What are Herefordshire Public Services doing to improve access to health services, bearing in mind the unique issues faced by our rural population?

1 Introduction

This paper is the third of a series of discussion papers setting out Herefordshire Public Service's approach to population health issues. This paper focuses on access to health services which is a key factor influencing the health of both individuals and the population as a whole. The issues which have been identified by the Health Scrutiny Committee in the context of this report as important in relation to access to health services are: broadband, transport, older people and dental access.

In relation to access to health services for older people, although this issue is mentioned in this report, it is scheduled to be covered in more detail at a future Health Scrutiny Committee (January 2011).

2 Access to health services

2.1 Access to health services – what are the issues?

A number of key findings about the county have been identified from work relating to the State of Herefordshire Report 2010. These are presented here verbatim from the Report as they have direct relevance to access to services, including health.

State of Herefordshire Report 2010: the findings

Herefordshire itself as a county

Herefordshire is a predominantly rural county of 842 square miles situated in the south-west corner of the West Midlands region bordering Wales. With 179,100 residents, it has the 4th lowest population density in England (0.8 persons per hectare). A particular challenge for service delivery is how scattered the population is. According to measures used in the calculation of the Local Government Finance Settlement, no other English county-level authority has a greater proportion of its population living in 'very sparse' Output Areas than Herefordshire (25%). Over half (54%) of the county's residents live in areas defined as rural[1].

Herefordshire's population has a relatively old age structure, with the proportion of older residents expected to increase

Just over a quarter (26%) of Herefordshire's population is of state retirement age (60 for females; 65 for males) or above (45,800 people), compared to a fifth both regionally and nationally (20%). Numbers of older people have grown more rapidly locally than nationally: there are 15% more people aged 65+ living in Herefordshire in 2009 than in 2001, compared to 8% more in England & Wales. This growth is expected to continue, but even more rapidly - with 57% more people aged 65+ forecast to be living in Herefordshire by 2026, from 38,800 in 2009 to 61,000 in 2026. In particular, the number of

[1] Sources: ONS population estimates, mid-2009; Small Area Population Estimates, mid-2008 – Crown copyright

people aged 85+ is expected to almost double, from 5,400 in 2009 to 10,200 in 2026[2].

Pockets of deprivation are concentrated in urban areas of Herefordshire, but smaller pockets also occur in more rural areas. Some of these areas have got worse since 2004

Herefordshire as a whole experiences relatively low levels of deprivation compared to some urban counterparts. However within Herefordshire there are pockets of deprivation where residents are likely to be subject to many different aspects of deprivation. For example there are two areas that have particularly high levels of income deprivation. In the Leominster Ridgemoor area, 41% of individuals live in income deprived households and Golden Post – Newton Farm area in Hereford City had 37%. The proportion of people experiencing income deprivation in all of these areas have increased from 2004. These areas also both experience high levels of health and employment deprivation.

Using these measures of deprivation at this geographical level can hide deprivation that can occur for smaller groups of households or even on a household level in rural areas. Looking at smaller areas of deprivation from the 2004 indices of deprivation, also identifies areas of income deprivation within the villages of Whitcurch, Kingstone, Peterchurch, Weobley, and Bartestree and in the other market towns of Ross-on-Wye, Ledbury and Kington.[3]

Rural areas in Herefordshire are less likely to receive a decent level of broadband service compared to urban areas

Overall 57% of Herefordshire's postcode areas have the potential for broadband up to 2 Mbps. However in 2008, 46% of rural areas were likely to receive no service or low broadband speed (up to 0.512 Mbps), compared to only 1% of urban areas. Broadband is of one of the most important issues facing the economic and social wellbeing of Herefordshire with many people relying on it for education, work, social and community cohesion, and for accessing services. Lack of broadband provision or poor speeds mean that many rural areas risk being left further behind as next generation broadband is introduced.

Access to key services in rural parts of Herefordshire is notably worse than for rural areas in England as a whole and the West Midlands

The percentage of Herefordshire households within set distances for most key services is much lower than for the West Midlands region and England as a whole. In particular, when comparing rural villages and dispersed areas across Herefordshire, the West Midlands and England, access is notably worse in Herefordshire. The most marked differences are seen for banks and building societies, supermarkets, NHS dentists, petrol stations and secondary

[2] Source: ONS population estimates (Crown copyright) and Herefordshire Council Research Team's 2006-based population forecasts

[3] Sources: ONS population estimates, mid-2009; Small Area Population Estimates, mid-2008 – Crown copyright

schools: Herefordshire's figures for these services being between 12% and 35% lower.[4]

However, since 2007 there has been an increase in the proportion of all Herefordshire households within set distances for GP Surgeries and a Public House. Access to GP surgeries increased from 76% in 2007 to 83% being within 4km in 2008 and access to a Public House within 2km saw a small increase from 86% in 2007 to 88% of households in 2008.

According to the 2007 Indices of Deprivation, 76 out of 116 Lower Super Output Areas in Herefordshire fall within the 25% most deprived in England in terms of geographical barriers to services. 52 of these also fall within the 10% most deprived[5].

Access to some other key services was seen as difficult by significant minorities

For instance public transport, a post office and cultural or recreational facilities by were seen as problematic by about one in five Herefordshire residents[6].

2.2 Access to services – what is happening

2.2.1 Rural Access Partnership

There are a number of programmes which address access to services in rural areas. The overarching body for these is the Rural Access Partnership (RAP), which is a subgroup of the Stronger Communities Policy and Delivery Group. The RAP has a number of key areas of activity within its 2010-11 action plan. These are as follows:

- Mapping of services: to gain an understanding of the level and type of services available in order to assess needs and gaps in provision. To also make information available to the public to aid knowledge of existing services.

- Address the needs of disadvantaged groups: to understand the needs of groups who are disadvantaged by limited access to services as a way of targeting resource of people who need the services most.

- Improving broadband coverage and width: to create solutions to address the "not-spots" of broadband coverage in Herefordshire and low bandwidth that can potentially create disadvantage in accessing information and services for communities, and competitive advantage for businesses.

- Promoting access to services: to increase service provision to enable better access to services combined with awareness of services currently provided. To this end improve the performance linked to the access to services Local Area Agreements (LAA) targets.

[4] Source: The Countryside Agency, 2008
[5] Source: Indices of Deprivation 2007, Department for Communities and Local Government (CLG)
[6] Source: Herefordshire Satisfaction Surveys, Herefordshire Council 2008

- Improving access to services to the digitally excluded: to increase digital service provision to those in need, who face barriers to accessing those services due to disadvantage, such as age, disability, and income.

- To address specific access to health and leisure services: to address access to and awareness of health services, specifically NHS dental facilities.

- Maintain access to transport: use a mixed range of transport options to enable people access to services at key locations in the county, primarily the city and market towns.

- Strengthening role of the Rural Access Partnership: to maximise the role of the partnership in bringing together different services and partners to address the combined challenges of people being able to access services.

These themes go some way to addressing the challenges of access to rural health services, but will need to link with the changes to commissioning of health provision in the future.

2.2.2 Broadband

Broadband is of one of the most important issues facing the economic and social wellbeing of Herefordshire with many people relying on it for education, work, social and community cohesion, and for accessing services including health services. Lack of broadband provision or poor speeds mean that many rural areas risk being left further behind as next generation broadband is introduced.

Access/lack of access to IT and broadband also has implications for population health and for the delivery of health services. One example is provided by telemedicine which is discussed below (section 2.2.4).

Herefordshire already has some residents unable to access broadband at all. BT is the only major provider in the county and it will have trouble providing 2Mbps to everyone by 2012, as the Government has proposed under Digital Britain. However, if the county is not to be left behind the rest of the world we need to look at implementing a communications infrastructure that will last for 50 years or longer, with broadband speeds in excess of 10Mbps, and with a high quality service to all residents in the county.

