Oxfordshire NHS
Primary Care Trust

# An Assessment of Healthcare Needs for Older People in Oxfordshire

Contents

# Introduction

England is undergoing a profound demographic change and Oxfordshire is no exception. The main features are:

1. The number of older people is increasing, particularly the over 85s.
2. The proportion of older people in the population is increasing. This means that the working population will be increasingly stretched to fund public services for the retired.
3. The increase in older people will be uneven across the county, affecting some of our most rural areas.
4. The economic impact on services will be severe – doing nothing is not an option. We cannot continue to provide our current range of services in the same way – they will simply not be affordable.
5. Change is, therefore, necessary. This is a long term issue which means a long term solution; all organisations in Oxfordshire will need to come together to grapple with it.

This issue is well recognised locally. Recent reports by the Patient and Public Involvement Forums and Scrutiny Committees across the county flag up similar concerns. This needs assessment is a key part of the response required to assess the impact demographic change is going to have on health services within Oxfordshire and to begin to align them for future provision. It will require joint working to solve the problems we may face, before this joint working can happen each organisation needs to be aware of what it is doing for older people and also consideration of what older people might want.

The issue is wide, complex, difficult to deal with, the problems do not just belong to one agency for example: - older people who live in lower standard of housing are more likely to have health problems than those in warm cosy houses whilst rural transport is a real issue for those not able to drive, high quality services are pointless if those needing to access them can not travel to them. It is clear that a sustained, long term, collaborative approach is needed.

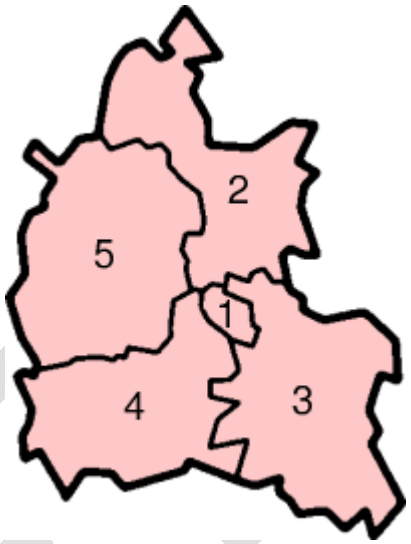
# Geography

Oxfordshire (abbreviated Oxon) is a county in the South East of England, bordering on Northamptonshire, Buckinghamshire, Berkshire, Wiltshire, Gloucestershire, and Warwickshire.

Within Oxfordshire a two tier government system works, Oxfordshire County Council provides certain services for the whole county whilst District Councils provide local services to the population. There are five local districts council: Oxford, Cherwell, Vale of White Horse (after the Uffington White Horse), West Oxfordshire and

South Oxfordshire. Oxfordshire County Council is responsible for providing social care services across the area.

The county has a major tourism industry. The area is noted for the concentration of high performance motor sport companies and facilities. Oxford University Press has headed a concentration of print and publishing firms; the university is also linked to the concentration of local biotechnology companies.




The main centre of population is the city of Oxford. Other significant settlements are Bicester, Banbury, Kidlington, and Chipping Norton to the north of Oxford; Witney to the west; Thame and Chinnor to the east; and Abingdon, Wantage, Didcot and Henley-on-Thames to the south. Future population growth in the county is expected to be concentrated around Banbury, Bicester, Didcot and Witney and Grove.

| | |
|---|---|
| 1 | Oxford City |
| 2 | Cherwell |
| 3 | SODC |
| 4 | Vale |
| 5 | WODC |

The highest point of the county is Whitehorse Hill, in the Vale of White Horse, reaching 856 feet (261m). The river Thames is a major geographical feature.

## Data Sources

Data for this needs assessment has been collated from

- Primary care data sources
- Secondary Uses Service (SUS) – Hospital Activity Data
- Department of Health – Programme Budgeting Categories methodology
- Office for National Statistics – Population Predictions
- King's Fund/Health Dialogue – PARR+ methodology
- NHS Institute for Innovation and Improvement – Ambulatory Care Sensitive Conditions definition and methodology

## Setting the Scene

In October 2006, five legacy PCT's (South West Oxon, South East Oxon, North East Oxon, Cherwell Vale and Oxford City PCT's) joined together to create an Oxfordshire wide PCT known as Oxfordshire PCT.

During the first six months of the new PCT's inception the DPH produced an annual report which identified older people as an area for action (DPH Oxfordshire annual Report 2005 – 2007). This was followed by the PCT

strategy which again highlighted the older people's agenda as a key area for development.

Nationally, there have been several key documents which relate to ensuring older peoples care is high on the agenda.

The Older Peoples NSF was first published in March 2001 and although most of the original work should now have been completed, several new areas of work have been developed, including the national dementia strategy and age discrimination policies.

Locally an Older Peoples Mental Health Needs Assessment was completed in September 2007. This work was carried out separately to this needs assessment but needs to be read in conjunction with this work and the recommendations from that assessment will be carried over into this work so that the whole picture can be seen.

This work aims to create a picture of what already exists for Older People in the way of health services within Oxfordshire and to identify what services will be required in the future.

# Methodology

### Research Question

The aim of this work is to discover

> "What health services do older people within Oxfordshire need and how can we ensure those services are fit for future purpose?"

### Aim

To develop an understanding of the current demands on services for the population of the over 65 age group. The information gathered will be to inform the service development from 2008, with reference to the demographic and technological changes to 2029.

### Objectives

1. To scope the current service provision for older people by the PCT for the population over 65 years of age, where the services are exclusively for the age group or that 80% of the users of the service are over 65, in the voluntary, social and health sectors.
2. To scope the current activity within primary care, community care and acute care for users over 65 in 5 year blocks to 85+.
3. To map current activity against projected demographic changes of 2020, and 2029, to understand the impact on the health and social care community

4. To inform a service design model for older people for March 2008 and the service development for Older People for the local delivery plan of 2008-2009

**Inclusions**

Registered patients with Oxfordshire GPs

**Exclusions**

Services for Elderly Mentally Ill (separate project)
Thame and Shrivenham areas – these areas are not included within the primary care data area as these practices are part of other PCT areas. However Oxfordshire data such as population data does include these populations.

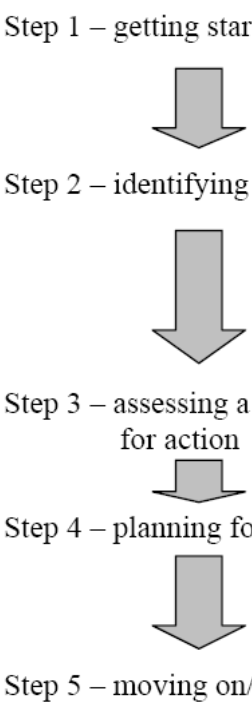
**Outcomes**

- A document that demonstrates
    - An understanding of the activity levels currently undertaken in Oxfordshire
    - Gaps and overlaps currently in services to the older person in Oxfordshire
    - Trends analysis against demographic models
- Professional and users consultation on the information and needs requirements by both users and organisations to take through to service development for older people
- Areas identified requiring service change / redesign / development for future provision of sustainable equitable and best value services for older people to inform for the 2008-09 local delivery plan onwards

This health needs assessment aims to form the rational basis for Oxfordshire PCT's older peoples commissioning strategy. Thus it is important that the process is thorough, transparent and inclusive. The assessment will follow the format below;

- Demographical breakdown of older people in Oxfordshire
- A literature review into the healthcare needs of Older people
- Dependency levels
- Health Status of Older People In Oxfordshire
- Discussion about what the issues are for people in Oxfordshire
- Recommendations to inform the future commissioning strategy for older peoples services within Oxfordshire

The needs assessment will follow the 5 step template suggested within the Health Needs Assessment Toolkit, written by the Health Development Agency (HDA)




| | |
|---|---|
| Step 1 – getting started | • What population is being assessed?<br>• What are you trying to achieve?<br>• Who needs to be involved?<br>• What resources are required?<br>• What are the risks? |
| Step 2 – identifying health priorities | • Population profiling<br>• Gathering data<br>• Perceptions of need<br>• Identifying and assessing health conditions and determinant factors<br>• Identifying current service provision<br>• Gap analysis |
| Step 3 – assessing a health priority for action | • Choosing health conditions and determinant factors with the most significant size and severity impact<br>• Determining effective and acceptable interventions and actions |
| Step 4 – planning for change | • Clarifying aims of intervention<br>• Action planning<br>• Monitoring and evaluation of strategy<br>• Risk-management strategy<br>• Forecasting predicted needs in 10 years |
| Step 5 – moving on/ review | • Learning from the project<br>• Measuring impact<br>• Choosing the next priority |

Source: Health Needs Assessment Toolkit, Health Development Agency[23]

In summary, the population being assessed are those over 65's registered within a GP Practice situated within Oxfordshire PCT boundary. We aim to achieve an understanding of the health needs of that population today so that health care provision can be planned for future years when a growth in the number of older people is expected. We have involved many different agencies including voluntary sector, social care providers, health care providers and older people themselves, a list can be found in appendix 1.

We have decided on a wide range of indicators to assess needs which are identified in section 7, we consulted on our findings at a validation work shop held on 22nd January 2008. The aim of this workshop was to ensure the data was a true representation of Oxfordshire's population, to understand which determinants were the most important to the wider population including a discussion around the size and impact of specific conditions against each other and determining what type of interventions were effective and acceptable to those within the group.

