

**Mental disorder and wellbeing: Information in Northamptonshire and  
suggested priorities**

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## **Introduction**

### **What is mental wellbeing?**

Mental health and wellbeing has a range of definitions including:

- ‘the combination of feeling good and functioning effectively. The concept of feeling good incorporates not only the positive emotions of happiness and contentment, but also such emotions as interest, engagement, confidence and affection. The concept of functioning effectively (in a psychological sense) involves the development of one’s potential, having some control over one’s life, having a sense of purpose such as working towards valued goals, and experiencing positive relationships (Huppert, 2008)

A recent national survey highlights that the majority experiences good wellbeing although a significant minority of the population experiences poor wellbeing (ONS, 2012).

### **What is mental illness and disorder?**

Mental illness includes depression, anxiety disorders and psychosis. Mental disorder includes mental illness as well as dementia, drug problems, alcohol problems, personality disorder and eating disorders. This is often referred to as ‘mental health’.

Mental disorder:

- Affects more than 1 in 4 of the population at any one time (McManus et al, 2009; Wittchen et al, 2011)
- A further similar proportion experiences symptoms of mental disorder at any one time which have significant impacts on quality of life and wellbeing
- Starts at an early age and can have lifetime consequences.
- Is responsible for the largest burden of disease in England – 23% of the total burden, compared to 16% for cancer and 16% for heart disease (WHO, 2008).
- Costs the English economy an estimated £105 billion a year (CMH, 2010).

### **How does mental disorder relate to wellbeing?**

Wellbeing reduces the risk of mental disorder while mental disorder is associated with reduced wellbeing. The single largest group with poor wellbeing are those with mental disorder. A number of other groups are at increased risk of both mental disorder and reduced wellbeing and disproportionately benefit from interventions to promote wellbeing, prevent mental disorder and intervene as soon as mental disorder arises.

### **What is the impact of improved mental wellbeing and reduced mental disorder?**

Improved mental wellbeing and reduced mental disorder are associated with a broad range of improved outcomes including:

- better physical health
- longer life expectancy
- reduced inequalities
- healthier lifestyles
- improved education and employment
- reduced crime and antisocial behaviour
- improved social functioning
- better quality of life

### **Interventions to promote wellbeing, prevent mental disorder, and treat mental disorder.**

Good evidence exists for a range of public mental health interventions across the life course. However, despite evidence based interventions with a broad range of impacts, only a minority of people with a mental disorder in the UK currently receive any treatment. Furthermore, spending on the prevention of mental disorder and promotion of mental health represents less than 0.001% of the annual NHS mental health budget (DH, 2011).

### **Economic savings of public mental health interventions**

Investment in the promotion of mental wellbeing, prevention of mental disorder and early treatment for mental disorder results in significant economic savings even in the short term (DH, 2011; Knapp et al, 2011) (see sections 9 and 12 below). Due to the broad impact of mental disorder and wellbeing, these savings occur in health, social care, criminal justice and other public sectors.

### **Priorities for mental disorder and wellbeing in Northamptonshire**

The following summary of the Report on Mental Disorder and Wellbeing in Northamptonshire gives further detail on the highlighted areas below.

Treatment of mental disorder, prevention of mental disorder and promotion of wellbeing result in a broad range of improved outcomes and economic savings even in the short term. Mental disorder costs more than £105 billion each year in England and while £11.9 billion was spent on treatment, only a minority of people with mental disorder receive any intervention. However, even less investment occurs in prevention of mental disorder or promotion of wellbeing. Such inaction results in a wide range of worse outcomes and economic costs.

Public mental health involves:

- use of intelligence on levels of mental disorder and wellbeing across populations (as well as risk and protective factors that influence these levels)
- to enable delivery of interventions that promote wellbeing, prevent mental disorder occurring and early intervention to treat mental disorder at the earliest possible opportunity
- to contribute towards a range of key outcomes (NHS, public health and social care) and achieve significant economic savings.

