PATIENT AND CARER TRAVEL ANALYSIS REGARDING PROPOSED CHANGES TO REHABILITATION SERVICES IN NORTH EAST GLASGOW

1. INTRODUCTION

NHS Greater Glasgow and Clyde are proposing to reshape the delivery of rehabilitation services for the elderly in the North East of Glasgow and East Dunbartonshire. This would result in the transfer of services from Lightburn Hospital to our acute sites at Glasgow Royal Infirmary and Stobhill Hospital and to local community facilities in the North East of Glasgow and East Dunbartonshire.

2. ACCESS

Relative accessibility of the sites was an issue raised by patients, carers and other stakeholders during the public engagement process. We had prepared surveys and analyses to help inform the engagement process by providing journey times from across the catchment area to the key sites both currently in use and those in the proposed model which is now being consulted on.

We accept that there are increased journey times for some patients particularly those close to Lightburn Hospital and that information is set out in the next section. Our aim is to mitigate those access issues in the way we deliver the proposed new service model:-

- A key part of the new model being proposed is the redesign of the rehabilitation pathway to reduce the time during which the patient is in the acute phase of rehabilitation. This will reduce the period during which the patient will be treated on an acute site as an inpatient and will reduce the need for their carers, friends and family to travel to the Glasgow Royal Infirmary or Stobhill sites.
- The model will enable the earlier return of patients to their own communities either in their own home, possibly with a package of home care, or for those patients not yet ready to return home, in the more homely setting of a local care home until they are ready to return home.
- For outpatients the new model will see a reduction in the need for return appointments to acute hospital sites.
- For day hospital the new model will see the majority of patients being assessed and treated on a one stop basis to enable most patients to return to local services.

3. SURVEY OF TRAVEL METHODS

In order to assess the impact of the proposed service changes we analysed the current method of travel to attend appointments and visit patients in the rehabilitation services. A series of surveys were conducted on the Stobhill and Lightburn sites to record the method of transport used by patients and carers to access those sites.

Lightburn Day Hospital and Outpatients

The survey shows the method of transport arrival for patients attending outpatient appointments and day hospital appointments at Lightburn:

Day Hospital Arrival Method	Percentage (%)
Ambulance/Patient Transport	74%
Car	22%
Taxi	2%
Walk	2%

The predominant method of transport to the day hospital is by ambulance or patient transport services.

Outpatients Arrival Method	Percentage (%)
Car	72%
Taxi	7%
Ambulance/Patient Transport	4%
Bus	14%
Walk	4%

The predominant method of transport to the outpatient department is by car.
Limited numbers of patients use public transport.

Stobhill Day Hospital

The survey again shows the method of transport arrival for patients attending day hospital appointments:

Day Hospital Arrival Method	Percentage (%)
Ambulance/Patient Transport	53%
Car	38%
Taxi	7%
Bus	2%

As with Lightburn the predominant method of transport to the day hospital is by ambulance or patient transport services.

Lightburn Visitor Survey

A survey of visitors to Lightburn was conducted which shows the method of transport used when visiting.

Lightburn Visitor Arrival Method	Percentage (%)
Car	65%
Bus	15%
Taxi	10%
Walk	10%

The predominant method of transport used to visit inpatients was by car.

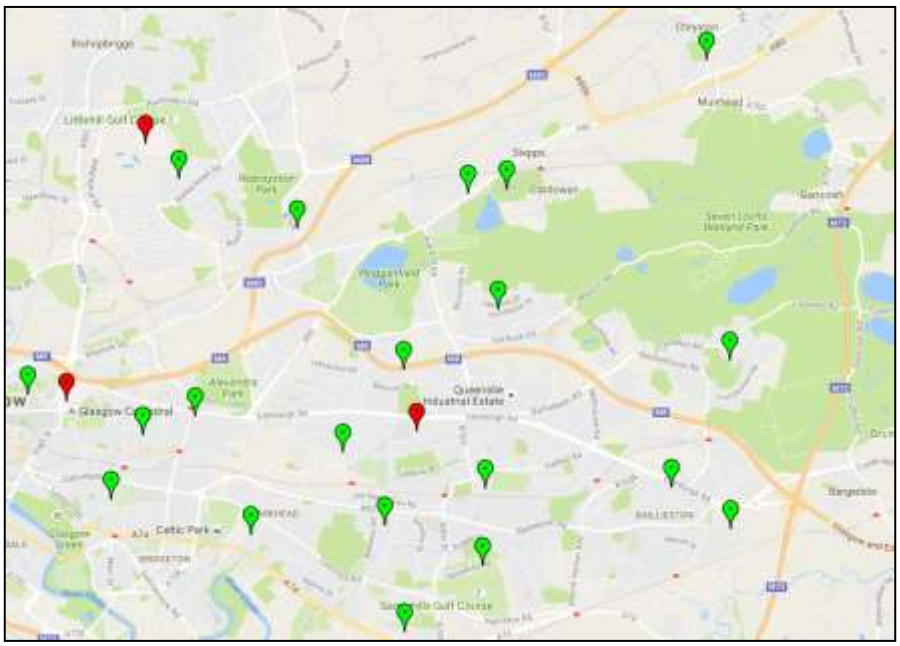
4. ANALYSIS OF JOURNEY TIMES

As part of the engagement and consultation information gathering process there were two journey time comparisons conducted.