This needs assessment document ends after phase three with it's recommendations for further action and a proposed action plan, this will be taken forward by the older peoples programme board, who instigated this work. Phase four will begin with the beginnings of a commissioning strategy

# Demography

Population Change in Oxfordshire 2004 – 2029

| Geographical Area | AGE 65+ | | | AGE 80+ | | | AGE 85+ | | |
|---|---|---|---|---|---|---|---|---|---|
| | Pop in 2004 (1,000s) | Pop in 2029 (1,000s) | %age Increase 2004 to 2029 | Pop in 2004 (1,000s) | Pop in 2029 (1,000s) | %age Increase 2004 to 2029 | Pop in 2004 (1,000s) | Pop in 2029 (1,000s) | %age Increase 2004 to 2029 |
| **Cherwell** | 18.8 | 34.9 | 85.6% | 5.1 | 11.1 | 117.6% | 2.2 | 5.5 | 150.0% |
| **Oxford City** | 17.2 | 23.0 | 33.7% | 5.4 | 7.5 | 38.9% | 2.3 | 3.9 | 69.6% |
| **South Oxfordshire** | 20.5 | 32.5 | 58.5% | 5.8 | 11.5 | 98.3% | 2.6 | 5.8 | 123.1% |
| **Vale of White Horse** | 18.8 | 29.4 | 56.4% | 5.2 | 10.6 | 103.8% | 2.2 | 5.4 | 145.5% |
| **West Oxfordshire** | 16.2 | 28.0 | 72.8% | 4.7 | 10.1 | 114.9% | 2.1 | 5.2 | 147.6% |
| **Oxfordshire** | **91.5** | **147.8** | **61.5%** | **26.2** | **50.8** | **93.9%** | **11.4** | **25.8** | **126.3%** |

Source: Office for National Statistics: Subnational population projections based on 2004 mid-year estimates

The above chart begins to show the growth expected in each District Council Area. It shows growth in the 85+ population in Oxfordshire of 126%, an increase of around 14,000 people. It accounts for natural growth and does not include changes in housing. Within Oxfordshire, there is an expectation that extra care housing will develop over the next 20 years which will also impact on the numbers of people requiring care.

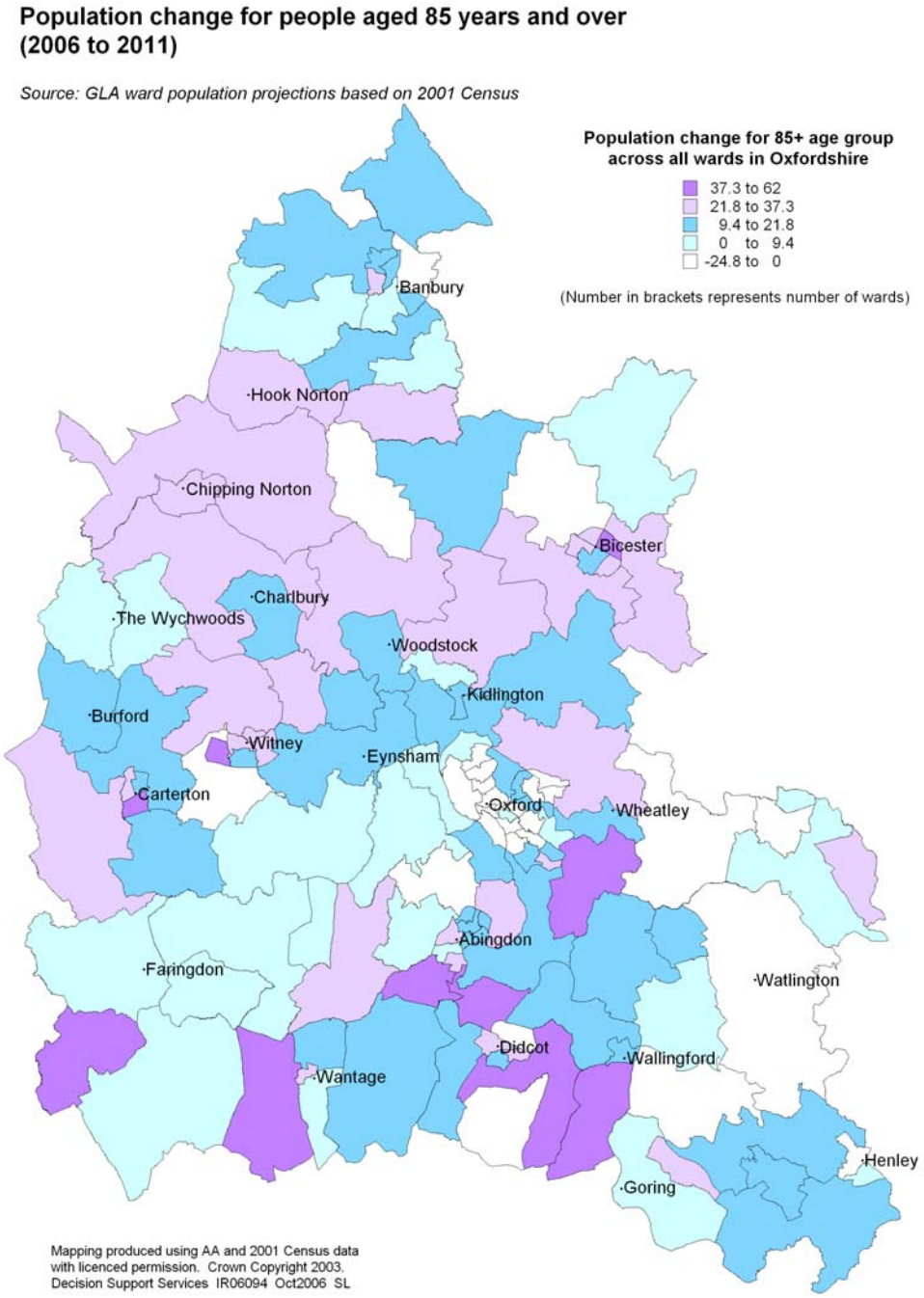
Older people make up just less than 15% of the total population covered by the PCT, which is slightly less than the national average. Women form 56% of this group. Older people are distributed unevenly across the county, with most concentrated around the urban conurbations and the southern half of the county. The older population of Oxfordshire is expected to increase by 20% over the next 10 years, with some sub-populations such as older people from the black and minority ethnic communities set to increase at a greater rate.

The increase in the elderly population will fall unevenly across the county, with the southern half of the county expected to show the largest increases, this area already has higher proportions of older people than other areas.

Deprivation as measured by the IMD (index of multiple deprivation score) shows that the majority of wards in Oxfordshire are above the median levels of deprivation for England; however there are pockets of deprivation concentrated in the towns of Oxford and Banbury, specifically the wards of Cowley and Grimsby. Those older people who were most likely to complain that their health was ‘not good’ or that the older peoples mental health needs assessment identified as having a long-term limiting illness were most likely to reside in the West or Northern parts of the county in contrast to the general distribution of older people.

Over 98% of people over the age of 65 classified themselves as White British or White Irish in the 2001 census. However ethnicity needs to be considered in planning future services as there are a greater number of people from other ethnic backgrounds within the working population. Their needs should be considered as part of any service reviews.

Ageing by ward




This map shows where increases in those people aged over 85 are most likely to occur, so whilst the above table would suggest that Cherwell District Council Area will witness the largest number of over 65's it is clear that there will be more people aged over 85 in the South of the County. Areas which have the highest level of growth need a targeted approach to ensure that services can meet growing demands. The map also clearly demonstrates that high growth areas are located in rural areas where transportation can be a barrier to service access.

## **Literature Review** – What do Older People Need?

Old age in itself is not an illness; today, older people are healthier than their parents were, and are making a huge contribution in their communities both in voluntary and paid work. However, when the older person becomes unwell and more dependent, they often have multiple needs and require a higher level of support to maintain an acceptable quality of life within the community. Older people are still often treated, and see themselves, as passive recipients rather than active consumers of their own care; chronological age should not be a bar to accessing choice and controlling life to its maximum possibilities.

Over the next twenty years the proportion of the older population in the community is set to expand by 48.4%, this is especially true of the over 85 age group whose growth by 2026 is estimated to be 80%; whilst the working age adult population is set to shrink. To meet the challenges that this presents, there is a need to find innovate solutions using both national and international evidence to find what works and what is acceptable to older people within Oxfordshire. Early interventions, long term conditions management; early supportive discharge; acute care when needed; and most importantly partnership working across the whole health and social care community is key to success.

The Health Survey for England published in 2007 reported that in those over 65, 71% reported longstanding illnesses and the most common of these were musculoskeletal and circulatory, which matches the health needs analysis carried out locally. Mobility problems were the most disabling problem and there is evidence that diabetes and arthritis are linked to obesity, a growing problem for all ages. It also found that poor health was linked to lower social capital and higher depression levels which increased in prevalence with age. The Wanless report of 2006 reflects this and indicates that by looking at the main causes of disability cardiovascular, arthritis and dementia trends in these areas can be determined to estimate the level of social care in the future.

When a grass routes research was carried out in the West Oxfordshire rural population last year, older people were asked what was important to them. The results were that older people are individuals and have their own ways of meeting their independence needs; that they require services that support prevention rather than prevention services. It also described seven transition points through old age from retirement through caring to death, the research also reflected how the place where older people live is important to their sense of well being, and that the social networks and the ability to remain mobile both physically and in transport terms have a large impact on life and its quality.