The following report considers the intelligence needed to inform the commissioning of effective interventions to promote mental health, prevent and treat mental disorder and where it can be obtained. It is based on JCPMH public mental health commissioning guidance (Campion and Fitch, 2012) and includes mental health intelligence which should be included in a JSNA

### **Addressing inequalities**

The Report on Mental Disorder and Wellbeing in Northamptonshire highlights that there are wide inequalities across different parts of the county: These inequalities underpin inequalities in a range of protective factors for wellbeing as well as risk factors for mental disorder and poor wellbeing (see section 1 and 2). This suggests that addressing inequalities is key to sustainably reducing mental disorder and promoting wellbeing.

### **Proportionate universal approaches**

Certain groups of the population have much higher rates of mental disorder and poor wellbeing. Numbers from these higher risk groups and level of increased risk they experience are outlined in the report. Therefore any interventions need to proportionately target such groups.

Suggested priority areas for treatment of mental disorder, prevention of mental disorder and promotion of wellbeing are outlined although are inter-related.

#### **1) Treatment of mental disorder:**

A) Child and adolescent mental disorder:

- Nationally, 10% of children and adolescents have a mental disorder at any one time which equates to 9186 individuals in Northamptonshire
- Half of lifetime mental disorder arises by the age of 14 and three quarters by mid 20’s and is associated with a broad range of adverse outcomes and economic costs (see section 8). Early intervention for mental disorder is associated with a broad range of improved outcomes and also prevents adult mental disorder.

- Only a minority with child and adolescent mental disorder receive any intervention in Northamptonshire.
  - In the previous year, there were 776 referrals to CAMHS with the anxiety disorder the most common diagnosis (287 individuals), followed by eating disorders (42 individuals) and childhood development disorders excluding autism (34).
  - There was no data on proportion seen in primary care although primary care made 430 referrals to CAMHS.
  - Still awaiting local data on numbers seen by services including from higher risk groups
- Conduct disorder is the most common mental disorder in childhood and adolescence affecting 5299 aged 5-16 year olds in Northamptonshire
  - Lifetime costs of each one year cohort of 5-16 year olds with conduct disorder in Northamptonshire is £795 million
  - Parenting interventions are NICE first line treatments for conduct disorder and ADHD although only 16 families received parenting skills in the last quarter.
  - Treatment of conduct disorder:
    - with parenting interventions results in net savings of £8 for each £ spent
    - 70% of savings occur due to reduced crime.
    - prevents antisocial personality disorder in adulthood (NICE, 2009)

#### B) Adult mental disorder

- Common mental disorder:
  - 4.3% of those with common mental disorder in Northamptonshire were referred for psychological therapies
  - Early detection and treatment of depression at work results in total returns of £5 for every £1 invested with net savings starting by year 1 (DH/ Knapp et al, 2011).
- Early intervention for psychosis is associated with net savings of £18 for each £ spent. However, only 49% of first episode psychoses in Northamptonshire are seen by in Early Intervention Psychosis services. Similarly, early intervention for the stage which precedes psychosis (at risk mental state) is associated with net savings of £10 for each £ spent although no intervention occurs at this stage in Northamptonshire.
- Alcohol
  - Nationally, 14% received treatment. Applying national figures to Northamptonshire suggests that 4,430 of the 31,645 adults with alcohol dependence received any intervention.

- Screening and brief interventions in primary care for alcohol misuse result in total returns of £12 for every £1 invested with net savings starting by year 1 (DH/ Knapp et al, 2011).
- Drug treatment: Fewer adults receive drug treatment in Northamptonshire (3.57/1000) compared to England (5.19/1000). Successful completion of drug treatment is also lower in Northamptonshire (5.6) compared to England (12.3)
- Tobacco dependence: Smoking is the largest preventable cause of death in England with 42% of tobacco consumption by people with mental disorder. However, 27.9% of smokers received NRT with no information on intervention for those with mental disorder.
- Self-harm: Emergency hospital admissions for self-harm per 100,000 was high in Northamptonshire (246.8) compared to England (212.1) with rates varying between 151.1 for South Northamptonshire and 355.9 for Corby
- Lack of local information on prevalence and treatment levels in a number of higher risk groups including new mothers with depression, adults with learning disability, people with long term physical conditions, homeless people, offenders, lesbian, gay, bisexual (LGB) and transgender people, Black and Minority Ethnic groups and the unemployed.

