Section 2 - Epidemiology

Epidemiological analysis is usually the first part of health needs assessment and is followed by analysis of local services and review of guidance and literature in order to identify gaps and to inform commissioning strategies and plans that are based on the best available evidence. This section considers the key characteristics of the population of Bradford and Airedale that are important in determining current and future need for dementia services in the context of the District as a whole. These include:

- Baseline age/sex profiles
- Population projections and trajectories
- Prevalence and incidence of dementia
- Diagnosis rates

A key purpose of this report is to help commissioners develop commissioning plans for the management of dementia in both Primary and Secondary care settings. It outlines the patterns of dementia across the Bradford and Airedale District, with additional activity data supplementing population level statistics.

This section of the report draws on a number of data sources and describes the burden of dementia in a number of categories:

- The overall burden of dementia
- Changes in prevalence of dementia
- Diagnosed and undiagnosed dementia
- Subtypes of dementia

Please note: By necessity this report has accessed a wide range of epidemiological and demographic data sources. Where discrepancies in estimates of prevalence exist, these are due to the use of different data sources and should be interpreted in the context of the samples and methods used – please seek advice from the Department of Public Health if necessary. It should also be noted that in some cases data gaps have necessitated local statistical manipulation of figures to derive estimates.

Primary prevention – Reduction of risk factors
Secondary prevention – Detection of preclinical states during which earlier intervention improves outcome
Tertiary prevention – Best possible care for people with manifest dementia
Note: Key Definitions - Incidence and Prevalence

Incidence:
The term incidence can be used in a number of ways, however in the context of a health needs assessment, or indeed most epidemiological reports, it refers to ‘the number of instances of illness commencing, or of persons becoming ill during a given period in a specified population’ \(^1\). For example:

“For fifteen people developed dementia in Bowling Ward between January 2012 and August 2013”.

When most people use the term they actually mean the incidence rate, which differs slightly in that it is the rate at which events occur in a population \(^1\) - That is:

“For new cases of dementia occurred in Bowling Ward at a rate of ten per year between January 2012 and August 2013”

Prevalence:
Prevalence gives a figure for how many cases of a given condition there are in existence at a single point in time in a specified population The important words are “at a single point in time” because prevalence can tell us only what is happening at a certain point. For example:

“As at December 1st 2012, there are seventy cases of dementia in Bowling Ward”

The prevalence of dementia in the population might be subject to change. Factors that might increase prevalence include: rising prevalence of risk factors, such as physical inactivity, obesity, and diabetes; increasing numbers of individuals living beyond 80 years with a shift in distribution of age at death \(^2\); persistent inequalities in health across the lifecourse \(^3\); and increased survival after stroke and with heart disease. By contrast, factors that might decrease prevalence include successful primary prevention of heart disease, accounting for half the substantial decrease in vascular mortality \(^4, 5\), and increased early life education, which is associated with reduced risk of dementia.
Bradford and Airedale

This section will present and discuss the demographic characteristics of the District, providing a perspective in relation to dementia and what the characteristics of our population mean for the epidemiology of the disease.

Bradford district covers an area of approximately 400 square km. It is located in the north west of West Yorkshire, bordering the areas covered by Leeds City Council to the east, Kirklees Council to the south and Calderdale Council to the south west. To the north lie Harrogate and Craven Councils and to the east lies Pendle Borough Council. The administrative boundaries and major settlements of the district are shown in Figure 1 below. It covers a mixture of urban and rural communities.

Figure 1  Administrative Boundaries and Major Settlements within West Yorkshire
The Local Population
The 2010 mid year estimate for Bradford is **512,600**, with the over 65 population being This is 5,800 more than in 2009 and represents an increase of 1.1% and the highest annual growth rate since 2005 (the 2009-10 growth rate for England and Wales was 0.8%).

During the 1990s the population remained fairly static and at the time of the 2001 Census 467,000 people lived in the Bradford district. However, since 2001 the population has been steadily growing. Since 2001, the population of the Bradford district has increased by 45,600, a rise of nearly 10%. The main driver of the District’s population growth is natural change (the difference between births and deaths). The difference between the number of births and deaths in the District accounted for three quarters of the population growth for the 12 months to July 2010. This is slightly lower than the figure for 2008-09 of 78%. The remaining population growth is attributable to net migration gains.