Our health, our care, our say, reports that care closer to home, access, equality, dignity, choice, support for carers and targeted care in times of crisis are all the important issues to patients and users. The Department of Health, 'Next Steps' to the NSF for older people turned its emphasis away from

'conditions' to three key topics; dignity, joined up care and healthy ageing. Therefore it is important that health care is developed around the patient and their home environment to develop 'active ageing' as the World Health Organisation described it in 2002. Active Ageing is about getting older people and adults with a disability more active more often.

Traditionally, health services for adults and the older person have been based around centralised acute care, with high levels of admission and long stays within hospital, therefore services are based around in-patient care. At present the 65+ population make up about 16% of the total UK population, but account for 43% of the NHS total budget and 58% of the social services budget. It is nationally estimated that they occupy 65% of acute hospital beds and receive 71% of social care packages. Action is required to make services sustainable as the population over the age of 65 increases. Within the social care aspect of the older population there has already been a shift from institutional based care to home based care, technological advances and assistive living will support this shift and the change of morbidity patterns towards chronic disease also supports this approach to care. The Commission for Social Care Inspection in 2006 highlighted the fragility of the current home care system in England and the need for innovation and strategic commissioning, with a cultural change and good workforce planning. Therefore services have to mirror these changes, self care, telemedicine and extra care housing are a few of the examples. Keeping the older person 'fit' often required poly-medicine and the cost of new medication needs to be factored into any modelling. Resources for health and social care services will always outstrip resources available, therefore added value, value for money, and the ability to balance priority setting against accurate information is essential.

With the aging of the population, and the increased expectations of the baby boomer generation of 24/7 services, the provider supply chain needs re-examining. Within a rural county with limited workforce mobility, the two main areas driving change are firstly the individualised budgets so shifting control of choice to the micro market to the user, and secondly the requirement of workforce development to meet the changing needs, the development of skills and knowledge in aging medicine and long term care with dignity and enablement.

Joint working between health and other public services has been strong; however there is not a joint strategic vision for the services for the older person and the development needs related to this. The challenges of demographic shift, and the growth of the extremely old, with all of the related long term illness and disability, linked to the technical and pharmaceutical advances and the changes in user expectation all drive the necessity of remodelling services. Health and social care can not work in isolation, and need to engage not only with older people but in partnership with other public services, to have services that are fit for purpose and that society can afford.

The main findings from the literature include:

- Older people are a diverse group, living in different circumstances and with different experiences which influence their individual attitudes and aspirations.
- All older people want to be as active and independent as possible, for as long as possible.
- Older People should expect and be able to make choices about the care they receive.
- The number of Older People are increasing and services need to be developed to be cost effective
- Efforts should be particularly focused in areas of deprivation and for those with a history of depression
- Accessing services can be difficult for those in rural communities
- People are living longer with a range of Long term disabling illnesses

Older people want to be supported in their aspirations by:

- creating opportunities for active participation – for example in employment, learning and volunteering for all ages, skills and types of experience;
- removing barriers to independence – through improved transport, customer focused, 'joined-up' services, and more accessible, user-friendly information;
- listening to their views – though a variety of forms of consultation, including informal, locally based dialogue between older people and government representatives
- Responding to their views – by clear and positive action following consultation with feedback on what has happened as a result of their input.

**Health Promotion Literature Review**

An extensive literature review into Older Peoples health promotion programmes has already been undertaken and completed by Windle et al (2003). Whilst this review focused on older people in Wales, the literature used was generic and there is no reason to suppose older people in Wales are any different from those in England or indeed Oxfordshire. The main findings of this report are detailed below.

**Exercise -** Moderate exercise can benefit both the quality and duration of life. There is strong evidence for the benefits of exercise to all sub-groups of the older population. Exercise has been found to improve strength, balance and flexibility, improve bone density, lower the risk of cardiovascular disease, reduce blood pressure, obesity and incontinence, and levels of depression.

Despite the benefits, many older adults do not partake in any regular physical activity. Gender differences have been found for exercise behaviour, with older women being less active. Many older people may be disabled or

housebound, yet frail older people potentially have the most to gain from exercise by maximising residual function. Compliance with exercise programmes is often difficult to maintain. Self-efficacy is strongly associated with exercise behaviour across the older population, thus initiatives to increase confidence may improve compliance and subsequent health and well-being. Increasing knowledge about the benefits of exercise was found to relate to higher levels of activity behaviour. Active older people may also enjoy the social contact of group schemes, thus community initiatives may be particularly beneficial. Home exercise programmes may be appropriate for frail older people, but evidence for the effectiveness of such programmes is limited. For the oldest old, educational, creative and social activities can further enhance quality of life.

**Fall prevention -** Early detection of risky situations, such as loss of mobility or poor balance, poor nutritional status, certain types of medication, poor vision and inappropriate environments is crucial. Individuals located in these categories are at a higher risk of falls and subsequent injury. Whilst there is sketchy evidence for the benefit of exercise as a single intervention in reducing falls, it has been found to improve balance and strength, increase confidence and improve bone density. Therefore it should be included in a multiple prevention programme. Home visits by occupational therapists can prevent falls in older people, and modification to homes such as the introduction of handrails, can reduce accidents and increase confidence.

Falls may be best prevented by multiple intervention programmes that address the risk factors identified. These could be targeted at the population, through the medium of advertisements, such as the Department of Trade and Industry initiative 'Avoiding slips, trips and broken hips,' or by the identification of high risk individuals by health care professionals.

**Diet and nutrition -** Dietary change can be extremely beneficial in older age. Poor diets can increase the risk of coronary heart disease (CHD), stroke, hypertension, diabetes and cancer, therefore reducing saturated fat and salt intake, and increasing fruit and vegetable consumption is considered a priority. Poor diet is also associated with osteoporosis, and is a risk factor for falling. Dietary supplements such as Calcium and vitamin D may be particularly beneficial.

Health promotion strategies need to consider the barriers to healthy eating for this age group. These include functional ability, economic status, poor dentition, socio-economic status and access to social support. Gender differences have also been found for nutritional status, with older men living alone having a worse nutritional status than women.

Limited research suggests that health professionals may be effective in influencing dietary change. However, there is insufficient evidence from the UK regarding the various sources of nutritional information and advice, and subsequent impacts on older people.

**Smoking Cessation -** Smoking is the single most important cause of cancer. It is associated with emphysema and a higher risk of death from CHD in older smokers. It also has negative effects on nutritional status. The disease consequences tend to occur later in life due to accumulated lifetime exposure.

The high risk for serious illness suggests that older smokers need prioritising for health education, yet many anti-smoking campaigns are focussed on the younger population. Smoking behaviour can be changed, and research evidence has demonstrated that health is improved and mortality reduced in older people who quit smoking. Older people are also more likely to be successful at quitting the habit. It is reported that information regarding quitting is well received by smokers when it is given through the medium of a health care professional. However, evidence regarding interventions in the older population is limited and requires further investigation.

**Hypertension -** Hypertension is regarded as one of the most significant causes of heart failure. However, hypertension is a reversible condition and blood pressure can be reduced in a number of ways. There is strong evidence to suggest that CHD and stroke can be reduced by anti-hypertensive medication, and compliance with medication can be improved by educational interventions.

Non-pharmacological interventions may also be effective in reducing blood pressure. Salt sensitivity occurs more frequently in hypertensive, obese or older people though blood pressure can be reduced by sodium restriction and low fat high fibre diets. Weight reducing diets, reducing alcohol consumption and increasing exercise also reduce blood pressure. Behavioural techniques such as stress management, yoga and meditation are often advocated as methods of reducing blood pressure.

Health promotion strategies for sufferers of hypertension may be most effective if tailored to specific risk groups, such as those identified as being obese or having a poor diet. For high risk individuals, strategies may be most beneficial with a combination of interventions. It would appear that a preventive strategy benefiting all older people would be a low sodium diet.

**Influenza -** Research has demonstrated that the influenza vaccine is a highly beneficial and cost effective intervention for the older population. The benefits include preventing hospitalisation and reducing mortality and related respiratory illnesses.

All people aged 65 and over are recommended to receive vaccination but vaccine uptake in this age group has been found to be poor. Barriers to non-vaccination include lack of information, concern about side effects, perceived efficacy of the vaccine, self perceptions of good health and smoking behaviour. Lower immunisation rates have been found for ethnic minorities, while increased likelihood of immunisation is associated with chronic conditions.

Postal reminders and information packs have been found to raise awareness and increase vaccine uptake. Personal advice from a doctor or practice nurse was also found to be effective. Information should be delivered through a medium where it can be clearly understood.

**Sensory Impairments -** The prevalence of sensory impairments is high in the older population, yet they may go unnoticed, undetected or put down to 'old age', together with a belief that nothing can be done to help. Access to services is not equitable across local authorities. Health promotion information is often not readily accessible for visually impaired individuals. Any health promotion strategies should consider the size of the typeface for written material, or the provision of audio information.

**Oral health -** Despite dental problems being common in older age, many older people do not seek dental aid. Factors for poor uptake include false perceptions of good oral health, deprivation, and dependency on care. Poor oral health can also affect the ability to eat a well-balanced diet, consequently affecting the quality of life of older people. In terms of oral health promotion, most evaluations appear to have been conducted on service provision. 'Chair side' information is considered to be more effective than mass media campaigns; however these should be backed up with written information.