This will be achieved through the ambition of all homes and business premises being able to connect to a high speed broadband service offering at least 10Mbps download speed and 5Mbps upload speed, by 2015. In the short term, by 2012, all homes and premises to have affordable access to broadband at speeds of 2Mbps. By 2020 any home and business should have the opportunity to access 100Mbps download speed with a choice of upload speeds. Broadband services in Herefordshire must be affordable to the user and in most cases offer a choice of Internet Service Provider.

How the vision should be delivered is subject to a range of technical options, but the majority of homes and premises should be served by a county wide fibre optic infrastructure. New homes and new premises on business parks should be built by their developers with fibre optic connections.

In the Comprehensive Spending Review October 2010 Herefordshire has been identified as a trial area for superfast broadband which will have an impact on access to improved IT for service delivery.

2.2.3 Update on Herefordshire Broadband, October 2010

Broadband Delivery UK (BDUK) is the organisation appointed by the government to deliver improved broadband services in the UK. They will let contracts for delivery of a 2Mb minimum service during 2011, to be completely rolled out by the end of 2015. In parallel, in July, they announced that they would fund three superfast broadband pilots to provide experience of the issues of delivering fast broadband in hard to reach areas. Herefordshire, backed by Advantage West Midlands, submitted a bid for the Golden Valley and south border area of Herefordshire to be a pilot area, extending into Wales and Gloucestershire in their adjacent border areas.

In the north of the county Airband Community Internet will be providing a wireless broadband service with up to16Mb speeds to the north and east of Leominster, funded through the RRZ using EU money. The service will be capable of being extended beyond the initial Ludlow, Leominster, Tenbury Wells triangle once the users within that area have been connected. Airband has found there has been reasonable interest in the service and the company will be looking for opportunities to promote the service at events around Leominster.

Allpay Broadband has said that it intends to provide a wireless broadband across the county by Christmas. Allpay currently provides wireless broadband in Kingstone and Allensmore, and is extending its reach into the Golden Valley and round to the west and north of Hereford before Christmas. There will be further expansion into other areas over the next six months.

2.2.4 Telemedicine

Telemedicine is defined as “the exchange of medical information from one site to another via electronic communications for the health and education of the patient or healthcare provider and for the purpose of improving patient care” (Kiel 2001)[7]. There are greater opportunities for improvements in telemedicine as a result of the developing broadband agenda in the county. The next generation of telehealthcare provision is likely to build on the emerging networks already in place.

Types of Telemedicine
The common thread for all telemedicine applications is that a client of some kind (e.g. a patient or healthcare worker) obtains an opinion from someone with more expertise in the relevant field, when parties are separated in space, in time or both (Wootton *et al.* 2006)[8]. Telemedicine can be classified into:

- Store-and-forward
- Remote monitoring

[7] Kiel JM, 2001. Information technology for the practicing physician. New York: Springer-Verlag.
[8] [8]Wootton R., Craig J., and Patterson V., 2006. Introduction to Telemedicine. London: Royal Society of Medicine Press.

- and interactive services

The type of interaction is usually classified as either pre-recorded (store-and-forward) or real time (also called synchronous or interactive). The former involves acquiring medical data (like medical images, biosignals etc) and then transmitting this data to an expert at a convenient time for assessment. Interactive telemedicine services provide real time interactions (no time delay in the information being collected and transmitted) between patient and provider, to include phone conversations, online communication such as video conferencing and home visits. Remote monitoring, also known as self-monitoring/testing, enables medical professionals to monitor a patient remotely using various technological devices.

Telehealth services in Herefordshire

A Telecare and Tele-healthcare Steering Group was convened at the end of July 2010 to start looking at the further application of telehealth services in the county, working to the Maximising Independence Workstream.

Currently work is talking place in telecare around application of DH Care Services Efficiency Delivery (CSED), telecare planning and an evaluation tool kit. A draft summary report is to be completed by the end of November and this will inform a Telecare Strategy.

Specific initiatives and proposals around telehealth services

A central review team will reassess clients' needs and a significant increase in the uptake of telecare is envisaged. There is also a proposal for an evaluation to identify the impacts of telecare to facilitate earlier discharge from hospital, and a proposal to specify and procure a sub-regional monitoring service.

Future initiatives and proposals around tele-healthcare

Through the Maximising Independence Workstream there is a proposed pilot to introduce tele-healthcare for people with COPD, and a proposal to implement and evaluate simple Tele-healthcare with a mobile phone text based system.

There is a joint bid to become Older Persons Pilot Site, around Improving cancer treatment assessment and support for older people with a diagnosis of cancer.

NHS Herefordshire and Herefordshire Council have released funding to develop a small scale project to evaluate the potential of touch screen technology to enhance the quality of life of people with memory difficulties. The Strategic Health Authority has funded Staffordshire University to research the potential for this technology to be a therapeutic alternative to anti-psychotic approaches.

It is likely that the Council will also look to build on the work so far to support individual provision of Telehealth from personalised budgets on the basis of patient benefit where appropriate.

2.2.5 Older People

The most recent major piece of work is the strategy document "Growing Older in Herefordshire" (Herefordshire Partnership 2007). This sets out the framework for service provision for older people in the county. A more detailed paper on older people's health is scheduled for the January 2011 Health Scrutiny Committee meeting.

2.2.6 Transport

Public Transport in Herefordshire is provided by commercial bus and train operating companies. Bus services are either fully-commercial or, where commercial operation is not viable, are operated under contract to the council. Train services are operated under a franchise from central government.

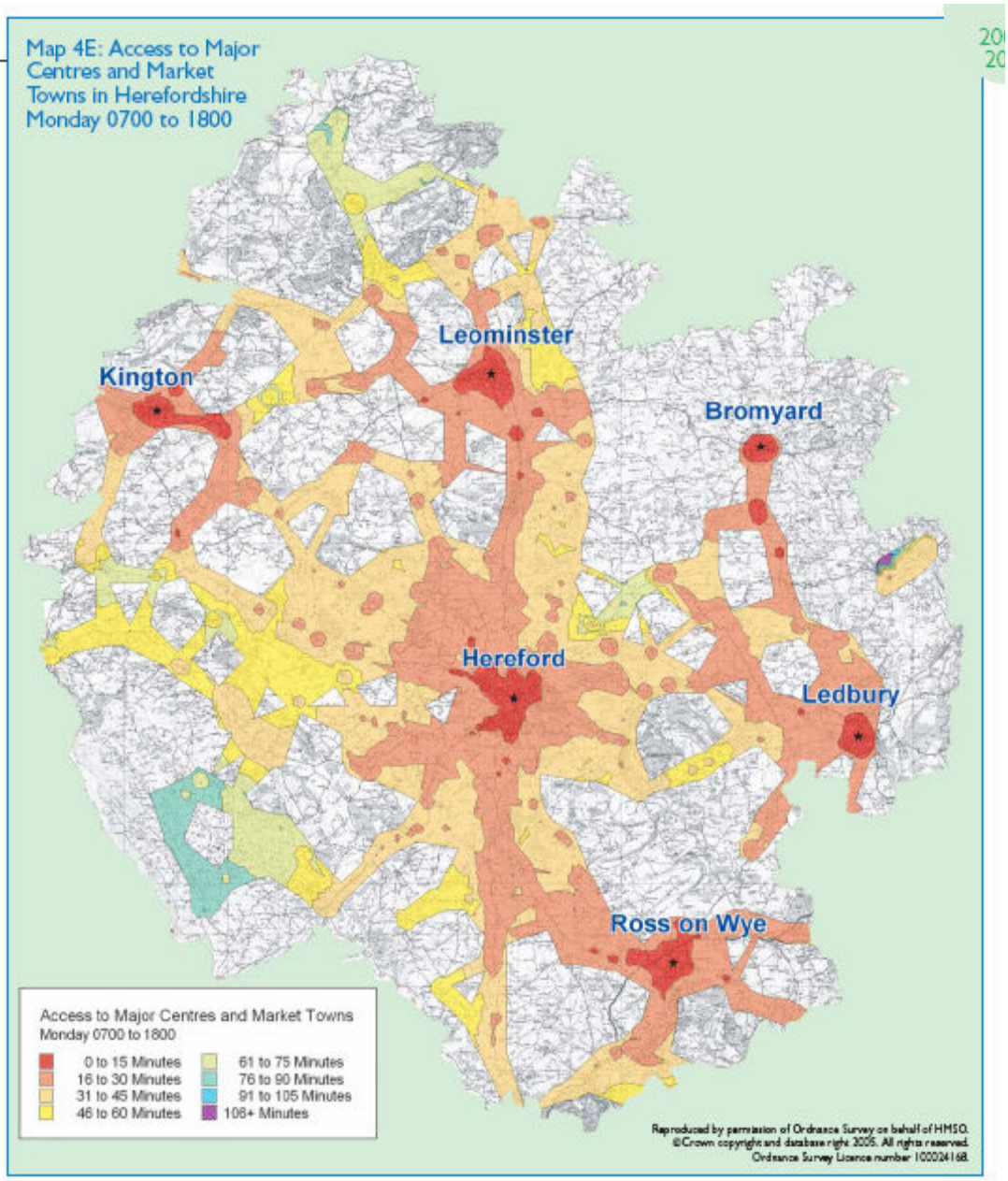
Most bus services, called "commercial" bus services, are planned and provided by bus companies, which are solely responsible for the routes, times and fares charged. "Contracted" bus services are run by bus companies to service specifications set out by Herefordshire Council, which also pays the companies the difference between the operating cost and the income from fares on these services. Contracted services are only provided where no suitable commercial service exists - 60% of the conventional bus network is provided on a commercial basis with 26 operators. There is not a predominant operator but six are significant players in the market. The commercial bus network is concentrated within Hereford and the four largest market towns. With increasing rurality, bus frequencies decrease. The Hereford urban area supports a frequent and comprehensive bus service with routes typically having a 15 minute frequency. Inter-urban routes have an hourly or two hourly services. There are no commercial journeys after 7pm or on Sundays, and even on weekdays other routes away from the main corridors have more sparse services with some having none at all.[9]

