

**NHS Wales car parking management:  
Environment and sustainability**



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# Overview

This guidance is designed to help NHS Wales organisations identify best practice in car park management and sustainable transport in order to improve the patient and visitor experience and support staff on their journeys to and from their workplace.

The guidance contains a number of topics which should be considered in order to reduce the demand on parking and promote better use of car parks on NHS Wales sites. These measures have been broken down into the following main categories:

- sustainable transport;
- car park management;
- car park equipment.

The potential benefits under each topic have been explored to determine whether implementing the measure would be low, medium or high cost for the organisation. The measures may not be suitable for every NHS Wales organisation and consequently it is recommended that detailed investigations and cost-benefit analyses be carried out before undertaking any action referenced in this guidance.

This guidance also includes discussion of:

- The importance of identifying partnerships, both internally and externally, and how they can assist NHS Wales organisations.
- The benefits of implementing successful travel plans and how they can improve the patient and visitor experience.
- Data collection and monitoring, including the ways NHS Wales organisations can collect data and the benefits of collecting data; also the role staff have in the process, most notably in the monitoring and review of statistics.
- The steps that can be taken to improve car park management, the sustainability of NHS Wales sites and any related travel themes which need to be considered.

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# Glossary of terms

**Access:** A way or means of approach or entry to a building or site.

**Accessibility:** In this context, accessibility is the ability of a person or group to, or the ease with which they can, reach the jobs and key services that they need.

**Did Not Attend (DNAs):** Patients who fail to attend their NHS appointment.

**Estates and Facilities Performance Management System (EFPMS):** An online data collection system that was set up in 2002 as part of the Welsh Government's commitment to improve the performance of the NHS estate in Wales.

**Geographic Information System (GIS):** A computer system for capturing, managing, integrating, manipulating, analysing and displaying data relating to positions on the earth's surface.

**Local transport plan:** A statutory five-year local authority strategy that aims to promote sustainable transport and provide a safe and integrated transport network via identified initiatives.

**Modal shift:** The shift in use from one mode of transport to another (for example from private car to public transport).

**NHS Wales organisation:** A health board or Trust charged with providing NHS care in Wales.

**Sustainable transport:** Ways and methods of travelling that do not have a significant impact on the environment or add to problems of congestion.

**Travel plan:** A document produced by a company or organisation which outlines measures to reduce reliance on the car as a means of getting to work and instead promotes healthier and more environmentally-friendly methods such as cycling or walking.

**Travel survey:** This is an important first step in developing a travel plan. It is an effective way to find out how staff and other stakeholders travel to work and why they choose to travel the way they do, and to assess those elements of a travel plan which are most likely to achieve results.

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# Chapter 1 Introduction and background

- 1.1 Car parking has a considerable bearing on an individual's experience of the National Health Service in Wales and influences perceptions of local healthcare facilities.  
Measures that can help to promote a positive view of an NHS Wales organisation include:
  - maintaining safety throughout the site;
  - avoiding any confusing messages and signage;
  - listening and responding to feedback from service users;
  - implementing measures in NHS Wales car parks that can reduce stress for patients and visitors.
- 1.2 Sustainable transport measures are discussed in detail (see **Chapter 4**) to highlight the methods that NHS Wales organisations can implement to reduce dependency on single-occupancy cars and car park demand, which is often at, or over, maximum capacity.
- 1.3 NHS Wales organisations are responsible for managing car parking and sustainable transport strategies at each of their sites. They are required to maintain travel plans that should be updated on an annual basis and will include references to car park management (see **Chapter 6**).
- 1.4 As required by Welsh Health Circular (2008)011 *Reform of car parking in NHS hospitals*, car parking is to be provided **free of charge** at all NHS Wales sites for patients, visitors and staff (except at those sites where external car parking contracts have been implemented). Where such contracts exist they should be allowed to run their course, however these contracts should not be renewed or extended. When contracts expire services should be brought back under the control of the NHS Wales organisation and all parking henceforth provided free of charge to patients, visitors and staff. Where applicable, NHS Wales organisations are required to develop and fund schemes to minimise car parking costs for patients, visitors and staff.

## Structure of this guidance

- 1.5 This guidance is structured as follows:
  - **Chapter 2** highlights the importance of effective patient, visitor and staff car parking management;
  - **Chapter 3** discusses car parking provision and what measures NHS Wales organisations can consider to reduce the demand on parking during busy times;
  - **Chapter 4** identifies travel planning measures that can reduce the demand on parking at NHS Wales sites;
  - **Chapter 5** identifies partnerships that can be formed to improve on-site parking and transport provision;
  - **Chapter 6** discusses travel plans and how they can benefit NHS Wales organisations;
  - **Chapter 7** provides information on how data collection and monitoring can be used for future planning of the NHS Wales site;
  - **Chapter 8** highlights the critical factors for a successful car parking and sustainable transport strategy.



## Chapter 2 Patient, visitor and staff car parking

- 2.1 This guidance aims to highlight how the patient and visitor experience can be vastly improved by robust car parking management. Each NHS Wales organisation should consider patients and visitors **at all times** when planning parking and transport measures, and where possible should listen to feedback and consult on proposals. NHS Wales organisations can use a number of communication channels to liaise with patients and visitors and these methods are discussed later in this guidance.
- 2.2 Monitoring of car parking arrangements through data collection should be carried out annually. The data should be analysed to identify whether there are reductions in single-occupancy trips, increases in the use of sustainable transport and improvements in patient and visitor experience. During the annual review, the principles outlined in paragraph 2.1 should be considered.
- 2.3 NHS Wales organisations should make their car parking policies available online and via mobile phone and tablet-based applications. This will help patients and visitors to establish the relevant parking information before (or during) their visit. This may influence their travel mode to and from the site.
- 2.4 The inclusion of car parking information in patient appointment letters should be considered. This will help to reduce the time spent on-site determining the car parking arrangements and will consequently improve their overall experience of visiting the healthcare facility. It may also be worth considering access guides that detail the locations of public transport facilities such as bus stops, park-and-ride sites and railway stations. These guides may provide information on the location of each car park, including recommendations on which car park is most suitable for the relevant department.
- 2.5 Consideration should be given to the use of parent and child spaces to assist patients and visitors who have small children, pushchairs and other equipment. This is highly recommended for sites that include paediatric and maternity departments. It may be necessary to have parent and child

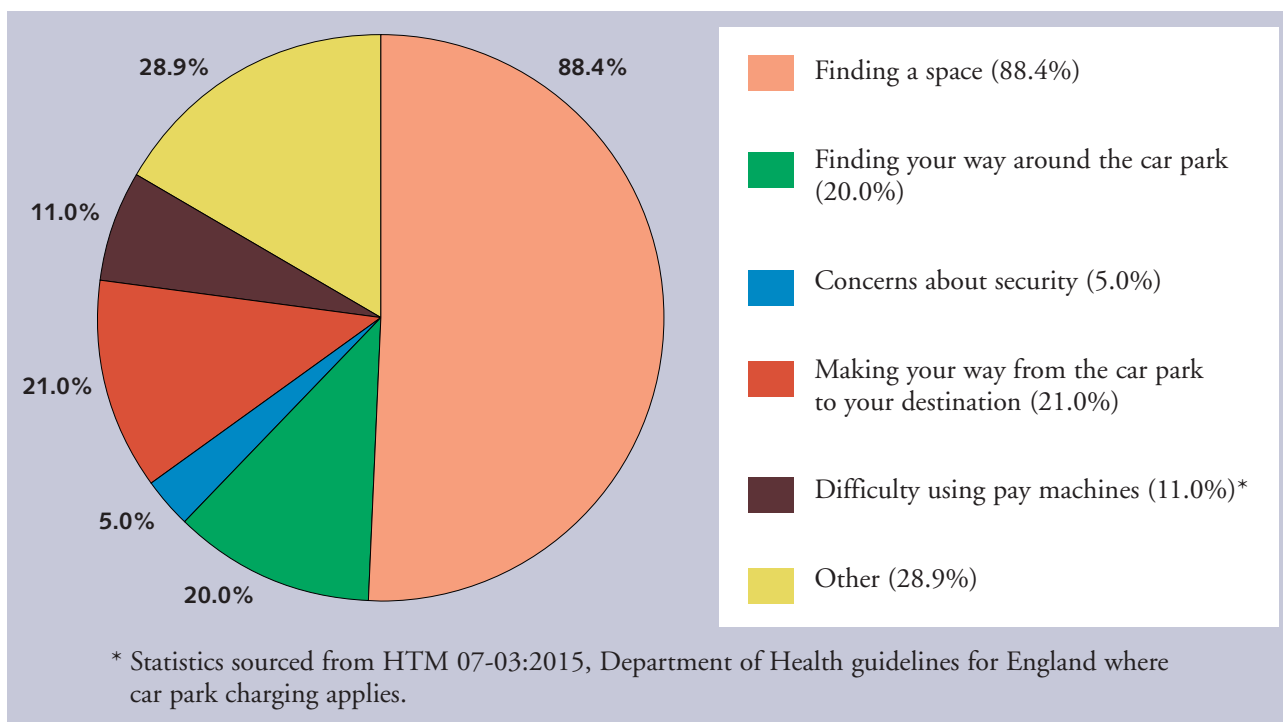
spaces in a number of car parks to ensure parents do not feel pressured to park in an area where they do not need to be. It can be difficult to enforce the correct use of parent and child spaces, which may have an impact on where they are located. Any parking bays that are difficult to enforce should not be provided close to main entrances such as those of accident and emergency departments.

### Improving the car parking experience for patients and visitors

- 2.6 It is crucial that NHS Wales organisations consider the patient and visitor experience at all times by taking the following points into account:
  - ensuring patient and visitor journeys are as straightforward as possible;
  - avoiding any confusing messages and signage;
  - giving plenty of information relating to parking;
  - maintaining safety throughout the NHS Wales site;
  - responding to feedback.
- 2.7 Parking and transport is an important factor for patients and visitors when visiting an NHS organisation. In a recent online patient focus survey in England, over 90% of responses indicated having parking problems at an NHS site. To date, a similar assessment has not been carried out in NHS Wales; however, comparable results to those in **Figure 1** would reasonably be expected. **Figure 1** shows some of the issues that respondents outlined. (Note: in the survey, respondents could choose more than one issue).
- 2.8 Over 44% of those responses stated that there had been parking problems experienced at every visit. NHS Wales organisations should investigate measures to reduce these figures, thereby improving the patient and visitor experience.