Age Breakdown
The District has a young population structure, with a large proportion of the total population being made up of people in the youngest age groups. The average age for the district is 34.6 years, compared to an average figure of 39.6 for England and Wales. Although in general the district’s population is living longer and there are more old people than ever before, the number of men and women of retirement age make up 16% of the district’s population, compared to 19.7% for England and Wales.

The composition of the population in terms of age structure varies throughout the district, with the inner city wards having younger populations than outlying areas. The areas of the district with the largest proportions of children include the wards of Great Horton, Keighley Central, Bowling and Barkerend, Heaton, Manningham, Toller, Little Horton and Bradford Moor. According to the latest ward level data from the Office for National Statistics, over 25% of the population of these wards is under 16 years of age. Nearly one third of the population in the wards of Toller, Little Horton and Bradford Moor is under 16 years of age.

What does this mean Bradford and Airedale?
The outlying wards in Bradford and Airedale have an older population structure than the more central wards. For example, around 25% of the population in the wards of Baildon, Craven and Ilkley is of pensionable age. The comparable figure for City ward is 6.7% and for Bradford Moor and Manningham 7.5% and 7.6% respectively.

So, given that the accepted prevalences for dementia in the UK, by age band, are\(^6\):

- 40-64 years: 1 in 1400
- 65-69 years: 1 in 100
- 70-79 years: 1 in 25
- 80+ years: 1 in 6

- It is not unreasonable to expect to see a greater prevalence of dementia in those wards with an older population and vice versa.
Gender breakdown

Overall the population of the district is evenly split between males and females. In July 2010 49.4% of the population was male and 50.6% female. However, the gender breakdown varies according to age group. The younger age groups tend to have similar numbers of males and females, but **there are nearly 10,000 more females over 65 years old than males**. This imbalance is shown in the population pyramid in Figure 2 below:

**Figure 2** Gender Breakdown, Bradford and Airedale 2010

![Gender Breakdown, Bradford and Airedale 2010](image)

The incidence of dementia varies between men and women according to their age group. In the UK, the overall prevalence of dementia is higher in older women than in older men, but it is not clear whether this is due to a true sex difference, or differential survival with fewer men surviving to the ages when dementia is most common, or longer survival of women than men after they develop dementia. Table 1 and Figure 3 below illustrates how the gender gap changes with age in older people. These figures were taken from the latest UK studies of dementia prevalence (7) and show how the gap widens in favour of women in the over 85s, with an overall M:F ratio in the over 65s of 7.7:4.9. Clearly this is reflected in the 10,000 excess of females over 65 in Bradford and Airedale, and will translate into a sizeable mismatch between males and females in the community and service settings.
Table 1  Percentage of people over 65 with Dementia, by Gender

<table>
<thead>
<tr>
<th>Age</th>
<th>%</th>
<th>95% C.I.</th>
<th>Age</th>
<th>%</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-69</td>
<td>1.2</td>
<td>0.6-2.3</td>
<td>65-69</td>
<td>1.8</td>
<td>0.9-3.6</td>
</tr>
<tr>
<td>70-74</td>
<td>3.0</td>
<td>2.0-4.4</td>
<td>70-74</td>
<td>2.5</td>
<td>1.6-3.9</td>
</tr>
<tr>
<td>75-79</td>
<td>5.2</td>
<td>3.8-7.0</td>
<td>75-79</td>
<td>6.2</td>
<td>4.5-8.4</td>
</tr>
<tr>
<td>80-84</td>
<td>10.6</td>
<td>8.2-13.7</td>
<td>80-84</td>
<td>9.5</td>
<td>7.3-12.3</td>
</tr>
<tr>
<td>85-89</td>
<td>12.8</td>
<td>9.0-18.0</td>
<td>85-89</td>
<td>18.1</td>
<td>14.5-22.2</td>
</tr>
<tr>
<td>90+</td>
<td>17.1</td>
<td>10.6-26.4</td>
<td>90+</td>
<td>35</td>
<td>28.4-42.2</td>
</tr>
<tr>
<td>Overall</td>
<td>4.9</td>
<td>4.2-5.7</td>
<td>Overall</td>
<td>7.7</td>
<td>6.8-8.5</td>
</tr>
</tbody>
</table>

M&F Overall | 6.5 | 5.9-7.0

Source: CFAS II

Figure 3  Percentage of people over 65 with Dementia, by Gender

Source: CFAS II
The future population

Bradford is one of the few Metropolitan Districts to be experiencing population growth. This growth is likely to continue over the coming decades due to one of the highest projected rates of population growth amongst metropolitan areas outside London. Based on recent population projections from the Office for National Statistics, the total population is forecast to reach almost 640,400 by 2033. This equals an average annual increase of around 5,500 and an overall total increase of 139,000 (28%).