Some bus services run early in the morning and do not return until evening, others leave little time for accessing health services before having to return on the only bus service back to an area, and some on only certain days of the week. For example, to travel from Bredwardine into Hereford is only possible on a bus at 07.09, returning at 13.10 on a Wednesday or a Friday, or at 17.10 for the whole week.

In many cases, because of the rural nature of the county, the bus services do not run at appropriate times or to venues that would enable people to access health services, particularly in rural areas.

The map below from the Local Transport Plan 2006-11 illustrates the issues around travel between rural villages as opposed to into urban areas with the paucity of services on offer.

[9] Local Transport Plan 2006-2011



Community Transport (CT) therefore plays an important role within Herefordshire by providing access to services for people who are unable to use conventional public transport. There are eight schemes operating in the county which are all run through charitable organisations. The schemes are all provided with grant funding from Herefordshire Council to enhance the service and are provided with support by Community First on behalf of Herefordshire Council.

The CT schemes provide a pre-booked, door-to-door transport service to help people get to local services, hospitals, visit friends and enjoy a range of leisure activities.

It provides transport for people unable to use conventional public transport services because:

- There is no public transport service available
- There is no alternative transport at the time they need to travel

- They have limited mobility, which prevents them from using bus or train services.

Community car schemes use volunteers driving their own cars to provide transport for passengers needing to make a journey. Some schemes also operate minibuses or multi-purpose vehicles which can be used by passengers in wheelchairs or people who are travelling together. Passengers pay a contribution towards the cost of the journeys which are also subsidised by Herefordshire Council. Journeys can be made to the shops, doctors, friends and relatives, hospitals, dentist, opticians and for appointments, where no alternative transport is available.

Figures from Community First, the third sector infrastructure organisation which oversees and supports the schemes in the county, on behalf of Herefordshire Council, show that last year there were 6,290 registered users making 53,900 journeys through community transport.

In addition to transport provision available direct to members of the public, the Ambulance Service also plays an important role in supporting access to medical services within the County. There is a volunteer drivers scheme which is run through the West Midlands Ambulance Foundation Trust to provide hospital journeys for patients meeting particular criteria around statutory obligations. This is not funded through Herefordshire Public Services but complements the work of the community transport schemes.

2.2 7 Dental Access

During 2010, a dental procurement exercise was undertaken as a result of which an additional 18,000 Units of Dental Activity (UDAs) have been commissioned in Herefordshire. This additional dental service capacity commenced on 1 October 2010 and will provide access to NHS dentistry for an additional ~6,000 patients, predominantly in the Ross-on-Wye and Ledbury areas.

NHS Herefordshire currently operates a central waiting list for residents who want to obtain a regular NHS dentist and is working towards removing the need for a centralised waiting list completely by April 2011. The waiting list has historically been seen as somewhat of a barrier to being able to access dentistry, especially due to the length of time that residents needed to wait in particular areas, i.e. Ledbury/Ross on Wye. Back in 2006/2007 the number of residents who were waiting to access regular dental care had reached approximately 25,000. By identifying this issue, and working with both existing and new dental providers, it has been possible to reduce this number to ~1,000 by providing more capacity. We anticipate that by April 2011, those remaining ~1,000 will have been allocated to an NHS dental practice.

NHS Herefordshire now has a dedicated Dental Helpline, which is supported by a Dental Service Improvement Coordinator. This service assists callers to locate an NHS dentist, without needed to trawl through telephone directories. Once the waiting list is no longer in operation, then callers will be assisted in finding a NHS dentist to suit their needs, through appropriate signposting.

Access to emergency care is available at the seven Dental Access Centres in the county.

Further information on access to NHS dental care in Herefordshire can be found in the report in Appendix 1.

2.2 8 Local Development Framework 2010 - 2020

In the Local Development Framework (LDF) there is a section on health which identifies the issues as follows:

- Ageing population
- Rising levels of obesity
- Disparities in health geographically and demographically
- Access to essential facilities
- Many small rural settlements without access to health, education, employment, retail or recreational facilities and with very little public transport
- Scarcity of local services such as post offices and independent shops
- Limited availability of high-speed broadband

As a result of the identification of these issues, the preferred policy direction for health will:

- Support development proposals for new or expanded healthcare facilities through the Hereford and Market Towns and Rural Areas Plans, in partnership with the Herefordshire Primary Care Trust and other healthcare providers, and facilitated by developer contributions; and
- Promote multiple community uses of new and existing facilities through the Hereford Area Plan and the Market Towns and Rural Areas Plan.

3 Summary

This paper has summarised the health issues relating to access to services and provided examples of the wide range of work going on within Herefordshire to improve access at a population level.

The support of both Health Scrutiny Committee and all the Members of Herefordshire Council is both welcomed and needed for developing and improving access to rural services. Councillors have an opportunity to advocate for appropriate policies, particularly around transport; to support local projects within their wards; and lobby for changes on a wider basis which will improve the health and wellbeing of the population of Herefordshire.