### Journey from door to door

- 2.9 For many patients, their healthcare journey begins when they receive pre-visit information about their appointment. It is likely that most patients will be feeling apprehensive about their impending



**Figure 1 Common types of problems encountered when parking at NHS sites (ratio of responses)**

healthcare experience; however, to help counteract these unwanted feelings, NHS Wales organisations should ensure the patient journey is kept as straightforward as possible to avoid any unnecessary upset, anger and stress. Car parking arrangements should be carefully considered to avoid unnecessary difficulties for patients (or visitors) that may exacerbate any existing negative feelings.

- 2.10 The main car park should be easy to access and as close as possible to the main building. Vehicles should be directed to park away from the entrance initially, to enable drivers to establish the capacity of the car park (simple signage can encourage this).
- 2.11 Where possible, staff parking should be kept separate to patient and visitor parking areas. In multi-storey car parks, consideration may be given to allocating specific floors to staff parking. Adequate signage should be provided to clearly differentiate the various parking areas.
- 2.12 Car park management plays a crucial part in the successful running of an NHS organisation. Without appropriate car park management, the patient and visitor experience is likely to be poor. A significant contributory factor associated with missed appointments (often known as 'Did Not Attends' or 'DNAs') is patients experiencing difficulty in parking at a site. Analysing the

current parking management setup through surveys with staff and through site investigations will ensure that maximum car park capacity can be achieved at all times and will reduce DNAs, as will identifying improvements for sustainable and public transport.

- 2.13 NHS Wales organisations should implement as many measures as possible to ensure that key areas such as blue light routes and ambulance holding areas are kept free at all times. During site construction works, construction traffic should not interfere with the day-to-day running of the organisation. Wherever possible, specific parking for construction vehicles should be provided.
- 2.14 Walkways between the car park and the main building should be clear, well maintained and have sufficient lighting to ensure safety is not compromised. There should be adequate signage to direct patients and visitors to the main building and walkways should be as direct as possible.
- 2.15 Patients and visitors who are making their way from the car park to the NHS Wales building should be protected at all times with the appropriate safety measures, including:
  - sufficient footway width to accommodate wheelchairs and pushchairs;
  - safe and clearly identified walkways within car parks;

- guard railing around blind corners and other areas with reduced visibility;
- dropped kerbs for wheelchair users, pushchairs and trolleys;
- suitable lighting throughout the site;
- zebra crossings at crossing points;
- reduced speed limits – maximum 20 mph;
- parking restrictions around key areas of the site.

2.16 Disabled users must be considered at all times, especially during the time they are making their way from their vehicle or public transport to the NHS Wales building. Particular attention needs to be given to signage, lighting and measures associated with crossings (for example, tactile paving).

2.17 Table 1 shows the road user hierarchy that should be followed at all times when considering an NHS Wales organisations' site and car parking.

1	Walking / mobility scooters
2	Cycling
3	Buses
4	Taxis and minibuses
5	Powered two wheelers
6	Private cars

**Table 1: Road user hierarchy**

2.18 The provision of dedicated motorcycle parking bays should be considered. If the site is large, it may be necessary to provide multiple bays around the site to ensure there is ample parking, as without designated motorcycle parking bays it is likely that motorcyclists will use other parking spaces, which will have an impact on car park capacity.

2.19 NHS Wales organisations should also consider motorcycle parking for staff that use motorcycles for work purposes (for example, paramedic motorcycles, blood/organ couriers and records couriers). These spaces need to be located in the most appropriate place to save time in case of emergencies. As these motorcycles may be used in emergencies, it is vital that there is clear access to blue light routes.

2.20 A secure locking system (for example, rails or ground anchors) should be made available for all motorcycle users.

## Signage and instructions

2.21 To ensure patients and visitors follow instructions provided by NHS Wales organisations, it is important to keep messages/signs as simple and clear as possible. **All signage is to be bilingual with both Welsh and English translations.** Where possible, signs should be grouped together to reduce sign clutter.

2.22 It is important that any required information is clearly visible throughout the site. Car parking signage should clearly indicate whether patients and visitors can park at the location or whether it is reserved for staff parking only. Ideally staff parking areas should be equipped with barriers that require identification to gain access, in order to avoid any confusion with patients and visitors.

2.23 Bays may be provided for volunteers and organisations that use vehicles to assist patients during their time at the site. These vehicles can be larger than standard vehicles therefore larger bays will be required. It should be borne in mind that these vehicles can often take a number of patients and visitors, therefore their use can reduce pressure on main department entrances and drop-off areas in addition to freeing up space in car parks.

2.24 To enhance the patient and visitor experience, wayfinding signage should also be carefully considered. This signage should be clear and straightforward to follow. The most effective wayfinding systems are consistent throughout an entire NHS Wales site.

## Assisting patients and visitors to park safely and securely

2.25 Car park signage should provide sufficient information to assist drivers to identify a safe and secure parking space. The more information provided, the easier it will be for the driver to locate a parking space, although it is important to avoid unnecessary sign clutter.

2.26 There are various methods to help patients and visitors to find a parking space. These methods can vary in cost. Higher cost options include variable-message signs that provide up to date parking information including the number and locations of spaces available.

2.27 A number of NHS Wales organisations have parking signs located throughout the site that direct patients and visitors to the most appropriate or convenient car park for their intended destination (for example, an A&E car park or

maternity car park). This will reduce the frustration of attempting to find an appropriate car park and will help to ease congestion.

## Listening to feedback

- 2.28 It is important that feedback relating to car parking that is received from patients and visitors is always responded to, particularly where a number of users have highlighted similar issues. Patient and visitor feedback should be valued and acknowledged by NHS Wales organisations.
- 2.29 Consideration should be given to using feedback from Community Health Council (CHC) site assessments on parking-related issues. The quality of the patient environment – which includes car parking facilities – is assessed by the CHC and reported in its annual *Hospital Patient Environment* reports. These assessments apply to all hospitals, hospices and day treatment centres providing NHS Wales-funded care. The assessments are made by teams of volunteers working collaboratively to look at a range of non-clinical aspects of patient care, including food services, cleanliness, patients' privacy and dignity, and general building maintenance. In these assessments, car parking facilities are evaluated in terms of overall capacity, accessibility of parking, drop-off zones, parking policy and external decoration (which includes maintenance, appearance and coordination, and state of repair).
- 2.30 NHS Wales organisations should have easy-to-find information on their websites detailing how patients and visitors can provide feedback on their car parking experience at the site.
- 2.31 Feedback should be acknowledged and responses provided to car park policy queries. For example, if modifications to car parks are generating feedback, it will be beneficial to explain the rationale for making such modifications. This transparent approach is likely to satisfy most queries.

# Chapter 3 Determining levels of car parking provision

- 3.1 Many NHS Wales organisations experience overcrowding in car parks, with a seemingly inadequate provision of spaces for all the patients, visitors and staff who wish to access particular sites. With the impetus being on better management controls and less car parking space, it is important to understand what levels of parking are appropriate for NHS Wales facilities, and to reach some consensus on how these levels can be determined consistently across a range of different sites and locations (for example, rural and urban localities).
- 3.2 In setting out a basis for car parking provision, it is necessary to differentiate between the various types of development and to consider how these are treated by local authority planning guidelines for healthcare developments.
- 3.3 The following methodology is a useful starting point for the different types of development. It considers how various local authority plans treat car parking provision, evaluates the application of guidelines against specific locations and considers the problems or successes arising. Consideration of external factors such as the presence of a travel plan, transport links, etc will all affect the outcome of whether car parking provision is considered to be sufficient.
- 3.4 The demand of vehicular access and, hence, car parking is likely to arise from the following user groups:
- patients;
  - visitors;
  - staff;
  - ambulances – including blue light and patient transport;
  - emergency vehicles;
  - deliveries;
  - contractors.
- 3.5 All NHS Wales organisations will have details of the numbers of employees in order to provide the baseline demand for parking. As this will account for the 24-hours-a-day/365-days-a-year operation of acute hospital sites and the consequent shift patterns; there will be less demand at any one time than the total number of staff. There are other staff factors which can affect the demand for parking, such as security concerns for shift workers, the need for some staff to work between sites, and the problems associated with recruitment and retention of staff.
- 3.6 Patients can be split into different groups who have different needs, as follows:
- outpatients / therapies;
  - inpatients;
  - day cases;
  - accident & emergency patients.
- 3.7 Patient activity information should be available to NHS Wales organisations for individual sites, giving an indication of the level of car parking requirement. Typically, outpatient visits at primary care sites will be of shorter duration than visits to acute hospital sites.
- 3.8 Day case and overnight stay patients do not generally require parking as they will be unlikely to drive, although there is a need for short-stay visitor/escort spaces, particularly to collect discharged patients; dedicated drop-off zones may be considered.
- 3.9 One of the issues that NHS Wales organisations face with car parking demand is experienced at peak times of the day; these include visiting times, shift changeovers and associated overlap periods, and clinic start and finish times. During these times it can be significantly more problematic to locate a suitable parking space, causing potential congestion at sites which can contribute to patients missing (or being late) for their appointments.
- 3.10 Where possible these peak demand times should be identified. Once done, NHS Wales organisations can begin to explore methods to alleviate the pressure on parking. From those NHS organisations that have been surveyed, a number experience severe availability issues at peak times



where finding a parking space can take in excess of thirty minutes.

3.11 There are measures that can be explored to alleviate peak time car parking. These include:

- staggering visiting times throughout the day;
- adjusting clinic appointments around the identified peak times of the day;
- implementation of weekend clinics;
- warning notices in pre-visit appointment letters advising that parking may be an issue at the appointment time;
- information included on the website with direct links to public transport.