Although the population of the district is forecast to increase substantially, the age structure of the population will remain largely the same. The district will continue to have a relatively young population. However, the retirement age population will form 19% of the population, compared to 16% today. This is lower than the average for England which is expected to be 25%, due to the continuing higher proportion of children compared to the national average.

Although the proportion of the population represented by children, working people and those of retirement age will continue to be similar, each group will experience a significant increase in size. It is anticipated that the working age population will increase by 68,500, with the number of 30 – 34 year olds expanding by 11,000 (34%) by 2033. The highest % increases, however will be amongst older age groups, with the 85 – 89 year age band projected to increase by 85%, from 6,200 to 11,500 by 2033. The over 90s are expected to increase from 2,800 to 8,700, an increase of over 200%.

The anticipated population growth and change in the character of the population will have major implications for the District. There will be considerable implications for public services and the local infrastructure. The large increase in the number of old people, particularly very old people, in the District will place considerable additional demands on health and social care services.

Figure 4 below illustrates the projected population growth for the District, by age band, from 2010 to 2035. Up to 2020, three age bands show notable upward trajectories, 0-14, 60-74 and 75+. Beyond this, the 60-74 and 75+ age bands depart noticeably from the rest of the population as they begin a sustained climb, with only the 60-74 age group showing signs of tail off as it approaches 2035. Figure 5 below this shows the 60+ population, by age band from 2012 to 2021, with the 90+ age group showing a starkly upward trajectory in comparison to the age groups from 60-89.
Figure 4  Projected population increase, by age band, Bradford and Airedale, 2010-2035

![Projected population increase, by age band, Bradford and Airedale, 2010-2035](image)

Figure 5  Projected population increase, by age band, age 60+, Bradford and Airedale, 2010-2035

![Projected population increase, by age band, age 60+, Bradford and Airedale, 2010-2035](image)
The Overall Burden of Dementia in Bradford and Airedale

The overall prevalence of dementia (i.e. diagnosed plus undiagnosed) in the over 65 population in the UK has previously been thought to be 8.3%, however this estimate has recently been reduced (using newer information from the key study that gave the initial estimate) to 6.5% \(^7\). If we apply this figure to the over 65 population in Bradford and Airedale it would suggest an overall prevalence (i.e. diagnosed plus undiagnosed) of around 5,000 cases across the District.

One important caveat with these estimates is that it should be recognised, however, that the observed fall in prevalence in the study was driven by non-care settings and was not noted within people in care settings, where prevalence actually increased \(^8\). The prevalence of dementia within care settings was estimated to have increased from 56% to 70%. This implies that the observed reduction in prevalence nationally will not have been transferred into the care service sector locally. The authors of the report suggest that the observed reduction in prevalence may be due to people living generally more health lifestyles as time progresses.

Undiagnosed Dementia

As with any illness, there can broadly be thought to be two groups of people, those who have been diagnosed with the illness, and those who have the illness, but have not yet been diagnosed. This is the case with dementia, where a number of key issues are relevant:

- The early and accurate diagnosis of dementia is essential for optimal disease management. Early detection increases the likelihood of initiation of pharmacological and behavioural interventions, and the identification and management of the treatable cardiovascular factors underpinning vascular dementia.
- Those people who have dementia but are undiagnosed may not therefore be receiving support and treatment. This threatens their quality of life.
- The longer the duration between onset of symptoms and diagnosis, the poorer their response to eventual treatment and care is likely to be.
- It is recognised nationally that diagnosis rates are too low\(^9\), with less than half of people living with dementia in the UK having a diagnosis, and large differences between diagnosis rates in different areas. This issue is addressed below.
- People with undiagnosed dementia are more likely to \(^9,10\):
  - Be older
  - Live alone
  - Be less likely to have a spouse caregiver
  - Perform better on cognitive testing
Diagnosed Dementia
In respect of the prevalence of diagnosed dementia in Bradford and Airedale, the most robust tool currently available to us is the GP Quality Outcome Framework (QoF) register, where diagnosed cases of dementia are recorded. The most up to date figures show that, based on QoF data for 2011/12 (the most recently publically available data):

- Dementia register for Bradford and Airedale = 2,960
- Dementia register for Bradford and Airedale & Craven = 3,394
- (Craven practices = 434)

However, it must be recognised again that these figures can only represent those people with dementia who have received a diagnosis.