## **2) Promotion of wellbeing**

Northampton has showed slightly higher rates of low satisfaction although lower rates of low happiness and low satisfaction scores (section 2). Place based approaches to promote wellbeing can be particularly effective since they cover a large number of the target population at the same time.

- School based social emotional learning programmes can results in net savings of £84 for each £ spent although most school being wellbeing promotion programmes have recently been cut
- Work based mental health promotion programmes can result in net savings of £10 for each £ spent although no such interventions are happening in Northamptonshire
- Other cost effective interventions include the following although there is no information on current local provision:
  - debt advice services
  - physical activity
  - befriending services
  - timebanks
  - community navigators

- Cost effective targeted promotion interventions for those recovering from mental disorder include supported employment and supported housing although no local information exists on level of current provision

### **3) Prevention of mental disorder**

This occurs through addressing risk factors (section 3) and in particular

- inequalities and deprivation
- maternal smoking
- violence and abuse particularly during childhood and adolescence: Nil.
  - 15,400 children and adolescents are estimated to be currently experiencing sexual abuse
  - 15,020 of 11-17 year olds are estimated to experience severe maltreatment during childhood
  - rates of referral to social care for abuse of vulnerable persons with learning disability are twice as higher for Northamptonshire (222.2) compared to England (103.1)

Cost effective approaches include:

- school based bullying prevention: Possibly no longer happening
- preventing and addressing child abuse
- school based violence and sexual abuse prevention programmes. Nil
- prevention of conduct disorder through school based social emotional learning programmes: Nil
- suicide prevention
- smoking cessation: No information on numbers with mental disorder stopping smoking despite this group consuming almost half of all tobacco

### **Resources**

Allocated average spend for mental health per head in Northamptonshire is £164.11 compared to England £182.85. However, 67.4% was spent on secondary care while only 1.7% was spent on prevention of mental disorder or promotion of mental health.

### **Summary of mental disorder and wellbeing in Northamptonshire report**

The following sections outline the key findings of the report on mental disorder and wellbeing in Northamptonshire. It is based on the JCPMH public mental health commissioning guidance (Campion and Fitch, 2012):

- 1) Level of protective factors for wellbeing
- 2) Local levels of wellbeing
- 3) Local level of risk factors for mental disorder and poor wellbeing
  - a) Inequalities and deprivation
  - b) Parental factors
  - c) Child factors
  - d) School factors
  - e) Household factors
  - f) Violence and abuse
- 4) Numbers in particular groups at higher risk of mental disorder and low wellbeing
- 5) Population size
- 6) Local levels of mental disorder
  - A) Local levels of child and adolescent mental disorder including in higher risk groups
  - B) Local levels of adult mental disorder and suicide including higher risk groups
- 7) Proportion with mental disorder who receive treatment
- 8) Costs of mental disorder
- 9) Economic savings of intervention for mental disorder
- 10) Spend on mental health
- 11) Local service provision for mental health promotion and disorder prevention
- 12) Economic savings of mental health promotion and mental disorder prevention
- 13) Outcomes