For those unable to attend a dental surgery, oral health education for professional care givers was found to improve care givers knowledge and performance, and improve oral health for dependents.

**Urinary Incontinence -** Urinary incontinence affects a far higher proportion of women than men, and may be a major contributory factor leading to residential care admission. Urinary incontinence is considerably under-diagnosed due to social stigma, embarrassment, lack of knowledge and an acceptance of it being inevitably associated with ageing. Urinary incontinence can have a major impact on quality of life for sufferers, yet evidence suggests that the condition responds well to interventions, including behavioural techniques such as exercise.

## Recommendations from the Literature

Although ageing is an inevitable part of the life cycle, many of the illnesses assumed to accompany old age are not inevitable, or can be successfully managed. Health promotion can involve disease prevention through modifying lifestyles, health education or health protection.

Lifestyle factors such as smoking, lack of exercise and poor diet play a major role in the incidence of heart disease, cerebrovascular disease and cancer.

However, these factors are all potentially amenable to change. This review presents good evidence that modification of these behaviours even late in life can be beneficial to the older person, by increasing life expectancy and/or the quality of life.

- Older people should be able to benefit from health promotion initiatives regardless of their age.
- Many interventions will be most effective when tailored to specific needs, whether they are for frail, institutionalised, community living, active or non-active older people.
- The problems of inequality in later life need to be identified and addressed in order for interventions to achieve a wide ranging success.
- Interventions should also focus on ethnic minority groups and be tailored according to their cultures, beliefs and values.
- Consideration should be given to initiatives that empower and enable an older person and that do not uphold negative ageist assumptions.
- Verbal instructions should be accompanied by written information. The prevalence of sensory impairments suggests that written information should be in a large enough font size, or in audio format.
- Health care professionals are well placed to deliver information either through surgery contact or when making home visits.

# Local Health Status of older people in Oxfordshire

### Methodology of data collection - Primary care data

There are 82 practices within Oxfordshire, all of whom have returned data for this needs assessment. The data was extracted from GP computer systems using MIQUEST. The query looked at the population as at 31st August 2007 on all currently registered patients aged 65 and over as at 1st April 2007. All data extracted by sex in 5 year age bands. Patients who are under investigation and do not have a clear diagnosis have been excluded from the data collection. The data includes 91,793 patients. 55% of the registered patients are female and 45% male. GP practices within Oxfordshire are organised in six consortia, we have looked at the geographical consortia area, which may include some unaligned practices. The practices within each consortia area are as follows

| **Oxfordshire** | **82 practices** |
|---|---|
| NE Oxfordshire PBC Consortium | 10 practice mainly based around Bicester and Kidlington |
| NOC Consortium | 12 Practices mainly based around Banbury, Chipping Norton and rural Oxfordshire |
| Oxford City | 28 practices within the city, this includes Luther Street Practice which has a unique population of homeless people. |
| SE Locality Group | 10 practices covering a mainly rural area and the towns of Henley and Wallingford |
| Vale Locality Group | 13 Practices covering Didcot, Abingdon Wantage and Faringdon |
| West Oxon Locality Group | 9 practices covering rural area in and around Witney. |

**Methodology of data collection - Secondary care data**

Data on predicted population change was available by 5 year age bands from the Office for National Statistics (ONS). As the predictions were based on calendar year, the most recent complete calendar year (2006) of Secondary Care data was also used. Secondary Care utilisation data was obtained via the Secondary Uses Service (SUS) using a standard definition designed to identify all patients for whom Oxfordshire PCT is responsible.

The utilisation data was processed in 5 year age bands to facilitate the combination with predicted percentage change, to calculate age-band-specific predicted change, at 5 year intervals from 2011 to 2026. Activity was also matched to broad diagnosis groupings known as Programme Budgeting Categories (PBCs) using Department of Health methodology.

Data for the number of patients currently deemed to be at high risk of readmission were derived from SUS source data using a methodology developed by the King's Fund/Health Dialogue, and endorsed by the Department of Health (PARR+). Predictions by 5 year age band were calculated in the same way as the utilisation data.

Data on the number of patients admitted for Ambulatory Care Sensitive (ACS) conditions were derived from SUS source data using a methodology and definitions promoted by the NHS Institute for Innovation and Improvement, and predictions were made in the same way as for the utilisation data.

**The results**

## Modifiable Risk Factors for CHD & Stroke

The literature has already shown us that life style factors are important indicators to ensuring that healthy old age and that change in life style factors can impact on health. Change is the only one thing people can control themselves; therefore this report starts by looking at life style issues.

**Physical Activity -** Physical inactivity is a major risk factor for CHD and the 2002 World Health Organisation Report estimated that 20% of CHD and 10% strokes were due to inactivity. There is growing evidence that inactive people have double the risk of having a heart attack than people who are regularly active and there is a clear dose response to activity levels and disease risk. The 2006 Active People Survey reported that levels of physical activity in Oxfordshire were below the recommended levels to maintain good health. Only 23% of the whole population were participating in 3 or more sessions of sport or active recreation a week and this fell to 13% in people over the age of 55. 45% of the 16+ population reported doing nothing at all. The literature would suggest that these people will become older people at risk and therefore time and energy should be used to ensure these people become active to reduce the need for care once they become older.

**High Cholesterol** – Risk of CHD is directly related to blood cholesterol levels. Blood cholesterol levels can be reduced by drugs, physical activity and by dietary changes, in particular a reduction in the consumption of saturated fat. The World Health Organisation Report 2002 estimated that over 60% of CHD and around 40% of ischaemic stroke in developed countries is due to total blood cholesterol levels in excess of the theoretical minimum (3.8mmol/l). 33% of registered patients aged 65 or over in Oxfordshire have high cholesterol (<5mmol/l) and 34% of the population are being prescribed stains. It would appear that those patients are being treated appropriately but this can not be assumed this is the case the data do not show whether they are the same cohort of patients. What is also unknown is any lifestyle advice they may have been given to further modify risk by increasing physical activity levels or reducing dietary fat intake.
The data shows there is a difference between genders in terms of incidence with 39% of women compared to 25% of men recorded with elevated cholesterol levels. However, only 30% of women compared to 39% of men are being prescribed statins. Questions should therefore be asked regarding any possible inequalities in statin prescribing and/or medication compliance between the genders. The highest levels of statin prescribing is in the North East Consortia (40.2%) reflecting higher than average rates of MI's amongst men there. The lowest level of statin prescribing was in the West (30.7%)

**High Blood Pressure** – Risk of CHD is directly related to both systolic and diastolic blood pressure levels. The World Health Organisation Report 2002 estimated that over 50% of CHD and almost 75% of stroke in developed countries is due to systolic blood pressure levels in excess of the theoretical minimum (115mmHg).
In Oxfordshire a higher percentage of females over 65 than males are recorded as having high blood pressure and nationally the prevalence of hypertension increases with age in women but not in men. Again when looking at Statin prescribing data women seem to have low prescribing than men, this needs further exploration.

In total 7857 (8.6%) older people within Oxfordshire are recorded as having high blood pressure (BP>/=100mmHg diastolic). Higher than Oxfordshire average numbers of hypertensive patients were recorded in the North Oxfordshire & Oxford City consortia which may reflect the higher prevalence of smoking in those areas. This data is inconclusive as it does not contain a cohort of patients who have fairly high blood pressure (diastolic >=90 - 100mmHg) or whose hypertension is well controlled by medication. More conclusive data is expected from the 2008 Hypertensive Audit which will be available in May 2008.

The national prevalence of hypertension (as defined as those with a systolic blood pressure of >= 140mmHg, a diastolic blood pressure of >=90mmHg or taking drugs for high blood pressure) has been reported as 62% of men and 64% of women aged 65 and over. Direct comparisons of prevalence within the Oxfordshire population may be difficult due to the varying definitions of hypertension nationally and locally for data collection purposes.

**Smoking -** Patients aged over 65 are less likely to be smoking than patients aged 18 -64. Nationally 25% of the population smoke and Oxfordshire data suggests that the whole population prevalence is approximately 16%. 8.6% of older people in Oxfordshire are recorded as current smokers, however, there are differences between genders as men are more likely to smoke (10%) compared to women (7.6%). North Oxfordshire & Oxford City consortia had higher than average recorded rates of smoking.

| Risk Factor | Data | % Females | % Males | % total |
|---|---|---|---|---|
| Physical **Inactivity** (defined as less than 3 x 30 minutes sport/active recreation per week) | Active People Survey (people over 55) | | | 87% |
| High Cholesterol (>5mmol/l) | Oxfordshire Data | 39% | 25% | 34% |
| High Blood Pressure (>/=100 mmHg diastolic) | Oxfordshire Data | 9.7% | 7.1% | 8.6% |
| Smoking (current smoker) | Oxfordshire Data | 7.6% | 10% | 8.6% |
| Patients prescribed statins | Oxfordshire Data | 30.1% | 39.2% | 34% |

## Circulatory Disease and Heart Failure

**Angina –** The data shows that the risk of angina increases with age, there is a clear difference between genders with men suffering from angina twice as frequently as women. Within the West locality there is a continual increase for males with angina, whilst the prevalence tends to fall away in the other localities. In the South East locality, women age 75 – 79 appear to have a higher than average rate of angina. The biggest increase in prevalence for females is between 70 – 75 whilst there appears to be equal between 65 – 75. In total 7837 older people within Oxfordshire are on the disease register for angina. National prevalence of Angina is 23% for males and 16% for females across over 65's; in Oxfordshire 10.9% of males and 6.6% of females have a diagnosis of angina. Diagnosis of Angina in women is different from that in men and can be more difficult to detect, the symptoms being less pronounced than those seen in men. These can be missed and it has been suggested that this might lead to miss diagnosis in women.