#### Note

Depending on the nature of a patient's appointment, it can be estimated how long the appointment will last. During the production of this guidance, a number of different outpatient appointments have been identified. Such information can be extremely useful in estimating the levels of traffic entering a site and the required capacity of car parks. For example, the list below shows a number of different outpatient appointments and their approximate durations. Using this information, appointments can be planned to take account of car parking issues. Considering the duration of appointments and planning appointments to reduce the number of vehicles entering the NHS Wales site at a similar time will almost certainly reduce DNAs. (The following information is a guide only. Each NHS organisation will need to use its own data on appointment duration).

- **new patient** (40-minute appointment) at a **consultant-led clinic**;
- **new patient** (40-minute appointment) at an **AHP-led clinic**;
- **new patient** (40-minute appointment) at a **nurse-led clinic**;
- **return patient** (20-minute appointment) at a **consultant-led clinic**;
- **return patient** (20-minute appointment) at an **AHP-led clinic**;
- **return patient** (20-minute appointment) at a **nurse-led clinic**.

(AHP = allied health professional)

3.12 NHS Wales organisations should look to identify arrival patterns for patients as part of the planning process. An example of patient arrival time is shown below. This information will be useful when identifying car park and transport peak times:

- the majority of **emergency** patients arrive between **10.00 and 21.00**;
- the majority of patients as **elective cases** arrive between **09.00 and 18.00**;
- **departure** is generally between **10.00 and 17.00**.

3.13 From the number of staff and patients, it is possible to determine the number of visitors who are likely to visit a site (typically an acute site). For example, an average of 1 – 1½ visitors or overnight stay cases per patient might be normal. These visitors will arrive on site throughout the year, with no particular day busier than any other, although there will be peaks at visiting times unless visiting times are staggered.

3.14 It is important to consider the design of the car park while determining car parking provision. While most NHS Wales organisations have more staff spaces than patient and visitor spaces, car park design should place patient and visitor parking nearer to the point of use than staff parking.

#### Note

A number of NHS organisations have successfully implemented staggered visiting times throughout the day. In a trial carried out at an acute hospital (Chesterfield Royal Hospital 2014), a handful of wards were open throughout various times of the day to see what the impact would be. Positive feedback was received from patients and visitors, and this included greater convenience and improved communication, with visitors feeling more involved in their loved one's care.

Another hospital has implemented measures to address parking concerns during peak times. On their website it states: '*Please arrive in plenty of time so that you do not miss your appointment, but if you are parking on or around the hospital site, please allow an extra 30 minutes as parking is limited*' (Royal United Hospitals Bath 2015). The hospital also runs weekend clinics which assist with the peak time parking issues.

*The studies referenced were carried out in England, however, their findings are still relevant to NHS Wales organisations.*

# Chapter 4 Travel planning measures that can reduce the demand on parking at NHS Wales sites

- 4.1 There are a number of measures that can promote better use of car parks within NHS Wales organisations, including sustainable transport options, innovative car park management, car park equipment and security measures.
- 4.2 **Before considering any of the following measures, it is important to carry out a cost-benefit analysis. While a particular measure may represent best practice, it may not be practical or beneficial to implement it in relation to its cost. A separate assessment should be carried out at each site, as one measure that may be suitable for one site may not be suitable at another.**
- 4.3 Car park and transport staff within NHS Wales organisations should liaise with their finance colleagues. It is likely that the staff directly involved in the day-to-day running of on-site parking will have detailed knowledge of specific issues that need to be considered. Therefore their input into future measures is vital to the success of car parking arrangements at the site.
- 4.7 The low-cost alternative to secure cycle hubs are cycle compounds. These measures can offer the same level of security as cycle hubs without the additional changing facilities. Cycle compounds vary in cost as different types are available.
- 4.8 Cycle compounds should be located in well-lit areas, be convenient for staff to use and should ideally be monitored by CCTV. They should preferably be located close to entrances and busy areas. This demonstrates a commitment to encouraging cycling.
- 4.9 Compared with secure cycle hubs, there is much more flexibility around the location of cycle compounds.

## Costs

- 4.10 Secure cycle hubs need to be discussed and evaluated to ascertain their suitability for the organisation. They are one of the higher cost measures available, therefore significant planning would be required before investing in this measure, both financially and operationally.

## Sustainable transport measures

### Secure cycle hubs and cycle compounds

- 4.4 NHS Wales organisations should aim to provide sufficient levels of appropriate cycle parking.
- 4.5 A secure cycle hub is a unit where cyclists can leave their bicycles knowing that safety will not be compromised. Most cycle hubs are sheltered so they remain dry and keep the bikes in better working condition. Cycle hubs should have some level of security in place; the most common security measure is the need to swipe ID cards to gain access into the hub, although some units have built-in CCTV. Cycle hubs may offer showers and changing facilities without the need to enter the workplace.
- 4.6 NHS Wales organisations may consider implementing secure cycle hubs that offer secure parking as well as lockers, showers and drying equipment. Secure cycle hubs increase cycle-to-work commuting, as employees often feel more comfortable using these facilities than changing in the workplace.

### Bus stops and park-and-ride sites

- 4.11 Park-and-ride systems are sites where people can park their private vehicles and use public transport to continue their journey. Park-and-ride avoids vehicles entering busy locations where congestion can be a problem, such as city centres and hospital sites. The most effective park-and-ride sites are those where the use of single-occupancy vehicles is reduced as much as possible. Sites ideally need to be located near motorways and out of city centres. To encourage park-and-ride use, tariffs should be kept as low as possible.
- 4.12 Most urban NHS Wales organisations and a number of rural ones have buses that serve their sites. However, the major variance is the number of buses and the frequency of the services provided. For instance, one site may have five bus routes with buses to various destinations running every 15–20 minutes, whereas other sites may only have one bus route with a bus running once per hour. It is necessary to ensure that the routes served by buses are suitable and that drop-off

points do not impede access for emergency vehicles.

- 4.13 NHS Wales organisations may wish to subsidise some of the cost to offer concessions for patients, visitors and staff. The most important factor is creating good partnerships with bus operators. Operators will need to be convinced that it will be beneficial to include the site on their bus routes. An effective way to do this is to undertake a travel survey considering patients, visitors and staff. (Example surveys for staff and patients/visitors are given in **Appendix 1** and **Appendix 2** respectively).
- 4.14 Significant work and planning is needed to implement a new bus route or to modify an existing route to assist patients, visitors and staff. More staff may need to be deployed to investigate the financial implications and potential take-up of any such service. A revenue impact assessment should be carried out during the planning stage to determine the likely success and identify the timescales involved.

#### Costs

- 4.15 NHS Wales organisations need to consider the cost and impact that any new services will have on bus operators. It is unlikely there will be support from operators if the financial assessment shows that there is a limited demand for a service.

#### Shuttle bus services connecting sites

- 4.16 A shuttle bus is a transport service designed to quickly transport people between two or more points. The vehicle will shuttle between the service points as quickly as possible to encourage use from patients, visitors and staff. A shuttle bus needs to make frequent trips to ensure users are not waiting for long periods. It can range in size from a small minibus to a coach.
- 4.17 Some NHS organisations have implemented shuttle bus services that connect large sites. This reduces the need for patients and visitors to attempt to park at specific locations on site where car parks may be smaller. A major benefit of shuttle bus services is that they allow staff to park off-site and use the service to gain access to the site and it has worked well where such a service has been implemented. However, consideration should be given to available space where staff can park off-site. If an NHS Wales organisation does require staff to park off-site, it may be necessary to buy or lease a number of vehicles to act as shuttle buses.
- 4.18 Linking shuttle bus services to existing park-and-ride sites may also be considered, as this may improve links from other areas that the park-and-

ride route serves. Creating partnerships with organisations that require similar services may also be beneficial and reduce implementation and running costs.

#### Costs

- 4.19 Having a site away from the NHS Wales organisation may incur a cost as consideration will need to be given to its development and to security such as lighting, CCTV and patrols. In addition, drivers will be needed and the necessary infrastructure put in place.

#### Car-share schemes

- 4.20 Car-sharing schemes allow staff that work together and live near each other to share a journey to work, reducing single-occupancy trips. These schemes work particularly well at workplaces with limited parking such as hospital sites. As well as environmental benefits, there is a cost saving to the staff who participate in the scheme as there are fewer individual journeys. NHS Wales organisations could organise car-share schemes or allow staff to make their own arrangements to suit their needs.
- 4.21 Staff wanting to participate in car-share schemes should be able to advertise their requirement in order to identify suitable sharers that live in the same area. Alternatively, there are external companies that can map-out staff routes to work and identify suitable participants. These systems can also be uploaded on to NHS Wales organisations' intranet sites.
- 4.22 It is important to remember that not all staff can use car-sharing schemes due to their working patterns and their need to travel outside the site.

#### Costs

- 4.23 Much of the cost for implementing car-share schemes is taken up by internal setup costs as time and resources are required. A cost will also be incurred if an NHS Wales organisation wishes to use an external company to assist with the creation of a scheme.

#### Note

It is necessary to ensure that staff members do not abuse car-share schemes as an unintended consequence of this could be a rise in single-occupancy car use.

#### Electric vehicles

- 4.24 Some NHS Wales organisations have bought or leased electric vehicles for staff to use when making short journeys outside the organisation. Sometimes electric vehicles can be leased cheaply for public bodies such as the NHS, as the lease



companies receive publicity associated with the initiative.

- 4.25 Electric vehicles have a somewhat limited range (although, as new models are launched this is continually improving) so it is important that journeys are kept short, unless it is known that there are charging facilities available at the destination.
- 4.26 Staff who own electric vehicles should be given high priority in car parks, especially if there are designated charging points.

#### Costs

- 4.27 Although electric vehicles vary in cost depending on the type of vehicle required, they will save costs as staff using these vehicles will save time when attempting to find parking spaces on returning to the site. A sufficient number of charging points for electric vehicles will also need to be installed in car parks.