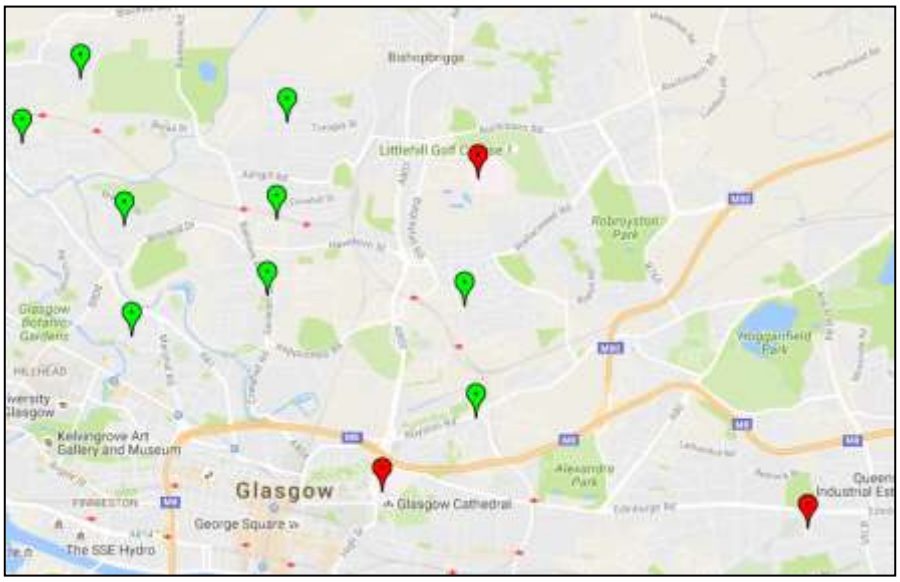
- Both comparisons used internet based mapping software to calculate road travel times and the SPT travel planner for public transport travel times.
- Both comparisons used postcodes from across the north east catchment.

The first comparison examined the journey times from sample postcodes across the catchment to the current sites at the Glasgow Royal infirmary, Stobhill and Lightburn. The maps below show the sample postcodes used in this comparison from across the catchment.

From the North East area:



From the North West Area:



From East Dunbartonshire:

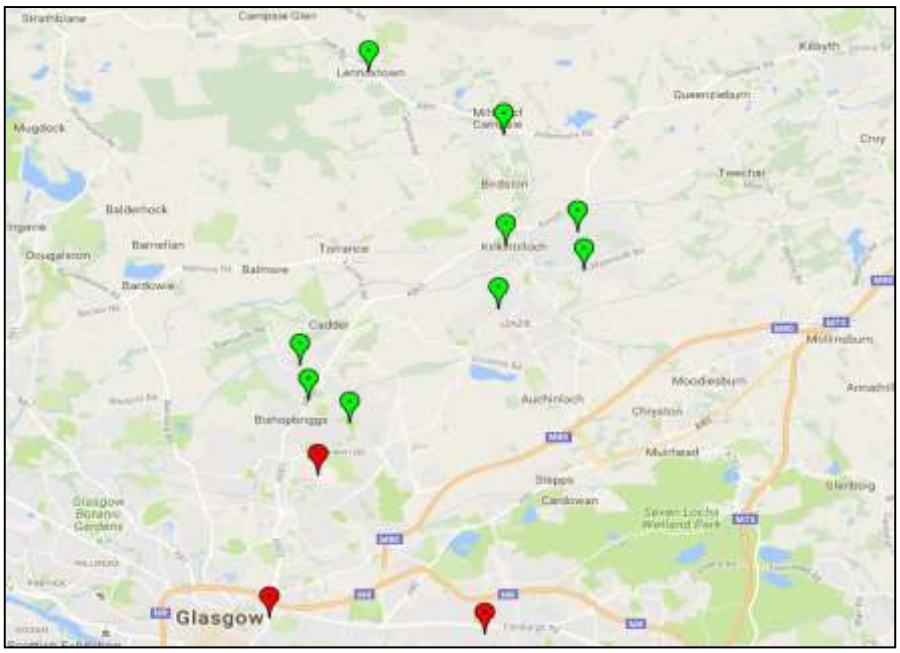


Table 1: Summary of travel study to each site

GRI = Glasgow Royal Infirmary
L-burn = Lightburn Hospital
S-hill = Stobhill Hospital