The Diagnosis Deficit in Bradford and Airedale
If we consider the numbers of diagnosed cases taken from QoF and set them against the total prevalence estimates derived from the CFASII study, we can estimate a diagnosis deficit of around 2,000 cases of dementia across Bradford and Airedale.

Variation in diagnosis rates across the District
Recent research has suggested that dementia prevalence can vary from geographic location to geographic location due to a number of potential factors, for example differences in the composition of diagnostic teams (e.g. neurologist vs. psychiatrist), rural vs. urban location \(^{(11)}\), as well as underlying demographic and epidemiological differences. We can analyse this here by comparing diagnosis rates across the district. The most practical way to do this is to analyse differences by CCG. This reflects the fact that the QoF register is a Primary care tool and that the majority of referrals to MATS are made by GPs.

The Dementia Map published by the Government in November 2013 \(^{(12)}\) estimated the overall prevalence (as percentage of the whole population) for the three Clinical Commissioning Group areas in Bradford and Airedale, i.e. Airedale, Wharfedale and Craven, Bradford Districts, and Bradford City. The Map then presents diagnosis rates based as a proportion of the overall prevalence (i.e. the number of diagnosed cases divided by the number of both diagnosed cases). We have also done this using QoF data and local population estimates (see Section 6a, Primary Care). The methodologies differ and so both estimates are presented below.
Table 2 sets out the figures expressed as percentages, with Figure 6 showing the total and diagnosed numbers by CCG, and Figure 7 showing the proportion of diagnosed cases as calculated by both the Dementia Map and this study.

Clearly the two Bradford CCGs have notably better diagnosis rates than AWCCG, with both BDCCG and BCCCG being placed in the top ten nationally for diagnosis rates. It is interesting that AWC has the highest total prevalence as a proportion of its total population (Figure 6), and the lowest diagnosis rates of the three CCGs. There is some evidence that diagnosing dementia in the very old can be difficult and that they are an underdiagnosed population.

<table>
<thead>
<tr>
<th></th>
<th>AWCCG</th>
<th>BDCCG</th>
<th>BCCCG</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of total population with dementia, from Dementia Map</td>
<td>1.57%</td>
<td>1.01%</td>
<td>0.43%</td>
</tr>
<tr>
<td>% of total population with a diagnosis of dementia, from QoF</td>
<td>0.71%</td>
<td>0.61%</td>
<td>0.24%</td>
</tr>
<tr>
<td>Proportion of total dementia cases that have a diagnosis, local estimate</td>
<td>45.22%</td>
<td>60.40%</td>
<td>55.81%</td>
</tr>
<tr>
<td>Proportion of total dementia cases that have a diagnosis, Dementia Map estimate</td>
<td>49.50%</td>
<td>65.29%</td>
<td>62.63%</td>
</tr>
</tbody>
</table>

Figure 6: Total vs. Diagnosed cases of Dementia, by CCG
A recent study analysing variation in diagnosis rates between Primary Care Trusts found that prevalence was lower in practices that were located in areas of high compared to low socioeconomic deprivation, and practices that were run by one GP compared to several.

Differing attitudes and knowledge of dementia diagnosis and management have been reported by GPs, community and practice nurses\textsuperscript{14, 15, 16, 17, 18}. These include poor awareness of epidemiology, confidence in own diagnostic skills, perceived lack of time and social services support available, and belief that diagnosis is not within a general practice domain. Research has also shown that dementia diagnoses may be missed by carers, patients and professionals\textsuperscript{14} because symptoms of dementia and loss of daily living skills are often misconstrued as part of the normal aging process\textsuperscript{19}. The current study supports these findings, showing that under-diagnosis continues to be a major issue in primary care dementia management.

The impact of differences in deprivation is difficult to apply as research suggests that prevalence is higher in more deprived communities and evidence is conflicting as to how social class influences how likely or how early people will seek help

Already there has been evidence that dementia detection rates can be improved in primary care through educational interventions such as decision support software, which prompts the clinical investigation of dementia, and practice workshops involving GPs and nursing staff\textsuperscript{20}.
Subtypes of Dementia

There are four main types of dementia as set out in table 3 below. Various studies report different estimates and a summary estimate of these is provided here along with estimates of local prevalence. Alzheimer’s Disease is the most common form of dementia in older people, followed by vascular dementia. However, Lewy Body Dementia and Frontotemporal Dementia occur sufficiently often to be seen frequently in clinical practice. Some people with dementia may have overlapping subtypes.