#### Car clubs

- 4.28 Car clubs allow individuals to use vehicles for single trips without worrying about the cost of using their own vehicles (for example, fuel, car insurance and general wear and tear). Staff who work at sites with limited parking, such as hospitals, will find car clubs particularly useful as they will save time looking for parking spaces. The vehicles used for car clubs have environmental benefits as they are often low emission vehicles. Companies can sign up to schemes in the local area or arrange for a vehicle to be located on site if it will be used frequently.
- 4.29 Some NHS Wales organisations that have implemented car clubs for staff have found that they work well for those who need vehicles during the day. Staff can use sustainable forms of transport for their journeys to and from work and book a vehicle to use for visits outside the organisation.

#### Costs

- 4.30 The cost of implementing car clubs depends on needs. NHS Wales organisations can join car clubs if vehicles are nearby. It is also possible to discuss needs with car-club companies, as they are often able to add locations to an area if the client can prove that demand is sufficient.

### Car park management measures

#### Short-term parking bays

- 4.31 Short-term parking bays allow patients or visitors to park their vehicle for a short period without

having to find a parking space in other car parks. These bays work well when patients and visitors only need to be on site briefly (for example, dropping-off or picking-up an individual, or picking up a prescription). As the bays are short-term, there is a constant turnaround in spaces, so vehicles do not need to wait too long for a space to become available.

- 4.32 Short-term parking bays are an effective way of managing car parks for short-term visitors. Drivers could otherwise spend more time trying to find a parking space than they do at their intended destination.
- 4.33 Short-term parking bays will help to reduce the number of vehicles in main car parks.
- 4.34 To achieve the best results, short-term parking bays should be in a separate area from the main car parks and as close as possible to the hospital entrance to ensure time is not wasted walking from the car park.
- 4.35 It is vital that the short-term bays are actively managed to ensure they are not misused by patients, visitors or staff. CCTV, patrols and signage are some of the methods available to manage the correct use of these bays.

#### Costs

- 4.36 The cost of providing short-term parking bays is low. A feasibility study will be required, which will incur staffing costs, and there will be the cost of providing the relevant signage.

#### Wheelchair hire

- 4.37 Wheelchair hire works in the same way that trolleys are released in supermarkets. It allows patients that require the use of a wheelchair to gain access to one without the need to enter the main building, as this may be difficult for some patients. Wheelchairs can be located within walkway areas of car parks and can be either returned to the same location or left within the main building.
- 4.38 Temporary wheelchairs may be located in the car park and accessed by inserting a coin deposit. This can be an effective method of saving time and improving the patient experience.
- 4.39 Patients that require wheelchairs are likely to attempt to park as close as possible to the main entrance. This can cause significant disruption around an already busy part of the building.

#### Costs

- 4.40 The cost of introducing temporary wheelchairs in car parks is low. Existing wheelchairs can be used

and fitted with the relevant device to allow the deposit to be inserted. It is worth managing this system for a period of time to establish how effective it is at improving the car park experience for patients.

- 4.41 It may be necessary throughout the day for any abandoned wheelchairs to be collected from around the site. NHS Wales organisations may consider volunteers to undertake this role.

### Identifiable car parks

- 4.42 Identifiable car parks are regular car parks that have readily identifiable features to allow users to recognise where they have parked their vehicle. The two most common forms of identification are the use of colour and numbers. Once a user has found a parking space, they simply have to identify the feature that demonstrates where they have parked (that is, drivers simply need to remember the colour or number of the area they have left their vehicle). There needs to be adequate signage to highlight the colours/numbers, giving the relevant details such as floor level and area.

### Costs

- 4.43 Implementing identifiable car parks is a low cost operation that can enhance the patient and visitor experience. The costs involved relate to signage, paint and staff resources to undertake the works.

### 'No loading' markings / red lines on blue light routes

- 4.44 'No loading' markings and red lines represent areas where no vehicles can wait during their hours of operation (usually waiting is prohibited at any time). Blue badge users are permitted to park on double yellow lines for a limited period of time unless signage states otherwise, there are 'no loading' markings on the kerb or the lines are red. Both of these measures require the appropriate signage to be installed on site, informing car park users about the restrictions and the potential for parking charge notices to be issued.
- 4.45 This measure only needs to be considered if there is an issue with vehicles parking on blue light routes.
- 4.46 It is of utmost importance that blue light routes are kept free, therefore it is recommended that appeals against any penalty charge notices are dismissed (unless they were issued incorrectly). These markings should only be implemented on emergency routes, such as blue light routes.
- 4.47 If external parking operators are used to carry out enforcement, it is important that enforcement is only carried out if there is no other way of moving

the vehicle on quickly. If the owner of the vehicle can be identified quickly, every effort should be made to do so. It may be worth the NHS Wales organisation producing a press release stating the reasoning behind this measure and its importance, to negate any negative publicity.

### Costs

- 4.48 It is very low cost although it does require enforcement to ensure vehicles do not park within the limits of the 'no loading' markings or double red lines.

### Utilising patrol staff for car parking

- 4.49 Car park patrols may use radio control systems to maintain contact to establish areas where parking is available, in order to assist patients and visitors who are experiencing parking difficulties. As most sites have problems with car parking during peak times, it is important to consider the effect this will have on patients and visitors; patients may have appointments and visitors may have limited time for visiting.
- 4.50 To reduce the time it takes to find a parking space, it is possible to utilise staff that may be carrying out other tasks, such as security patrols. Security officers commonly have communication devices that can be used to identify available parking spaces and any areas to avoid. This will considerably improve the patient and visitor experience as there will be less concern about finding parking spaces, however, it is reliant on having staff available to assist. It is vital that staff carrying out this function are clearly identifiable and visible through the correct high-visibility PPE, preferably with the NHS Wales organisation name/logo. Staff can also use CCTV to identify available parking and communicate the information to staff on the ground.

### Costs

- 4.51 This measure incurs a cost in providing staff. It is unlikely that NHS Wales organisations will have designated staff to perform this function, which means they will be reliant on utilising staff that are carrying out other tasks such as security patrols.
- 4.52 Where an external company is managing a car park additional costs may be incurred, therefore consideration of the existing car park management is required. NHS Wales organisations often have volunteers working on site who could also be used to perform this function, although appropriate Personal Protective Equipment (PPE) and training must be provided.

### Liaising with NHS departments to assist car parking

4.53 Good channels of communication should be maintained between NHS departments and car parking operatives. Wards may contact the parking team to identify any overrunning appointments and clinics that could possibly result in patients overrunning their parking time

#### Costs

4.54 This measure incurs a cost in providing staff to contact the parking team regularly with the relevant vehicle details.

### Designated 'blue badge' car parks

4.55 Some NHS Wales organisations have designated 'blue badge' car parks (that is, only vehicles that display blue disabled badges are allowed to park in these car parks). The benefit is that blue badge holders can avoid queuing at main car park entrances.

4.56 Each parking place should conform to the disabled parking bay dimensions, which allows additional room for entering and leaving the vehicle.

4.57 Although there is no statutory requirement under the *Equality Act 2010* to make provision for a certain number of disabled parking bays within a car park, local planning conditions often stipulate a required number, and this averages around 4-6% of car park capacity. NHS Wales organisations should aim to increase this figure, as it is likely

that a higher percentage of disabled users will attend an NHS site compared with other sites.

4.58 Location is important as these car parks need to be close to the main entrance. Blue badge parking spaces are larger than standard ones so the total number of spaces within the car park will be reduced.

4.59 It is important to enforce blue badge bays and car parks to ensure their use is not abused by non blue badge holders.

#### Costs

4.60 This is a low cost measure to implement. However, there is considerable work involved, as initially a car park analysis needs to be carried out to establish how many blue badge spaces are required as well as to determine the most suitable location for the blue badge car park.

### Liaising with the police regarding any offsite issues

4.61 There may be issues with staff parking offsite in nearby residential streets, as occasionally there are more staff members than parking spaces available. This can cause residents concern and can reflect negatively on an organisation. NHS Wales organisations may liaise with local authorities and community groups to address this problem. Waiting restrictions may need to be implemented by local authorities to allow civil enforcement officers to take any necessary action.



Ardudwy Health Centre Harlech. Courtesy of NWSSP - SES



## Costs

- 4.62 There is no cost to implement this measure. It is, however, reliant on having the appropriate staff in place to liaise with local authorities and to take the necessary action.

## Equipment measures that promote better use of NHS Wales car parks

### Car park barrier systems

- 4.63 A car park barrier controls the flow of traffic into and out of a car park. Some barriers require an identity card to be inserted, a button to be pushed, or have sensors that detect vehicles and the barrier rises automatically.
- 4.64 NHS Wales organisations that have implemented car park barriers have seen a noticeable reduction in crime and anti-social behaviour.

## Costs

- 4.65 Car park barriers can be solar powered, which will reduce the cost of running the system.

### Variable message systems

- 4.66 Car park variable message systems are designed to assist users looking for a parking space. It can be particularly helpful when a car park is full to capacity, as it notifies the user before entering the car park.
- 4.67 Some variable message systems can identify each available space in the car park and how many spaces are available in each level or section of the car park. This can save time, money and reduce stress for the driver, and it will enhance the experience of patients and visitors.

## Costs

- 4.68 Variable message systems vary in cost depending on the type of measure required. Some systems can highlight every single parking space with central displays throughout the car park. However, simple systems that refer to the total number of available spaces in the car park will be significantly cheaper to purchase and maintain.

### Reactive access systems

- 4.69 A reactive access system allows the car park operator to decide how vehicles enter and exit the car park. The operator can choose where to direct vehicles. If the car park has three entrance points, the operator may choose to have two staff lanes in the morning to allow staff to enter the site as quickly as possible. However, after 10am when the majority of vehicles are visitors, it can be adjusted to allow two lanes for visitors to enter. In the afternoon, when the majority of vehicles are

leaving the car park, it can be adjusted to allow additional lanes for exit and reduce the entrance points to one lane. This system will significantly improve the time for staff and visitors to access and exit the car park. It will also enhance the experience for patients and visitors.

## Costs

- 4.70 The cost of reactive access systems can vary depending on the type of system required. A standard system that allows car park operators to control how staff and visitors enter and exit the car park will cost significantly less than systems that control the entire car park access.