Appendix 1

Access to NHS Dental Care

NHS Herefordshire (Oct 2010)

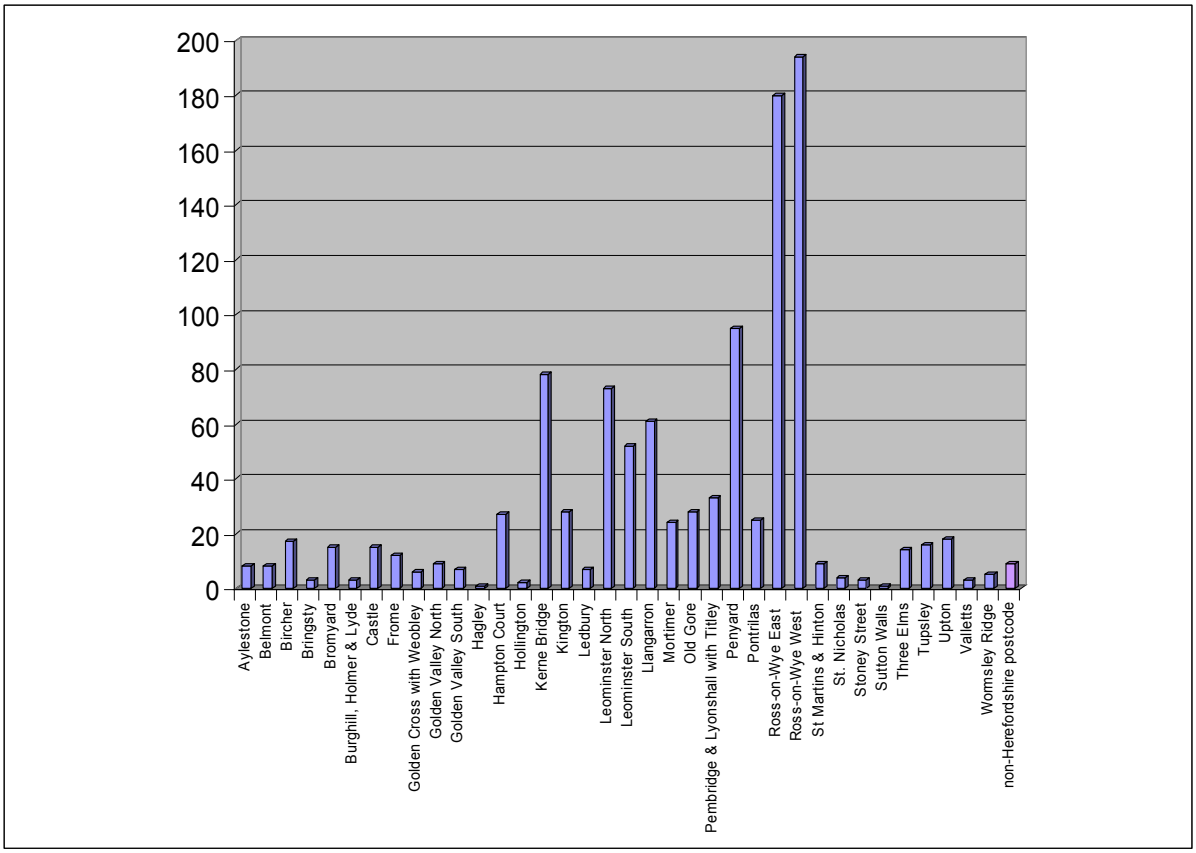
1. Introduction

This report provides data and geographical information in relation to patient access to NHS dental care in Herefordshire at October 2010.[10]

2. Numbers Waiting for Routine Dental Care

NHS Herefordshire currently operates a centralised dental waiting list for routine NHS dental care.[11] Analysis of this waiting list based on resident post-code shows that the numbers of people waiting for NHS dental care varies markedly across the county and is highest in the following wards: Ross-on-Wye West (194), Ross-on-Wye East (180), Penyard (95), Kerne Bridge (78), Leominster North (73), Llangarron (61) and Leominster South (52) (see figure 1).[12]

Figure 1: Numbers of people on the NHS Herefordshire dental waiting list by ward of residence (October 2010)



[10] It is important to note that because of the inherent delay in the reporting of dental access data, increased access resulting from the additional dental capacity procured during 2010/11, which started to be delivered in October 2010, is not reflected in the data shown in this report.

[11] The PCT is aiming to phase out this waiting list: during 2010/11 the PCT has procured an additional 18,000 UDAs and instigated a manned dental helpline to improve access to NHS dentistry.

[12] Figures correct at 13th October 2010: the total number on the waiting list on this date was 1093.

3. Access to NHS dental care

In September 2010, the percentage of the resident population of Herefordshire who had accessed NHS dental care within the previous 24 month period was 52.16%. (compared to 56% in England as a whole).[13] Table 1 gives an overview of the number of patients seen in the previous 24 months for the quarter ending September 2009 to the quarter ending September 2010.

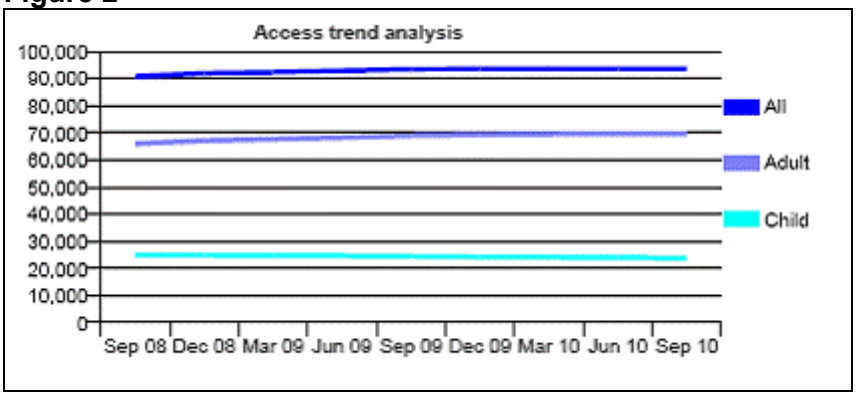
Table 1

Patients seen in 24 months	Total	Change since previous quarter
Quarter ending September 2009	93,436	
Quarter ending December 2009	93,498	→
Quarter ending March 2010	93,622	→
Quarter ending June 2010	93,582	→
Quarter ending September 2010	93,521	→
Variance since September 2009	0.1%	

Source: Vital Signs at a Glance Report, Dental Practice Board (NHS BSA)

Figure 2 shows the trend in the number of patients accessing NHS dental care since September 2008.[14]

Figure 2



Source: Vital Signs at a Glance Report, Dental Practice Board (NHS BSA)

The maps shown below in figures 3 - 5 show the access rate by ward (expressed as a % of the ward population) for patients resident in Herefordshire. They are broken down by age group (figures 4 and 5) as well as for all patients (figure 3). For each map those wards shaded red have the lowest access rate, those shaded blue the highest. The scales for each map are based on an equal range, which divides records across ranges of equal size, therefore the levels for each map are relative to the specific data.

These maps show that access rates are lowest overall in the south-east of the county, notably in Hope End, Ledbury, Old Gore, Penyard and Ross-on-Wye East

[13] 24 month access rates are a standard measure for dental access.
[14] NB the additional dental capacity procured during 2010/11 started to be delivered in October 2010 and so is not yet reflected in published access data

wards (figure 3). A similar pattern is seen in patients aged 20 years and over (figure 4). For patients aged 19 and under, the lowest level of access is found in Hope End (figure 5).