Table 3  Estimates of Dementia Subtype Prevalence based on Research Estimates

<table>
<thead>
<tr>
<th></th>
<th>Stevens 2002 (UK)</th>
<th>Brunnstrom 2009 (Sweden)</th>
<th>Lobo 200 (Europe)</th>
<th>Fratiglioni 2000 (Europe)</th>
<th>Summary Estimate</th>
<th>Local prevalence - cases estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer’s Disease</td>
<td>31.3%</td>
<td>42.0%</td>
<td>53.7%</td>
<td>65.0%</td>
<td>50.0%</td>
<td>2500</td>
</tr>
<tr>
<td>Vascular Dementia</td>
<td>21.9%</td>
<td>23.7%</td>
<td>15.8%</td>
<td></td>
<td>20.0%</td>
<td>1000</td>
</tr>
<tr>
<td>Lewy Body Dementia</td>
<td>10.9%</td>
<td>8.0%</td>
<td></td>
<td></td>
<td>10.0%</td>
<td>500</td>
</tr>
<tr>
<td>Frontotemporal Dementia</td>
<td>7.8%</td>
<td>4.0%</td>
<td></td>
<td></td>
<td>6.0%</td>
<td>300</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14%</td>
<td>700</td>
</tr>
</tbody>
</table>

There are two particularly important factors to acknowledge in respect of dementia subtypes:

1. Drugs approved by the National Institute for Health and Clinical Excellence (NICE) to slow the progression of dementia, such as donepezil and galantamine will only work in Alzheimer’s Disease, the other subtypes do not currently have any licensed drug treatments, although there is some evidence that secondary prevention of cardiovascular disease may be of help in patients with vascular dementia.

2. Vascular dementia is caused by the same processes that underpin cardiovascular disease and shares the same risk factors, e.g. smoking, excessive alcohol consumption, poor/fatty diet and lack of exercise. This means it can be prevented through healthy lifestyles in the same manner as stroke and myocardial infarction.

Projected Changes in the Prevalence of Dementia

Clearly a major element of the ongoing concern regarding capacity to manage dementia is the projected increase in numbers of older people, and by association dementia itself, over coming years. For planning purposes, it is important that we understand the potential yearly increases in numbers of people with dementia locally. This will enable us to better design services across the community, residential and hospital sectors. It will also help us more accurately place dementia in the list of local priorities for funding and resource and inform our strategic approach to dementia generally.
The Projecting Older People Population Information (POPPI) service hosted by Oxford Brookes University provides us with estimates in the over 65s for Bradford and Airedale up to 2020 and these are set out in tables 4, 5, and 6 and Figures 8, 9, and 10 below for males and females, males alone and females alone. It must be borne in mind that these represent total (i.e. diagnosed and undiagnosed) cases. The key observations are:

1. By 2020, we might expect an additional 750 cases of dementia to occur across the District
2. This 750 split M:F by 400:350 – this is interesting as dementia is more prevalent in females than males in the over 65s
3. The steepest rise, seen in both sexes, is in the 90+ age group
4. Minimal changes are seen in the 65-69 and 75-79 age groups in both sexes

Table 4   Projected Dementia Cases, Bradford and Airedale, Male and Female 2012-2010

<table>
<thead>
<tr>
<th>Age</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-69</td>
<td>260</td>
<td>286</td>
<td>304</td>
<td>287</td>
<td>289</td>
</tr>
<tr>
<td>70-74</td>
<td>444</td>
<td>453</td>
<td>467</td>
<td>553</td>
<td>591</td>
</tr>
<tr>
<td>75-79</td>
<td>836</td>
<td>853</td>
<td>840</td>
<td>815</td>
<td>844</td>
</tr>
<tr>
<td>80-84</td>
<td>1,266</td>
<td>1,287</td>
<td>1,334</td>
<td>1,391</td>
<td>1,401</td>
</tr>
<tr>
<td>85-89</td>
<td>1,317</td>
<td>1,294</td>
<td>1,367</td>
<td>1,428</td>
<td>1,506</td>
</tr>
<tr>
<td>90+</td>
<td>1,047</td>
<td>1,136</td>
<td>1,253</td>
<td>1,312</td>
<td>1,429</td>
</tr>
<tr>
<td>Total Population</td>
<td>5,169</td>
<td>5,309</td>
<td>5,564</td>
<td>5,785</td>
<td>6,059</td>
</tr>
</tbody>
</table>