## **1) Level of protective factors for wellbeing**

- A. Breastfeeding 6-8 weeks: Northamptonshire 44.8% compared to England 47%
- B. Education
- % of 3 and 4 year old children benefiting from early education places by local authority (2012): Northamptonshire 44.8% compared to England 47%
  - Early years % of good development: Northamptonshire 61.0% (range 54.0 in Wellingborough to 68.0% in South Northamptonshire) compared to England 59.0
  - % of pupils achieving 5 A\* to C grades at GCSE: England 58.0% and Northamptonshire (55.0%) ranging from 47.0% in Corby to 71.2% in South Northamptonshire
  - Children’s participation in positive activities: Northamptonshire (55.0%) compared to England 65.8%
- C. Employment
- % people aged 16-64 in employment: UK (70.1%) and Northamptonshire (76.8%) ranging from 68.3% in Daventry to 81.8% in Wellingborough
  - % adults receiving secondary care mental health services in paid employment: Northamptonshire 14.1% compared to England 8.9%
- D. Physical activity
- % of 5-16 year old pupils participating in physical activity: Northamptonshire 91.6% compared to England 86.4%
  - % of adults (16+) participating in recommended level of physical activity: Northamptonshire 11.3% compared to England 11.2%
  - Adult participation in 30 minutes, moderate intensity sport: England 36.0% and Northamptonshire 34.0%) ranging from 23.1% in Wellingborough to 37.1% in Northampton
  - Utilisation of outdoor space for exercise/ health reasons: Northamptonshire 15.6% compared to England 14.0%
- E. Life expectancy
- Life expectancy (LE) for men at age 16: England 62.8 and Northamptonshire 63.7 ranging from 62.4 in Northampton to 65.1 in Northamptonshire
  - Life expectancy (LE) for men at age 65: England 18.0 and Northamptonshire 17.9 ranging from 16.9 in Corby to 18.8 in South Northamptonshire
  - Life expectancy (LE) for women at age 16: England 66.8 and Northamptonshire 66.7 ranging from 65.3 in Corby to 68.3 in South Northamptonshire

- Life expectancy (LE) for women at age 65: England 20.6 and Northamptonshire 20.6 ranging from 19.7 in Corby to 21.7 in South Northamptonshire
- Healthy life expectancy
  - Disability Free Life expectancy (DFLE) for men at age 16: England 49.1 and Northamptonshire 51.4 ranging from 46.0 in Corby to 55.3 in Daventry
  - % of life spent disability-free for men at age 16: England 78.2 and Northamptonshire 81.8 ranging from 75.9 in Kettering to 87.4 in Daventry
  - Disability Free Life expectancy (years) for men at age 65: England 10.2 and Northamptonshire 11.2 ranging from 9.0 in Corby to 13.4 in Daventry
  - % of life spent disability-free for men at age 65: England 56.6 and Northamptonshire 62.3 ranging from 53.1 in Corby to 71.6 in Daventry
  - Disability Free Life expectancy (DFLE) for women at age 16: England 50.1 and Northamptonshire 51.5 ranging from 45.4 in Corby to 57.8 in Daventry
  - % of life spent disability-free for women at age 16: England 75.0 and Northamptonshire 77.1 ranging from 69.6 in Corby to 81.0 in South Northamptonshire
  - Disability Free Life expectancy (years) for women at age 65: England 10.9 and Northamptonshire 11.9 ranging from 7.9 in Corby to 14.9 in Daventry
  - % of life spent disability-free for women at age 65: England 52.8 and Northamptonshire 57.6 ranging from 40.0 in Corby to 68.5 in Daventry

## F. Housing

- One person household %: England 30.3% and Northamptonshire 27.8% ranging from 23.8% in South Northamptonshire to 30.5% in Northampton
- Home ownership: England 64.1% and Northamptonshire 68.8% ranging from 62.5% in Corby to 77.3 % in South Northamptonshire
- % people with mental illness and or disability in settled accommodation: England 66.8% and Northamptonshire 80.4%

## 2) Local levels of wellbeing

### A. Children and adolescent wellbeing

- Child wellbeing index: Ranges from 54.3 in South Northants to 184.7 in Corby
- Emotional wellbeing of looked after children: Northamptonshire 15.0 and England 13.9 (ranging from 10.1 to 22.8)

## **B. Adult wellbeing**

- Self-reported well-being - people with a high anxiety score: England 40.1% and Northamptonshire 64.0%
- Self-reported well-being - people with a low happiness score: England 29.0% and Northamptonshire 24.7%
- Self-reported well-being - people with a low satisfaction score: England 24.3% and Northamptonshire 22.7%
- Self-reported well-being - people with a low worthwhile score: England 20.1% and Northamptonshire 16.7%