### Car park security measures

- 4.71 Car parks that are not properly secured are more vulnerable to targeted and opportunistic crime than those equipped with crime prevention measures such as CCTV, signage, security lighting and security patrols. Car parks with poor security measures are more likely to have incidents of vehicle thefts, thefts from vehicles and other types of crime such as trespass and damage to vehicles or property.
- 4.72 Before implementing preventative security measures in NHS Wales car parks, an assessment should be undertaken to establish the nature of any existing problems such as levels and types of crime, the appropriateness of security measures in place, and staff and visitor perceptions of safety and effectiveness of current management practice.
- 4.73 There are numerous measures that improve the security of NHS Wales car parks, some of which have already been mentioned including:
- car park barrier systems;
  - secure cycle parking.

### Closed Circuit TV (CCTV) systems

- 4.74 Many NHS Wales car parks have CCTV systems in place to reduce the likelihood of crime and anti-social behaviour. CCTV is the most visible system and, as well as car park security, can help an organisation to deal with complaints and regular parking misuse. Consideration should be given to the need for suitably qualified staff to monitor CCTV images, particularly in the event of an incident, as well as the number of camera images a single operator can effectively monitor at any one time.

## Costs

- 4.75 The cost is dependent on how much coverage is required. As many car parks as possible should be covered, especially those that have regular users during off-peak hours. There is also a requirement



**Rhymney Integrated Health and Social Care Centre.** © Matt Livey

for CCTV operators to actively manage the system in place.

### Security patrols

4.76 Along with CCTV systems, the most likely visual deterrent to crime and anti-social behaviour are security patrols.

### Costs

4.77 The only cost involved is the staff resource, although security patrols may be undertaken by car park attendants where appropriate.

### Car park lighting

4.78 NHS car parks should have sufficient lighting in place to discourage crime and anti-social behaviour. All areas within the car park should be illuminated when the car park is operational. It is especially important that the key areas have additional lighting to increase patient, visitor and staff safety.

4.79 NHS Wales organisations may upgrade the lighting systems to more environmentally friendly lighting such as LED lighting.

### Note

It is crucial that there are systems in place to assist patients and visitors that may experience difficulty in using car park equipment.

Contingency measures should be considered in the early planning stages of any potential modification to the site.

Where possible, NHS Wales organisations should include on-site signage that informs patients and visitors what types of car park are available.

Every effort should be made to ensure patients are aware of car park arrangements before their visit, stating what facilities are in place, and providing information on how users can contact the organisation to inform it of any issues they may experience using the facilities. Methods of information distribution include:

- appointment letters;
- leaflets;
- the NHS organisation's website;
- on-site signage.

## Chapter 5 Identifying partnerships

- 5.1 The creation and delivery of car parking strategies depends upon a number of factors and a range of individuals and organisations combining to meet the aims of these strategies. Generally speaking, car parks that demonstrate best practice, whether in the NHS or in other organisations, are those where the lead organisation managing the car park has formed partnerships with other companies that work in the parking industry, such as trade bodies and operators.
- 5.2 Every NHS Wales organisation should try to create partnerships with patient groups within the organisation as they can provide valuable feedback on specific needs, such as car parking issues. Patient groups may identify issues that the organisation is unaware of. This also allows it to provide information and reasoning behind any decisions relating to the site, including parking and sustainable transport. Feedback from patient groups may save a number of enquiries from patients and visitors.

### External partnerships

- 5.3 The British Parking Association and similar organisations have contacts for a range of car parking operators that specialise in many alternative aspects of parking. Using these resources can significantly help NHS Wales organisations to develop ideas for car parking improvements.
- 5.4 Good working relationships should be developed with public transport providers so that they can appreciate the likely demand for services. Operators may consider an alternative route for services if this meets future passenger demand.
- 5.5 NHS Wales organisations should also consider how they can work with other local employers to develop solutions to transport problems. By including other groups of workers, a 'critical mass' for success can be more easily achieved.
- 5.6 Creating groups to share best practice can benefit NHS Wales organisations, and it allows other organisations to share experiences that may or may not work. Organisations that offer parking can

include shopping centres, universities and business parks. As well as promoting best practice, savings can be made if all organisations agree to buy the same equipment or measures, as operators often offer discounts for bulk buying.

- 5.7 NHS Wales organisations should consider networking groups as a tool for more effective communication and a step towards more innovative partnership solutions. Car parking strategies are more likely to succeed if a holistic approach is adopted, rather than where they are used to identify isolated measures because solving one problem may introduce a new problem. Considering the entire site for each approach is likely to identify possible issues at the investigation stage.
- 5.8 NHS Wales organisations should engage with local authorities where possible, most notably during any consultations relating to waiting restrictions close to an NHS Wales site. It is possible that patients, visitors and staff may park in nearby residential streets during peak times, particularly where there is insufficient staff car parking availability on site, or changes to the hospital parking system. Consultation with the local authority and residents is advisable as there may be a need to communicate any changes and discuss solutions, such as resident parking zones around the NHS site.

### Internal partnerships

- 5.9 In addition to external partnership working, internal partnerships should be developed so that different departments and sectors of staff understand each other's needs. These partnerships are particularly important between management and staff. Senior management should include clinical and operational teams and directors. Directors should seek to make regular contact with parking management teams.
- 5.10 Within an NHS Wales organisation, dedicated 'travel groups' can be set up to meet regularly to consider a number of travel and transport matters including car parking and sustainable transport

measures. These travel groups should consist of multiple departments (for example, human resources, IT, the chief executive officer's office, the medical director's office, head of nursing, patient advice and liaison services, and finance). It is important to ensure the group is multidisciplinary with a broad knowledge and understanding of parking and transport related issues.

- 5.11 To ensure an NHS Wales site operates at an optimum level, it is important to create close working partnerships with all partners that work on the site. This includes security, patient transport, cleaners, contractors and maintenance officers. Without these partnerships it is unlikely that NHS Wales organisations will be able to deliver the full service required.

# Chapter 6 Travel plans

## Benefits

6.1 **Travel plans** outline measures that can reduce reliance on the car as a means of getting to work and instead promote healthier and more environmentally friendly methods of commuting, such as cycling or walking. The successful development and implementation of a travel plan will help to reduce congestion and thereby improve car parking efficiency. Travel plans can produce real benefits for:

- **the individual**, through improved health, reduced stress and cost savings;
- **the patient**, by freeing up accessibility to sites, relieving concern, allowing the ability to keep appointments etc;
- **the workplace**, through a healthier, more motivated workforce, reduced congestion and improved access to sites for employees, potential recruits, visitors and contractors;
- **the community**, by organisations demonstrating their commitment to environmental priorities and setting an example to others; reducing congestion, freeing the flow of movement through local routes, reducing road traffic accidents whilst also addressing issues of nuisance and noise;
- **the environment**, through improved local air quality, with less noise, dirt and fumes, which can contribute to other national and global improvements;
- **health promotion**, by encouraging physical exercise, such as walking and cycling.

6.2 An NHS Wales organisation's travel plan should consider the following:

- staff transport to and from work;
- staff transport in the course of their work;
- patient and visitor travel and access to NHS sites;
- public transport availability;
- use and type of fleet vehicles;
- deliveries and contractors;

- peripatetic/community visits;
- reimbursement of travel costs, rewarding vehicles with low emission engines;
- the needs of disabled people with a physical, mental or visual impairment, and the needs of patients, visitors or staff accompanied by young children;
- patients that have temporary disabilities and require assistance during this time.

## Steps to producing a travel plan

6.3 There are a number of defined steps involved in the production of a travel plan, which are all underpinned by a need for continued awareness raising and marketing. The steps are shown in **Figure 2**.

- **Secure senior management support:** the travel plan process should be driven by management to give it authority; provide an example; provide budgets and staff time; and ensure that changes can take place.
- **Identify roles and responsibilities:** includes setting up a steering group and designating a travel plan coordinator. Everyone involved should accept and understand their role. This will include consultation with staff representatives and liaising with management. Examples of roles that need to be considered include the local security management specialist or nominated security specialist and community safety partnerships (CSPs). CSPs are made up of representatives from the police service, health service, local authority, fire & rescue service and probation service.
- **Undertake a site and facilities assessment:** this is recommended in order to ascertain the existing level of provision of issues such as public transport, cycling and pedestrian facilities and car parking. The site and facilities assessment should also give consideration to any potential or existing security risks within the car parking and delivery/drop-off areas. This is to ensure that any future actions do not exacerbate or introduce a new problem.