	North East HSCP Area 25 postcode areas			**North West HSCP Area** 9 postcode areas			**East Dunbartonshire HSCP Area** 9 Postcode areas		
	GRI	**L-burn**	**S-hill**	**GRI**	**L-burn**	**S-hill**	**GRI**	**L-burn**	**S-hill**
Average journey time in minutes by public transport	31	33	62	29	50	31	34	61	36
Average journey time in minutes by car	14	13	17	12	17	10	17	20	14
Percentage of area needing >1 bus / train	24%	20%	20%	66%	88%	11%	22%	11%	55%
Percentage of area with 10+ minute walk to public transport	4%	4%	4%	0%	0%	0%	22%	55%	22%
Percentage of area with 10+ minute walk needing >1 bus / train	0%	6%	32%	0%	11%	0%	0%	33%	0%

Table 2: Average time by public transport to each site

Total average time for catchment by public transport to GRI	94 minutes
Total average time for catchment by public transport to Lightburn	144 minutes
Total average time for catchment by public transport to Stobhill	129 minutes

This table shows that for the whole catchment area the GRI is the quickest to get to, followed by Stobhill then Lightburn.

Table 3: Average time by car to each site

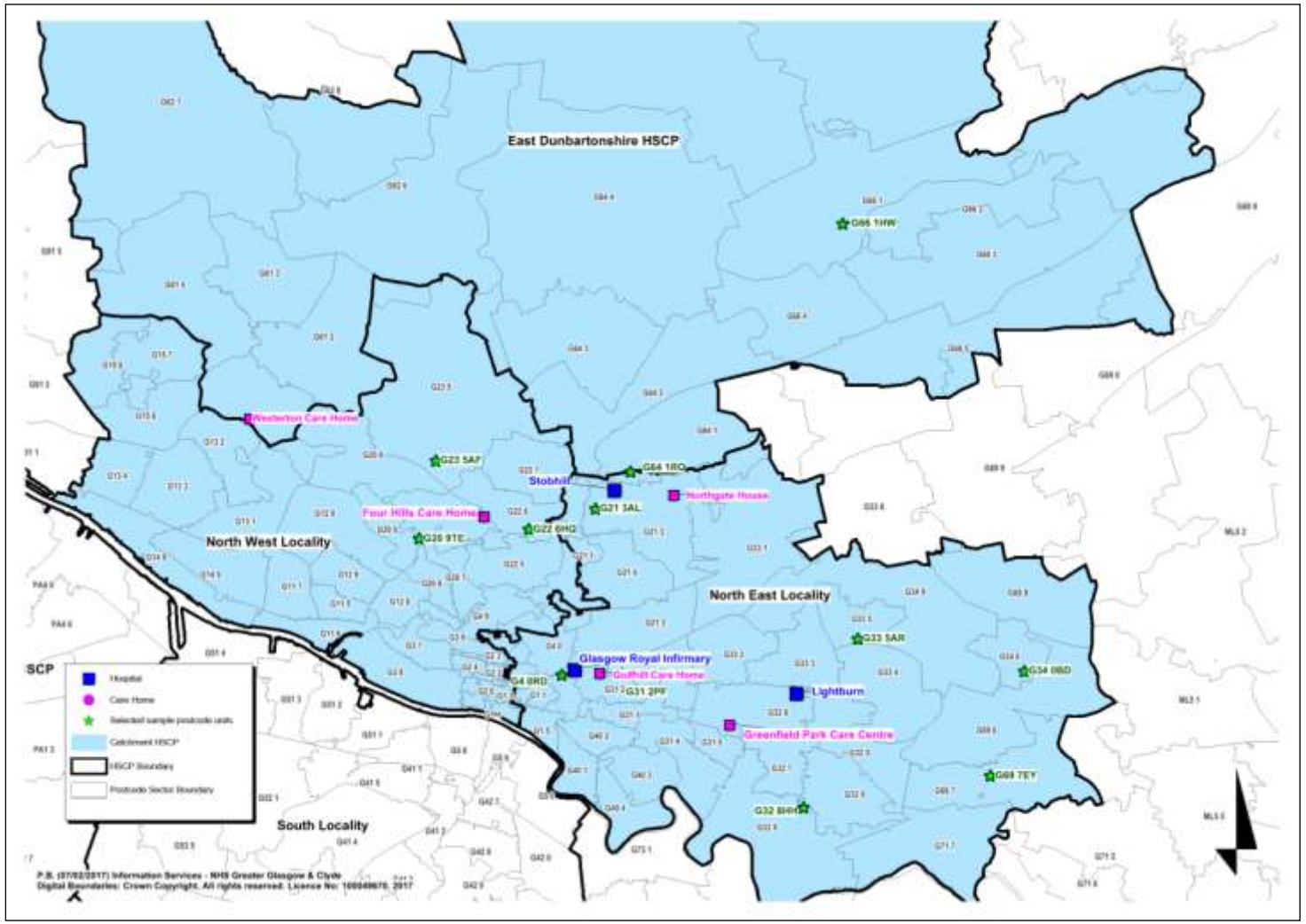
Total average time in minutes for catchment by car to GRI	43 minutes
Total average time in minutes for catchment by car to Lightburn	50 minutes
Total average time in minutes for catchment by car to Stobhill	41minutes