**Heart Failures** – There is an expectation that the data for heart failure should mimic the charts for MI and Angina. However, although men are more likely to have heart failure than females, this is less clear. The range for those in the 65 age group is between 0.5% - 1.8% which increases significantly to 7.9% - 12.9% by the age of 85+. Heart failure would appear to be a disease of age. . In total 3862 older people within Oxfordshire are on the disease register for Heart Failure. It should be noted that within Oxfordshire PCT area

there is a new nursing service specifically for those with heart failure, which may have raised awareness of the condition. There is no particular area which has an identifiable higher prevalence than other areas.

**Myocardial Infarction** – There is a clear difference between genders when considering the prevalence of Myocardial Infarctions. For women across the PCT area there is a very small difference in the range of disease with 1.2% – 1.6% of the 65 yr old age range suffering from heart failure climbing to 4.9% - 7.1% for the 85+ age range. Within the male population there is a slightly wider range with 5.2% - 6.9% of 65 yr olds rising to 8.0% - 12.5% of 75 year old suffering from heart disease. The gap begins to close again for the oldest age range.

National data amalgamates the three categories above as Cardio Vascular Disease (CVD). The Health Survey for England suggests national prevalence for CVD is 37% for males and 31% for females, if the Oxfordshire classifications above (Heart failure and MI) are amalgamated; there are 12.98% for males and 7.41% for females. Again it is difficult to draw direct comparisons when the data collection criteria are not clearly identified within the national studies. However, general prevalence as predicted by the Office for National Statistics (2006) suggests an English prevalence of 28 %(M) and 26% (F) for people aged 65-74 and 33% (M) and 31% (F) for those over 75.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | 31% | 37% | |
| ONS 2006 | 65 – 74 = 26%<br>75+ = 31% | 65 – 74 = 29%<br>75+ = 33% | 65 – 74 = 27%<br>75+ = 32% |
| Oxfordshire Data | 7.4% | 12.98% | 9.9% |

**Stroke and TIA's –** Strokes are caused by vascular disease and therefore it is not surprising considering the data on heart disease that more men have strokes and TIA's than females. TIA's are often described as mini strokes which are a warning sign of an underlying vascular disease. There are 4601 older people in Oxfordshire who have had strokes and another 4609 with a TIA. The likelihood of a stroke and TIA increases with age, with 85 year olds 3 times more likely to have had a stroke than 65 year olds and a four fold increase in prevalence for TIA's. When looking at QMAS data, the two data sets can be aligned. According to QMAS there were 9,999 people in Oxfordshire with either a stroke or TIA, the separate data collection suggests that there were 9210. QMAS data also includes a proportion of younger people under the age of 65 who have had strokes and a prevalence rate of 1.6% (NCHAD) takes into account the whole population rather than just those over 65.

Stroke

| Survey | % Females | % Males | % total |
|---|---|---|---|
| ONS 2006 | NA | NA | 1.75% all strokes |
| Kings Fund | NA | NA | 1.45 per 1000 |
| Total Oxfordshire | NA | NA | 1.6% all strokes |
| Oxfordshire Data | 4.6% | 5.6% | 5% over 65 only (0.5 per 1000) |

TIA

| Survey | % Females | % Males | % total |
|---|---|---|---|
| ONS 2006 | NA | NA | 31 per 100,000 per year (total) |
| Oxfordshire Data | 4.8% | 5.3% | 5% |

There are approximately 1000 hospital admissions each year with a primary diagnosis of Stroke.

## Respiratory Disease

**Active Asthma** - There is no clear difference between genders with those patients suffering from active asthma. There is a steady decrease in active asthma as the population ages. The prevalence for older people matches that of Oxfordshire as a whole. In total 6402 older people within Oxfordshire are on the disease register for active asthma. The data below would appear to suggest that Oxfordshire has average number of asthmatics than the national average.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | 12% | 10% | NA |
| ONS 2006 | 65 – 74 = 6.1%<br>75+ = 3.7% | 65 – 74 = 4.1%<br>75+ = 4.4% | NA |
| Oxfordshire Data | 7.5% | 6.3% | 6.97% |

**COPD** – There is a clear denotation between males and females with men more likely to suffer from COPD. This could be linked to lifestyle issues especially smoking, which is more prevalent in males than in females especially in the North Consortia. In total 4648 older people within Oxfordshire are on the disease register for COPD.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | 7% | 9% | NA |
| ONS 2006 | 65 – 74 = 8.9%<br>75+ = 7.5% | 65 – 74 = 10.4%<br>75+ = 10.6% | 65 – 74 = 9.6%<br>75+ = 8.7% |
| Oxfordshire Data | 4.1% | 6.3% | 5% |

Again Oxfordshire would appear to have less cases of COPD than national figures would suggest.

## Cancer

**Cancer Diagnosis within the last 18 months** – Females are less likely to have cancer than men. The most dramatic difference is for men in the North East area where there is a steady increase in cases with age, West Oxfordshire males also appear to have a higher than expected number of cases. It is interesting to note that those males in the North East Consortia area are least likely to smoke of all men yet they have the highest cancer rate. This should be investigated further by investigating whether they are being identified early or whether they are being identified later than in other areas and whether these males have given up smoking in the past. At age of 65 the range of diagnosis is much smaller than at the age of 85+. The prevalence in this age group is higher than for the rest of the county. In total 2430 older people within Oxfordshire are on the disease register for cancer.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | 9% | 10% | NA |
| ONS 2006 | NA | NA | NA |
| Oxfordshire Data | 2.1% | 3.4% | 2.6% |

## Muscular Skeletal Problems including fractures

**Osteoarthritis –** Large proportions of older people suffer from osteoarthritis. Women are more likely to have osteoarthritis than men although there is no clear difference between the groups, the percentage range for females is 23.4% - 35.6% whilst the range for men is 16.9% - 29.5%. There are 24,150 older people suffering from osteoarthritis. A clear question here is whether older people consider this as a natural part of the aging process and to what degree it affects their lives. Putting money into treating arthritis could have the biggest impact in improving quality of life. For both men and women Vale has the highest rates of arthritis – is this due to a special interest or do older people in the vale really suffer from arthritis more than anywhere else in the county. Osteoarthritis in Oxfordshire is higher than the diagnosed prevalence reported in ONS 2006; however, the figures are lower than the self reported HSE data. It is a disease of immobility and the literature suggests that immobility is the greatest cause of disability. Little is known about the services on offer for these specific patients and it is therefore recommended that this is investigated in future work.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | 47% | 32% | NA |
| ONS 2006 | 65 – 74 = 22.8%<br>75+ = 21.4% | 65 – 74 = 12.4%<br>75+ = 13.3% | 65 – 74 = 29.6%<br>75+ = 30.8% |
| Oxfordshire Data | 30% | 21.7% | 26.31% |

**Osteoporosis** – As this is predominantly a disease of post menopausal women, it was not surprising to see that more women suffered from osteoporosis than men. Women outnumber men with 10 times more disease than men with 4265 women suffers and only 474 men. In three areas there is a drop in prevalence towards the older age group whilst in the north and north east there is a modest increase. In the city the number of cases increases dramatically in the oldest age group, after having a lower rate than any other area earlier on in older age it rises sharply, this could indicate later diagnosis within the city than other areas. South East females have a much higher rate of diagnosis across the whole age spectrum.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | 12% | 2% | NA |
| ONS 2006 | NA | NA | NA |
| Oxfordshire Data | 8.4% | 1.2% | 5.2% |

**Hip Fractures** – The data shows that at the age of 65 there is only a slight difference between men and women in the numbers of hip fractures suffered, by the time we reach the 85 yr old age band women are three times more likely to have a hip fracture then men. This mirrors the prevalence of osteoporosis within females and is expected. Of those who had fractured hips there were 2219 fractures suffered with 1795 being in females and only 424 in men. There is no particular area which stands out as having more hip fractures than any other although Vale and City women have the lowest level of fractures in females (9.3) whilst women in the North East have the highest rate of fractures (11.6%).

Hip fractures in the elderly are most often caused by a fall, usually a seemingly insignificant fall and 12, 423 (13.5%) older people in Oxfordshire are recorded as having had a fall. This figure appears fairly low and shows that high numbers of falls in the elderly remain unrecorded. Nationally a third of over 65's and a half of over 80's are predicted to fall without effective intervention and in any one year in this would amount to 30, 597 over 65's falling in Oxfordshire. The data show that older women were nearly twice as likely to have had a fall as their male counterparts and the incidence of falls increases with age. Higher than average numbers of falls were reported in North Oxon, North East and Vale consortia groups. Older people may not report falls as they may see it as a consequence of aging, therefore work on improving awareness and availability of treatments for falls should be considered

A referral to the Falls Service can help reduce the risk of a patient falling and consequently sustaining an injury. The service is provided by specialist

nurses who offer a detailed assessment and make recommendations about medication, physiotherapy, home adaptations etc. In 2006 there were 1200 referral to the falls service and 200 patients went on to attend balance & safety classes. This service is not being used to its full capacity.