Figure 3: Ward Level Access Rate (%) for All Patients

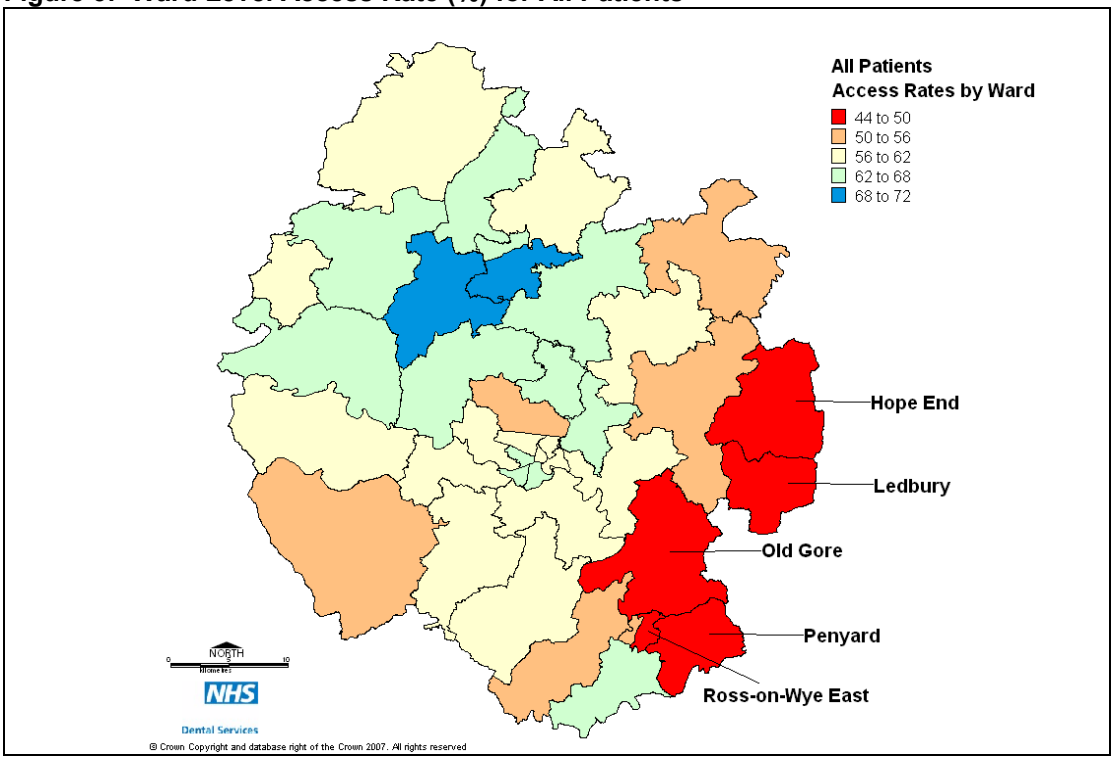


Figure 4: Ward Level Access Rate (%) for Patients aged 20 and over

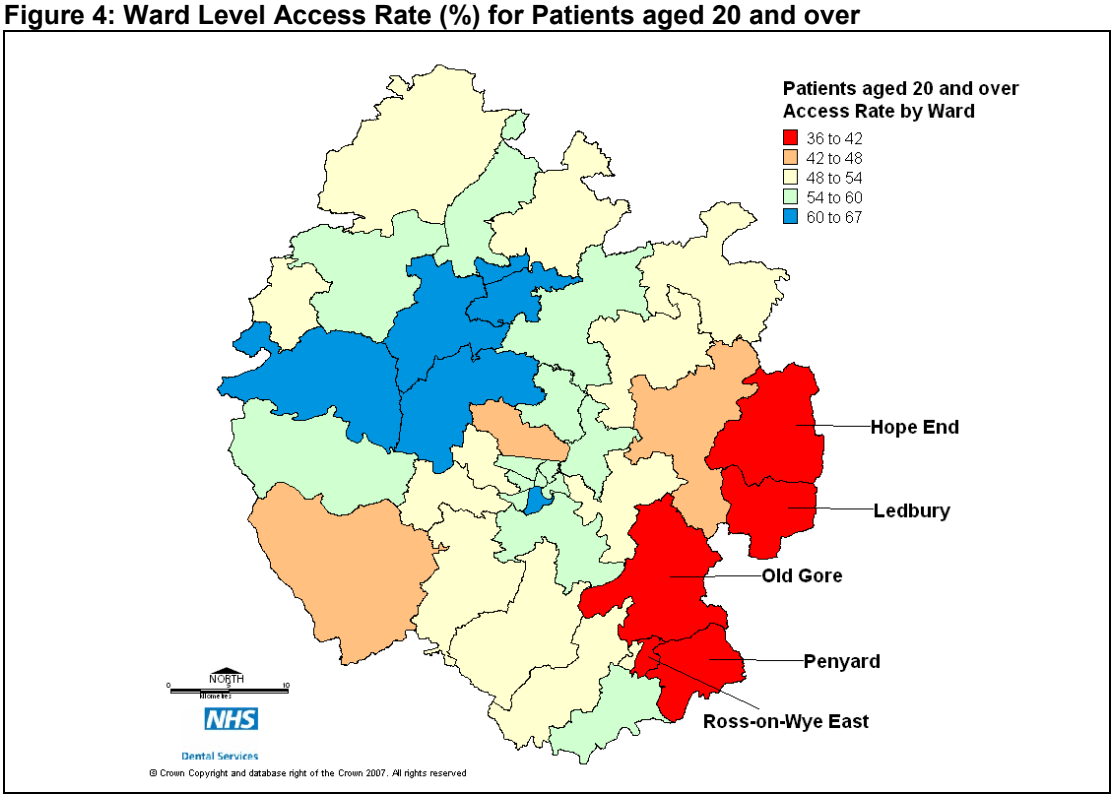
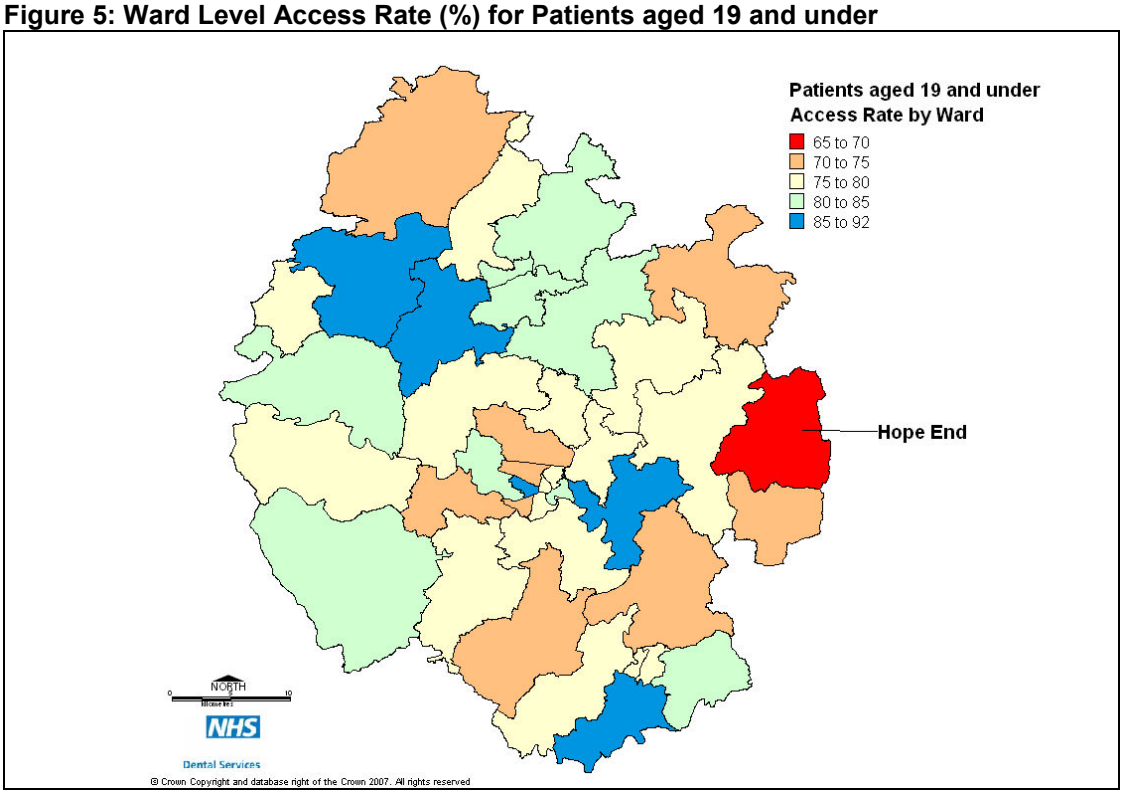


Figure 5: Ward Level Access Rate (%) for Patients aged 19 and under



4. NHS Dental Services Delivered (UDAs)

Figure 6 shows the treatment locations which have delivered NHS dental care (by UDAs)[15] for the 12 month period October 2009 to September 2010. Those locations with the highest levels of UDA are shown with the larger symbols on the map. Main towns and cities are shown for geographical reference.