Rise 2014-2020  750

Source: POPPI

Figure 8   Projected Dementia Cases, Bradford and Airedale, Male and Female 2012-2010

Source: POPPI
Table 5  Projected Dementia Cases, Bradford and Airedale, Males, 2012-2020

<table>
<thead>
<tr>
<th>Age</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-69</td>
<td>153</td>
<td>168</td>
<td>180</td>
<td>171</td>
<td>174</td>
</tr>
<tr>
<td>70-74</td>
<td>233</td>
<td>242</td>
<td>251</td>
<td>301</td>
<td>322</td>
</tr>
<tr>
<td>75-79</td>
<td>316</td>
<td>326</td>
<td>326</td>
<td>321</td>
<td>337</td>
</tr>
<tr>
<td>80-84</td>
<td>428</td>
<td>449</td>
<td>469</td>
<td>500</td>
<td>510</td>
</tr>
<tr>
<td>85-89</td>
<td>384</td>
<td>384</td>
<td>434</td>
<td>451</td>
<td>484</td>
</tr>
<tr>
<td>90+</td>
<td>279</td>
<td>307</td>
<td>363</td>
<td>391</td>
<td>446</td>
</tr>
<tr>
<td>Total Population</td>
<td>1,793</td>
<td>1,876</td>
<td>2,024</td>
<td>2,134</td>
<td>2,274</td>
</tr>
</tbody>
</table>

Source: POPPI

Figure 9  Projected Dementia Cases, Bradford and Airedale, Males, 2012-2020

![Graph showing projected dementia cases for males from 2012 to 2020.](source: POPPI)

Table 6  Projected Dementia Cases, Bradford and Airedale, Females, 2012-2020

<table>
<thead>
<tr>
<th>Age</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-69</td>
<td>107</td>
<td>118</td>
<td>124</td>
<td>116</td>
<td>115</td>
</tr>
<tr>
<td>70-74</td>
<td>211</td>
<td>211</td>
<td>216</td>
<td>252</td>
<td>269</td>
</tr>
<tr>
<td>75-79</td>
<td>520</td>
<td>527</td>
<td>514</td>
<td>494</td>
<td>507</td>
</tr>
<tr>
<td>80-84</td>
<td>838</td>
<td>838</td>
<td>865</td>
<td>891</td>
<td>891</td>
</tr>
<tr>
<td>85-89</td>
<td>932</td>
<td>910</td>
<td>932</td>
<td>977</td>
<td>1,021</td>
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<tr>
<td>90+</td>
<td>768</td>
<td>829</td>
<td>890</td>
<td>921</td>
<td>982</td>
</tr>
</tbody>
</table>

Source: POPPI
**Figure 10**  
Projected Dementia Cases, Bradford and Airedale, Females, 2012-2020

![Projected Dementia Cases Chart](chart.png)

**What does this mean for Bradford and Airedale?**

The 5,000 people with dementia prevalence figure is a rounded estimate based on known diagnoses plus estimates of undiagnosed cases based on published research studies. The 3000:2000 split is a useful message. There are different methods and tools applied nationally for estimation, and it will be useful to set these figures against the rest of the findings of this report as we apply them to service redesign and commissioning development.

As we progress in finding people with undiagnosed dementia and offering them diagnosis and support, it is vital that we bear in mind differences between diagnosed and undiagnosed cohorts. The success of the pursuit of undiagnosed cases will ultimately determine the impact on services in respect of demand and capacity.

Consideration of present and projected age profiles must be central to strategic planning in addition to knowledge of ethnic composition and socioeconomic deprivation across the district.

**Recommendations**

- Work must continue to query and understand the methodologies in order that we use the appropriate measure in the appropriate circumstances
- A local Steering Group should be established with a specific remit to develop and implement a case-finding action plan to increase diagnosis among the ~2,000 undiagnosed cases already living in the district as recommended in Section 6b – Memory Assessment and Treatment Services
- The data contained in this report should be used to inform capacity:demand modelling as new services develop
REFERENCES:

2. National End of Life Care Intelligence Network Deaths from Alzheimer's disease, dementia and senility in England. 2010
3. Fair Society, Healthy Lives - The Marmot Review. Published by the Marmot review 2010
25. Dr Gregor Russell Personal Communication December 2013