Travel and Transport Impact Assessment for South Tyneside and Sunderland NHS Partnership

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South Tyneside and Sunderland

## Overview

- The impact assessment has reviewed the potential options for clinical service changes and has assessed how these changes may impact on travel and transport needs of visitors and patients
- The primary means of assessment has been through comparing levels of accessibility (using the TRACC model) of
  - the South Tyneside population to both STDH and SRH
  - previous patients / service users to STDH and SRH
- Snapshot travel survey data of visitors and patients has helped to inform assumptions for modal choice for assessment exercises
- Estimated impacts on parking calculated



# PT Accessibility to STDH and SRH (2pm – 4pm)





# Car accessibility to STDH and SRH





## PT Field testing exercise

- Background
- Undertaken at the end of March over two days
- Origin points chosen at random
- 12 single leg journeys made primarily by bus
- Findings
- Observed journeys to STDH were longer than predicted in TRACC but align with Google journey planner
- Observed journeys from Jarrow and South Shields to SRH are closely aligned to predicted TRACC times
- TRACC journeys appear to relate more closely to Google metro journey times



#### Use of alternative hospitals

- Recognised that Jarrow and Hebburn residents, in particular, may choose to access to QEG or RVI for healthcare needs
- Google journey planner review of both PT and car journeys to STDH, SRH, QEG and RVI at various times of the day from 2 origin points
- Findings for Jarrow
  - Two miles closer to QEG than to SRH or RVI
  - Car journey times to SRH and QEG are comparable but slightly quicker to SRH
  - Bus journey times are quicker to QEG than to SRH
- Findings for Hebburn
  - Closer to QEG than to both STDH and SRH
  - Car journey times to QEG are comparable to STDH
  - Bus journey times almost twice as long to SRH as they are to QEG



#### Travel impact from Stroke service options -PT Accessibility of ST Stroke patient postcodes (2pm - 4pm)



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Postcodes of previous South Tyneside based stroke service users and public transport accessibility to STDH.





Postcodes of previous South Tyneside based stroke service users and public transport accessibility to SRH.



#### Stroke - visitor travel survey results

- 37 surveys completed, 15 of which were completed by individuals visiting a Stroke patient residing in South Tyneside
- 97% of visitors had made their trip to the hospital from home
- 93% of ST visitors had travelled by car either alone or with others
- 4 ST visitors had changed the way they travelled to visit patients at SRH rather than STDH including 3 previous pedestrians who now either drove, car shared or caught the bus.



## Stroke - key findings

- Average public transport journey times will increase by 20 mins in the afternoon and 25 mins in the evening travelling to SRH rather than STDH
- Average car journey times to SRH will take 7 minutes longer than to STDH
- Additional parking demand from South Tyneside visitors is forecast to be 1 – 2 vehicles in the afternoon and between 2 and 6 vehicles in the evening (depending on the number of visitors received)
- Parking costs will vary depending on how often a person visits, how long they stay and the number of days that the Stroke patient is in hospital



# Travel impact from Paediatric service options – PT Accessibility of ST Paediatric postcodes 7pm – 9pm



## Paediatrics - key findings

- Option 1 (Travel to SRH between 8pm and 8am)
- Average public transport journey times travelling away from SRH in the evening (7pm – 9pm) will increase by 23 mins
- 78% of respondents would either drive or obtain a lift to SRH Paediatric A&E. 12% would travel by bus and 5% would use the metro.
- Estimated additional parking demand would be 7 vehicles through the course of the night time period.



# Paediatrics - key findings

- Option 2 (Travel to SRH for Paediatric A&E treatment 24 hours)
- Average public transport journey times during the day (2pm 4pm) will increase by 18 mins
- 83% would either drive or obtain a lift to SRH
- Assumed 40% current STDH ED presentations require ED treatment at SRH
- Estimated additional parking demand of 10 vehicles between 8am and 8pm
- Total estimated parking of 17 vehicles over 24 hr period



# Travel impact from Maternity service options – PT Accessibility of ST Maternity postcodes (2pm – 4pm)





# Maternity – key findings

- 69% of visitors stated they would travel to SRH Maternity services by car. 17% would use the bus and 5% would use the metro
- Option 1
- Estimated additional parking demand is between 1 and 4 vehicles per day (depending on the number of visitors per patient)
- Option 2
- Estimated additional parking demand is between 2 and 7 vehicles per day (depending on the number of visitors per patient)
- SRH parking costs are equal to or slightly higher than STDH depending on length of stay.



# Gynaecology

- Average public transport journey times to SRH will increase by 20 mins during the day
- Average car journey times will increase by 6 mins
- Additional parking demand at SRH will be 1 vehicle per day



# Potential impact reduction measures

- Travel planning / travel advice / journey planning tools
- Assistance with travel costs where possible through existing schemes
- Discussion and rescheduling of appointment times
- Investigation into improved bus routes and connections



# Additional work being undertaken

- Researching different evidence bases for car based modal shares
- Understanding the effect of different car based modal shares on the estimated additional parking impacts of different service proposals
- Comparison of car journey time data sources, e.g. google journey planning comparison to TRACC journey times.