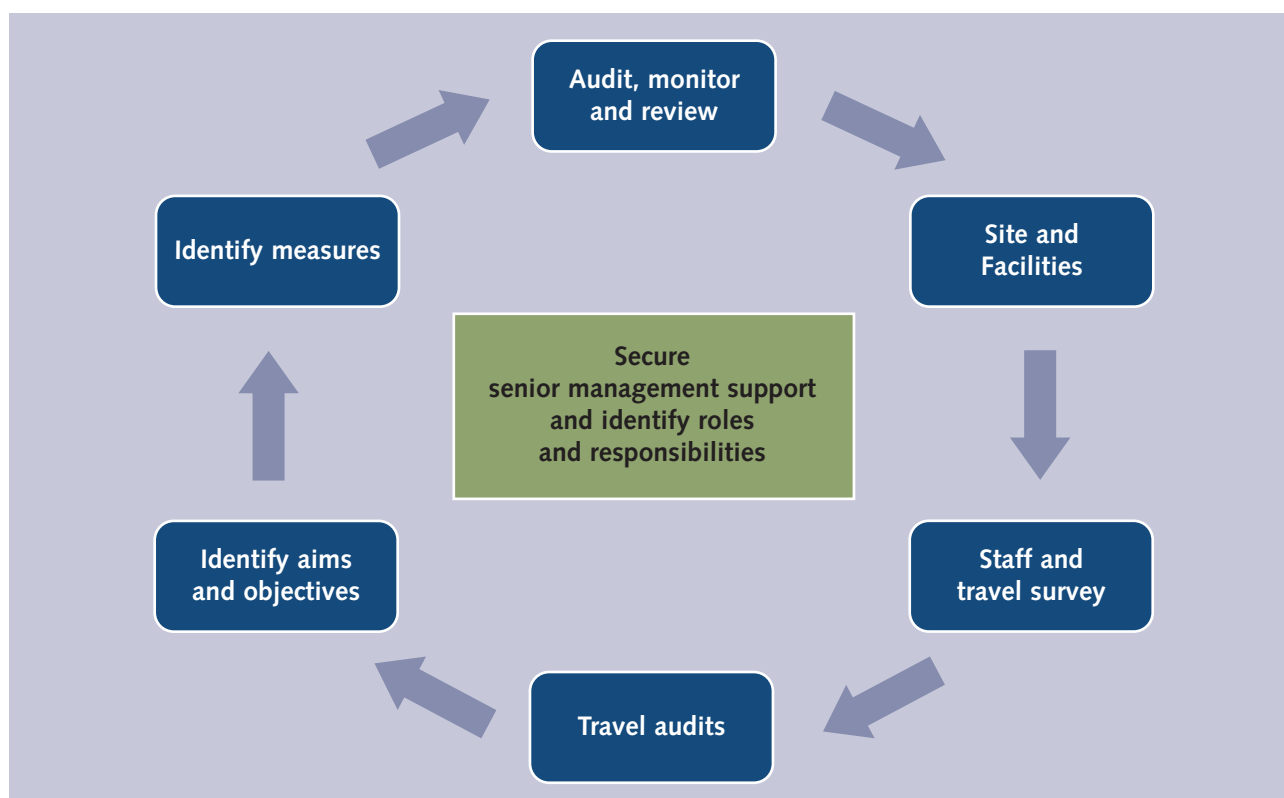


Figure 2 Travel plan 'virtuous circle'

- **Undertake a staff transport survey:** this is recommended in order to understand the existing travel patterns of staff including how they travel, where from, and what factors influence their means of transport.
  - **Undertake transport audits:** this is an analysis of patient/visitor transport and traffic counts. This will include the impact of street parking, disturbance and other community issues, and can be achieved through contact with local community groups and liaison committees.
  - **Identify objectives and indicators for improvement:** meaningful but realistic objectives should be considered for the reduction of single-occupancy vehicle trips to sites, and these are included within travel plans so that they can achieve real improvements in traffic management.
  - **Identify actions:** there are a range of measures that are likely to be incorporated in any successful travel plan, ranging from financial incentives, to choosing an alternative to the private vehicle, to encouraging cycling, walking and the use of electric vehicles for fleet and community staff (for example, midwives).
  - **Audit, monitor and review:** to assess the effectiveness of travel plans, there is an ongoing need to monitor their effectiveness through continued surveys and traffic counts.
  - **Geographic information system (GIS):** consider the benefits of using a software-based GIS to inform and tailor transport to the needs of the staff employed by an NHS Wales organisation.
- 6.4 Travel plans for NHS Wales organisations should consider arrangements for patients that may have temporary disabilities without the necessary documentation that provides assistance (such as blue badges). A system needs to be identified that allows patients with temporary disabilities to receive a level of assistance during their time on site. This could include patient transport and an on-site collection point. If an identified system is implemented, it is important to consider control methods to ensure the system is monitored correctly and not abused. The patient and visitor experience needs to be considered during the planning stages of such a system.

#### Note

NHS Wales organisations should consider any local transport plans when developing bespoke arrangements.

# Chapter 7 Data collection and monitoring

## Note

Car parking data are collected from NHS Wales annually through submissions to the **Estates and Facilities Performance Management System** (EFPMS). The data captures the total number and allocation of parking spaces available at most NHS Wales sites and includes the number of disabled spaces available, the number allocated for patients and visitors, and the number of staff car parking spaces provided.

- 7.1 There are a number of different methods which NHS Wales organisations can use to collect data, monitor parking and sustainable transport related matters; these can be used to make improvements to the site and the running of the organisation.
- 7.2 A wide range of data should be collected and the required monitoring and analysis needs to be carried out before making any on-site modifications to parking and transport. Carrying out these tasks will allow NHS Wales organisations to form an evidence base that can be used to demonstrate the reasoning behind any decisions.
- 7.3 The first stage of data collection is the process of gathering baseline information. This will include details of staff numbers, patient and visitor numbers, number of car parking spaces and other physical information that should generally be available, along with other supporting information such as site plans indicating points of access and egress to and from sites.
- 7.4 A number of considerations should be given to data collection and monitoring, including:
  - **Public transport provision** – up to date, reliable information about public transport can make a significant difference to the way people travel. It should be established what services run near to sites, where the stops/stations are, and what actions could be taken to make public transport more attractive.
  - **Pedestrian access** – identify whether footpaths around the site are safe, secure, well lit, properly maintained and free from obstructions.
- **Cycle infrastructure and facilities** – review and assess whether there are secure and convenient facilities around the site. This should include details of lockers, showers and changing facilities, as well as safe access routes for cyclists that are well lit and well maintained.
- **Vehicular access** – an assessment of whether there are any congestion or access problems on/around the site should be carried out, complete with appropriately signposted routes.
- **Car parking availability and policy** – identify how many spaces are available, who uses the spaces, when and how, and particularly whether there are key times during the day when it is difficult to find a space. An assessment of potential alternative parking provisions should also be undertaken.
- 7.5 Further information gathering may need to be commissioned which will predominantly involve traffic counting. This will establish the number of vehicles accessing the site at various times of the day and, where time permits, over a number of months, to allow for seasonal fluctuations.
- 7.6 There needs to be a clear focus on managing the demand for parking places at peak periods, such as shift changes and to question whether it is possible to review the appointment procedure to avoid severe traffic congestion during times when patients, visitors and staff are all attempting to access the site at a similar time.

## Staff involvement

- 7.7 When considering on-site parking and transport, it is necessary to have the support of senior management and staff representatives. It is beneficial to encourage car parking staff to liaise with senior management as they will be aware of the day-to-day running of the site and will be able to offer assistance and guidance to those that provide input on parking and transport policy. Regular meetings can be arranged for this information to be passed over and discussed.
- 7.8 To assist senior management and make recommendations on parking and transport related

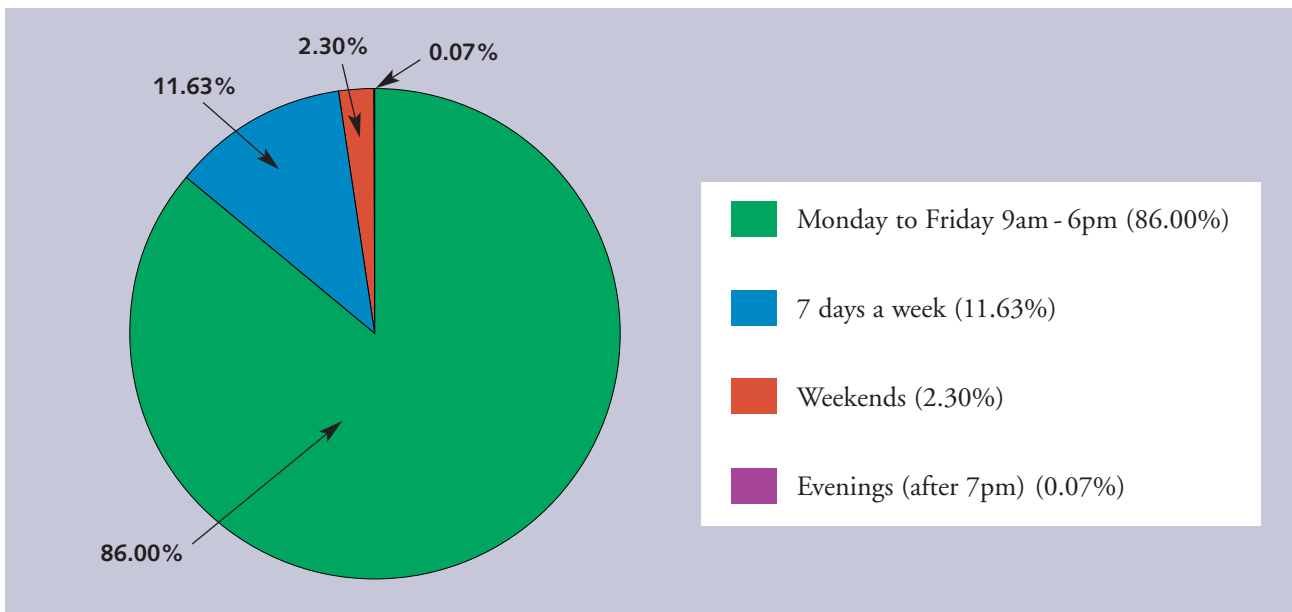
matters, NHS Wales organisations should consider carrying out a travel survey for staff and, where necessary, patients to complete. The results of such a survey will highlight areas that work well and those that need further work. Example travel surveys are given in **Appendix 1** and **Appendix 2**.

## **Audit, monitor and review**

- 7.9 To track the success of a new parking or transport measure, monitoring systems will need to be put in place to establish the success the measure has had on the site and the surrounding area. It is recommended that monitoring is carried out annually and should look to tie into an NHS Wales organisation's parking and transport policies.
- 7.10 NHS Wales organisations that carry out an annual car park analysis will be able to track their progress in reducing single-occupancy journeys to and from NHS sites.