**Rheumatoid Arthritis** – There is not a clear trend line although it appears that the prevalence decreases with age. This trend is bucked by North East and West Oxfordshire men who have a low diagnosis rate until they reach the oldest age range (85) when it increases dramatically. In total 1586 older people within Oxfordshire are on the disease register for rheumatoid arthritis.

## Conditions of Aging

**Registered blind or have poor vision** – There data show there are 510 older people registered as blind, 348 (68%) were females compared to 162 (32%) males. 275 older people who are registered blind are also over the age of 85. 22% of the older population have poor vision making them more venerable to trips & falls and less independent in their daily lives. Prevalence increases with age with 45% of women and 42% of men over the age of 85 suffering from poor vision or registered as blind. Local consultation tells us that these figures underestimate the true numbers due to poor recording in general practice or lack of follow-up as the condition worsens. This cohort of patients would benefit from benefit from closer monitoring, prompt access to suitable treatment and referral to balance & safety classes to reduce the risk of falling.

**Continence Problems** – Only 2.3% of the older population were registered with having a continence problem, 1711 women compared with 440 men. Nationally this condition affects more females than males and worsens with age for both sexes. Observed rates are similar across the patch apart from the West Oxon locality where rates are lower than average.

In 2005 HSE it was reported that 21% of men and 22% of women aged 65 and over had some sort of bladder problem. This would equate to 11,108 women and 8, 674 men in Oxfordshire. It would appear therefore that this problem may remain relatively under recorded possibly due to self management and/or embarrassment about the issue and patients not reporting the condition to their GP. Potentially, a large number of patients are managing this condition alone and unsupported by primary or community services.

**Hearing -** 13,238 (14.4 %) older people are registered with a hearing problem in Oxfordshire. The figure is higher for men (16.1%) than women (13%) but rises with age for both sexes. The data show that the highest numbers of older people with recorded hearing problems are in the Vale & North East consortia. Local consultation tells us that these figures underestimate the true numbers due to poor recording in general practice or lack of follow-up as the condition worsens.

**Mobility -** Only a small proportion of older people (2.1%) are registered as having mobility problems. This would appear to be under representation of the true number since the recent Health Survey for England reported that 39% of men & 47% of women over the age of 65 reported difficulties in walking a quarter of a mile. The prevalence & severity of this mobility problem increased with age. If mobility problems were better recorded GP's would be able to invite or signpost vulnerable patient to older people's exercise or balance & safety classes as part of falls prevention work. Whilst there is a lack of recording around mobility issues it is difficult to justify extra services such as transport services. Whilst transport exists to take patients to secondary care appointments, as these clinics move out into the community, transport may become more of an issue.

## Neurological Conditions

**Parkinson's disease** – There is no clear pattern to the data for this disease with no group standing out as having more Parkinson's disease than any other group. Men in the city do appear to have a slightly higher diagnosis rate, especially at 75 and 80 than other areas, whilst there is a dip at the age of 75 in the NOC area. As this is a relatively rare disease, these figures could be swayed by relatively small numbers with the illness, across the county there are 1087 (1.2%) people with Parkinson evenly split between males (579, 1.4%) and females (508, 1%), the figures are small and so small changes can represent large percentage changes.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | | | |
| ONS 2006 All nervous disease | 65 – 74 = 3.6%<br>75+ = 3.1% | 65 – 74 = 3.6%<br>75+ = 3.6% | 65 – 74 = 3.6%<br>75+ = 3.3% |
| Oxfordshire Data | 1% | 1.4% | 1.2% |

**Other Neurological diseases** – There is no pattern to the data for other neurological diseases. The trend lines show a decrease with age with an even mixture of disease amongst men and women. Diseases included in this category include MS, motor neurone disease etc it was interesting to note that Vale males and females had the least disease across the county. Again the number of people with these diseases are small.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | | | |
| ONS 2006 All nervous disease | 65 – 74 = 3.6%<br>75+ = 3.1% | 65 – 74 = 3.6%<br>75+ = 3.6% | 65 – 74 = 3.6%<br>75+ = 3.3% |
| Oxfordshire Data | 5.1% | 3.6% | 4.4% |

## Mental health conditions

Mental health is an important component of overall health and well-being in older people; however a wide range of mental health problems may affect people in later life. Many people develop mental health problems for the first time in later life, whilst a few others will grow older with severe enduring mental illness.

The most commonly diagnosed mental health conditions amongst the elderly are depression, dementia and anxiety disorders. National prevalence rates for these conditions were recently estimated in the community and at different levels of the healthcare service using the latest evidence by the UK inquiry into mental health and well-being in later life.

| Condition | Community (symptomatic) | Community (diagnostic) |
|---|---|---|
| Depression | 19% – 43% | 2% - 15% |
| Dementia | Unknown | 1.4% - 21.6% |
| Anxiety | 10% - 24% | 2% - 15% |
| Delirium | Unknown | 1% - 2% |
| Schizophrenia | 2% - 5% | 0.5% |
| Alcohol misuse | Unknown | 2% - 15% |
| Drug misuse | | |
| - prescription | Unknown | 11% |
| - illicit | Unknown | 0.1% |

Unfortunately no recent community survey have been undertaken to clarify whether these prevalence figures in the community are reflected within Oxfordshire. Data from a primary care has been used to give an indication of the prevalence of common mental health conditions in older people in the community. As shown below these prevalence figures are similar to the level expected from the evidence.

| Condition | Community (diagnostic) | Prevalence from GP data in Oxfordshire as % of GP pop | Total number of cases 2007 | Predicted number of cases 2026 |
|---|---|---|---|---|
| Depression and Anxiety | 2% - 15% | 3.08% | 2,830 | 4556 |
| Dementia | 1.4% - 21.6% | 2.62% | 2,406 | 3874 |
| Delirium | 1% - 2% | - | 321 | 517 |
| Schizophrenia | 0.5% | 0.71% | 655 | 1055 |
| Alcohol misuse | 2% - 15% | 0.18% | 121 | 195 |
| Drug misuse | | | 35 | 56 |

These aggregated figures for Oxfordshire hide considerable variations in prevalence of mental illness between PBC consortia and older people within different age bands. For example, the prevalence of schizophrenia varies between (0.55 - 0.80%) and when taken in consideration with the prevalence of bipolar disorder, the prevalence increases to 1.06% (0.86-1.45%) with Oxford City PBC having almost twice the burden of older people with severe

mental illness than Vale Locality PBC. There is an equally wide variation in presentation when we look at the prevalence rate of dementia in general practice across Oxfordshire which shows that the prevalence varies between 2.07% of the older population in Vale Locality PBC compared with 3.4% in NE Oxon PBC which is extenuated when we break down these figures by age groups.

| Condition | National rate in acute hospitals | Oxfordshire rate | National rate in care homes |
|---|---|---|---|
| Depression | 29% | 1.61% | 40% |
| Dementia | 31% | 6.64% | 50% - 80% |
| Anxiety | 8% | 0.3% | 6% - 30% |
| Delirium | 20% | - | 'very common' |
| Schizophrenia | 0.4% | 0.17% | Unknown |
| Alcohol misuse | 3% | 0.35% | Unknown |
| Drug misuse | | | |
| - prescription | Unknown | - | Unknown |
| - illicit | Unknown | - | Unknown |

Data from Dr Fosters detailing admissions to secondary care indicates that inpatient admission for mental illness amongst older people in Oxfordshire is below the national rate. However, one most approach these figures with caution due to the frequent co-morbidity of mental health illness and physical illness in those who are admitted to hospital, and the predominance of care for mental illness being provided in the community as opposed to inpatient care.

Prescribing of psychiatric medications has become an increasingly important part of the management of older patients with mental illness. However, prescribing data from both primary and secondary care outlined in recent mental health needs assessment indicates that much further work is needed to ensure best practice in prescribing for mental illness in old age, especially for patients with dementia.