[15] Unit of Dental Activity – the measure used to record dentists' work

Figure 6: Delivered UDA October 2009 to September 2010 by Treatment Location

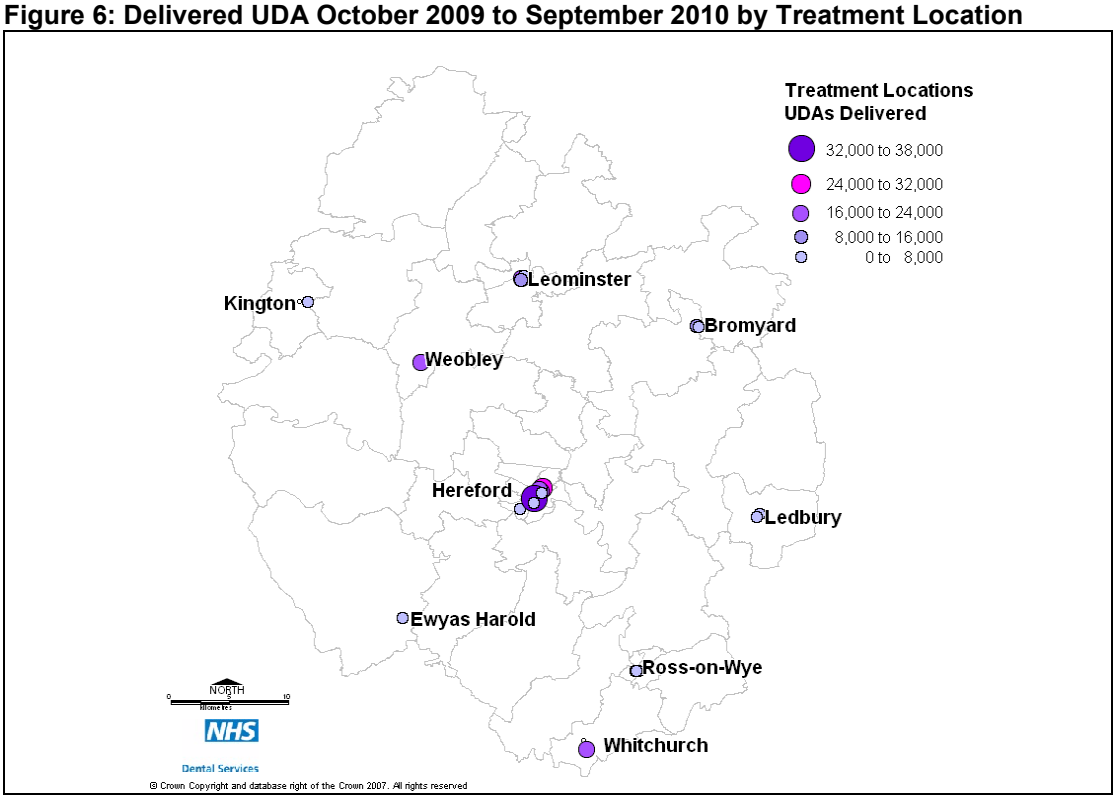
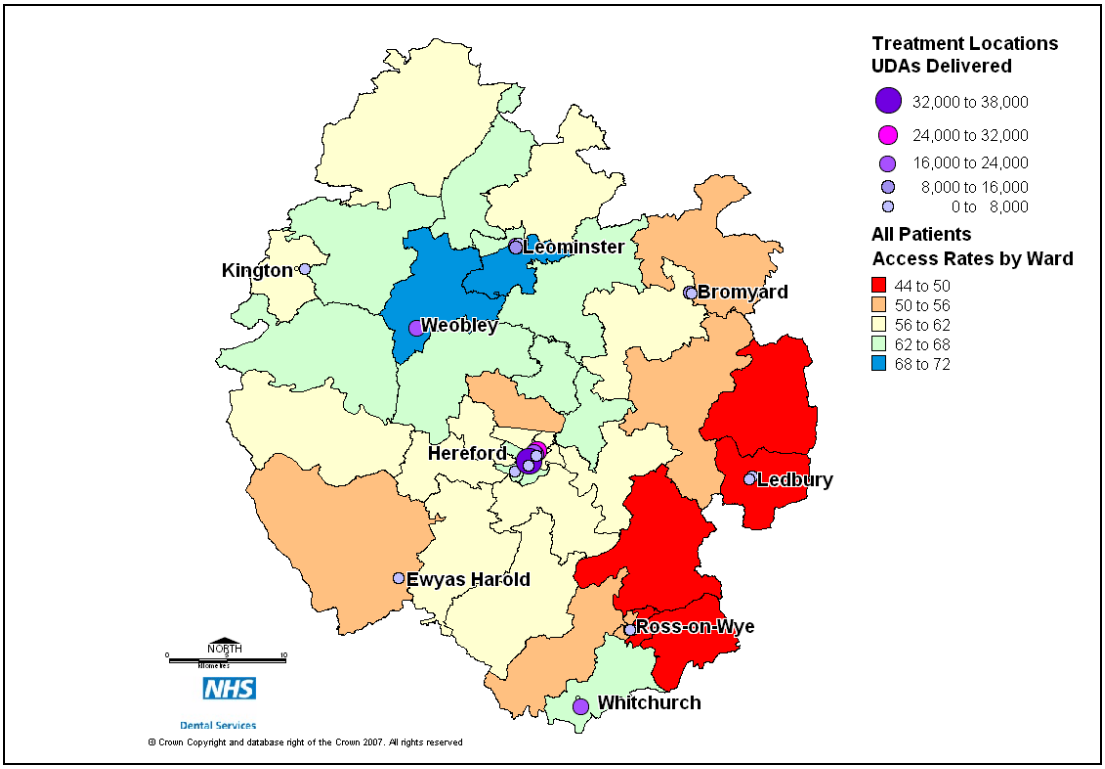


Figure 7 shows the access rate by ward overlaid with treatment locations that delivered UDAs for the analysed period.

Figure 7: Delivered UDA and Ward Level Access Rate (%)

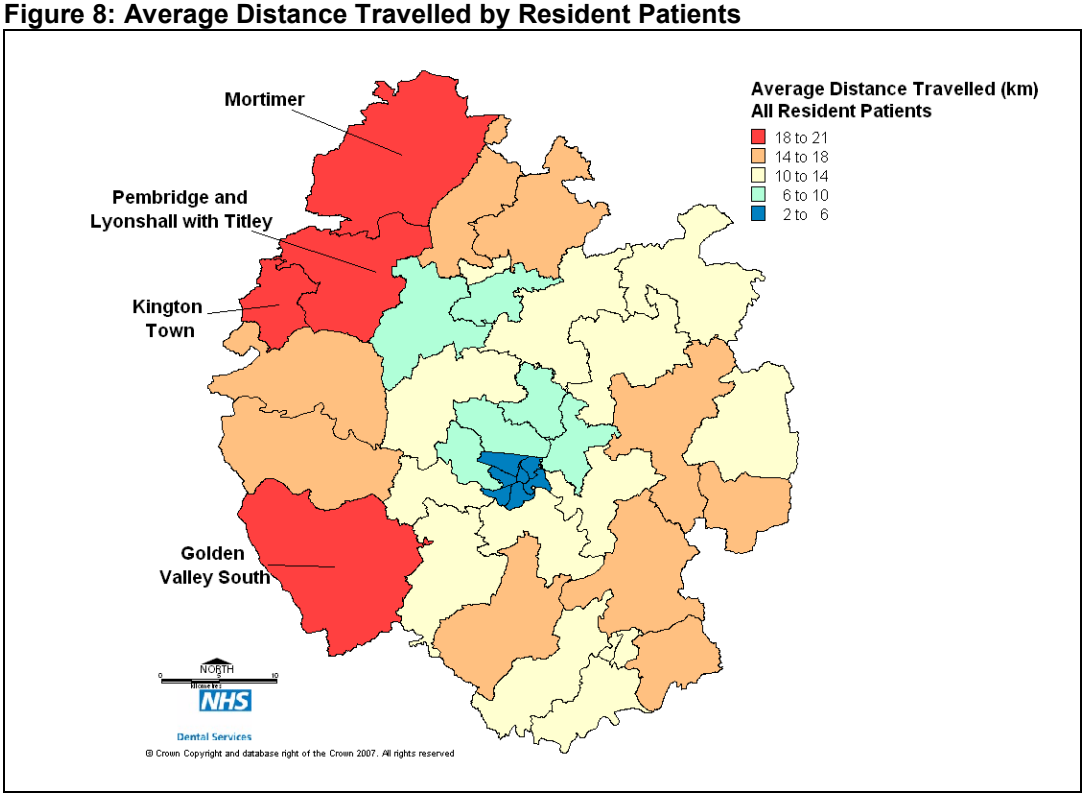


5. Distance Travelled

Figure 8 shows the average distance travelled in kilometres by patients resident in Herefordshire wards for the 24 month period October 2008 to September 2010. This is calculated by measuring a straight line between the home postcode and contract location. Please note as defined above, patients are selected on the basis that their "Patient Health Body Code" and therefore is not dependant on where the patient received treatment, so can either be in or outside the PCT.