# Chapter 8 Steps to success

- 8.1 **Chapter 2** provides a number of measures that NHS Wales organisations may wish to consider to improve the car parking experience for patients and visitors, and increase the likelihood of sustainable transport being used for journeys to and from the site. However, while these measures can be utilised to improve the car parking experience or sustainable transport, they may not be suitable for the intended purpose.
- 8.2 It is therefore important that a detailed investigation and revenue impact assessment is carried out to establish the suitability of each measure. There are a number of questions that should be worked through before arriving at a conclusion on whether to progress the discussed measure. These include:
- **How much will it cost to implement, maintain and provide staff?**
  - **Who will it benefit and why will it be beneficial?**
  - **Is it likely there may be some drawbacks to implementing the measure?**
  - **Can the measure be sourced and implemented sustainably?**
  - **Will it improve the patient and visitor experience?**
  - **Is there any evidence to suggest the measure will be successful?**
  - **Who do I need to liaise with during the investigation, including internal and external individuals and groups?**
  - **Does the measure offer technology that will improve car parking and sustainable transport?**
- 8.2 Whilst a number of the measures listed in **Chapter 3** are designed to improve the patient and visitor experience, they may be used for operational requirements to assist the running of the site. As there are so many staff employed in NHS Wales organisations, it is not possible to provide parking for all of them, therefore these measures can be used to reduce the need for staff to use private vehicles and single-occupancy trips to and from the site.
- 8.4 NHS car parks typically operate at overcapacity during the peak times Monday - Friday. This means more vehicles are aiming to park than there are spaces available. Surveys conducted in England demonstrated that car parks operate at overcapacity 86% of the time Monday - Friday 9am - 6pm (a similar assessment has not been carried out in NHS Wales, but it would be reasonable to expect similar results). **Figure 3** shows this figure in relation to other times the car park is operational.
- 8.5 NHS Wales organisations therefore need to identify opportunities to alleviate the demand on parking. It is important that this is carried out in a transparent manner with full justification for any decisions made.
- 8.6 It is essential that a wider geographical area than the NHS site be considered when devising car park management strategies so that parking is not displaced into surrounding areas, as this can lead to neighbouring residents being disadvantaged and aggrieved.
- 8.7 Local authorities are generally recognising this problem and will often require the introduction of off-site parking measures, normally residents' parking zones, to prevent this happening. This measure can only be adopted in conjunction with the local highway authority, as they are the body responsible for introducing the necessary orders.
- 8.8 The ultimate success of the car park will be down to how each parking space is allocated. There needs to be an appropriate ratio between patient/visitor spaces and staff spaces. If too much consideration is given to one over the other, it is likely that significant issues will be encountered.
- 8.9 Having collected results from car park ratios of staff against patients and visitors, it is possible to identify the approximate average ratio among all sites.
- 8.10 The more funding and resources provided to improving car parking measures and sustainable transport, the more likely the dependency on private vehicles will reduce. This will allow NHS



**Figure 3** Periods during the week that car parks run at overcapacity (HTM 07-03:2015)

Wales organisations to adjust the car park ratios to allow a greater number of parking spaces. This will almost certainly improve the patient and visitor experience.

## Financial incentives and disincentives

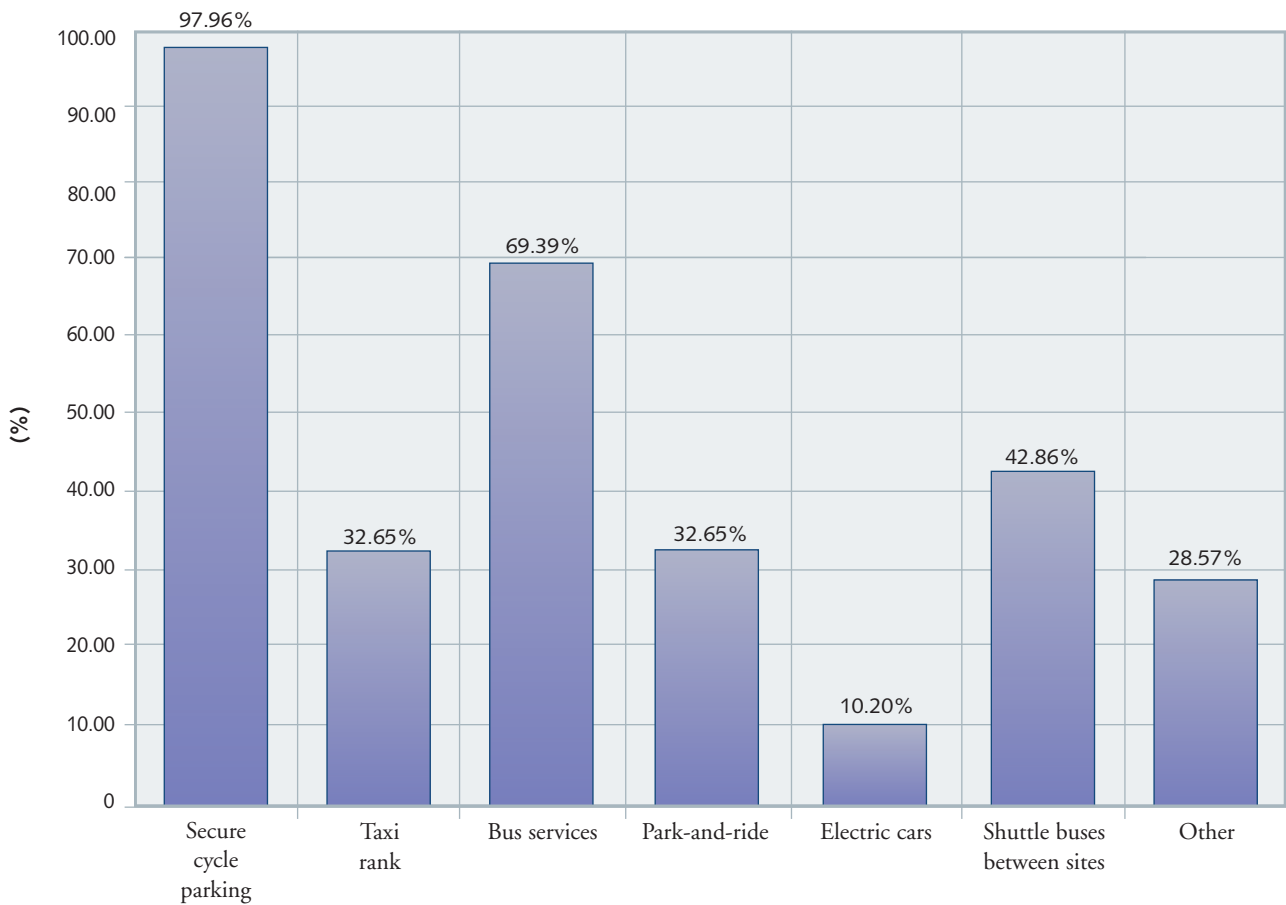
- 8.11 To help staff shift from single-occupancy car travel to more sustainable forms of transport, financial incentives and disincentives must be considered. These can include:
- incentives paid to those who arrive without a car;
  - reductions on public transport fares through negotiated discounts or provision of free bus passes;
  - interest-free loans for cycles;
  - salary sacrifice schemes.
- 8.12 The balance between disincentive and incentive should also be considered, as well as the reliability and regularity of alternative public transport provision, so that the 'opportunity cost' of travelling to the site by means other than a car is more attractive.
- 8.13 Whilst restricting the ability for staff to park in on-site car parks may be the most obvious measure, similar results can be achieved through good transport planning, partnership working and communication. Taking these tasks into consideration, it is possible to reduce the requirement for single-occupancy trips and increase the use of sustainable modes of

transport. However, each NHS Wales organisation will have differing factors that need to be considered. Therefore, what may work for one site, may not work at another site.

## Alternative modes of transport – the modal shift

### Information and communication

- 8.14 The improvement of public transport and provision of information about availability can be a significant benefit in producing a modal shift towards public transport services by people who would previously have driven by car to the site. Liaison between NHS Wales organisations and public transport providers is recommended to ensure that appropriate services are provided.
- 8.15 This will encourage more people to use public transport, particularly where services can be designed so that there are bus stops adjacent to main staff and visitor/patient entrances. This needs to be continuous, with access to a helpline for problems and enquiries.
- 8.16 NHS Wales organisations may have measures in place to assist patients, visitors and staff and which promote sustainable transport, whereas many sites have a number of measures readily available. **Figure 4** shows the measures that NHS organisations have in place in England (a similar study has not been carried out in NHS Wales but it would be reasonable to expect comparable results).



**Figure 3 Measures put in place to promote sustainable transport (source: HTM 07-03: 2015)**  
 (percentage of respondents that have implemented the highlighted sustainable transport measures)

8.17 When considering the potential availability of these measures, NHS Wales organisations should consult staff, and where possible, patients and visitors. This will almost certainly increase the likelihood of the measure being successful after implementation.

8.18 Involving staff can be done through using emails, posters, workshops and team meetings. Engaging with patients and visitors can be done through the measures in place to collect feedback.

8.19 If an NHS Wales organisation has the available staff resource, it is recommended to carry out annual reviews on staff travel behaviour to establish what form of modal shift occurs. Positive results are likely to increase the likelihood of securing funding for other parking and transport related projects and measures.

**Patients' appointments**

8.20 To increase the likelihood of patients and visitors using more sustainable forms of transport, all available resources should be used, such as public

transport, information in appointment letters and details on the organisation's website. NHS Wales organisations should liaise with public transport providers to detail possible needs and requirements to be considered.

8.21 As well as public transport, NHS Wales organisations should consider providing details about car parking in appointment letters. This is likely to reduce DNAs. It will also enhance the patient and visitor experience if warnings are provided about any difficulties highlighted with parking.

**Contractor visits**

8.22 It is important to manage contractors who may be working on-site, either on a daily basis or as part of a large development scheme. Consideration should be given to imposing conditions on contracts for large development schemes, preventing contractors bringing private vehicles onto site, but rather having to rely on transporting staff from other locations.



## Culture and trends

8.23 Not surprisingly, cycling is a more popular alternative where there is a culture of cycle riding and where the environment encourages it. There can also be significant seasonal variations, with more people using cycles in the summer than in winter, and this can often reduce car usage in the summer months. Most NHS Wales organisations provide on-site secure cycle parking and changing facilities, either as standalone sites or incorporated within the main buildings. An analysis of likely demand should be carried out to establish how cost-effective the infrastructure would be.

## Change management

8.24 To increase the likelihood of measures being successful, NHS Wales organisations should consider the impact the changes can make on the site. Making the change from private car to sustainable transport should be made as smooth, easy and comfortable as possible for staff to ensure that there is a minimum of dissatisfaction. When introducing sustainable measures, the time of year should be considered. For instance, in winter months it is unlikely that new cycle facilities will result in a significant increase in cycling owing to the adverse weather.

8.25 The existing infrastructure should be analysed as part of potential measures. For example, to gain maximum success from implementing cycle facilities, the site should have secure and comfortable changing facilities. Without these, the true benefit of the facilities will not be derived. Therefore a holistic approach to the measures is recommended.