## Endocrinology Conditions

**Type 1 Diabetes** – Type 1 diabetes is a condition which usually develops during childhood. Therefore older people with type 1 diabetes have often had it for most of their lives. As a chronic long term condition, the risks of complications increase the longer the disease process has been in evidence. It is a relatively rare disease with 415 older people in Oxfordshire registered as having type 1 diabetes. For this condition it is less useful to look at % of populations but numbers of people suffering from it and the well known complications which relate to diabetes, these are amputations and foot ulcers caused by poor peripheral circulation and retinopathy, a form of eye disease, caused by poor oxygenation of the retina, again a complication of poor circulation.
Of the 415 type 1 diabetics within Oxfordshire's older population, 19 had amputations of the lower limbs, 231 have some form of retinopathy and 16 of

them currently have an unhealed foot ulcer. Over half of older people with type 1 diabetes have some visual impairment which is the complication with the largest prevalence. 35 have evidence of peripheral disease which in some cases this has lead to amputation. No one area stands out as having more complications than any other area and there is little difference between genders.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | 0.75% general population | | |
| Oxfordshire Data | 0.4% | 0.5% | 0.5% |

Complications of Type 1 diabetes

| Total Pop with Type1 | 415 | 415 | 415 | 415 |
|---|---|---|---|---|
| Complication | Amputation | Retinopathy | Foot Ulcer | Any |
| Total Population with com | 19 | 231 | 16 | 266 |
| % of type 1 pop with complication | 4.57% | 55.66% | 3.85% | 64.09% |

(Note some patients may have several complications)

**Type 2 Diabetes** – Type 2 diabetes is a condition which develops with age and therefore is much more prevalent than type 1 diabetes for this age group. It is more common in men & women who are overweight or obese and in those with a raised waist circumference. The 2005 Health Survey for England reported that 72% of men and 68% of women over 65 were either overweight or obese. Of the Oxfordshire patients who were over 65 and had a recorded BMI, 44,193 (48%) had a BMI >25. Unfortunately, only 30% of the practice population has a BMI recording making direct comparison of prevalence more difficult. The onset of type 2 diabetes is much slower and often people are identified as a result of developing complications rather than with the primary disease. There is a slight increase in diagnosis between the ages of 65 and 75 when the rate of diabetes begins to decline. As with type 1 diabetes, retinopathy is the most common complication, with smaller numbers of amputations and foot ulcers. In total 10,028 older people within Oxfordshire are on the disease register for type 2 diabetes which equates to 10.9% of this population. Higher than average levels of Overweight and Obesity were recorded in the North East, North consortia and this is reflected by the higher prevalence of males with type 2 diabetes recorded. Generally more men than women have type 2 diabetes; however, women in the Oxford City area have a high prevalence of diabetes.

| Survey | % Females | % Males | % total |
|---|---|---|---|
| HSE | 2.5% (whole pop) | 3.3% (whole pop) | 3.0% (whole pop) |
| ONS 2006 | 8.6% (75 – 84) | 8.7% (75 – 84) | 8.7% (75 – 84) |
| Oxfordshire Data | 9.6% | 12.6% | 10.9% |

| | | | | |
|---|---|---|---|---|
| Total Pop with Type2 | 10,028 | 10,028 | 10,028 | 1028 |
| Complication | Amputation | Retinopathy | Foot Ulcer | Any |
| Total Population with com | 119 | 2041 | 105 | 2265 |
| % of type 1 pop with complication | 1.18% | 20.35% | 1.04% | 22.58% |

(Note some patients may have several complications)

## Over view of all Diseases Analysed

Disease in order of prevalence in general practice

| Condition | Sub condition | Number of cases 2007 | Number of cases 2007 | % of population | % of disease group | Predicted Numbers of cases 2026 |
|---|---|---|---|---|---|---|
| Osteoarthritis | | 24150 | | 26.30% | | 38,882 |
| Type 2 Diabetes | | 10028 | | 10.90% | | 16,145 |
| | Retinopathy | | 2041 | | 20.40% | 3,286 |
| | Amputation | | 119 | | 1.20% | 192 |
| | Foot Ulcer | | 105 | | 1.00% | 169 |
| Angina | | 7837 | | 8.50% | | 12,618 |
| Asthma | | 6402 | | 7.00% | | 10,307 |
| MI | | 5228 | | 5.70% | | 8,417 |
| Osteoporosis | | 4739 | | 5.20% | | 7,630 |
| COPD | | 4648 | | 5.10% | | 7,483 |
| TIA | | 4609 | | 5.00% | | 7,420 |
| Stroke | | 4601 | | 5.00% | | 7,408 |
| Neurological | | 4070 | | 4.40% | | 6,553 |
| Heart Failure | | 3862 | | 4.20% | | 6,218 |
| Anxiety and/ or depressive illness in last 12 months | | 2830 | | 3.08% | | |
| Cancer | | 2430 | | 2.60% | | 3,912 |
| Dementia | | 2406 | | 2.60% | | 3,874 |
| Fractured Hip | | 2219 | | 2.40% | | 3,573 |
| Rheumatoid | | 1586 | | 1.70% | | 2,553 |
| Parkinson | | 1087 | | 1.20% | | 1,750 |
| Schizophrenia | | 655 | | 0.71% | | 1,055 |
| Type 1 Diabetes | | 415 | | 0.50% | | 668 |
| | Retinopathy | | 231 | | 55.70% | 372 |
| | Foot Ulcer | | 41 | | 9.8% | 66 |
| | Amputation | | 19 | | 4.60% | 31 |
| Palliative Care | | 364 | | 0.40% | | 586 |
| Bipolar affective disorder | | 321 | | 0.35% | | 517 |
| Diagnosis of alcohol abuse in the last 12 months | | 121 | | 0.13% | | 195 |

Order of disease by Secondary care Admission numbers 2006

| Disease | Numbers Admitted |
|---|---|
| Heart Disease | 15,802 |
| Muscular skeletal | 14,867 |
| Cancer | 14,040 |
| Trauma | 12,775 |
| Endocrinology | 8,023 |
| Neurological | 7,453 |
| Respiratory | 6,774 |
| Mental health | 1,137 |

Order of disease by Secondary care Admission increase in future need 2026

| Disease | Additional appointments required by 2026 |
|---|---|
| Trauma | 773 |
| Heart Disease | 571 |
| Muscular skeletal | 504 |
| Cancer | 460 |
| Respiratory | 405 |
| Neurological | 225 |
| Endocrinology | 160 |

Osteoarthritis is the most common disease diagnosed by Practitioners within the Older Population (65+) registered within Oxfordshire GP Practices.

Type 2 follows affecting over 10% of this population, however, if Angina, Heart Failure and Myocardial Infarction are added together as heart disease 16,927 people would make heart disease the second biggest threat to health with 18.4% of the population having some form of heart disease.

## Summary from Data Analysis

It can be seen that for the most, older people in Oxfordshire have less ill health than their counterpart across the country. There is one noticeable exception - osteoarthritis and further work is required to understand what could be done to address this, this should be linked to work around reduced mobility and increased likelihood of trauma by 2026.
Within the county there appears to be differences in your chances of having ill health, these can frequently be aligned to the more deprived areas of Oxford City and Banbury, however, in some instances e.g. cancer there is no clear explanation for differences across the county.
Most of the diseases above can be prevented or the impact reduced by effective health promotion. Increased physical activity, reduced smoking and obesity and improved early diagnosis would decrease the numbers of people requiring active intervention for these diseases. If we are to be able to afford

the costs of caring for an increased number of older people we need to ensure they are healthier when they arrive at old age, therefore putting into place prevention programmes now.

## Current Service Provision

Now that a picture has been drawn of the types of conditions older people suffer from, we should consider the services they receive.

### Home Support

For home support services there is an increase in demand with an increase in age, 3% of population aged 65-74 use home support whilst 24% of the population are using it by the age of 85.

### District Nursing

There is a much more dramatic increase in the number of patients seen by district nursing services with 10% of 65 seen to 113% by the age of 85. This figure is higher than the actual population and is due to patients having more than one episode of care per year. Work needs to be done to see what the average number of episodes of care is for each patient and whether the reason for care is the same each time. A review of services is required to see whether patients are moved effectively through the service onto other care streams or whether patients recover, elapse and return into the service.

### Direct Access Physiotherapy sessions

The older a person is the less likely they are to be using the direct access physiotherapy service. As this service is not well used by the older population, we need to consider whether older people are accessing an alternative service or are not accessing this service at all. If they are not accessing this service, it may be because this age group do not require physiotherapy although this seems unlikely given the mobility problems that they suffer from.

### Podiatry Services

Again usage increases with age – 5% of this population are using this service at the age of 65 which steadily increases to 15% by the age of 85. Each patient is generally seen just under 6 times. This does not include patients who are currently seen through the soul mates project which cuts toe nails and does basic foot care for those unable to reach their feet.

### Speech therapy

Very few older people are referred to speech therapy services; speech therapy is a significant treatment for stroke patients who may have problems with swallowing and talking.

### Palliative Care

When one considers that older people are reaching the end of life there is surprisingly little palliative care received by this population, although this may be a recording issue. The death rate for this age group is 3.3% of the population per year; this equates to approx 2750 deaths per year. Only 364 people are receiving palliative care out of a population of over 91,000. By the age of 85, people in the North East of the county are most likely top receive palliative care (2%) with those in the Vale and South East receiving the least palliative care (0.5%). There is no difference between genders receiving palliative care. This data may reflect different recording trends and this should be looked at in more detail.

## Summary from analysis of service provision

It is clear from the data above that some services such as District Nurses are considerably important in keeping older people well at home. The challenge is to find ways of increasing the amount of care we can provide for the same expenditure. This can be done in two ways by reducing the number of people needing to access the service (i.e. preventing people from becoming ill in the first place) or increasing the service provision by increasing skill mix. Closer links with the home support services may achieve this.

It would appear that some services such as speech therapy and physiotherapy are rarely accessed by older people and this needs to be addressed as older people can regain independence and confidence if given the right rehabilitative treatment.

Palliative Care and End of Life care appears to be lacking for this age group and further work is needed to understand why this might be, whether it is a true reflection of care or a recording issue.

# Full Discussion

In general older people within Oxfordshire are healthier than their counterparts in England. Older people are a diverse group, living in different circumstances and with different experiences which influence their individual attitudes and aspirations and this should be remembered when developing service models. Older people need different things depending on their living situation, rural or urban, there previous life experiences and their outlook on life.

### Health Promotion / Disease Prevention

As with all older people, older people in Oxfordshire become ill as they age, and although this is expected, some of the ailments from which they suffer could be delayed or prevented with better health promotion and access to lifestyle clinics which will make adopting healthy lifestyles easier. The literature suggests that older people want health promotion delivered as part of their on going care, rather than as a separate service. At present, health promotion within service delivery tends to be ad hoc, depending on many different considerations.