This shows that, on average, people who live in the north-west of the county (Mortimer, Pembridge and Lyonshall with Titley and Kington Town wards) and those who live in Golden Valley South, travelled the furthest for dental care. People who live in or around Hereford, travelled the shortest distances to their dentist on average.

Figure 8: Average Distance Travelled by Resident Patients



6. Cross-border Patient Flows

Figure 9 shows the number of patients living in Herefordshire who received dental treatment at NHS dental practices outside Herefordshire PCT over the 12 month period from October 2009 to September 2010.

Figure 9: Patient Flow Out of Herefordshire to other areas

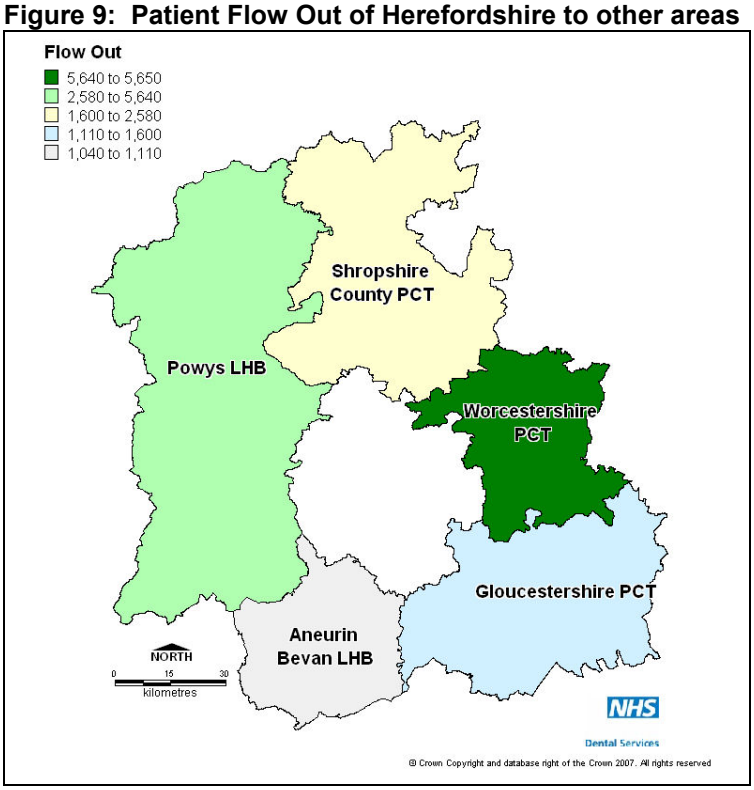
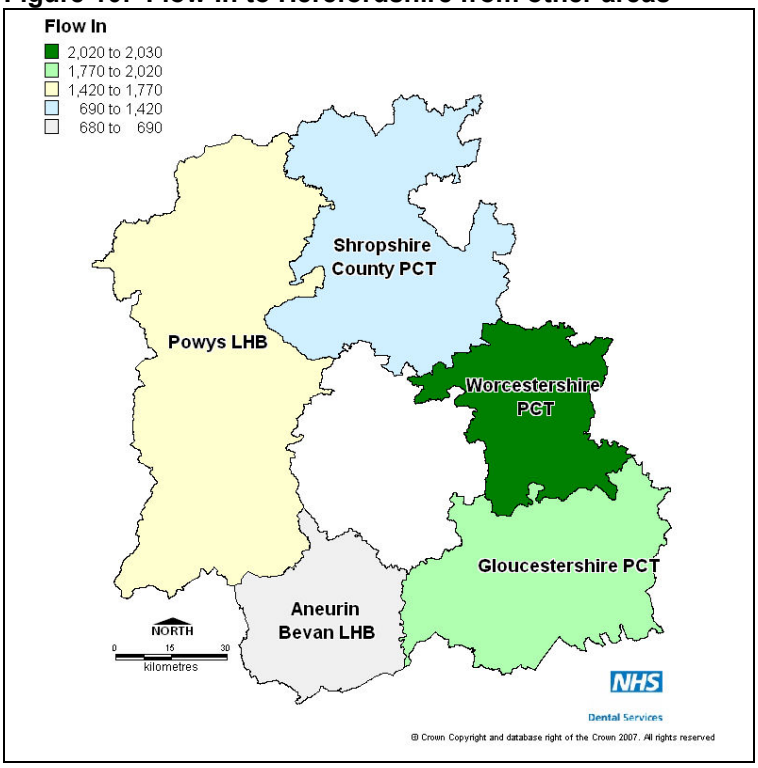


Figure 10 shows the number of patients living outside Herefordshire who received treatment at NHS dental practices within Herefordshire during the 12 month period October 2009 to September 2010.

Figure 10: Flow In to Herefordshire from other areas



Overall during this period, more Herefordshire residents accessed dental care out of county, compared to the number of non-Herefordshire residents who accessed care within Herefordshire – i.e. there was a net export of 3,914 dental patients. The highest "traffic" in patient flow, both into and out of the county, was between Herefordshire and Worcestershire (see table 2).

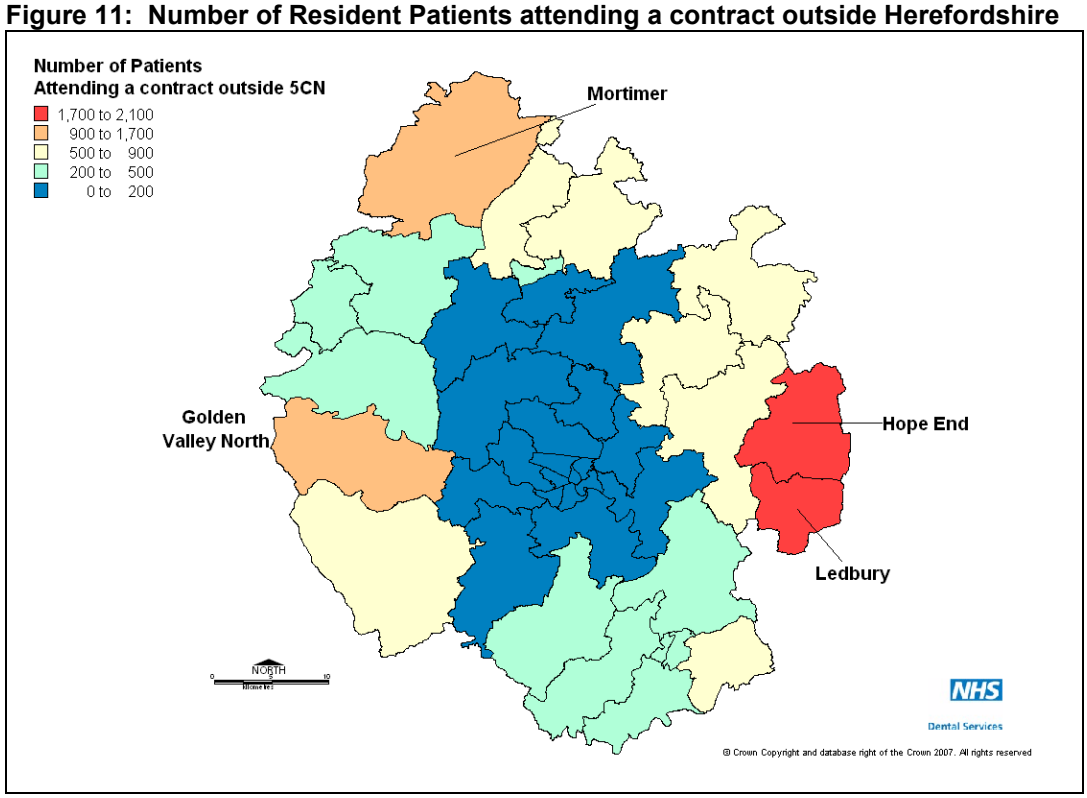
Table 2: Net Patient Flow (Oct 2009 – Sept 2010)

