to ensure patients are able to access healthcare services. These include both public and community transport providers. However, it is clear that lots of people are unaware of the services that do exist and so do not/would not utilise them. For those who are aware it is clear that often booking arrangements can be confusing and that costs vary considerably.

Consideration should be given to arrangements that ensure the public affected by New Health Deal proposals are better able to access existing community/public transport solutions. Consideration should also be given to agreeing 'fixed rate' taxi journeys for residents who need to access hospital services affected by New Health Deal proposals.

5.0 Conclusion

The issues outlined above, as well as the analysis provided, have been fed into the process of designing transport solutions which minimise the impact of the New Health Deal proposals. These solutions, and the process that was adopted to reach them is outlined in 'Are we there yet? The social needs transport implications of proposed changes to hospital services'.

6.0 Appendicies

Appendix 1	TfGM isochrone maps	Paper copies circulated 12 th December 2012
Appendix 2	Results of Focus Groups	Feedback from the transport focus group Feedback from the transport focus group
Appendix 3	List of scenarios considered by SPB	2012 10 24 Trafford Strategic Programme

Appendix 4	Car Parking Concessions	2012 Hospital_parking_fee:
Appendix 5	Car Parking assurances – given by providers	2012 11 30 Car Parking Capacity and