This table shows that for the whole catchment area the GRI is the quickest to get to, followed by Stobhill then Lightburn.

For the second comparison a similar method was used but this time the comparison looked at the journey time by public transport and road from a selection of postcodes across the catchment to all of the sites in the new and existing model including the community based care home facilities.
The map below shows the sample postcodes and the location of all the sites in the new model and the existing sites.

In the new model acute assessment would be delivered at GRI, acute rehabilitation at Stobhill and intermediate care at Greenfield Park, Fourhills, Northgate House, Golfhill and Westerton.

Outpatients and Day Hospital care would be delivered at Stobhill.



The table below summarises the journey times by car and by public transport from the selection of catchment postcodes to the sites in the new and existing model.

Table 3: Journey time summary from catchment postcodes to all sites

North East Rehabilitation Travel Study				Travel Time in Minutes															
				Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car
Admissions	Postcode Sector	Postcode Sample	Sample Address	Glasgow Royal Infirmary G4 0SF		Lightburn G32 6ND		Stobhill G21 3UW		Greenfield Park G32 6BX		North Gate House G21 3RB		Fourhills G20 9NU		Westerton G61 1HU		Golfhill G31 2HG	
196	G21 3	G21 3AL	Balgaryhill Road	25	10	39 * +	15	4	3	47 * +	15	6	5	22	8	45 *	19	24	11
160	G69 7	G69 7EY	Muirhead Road	40	14	23	10 +	59 * +	19	30 +	13	51 * +	17	61 * +	22	43	27	34	16
152	G22 6	G22 6HQ	Ashfield Street	22	11	57 *	18	21	7	45 *	19	27	9	6	3	27	15	26 +	12
151	G64 1	G64 1RQ	Auchinairn Road	26 +	10	46 *	15	11	5	45 * +	15	4	3	22 *	9	48 *	20	30	13
130	G32 8	G32 8HH	Tollcross Road	32 *	16	29 *	9	57 * +	19	21 +	9	53 *	20	50 * +	25	50 *	26	37 *	17
121	G66 1	G66 1HW	Cowgate	27	17	59 *	19	31 *	17	57 * +	20	31	16	43 *	22	46 *	24	40	17
117	G31 2	G31 2PF	Alexandria Parade	5	3	22	9	40	11	24	9	34	11	35	15	38*	19	3	3
108	G33 5	G33 5AR	Gartloch Road	15	9	19	6	49+	10	42	5	40*	9	48*	18	39*	21	25	10
104	G4 0	G4 0RD	Cathedral Street	0	0	23	10	27	11	30	12	22	10	30	13	26	16	7	5
94	G20 9	G20 9TE	Maryhill Road	30 *	12	48 *	17	48	11	56*	16	49*	14	19	3	28	11	39 +	15
85	G34 0	G34 0BQ	Lochdochart Road	22	11	15	8	59+	16	34	13	34	14	61*	20	52*	24	37	12
72	G23 5	G23 5AF	Skirsa Street	35 *	15	66 *	24	37	12	59*	23	37	13	19	7	27*	11	48 +	18
				Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car	Public Transport	Car
Totals				279	128	446	160	443	141	490	169	388	141	416	165	469	233	350	149
				Grand Total	407	Grand Total	606	Grand Total	584	Grand Total	659	Grand Total	529	Grand Total	581	Grand Total	702	Grand Total	499

The study above shows that GRI is the most accessible site by public transport and by car.
The study above shows that Westerton is the least accessible site by public transport and by car followed by Lightburn.
The study shows that for the whole of the catchment Stobhill is more accessible by public transport and car than Lightburn.

In view of the survey results which show the majority of journeys are by road, the study shows that for each sample postcode across the catchment there will be a intermediate care site within 17 minutes drive, access to acute assessment will be at most a 17 minutes drive and access to acute rehabilitation at Stobhill will be less than 19 minutes drive.