8.26 NHS Wales organisations should encourage staff to participate in new initiatives on a part time basis to secure support and increase the likelihood of the staff eventually increasing their commitment. For instance, staff could be encouraged to car-share or use public transport on a few days a week. This may lead to better rates of success in the longer term, rather than the 'big bang' approach of sudden cessation.

## Managing opposition

8.27 It is important to pay attention to complaints and dissent throughout the process of implementing new sustainable measures or car park improvement measures. However, organisations should remember that some groups or individuals may have an agenda.

8.28 Challenging the prevailing culture of car dependence can be difficult and however carefully changes are introduced, there may be some opposition. It is important to have explanations ready and emphasise that the organisation is not asking the impossible. While not everyone will be able to change the way they travel, there are some who can and will.

8.29 It is important to make staff aware of parking as a resource with a cost attached. Devolving responsibility for parking costs or maintenance to departments or business units can help to do this.

8.30 Perceptions are important – every effort should be made to ensure those who use the alternatives such as public transport etc, do not feel like second-class travellers compared with those who enjoy the perceived privilege of car access to the site. NHS Wales organisations should ensure that the transport they use and the facilities they need are of good quality and well maintained; this could tip the balance between success and a negative response.

## Senior level commitment

8.31 Another critical factor in the success of car parking and sustainable transport is ensuring that there is sufficient high level management support from the chief executive and directors, as well as backing from the board. The NHS Wales organisations that demonstrate a level of best practice appear to have management backing, with senior members of staff leading by example.

8.32 Car parking staff should be encouraged to contact high level management, such as directors of estates, who have an overarching responsibility for car parking to raise issues and enquire about decisions. This communication will contribute to the successful running of the car park and site.

# Appendix 1: Example staff travel survey

STAFF TRAVEL SURVEY	
<b>1</b>	<b>Full home postcode</b> .....
<b>2</b>	<b>Gender</b> <input type="radio"/> Male 01 <input type="radio"/> Female 02
<b>3</b>	<b>Staff group (e.g. nursing, admin / clerical)</b> .....
<b>4</b>	<b>Usual place of work (which department / ward)</b> .....
<b>5</b>	<b>How often do you work at more than one location?</b> <input type="radio"/> Never 01 <input type="radio"/> Less than once a week 02 <input type="radio"/> One to four times a week 03 <input type="radio"/> Once a day 04 <input type="radio"/> More than once a day 05
<b>6</b>	<b>Age</b> <input type="radio"/> Under 25 01 <input type="radio"/> 25–34 02 <input type="radio"/> 35–44 03 <input type="radio"/> 45–54 04 <input type="radio"/> 55 or over 05
<b>7</b>	<b>Do you have a disability which affects your travel arrangements</b> <input type="radio"/> Yes 01 <input type="radio"/> No 02 <i>(If YES, please state type of disability e.g. visual, mobility)</i> .....
<b>8</b>	<b>Do you normally work:</b> <input type="radio"/> Normal working day e.g. 8–4, 9–5, 10–6 01 <input type="radio"/> Day shifts i.e. mornings / afternoon 02 <input type="radio"/> Out of hours e.g. night shifts 03 <input type="radio"/> Other (please specify) 04 .....
<b>9</b>	<b>How do you mostly travel to work?</b> <input type="radio"/> Bus 01 <input type="radio"/> Bicycle 02 <input type="radio"/> Car, on your own 03 <input type="radio"/> Car, with other(s) 04 <input type="radio"/> Foot 05 <input type="radio"/> Motorbike 06 <input type="radio"/> Train 07 <input type="radio"/> Other (please specify) 08 .....
<b>10</b>	<b>Which of the following do you occasionally use instead of your usual form of transport?</b> <input type="radio"/> Bus 01 <input type="radio"/> Bicycle 02 <input type="radio"/> Car, on your own 03 <input type="radio"/> Car, with other(s) 04 <input type="radio"/> Foot 05 <input type="radio"/> Motorbike 06 <input type="radio"/> Train 07 <input type="radio"/> Other (please specify) 08 ..... <input type="radio"/> No alternative used 09
<b>11</b>	<b>How far do you travel to work?</b> <input type="radio"/> Up to 1 mile 01 <input type="radio"/> Over 1 mile, up to 2 miles 02 <input type="radio"/> Over 2 miles, up to 5 miles 03 <input type="radio"/> Over 5 miles, up to 10 miles 04 <input type="radio"/> Over 10 miles, up to 20 miles 05 <input type="radio"/> Over 20 miles 06
<b>12</b>	<b>How long does it usually take you to get to work, using your normal mode of travel?</b> <input type="radio"/> Up to 15 minutes 01 <input type="radio"/> 16–30 minutes 02 <input type="radio"/> 31–60 minutes 03 <input type="radio"/> 61–90 minutes 04 <input type="radio"/> Longer than 90 minutes 05
<b>13</b>	<b>Which of the following changes would persuade you to cycle to work? (If you already cycle to work, which would you most like to see?) PLEASE TICK NO MORE THAN 2</b> <input type="radio"/> Safer, better lit work-site cycle paths 01 <input type="radio"/> Improved cycle paths on journey to work 02 <input type="radio"/> Improved cycle parking at workplace 03 <input type="radio"/> More / Improved workplace showers & changing facilities 04 <input type="radio"/> More / Improved workplace lockers for cyclists 05 <input type="radio"/> Arrangements to buy a bicycle at a discount 06 <input type="radio"/> Other financial incentives 07 <input type="radio"/> Promotion of associated health benefits 08 <input type="radio"/> None 09 <input type="radio"/> Other (please specify) 10 .....
<b>14</b>	<b>Which of the following changes would persuade you to use public transport for your journey to work? (If you already use public transport, which would you most like to see?) PLEASE TICK NO MORE THAN 2</b> <input type="radio"/> More direct bus routes 01 <input type="radio"/> More frequent bus service 02 <input type="radio"/> More frequent train service 03 <input type="radio"/> More reliable bus or train service 04 <input type="radio"/> Better lighting at bus shelters & workplace paths 05



## STAFF TRAVEL SURVEY

- Cheaper travel 06
  - More convenient drop-off points 07
  - Better links to work from the station 08
  - Better public transport information 09
  - None 10
  - Other (please specify) 11
- .....

**15 Which of the following changes would persuade you to walk to work? (If you already walk to work, which would you most like to see?) PLEASE TICK NO MORE THAN 2**

- Improved layout of workplace footpaths 01
  - Improved maintenance of workplace footpaths 02
  - Improved lighting on workplace footpaths 03
  - More security measures around site 04
  - More conveniently placed entrances to site 05
  - Road safety improvements in the local area 06
  - Better street lighting in the local area 07
  - Promotion of associated health benefits 08
  - Financial Incentives 09
  - None 10
  - Other (please specify) 11
- .....

Please complete sections 16 –19 if you use a car to get to work.

**16 What are your main reasons for using a car to get to work? PLEASE TICK NO MORE THAN 2**

- Essential to use a car during the working day 01
  - Dropping / collecting children 02
  - Get a lift 03
  - Health reasons 04
  - Personal security 05
  - Lack of an alternative 06
  - Cost 07
  - Reliability 08
  - Other (please specify) 09
- .....

**17 Where do you usually park?**

- On hospital site in a staff parking space 01
  - On hospital site in a patient or visitor space 02
  - On hospital site in the main barrier controlled car park 03
  - On hospital site, but not in a designated parking space 04
  - Off site in a nearby street 05
  - Off site in a nearby car park 06
  - Other (please specify) 07
- .....

**18 Would you be prepared to car-share?**

- Yes 01
- No 02
- I already car-share 03

**19 Which of the following would persuade you to car-share? (If you already car-share, which would you most like to see?) PLEASE TICK NO MORE THAN 2**

- Help in finding car-share partners with similar work patterns 01
  - Free taxi home if let down by car driver 02
  - Reserved parking for car-sharers 03
  - Reduced car parking charges for car-sharers 04
  - None of these 05
  - Other (please specify) 06
- .....

**20 Are you aware that Park & Ride is available to get to work?**

- Yes 01
- No 02

**21 Do you use Park & Ride to get to work?**

- Yes 01
- If Yes, which Park and Ride site?
- .....

- No 02
- If No, what prevents you from using it?
- .....

**22 Do you have any comments about your travel to work?**

.....

.....

.....

.....

.....

.....

*Thank you for your co-operation. Please be assured that all your answers remain confidential.*

# Appendix 2: Example patient / visitor travel survey

## PATIENT / VISITOR TRAVEL SURVEY

**1 Are you a patient or a visitor? (please tick)**

- Patient 01
- Visitor 02

**2 Which hospital department are you visiting, or being treated at today?**

.....

**3 At what time did you arrive at the hospital?**

.....

**4 Which day of the week did you arrive at the hospital?**

- Monday 01
- Tuesday 02
- Wednesday 03
- Thursday 04
- Friday 05
- Saturday 06
- Sunday 07

**5 Do you have a disability which affects your travel arrangements?**

- Yes 01
  - No 02
- (If YES, please state type of disability e.g. visual, mobility)*

.....

**6 Please could you give your home postcode?**

.....

**7 How did you travel to the hospital?**

- Ambulance 01
- Bus 02
- Train 03
- Bicycle 04
- Car, driving yourself 05
- Car, as a passenger 06
- Foot 07
- Motorbike 08
- Voluntary/Dial-a-ride 09
- Other (please specify) 10

.....

**8 If you did not use public transport, what would have persuaded you to use the bus or the train for your trip? (please rank your three most important reasons)?**

- More direct routes ....
- More frequent ....
- More reliable ....
- Faster service ....
- Cheaper fares ....
- Better security ....
- Safer walking route from the station ....
- More public transport information ....
- Better access on and off the bus ....
- Other (please specify) ....

.....

**9 If you came by car, did you have difficulty in finding a place to park on the hospital site?**

- Yes 01
- No 02

**10 Do you have any comments about your journey to the hospital?**

.....

.....

.....

.....

.....

.....

.....

*Thank you for completing our survey*

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