Health body	Flow Out	Flow In	Net (Flow Out minus Flow In)
Worcestershire PCT	5,641	2,025	-3,616
Powys Health Board	2,583	1,421	-1,162
Shropshire County PCT	1,601	695	-906
Gloucestershire PCT	1,112	1,770	658
Aneurin Bevan Health Board	1,044	684	-360
Non Neighbouring Bodies	1,007	765	-242
Unknown Health Body		1,714	1,714
Total			-3,914

Further detail of patient outflow from Herefordshire is shown in figures 11 and 12 which illustrate the numbers and proportion of resident patients by Herefordshire ward whose last treatment was at a dental practice located in another PCT or Health Board area.

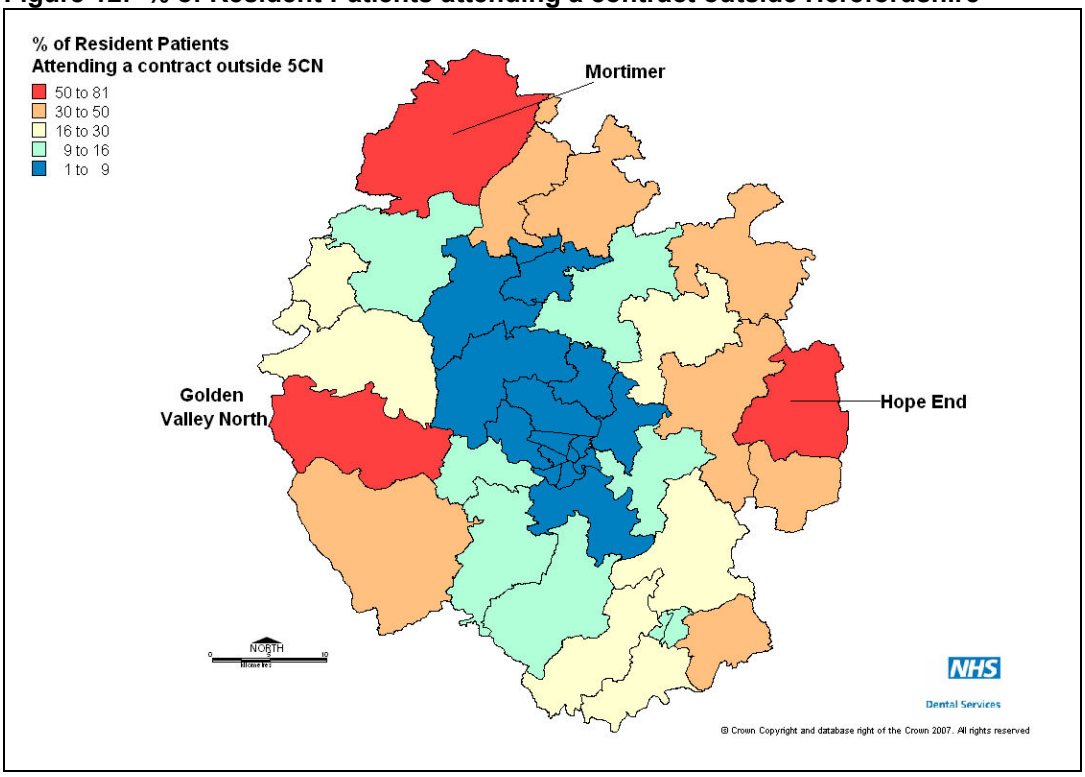
Figure 11 shows that the highest numbers of patients accessing dental care outside Herefordshire come from Hope End and Ledbury wards.

Figure 11: Number of Resident Patients attending a contract outside Herefordshire



The wards with the highest proportion of resident patients accessing care outside Herefordshire are Hope End, Mortimer and Golden Valley North (figure 12).

Figure 12: % of Resident Patients attending a contract outside Herefordshire



7. Data and methodology (sections 3-6)

This section provides a summary by the NHS BSA of their methodology in producing the data and maps used in sections 3-6 of this report:

7.1 Patients resident in Herefordshire: selected over a 24 scheduled month period from October 2008 to September 2010 (24 months to Sept 2010) on the basis that their "Patient Health Body Code" was that of the highlighted PCT. This is therefore not dependant on where the patient received treatment, so can either be in or outside the PCT. This "Patient Health Body Code" is based on the home postcode recorded in the personal details section of each FP17 submitted, therefore is dependant on this information being included and accurate in the records. A patient identifier, which consists of the patient's surname, initial, date of birth and gender, was used to remove duplicates (where duplicate records were found the most recent records were selected based on the most current Treatment Acceptance Date, with duplicate records excluded). This methodology differs from that used to produce PCT 24 Month Patient Numbers; therefore the information contained here is specifically for use in analysis. Any reference to Access Rates for the PCT as a whole should be made using the 24 Month Patient List which is supplied to the PCT every month.

7.2 Access Rates: by ward (expressed as a % of the ward population) were calculated using 24 months of scheduled data. Unique patient identifiers were used to identify single patients, whose address information was then used.

7.3 Patient Age Access rates: Ward level access rates have also been broken down by specific age groups. Currently published ward level population data is only available in quinary age groups (0-4, 5-9, etc). Therefore it is not possible to calculate child patient access rates (0-18 year old patients). Patients aged 0 to 19 have been used to as a best fit to calculate child access rates.

7.4 Ward boundaries: are given as at May 2008. The data is sourced from Ordnance Survey Boundary-Line[16].

7.5 Population: based on ward level data "Mid-2007 Ward Population Estimates for England and Wales for 2008 Wards" Source: Office for National Statistics. This is the most current ward population estimate available.

7.6 Ward Population Density: calculated as the number of residents per km^2. The data is taken from the population estimates and ward boundaries as defined above.

7.7 Distance Travelled: This is calculated by measuring a straight line between the home postcode and contract location.

7.8 UDAs Delivered: based on Total UDA[17] by treatment location. This consists of all activity data (including amendments) collected from FP17s scheduled in any of the last 12 schedule[18] months from October 2009 to September 2010. Only treatment locations which have some level of delivered UDA have been included in this analysis i.e. Total UDA is greater than zero. Treatment Locations were selected for the analysed period for contracts located within the PCT concerned. The reasoning behind selecting Treatment Locations rather than Practice Locations is that for some contracts these locations can be different. As the remit of the report and mapping process is to analyse provision and activity in a geographical context, it is thought that it would be best to assess locations where patients actually receive dental treatment.

7.9 Flow In and Out Data: based on the same methodology as PCT Patient Flow In and PCT Patient Flow Out Reports published on a quarterly basis. 12 schedule months from October 2009 to September 2010 has been extracted.

8. Acknowledgement

The data and maps reported in sections 3-6 (and summary of methodology in section 7) were provided by Robert Wise, Information Analyst, NHS Dental Services (NHS BSA).

[16] Admin Line Ward Boundaries: PB MapInfo Corporation
[17] Non VDPs only
[18] The term scheduled means FP17s that were received and processed prior to the processing date as given in the relevant month's schedule programme. Please see our website for details of the 2009/2010 schedule dates www.nhsbsa.nhs.uk/dental