- clinician interest and knowledge base
- time available
- the importance of the topic against the importance of the moment, for example someone who is having a medical or family crisis will not be responsive to health promotion messages

There is a need to overcome some of these obstacles by ensuring that clinicians have the tools available to them to offer health promotional advice at the right moment. This should include tools which allow clinicians to assess the motivation to change and services such as weight management services to refer patients on to. Recent work with Dr Foster has shown that smokers in the older age groups are least likely to give up smoking and therefore targeted interventions about giving up smoking may be required. It is perhaps understandable that those in older age might not see the benefits of giving up smoking, yet the benefits of stopping smoking can be seen within 24 hours of giving up, these messages need to be clearly made to older people. Nutrition is another issue identified within the validation workshop which affects the long term health of older people, the data collected did not clearly show whether older people had high / low BMI's etc, this work recommends that a separate piece of work be conducted which assesses the nutritional status of older people which considers issues such as accessibility and affordability of healthy foods.

### Inequalities

There appears to be some clear cases inequalities within services across the county although it is not clear whether these inequalities arise from different practitioner protocols (brought about from the five different organisations merging) or whether the differences are driven by different cultures and norms within the population. Older people within the city are least likely to be using statins and present later with a diagnosis for osteoporosis, women are more likely than men to have high cholesterol but are less likely to be using statins.

A population based campaign in areas of low uptake/late diagnosis may be an effective method of increasing awareness and treatment options. At the same time there is a need to ensure practitioners are making the most of opportunistic consultations and are offering screening where available and indicated.

There is a need to ensure that all patients who have significant risk factors for chronic disease. One way of assessing the level of inequality is to ensure consistent recording of data. One way forward may be to develop a standard assessment template, which links with the single assessment process to ensure that the information recorded is uniform. One clear area for further investigation relates to palliative. It is unclear whether palliative care is less available to older people or recorded differently for older people, this needs to be understood in more depth. There is some evidence that older people are less likely to access some services such as physiotherapy, the literature would suggest that loss of mobility is the most disabling aspect of aging and that all older people want to be as active and independent as possible, for as long as possible, increasing provision of the therapy. There is an aging ethnic population whose needs must be considered within new service design.

**Physical Ill Health**

Older People are more likely to have circulatory disease, mobility issues and muscular skeletal problems than at any other age. Older People tell us that the most disabling of these is a reduction in their mobility which impacts on all aspects of their life. Older people who can not get about have problems with

- Shopping and then preparing food
- Keeping their environment clean
- Social Networking
- Accessing care

Treating conditions may be relatively easy but improving mobility is more difficult. Very few patients were recorded as having a mobility problem which could lead us assume that mobility is not high on the agenda. Increasing mobility extends independence and keeps older people within their chosen environment for longer, this should be a key priority for new services.

**Mental Ill Health**

Mental illness, especially dementia within the elderly population in Oxfordshire is an increasing problem. GP data has shown that the prevalence of the disease in primary care is equal to that of cancer in those over the age of 65. However, this hides the fact that the prevalence of dementia is much higher in the frailest elderly, over the age of 85, which is the group that is expected to increase at the fastest rate over the next decade. No strategy has been put forward to address this issue locally and few resources are currently devoted to preventing this imminent problem.

The mental health needs assessment has also demonstrated that the current management of older patients with mental illness both in primary and secondary care is far from ideal, with drug costs for dementia in primary care doubling over the past four years and with the number of bed days consumed

by patients with dementia being second only to patients with fractured neck of femurs. Mental illness is also a consistent reason for the readmission. There is clear evidence from service users and carer's points to the inconsistency of care across the PCT leading to an urgent need to standardised care pathways for older people with the most common mental health problems.

Older people with mental health issues are not immune to physical health problems and there is a need to bring together work streams to ensure that care pathways can cope with both physical and mental aspects of a persons health needs in a seamless and compassionate way that respects both individuals and their carers.

**Transportation**

National policy and local service development recognises that services need to be delivered within local communities. Whilst this seems to solve some problems, it creates others. For those older people who have been dependant on hospital transport services, services which are relocated to community services are no longer able to access transport and whilst the distance can be much nearer, for some the issue of getting there is still as difficult. For the rural community, where the number of older people is growing fastest, this is a much more difficult issue to address. Accessing services can be difficult for those in rural communities especially when bus services are infrequent or difficult to access. New service designs should consider not only who is going to use the service but how the service can be accessed.

**Changing population – changing services**

At present older people are often happy to be the passive recipients of care, this needs to change with older people taking decisions and making choices about the care they receive. This means older people should have choice of care in different settings, with different practitioners and with a choice of treatments. The number of older people is increasing and services need to be developed which are cost effective as well as offering an acceptable choice, this will be particularly challenging considering the rurality of the area and limited workforce available to deliver services. There is a need to therefore think laterally and work together with many providers of care including voluntary services and social care providers to be innovative in filling the gap. Joined up care, dignity and healthy aging should be key principles of all new service development. Efforts should be particularly focused in areas of deprivation and for those with a history of depression, as there is clear evidence within the literature which shows these are the most vulnerable group of older people. Ethnicity and acceptability of services for all is another key consideration which should be given to service redesign. At present the older population within Oxfordshire is a predominantly white population and this will change within the next 10 years to reflect an aging ethnic population. Services need to be developed which are ethnically acceptable and accessible to all.

# Recommendations

### Principles of care

- Older people should have their needs identified as individuals.
- There is no place for ageism or prejudiced attitudes towards older patients in the provision of care.
- Older people should be offered choice and encouraged to actively participate in decisions about their care
- Comprehensive multidisciplinary assessment from the point of contact / admission is necessary to optimise the journey of care. Single assessment process should be extended and built into GP systems (where this has not happened).
- Older people should remain independent for as long as is possible with time and effort going into services which promote and maintain independence
- Good communication between secondary care, primary care and social services is essential to devise effective care for each older patient.

### Reinforce the importance of prevention and early diagnosis

- The expected demographic changes over the next decade have highlighted the need to put in place a model of care that promotes well-being in old age and makes prevention an accessible and realistic option for older people.
- Creating opportunities for active participation – for example in employment, learning and volunteering for all ages, skills and types of experience, will ensure older people remain fit and healthy for longer.
- Removing barriers to independence – through improved transport, customer focused, 'joined-up' services, and more accessible, user-friendly information
- Older people should be able to benefit from health promotion initiatives regardless of their age.
- The problems of inequality in later life need to be identified and addressed in order for interventions to achieve a wide ranging success.
- Verbal instructions should be accompanied by written information. The prevalence of sensory impairments suggests that written information should be in a large enough font size, or in audio format.
- For patients with dementia, there is an urgent need to improve the timeliness of diagnosis.
- Working aged people should be encouraged to be physically active to reduce need for care once older

### System of care

- Across the county and healthcare spectrum, several models of care have developed, involving greater or lesser degrees of integration between services for older and younger adults. Best practice should be identified and rolled out across the county to ensure an equitable service.

- Care must be joined up with local partners to ensure that resources are optimised and care is seamless for those receiving it.
- Interventions will be most effective when tailored to specific needs, whether they are for frail, institutionalised, community living, active or non-active older people

**Rehabilitation**

- Rehabilitation remains a cornerstone of care for older patients after recovery from acute illness and services should be expanded to ensure that all older people have appropriate access which is timely.
- Comprehensive multidisciplinary assessment coupled with rehabilitation has been shown to reduce mortality and institutionalisation, therefore allowing people to remain independent.
- Preventative services should be a part of all areas of delivery.

**Consulting with Older people**

- Listening to their views – though a variety of forms of consultation, including informal, locally based dialogue between older people and government representatives
- Responding to their views – by clear and positive action following consultation with feedback on what has happened as a result of their input.

**Inequalities**

- Interventions should also focus on ethnic minority groups and be tailored according to their cultures, beliefs and values. Our population of older people from ethnic minorities is growing and we therefore need to ensure that our services are ready to manage this change in population.

**Recommendations for further local work**

- Work with prescribing and primary care leads at the PCT to rerun the prescribing query with next planned data collection to ensure continued local compliance with best practice for managing dementia patients, including compliance with NICE prescribing guidelines
- Investigate further the inequalities in statin prescribing which appears to exist between the different genders
- Investigate whether cancers in males within the North East Consortia are being identified earlier than in other areas and share best practice.
- Investigate whether the North East Consortia males have a high prevalence of having smoked in the past and if so what the triggers where for giving up smoking.
- Older people may not report falls as they may see it as a consequence of aging, therefore work on improving awareness and availability of treatments for falls should be considered
- Recording of data especially life style issues such as sight, hearing continence and falls

- Early identification & signposting of patients from primary care and community services into appropriate prevention, treatment & support services
- A separate piece of work should be conducted which assesses the nutritional status of older people which considers issues such as accessibility and affordability of healthy foods.
- Investigate further the provision of palliative care

**Recommendations before beginning future HNA's**

- Ensure national markers are found prior to data collection so that comparisons are easier to make
- In a future Older peoples Needs Assessment consider breaking the age groups down further for those aged 85+
- Once available build in needs assessments for those in care homes and add housing data
- Build in user experience and requirements for services provided by carers and the voluntary sector to give a wider perspective of need.