## **3) Local level of risk factors for mental disorder and poor wellbeing**

### **A. Inequalities and deprivation**

- % of children in poverty: England 21.1% and Northamptonshire 16.8% ranging from 22.5% in Northampton to 7.1% in South Northamptonshire
- % of under 16s living in low income households: England 21.9% and in Northamptonshire ranging from 7.1% in South Northamptonshire to 22.5% in Northampton
- % of population living in the most deprived national quintile: England 19.8% and Northamptonshire 13.0% ranging from 0 in South and East Northamptonshire to 31.1% in Corby
- Index of Multiple Deprivation with 1 being the most deprived and 326 being the least deprived area: Ranging from Corby (57) to South Northamptonshire (323)
- % gap between mean score of lowest 20% of achievers at Early Years Foundation Stage and the overall median score: England 30.1% and Northamptonshire 28,4%

### **B. Parental factors**

- Maternal smoking status at time of delivery: England 13.4% and Northamptonshire 16.3%
- % lone parent families compared to total families: England 10.5% and Northamptonshire 10.2% ranging from 12.8% in Corby and Northamptonshire to 6.4% in South Northamptonshire
- Number of children in out of work families: 27,100 in Northamptonshire

**C. Child factors**

- Low birth weight: England 7.3% and Northamptonshire 7.7% ranging from 8.8% in Northampton to 6.2% in South Northamptonshire
- Proportion of BME background: England 16.7% and Northamptonshire 10.2% ranging from 17.1% in Northamptonshire to 7% in Corby

**D. School factors**

- Inadequate behaviour grade for all schools: England 0.3% and Northamptonshire 0.3%
- Pupil absence aged 5-15: England 5.8% and Northamptonshire 5.7%
- Number of fixed period exclusions as % of school population: England 6.5% and Northamptonshire 7.8%
- Number of permanent exclusions as % of school population: England 0.08% and Northamptonshire 0.12%

**E. Household factors**

- Fuel poverty: England 16% and Northamptonshire 15.5% ranging from 16.5% in Kettering to 13.5% in South Northamptonshire
- % of households without central heating: England 2.7% and Northamptonshire 2.1% ranging from 1.1% in Corby to 2.5% in Northampton
- % Excess Winter Deaths: Northamptonshire 15.7% ranging from 8.6% in East Northamptonshire to 27.1% in Daventry

**F. Violence and abuse**

- % of pupils who say they have been bullied: England 9.6% and Northamptonshire 10.9%
- % of pupils who say their school deals poorly with bullying: England 26.0% and Northamptonshire 29.0%
- Rate of children who became the subject of a child protection plan (per 1000): England 46.0 and Northamptonshire 40.8
- Child abuse
  - Includes physical abuse, emotional abuse, sexual abuse, neglect, bullying and domestic violence. It is associated with increased risk of the following mental disorders although the impact is greater if abuse is repeated (Jonas et al, 2011):

- Depressive episode (OR 2.9)
- Post-traumatic stress disorder (OR 4.0)
- Psychosis (OR 2.7)
- Alcohol dependence (OR 1.8)
- Drug problems (OR 2.1)
- NSPCC (2011) survey highlights that:
  - 25% of 18-24 year-olds and 19% of 11-17 year-olds experience severe maltreatment during childhood
  - 7% of 11-17 year-olds and 12% of 18-24 year-olds experienced physical violence by an adult.
  - Applying these figures to Northamptonshire means that:
    - 15,020 of 11-17 year olds and 10,648 18-24 year olds experience severe maltreatment during childhood
    - 4206 of 11-17 year olds and 6725 of 18-24 year olds experience physical violence by an adult
- Sexual abuse:
  - Repeated sexual abuse/ intercourse in England during childhood and adolescence is associated with even higher rates of adult mental disorder (Jonas et al, 2011):
    - Depressive episode (OR 6.2)
    - Post-traumatic stress disorder (OR 6.9)
    - Probable psychosis (OR 15.3).
    - Alcohol dependence (OR 5.2)
    - Eating disorder (OR 11.7)
    - Attempted suicide (OR 9.4) (Bebbington et al, 2009)
  - Levels of child sexual abuse in England (Bebbington et al, 2011) are as follows:
    - 3% of women and 1% of men experienced sexual intercourse during childhood
    - 11% of women and 5% of men experienced sexual touching

- Applying these figures to Northamptonshire means that:
  - 13,098 men experienced sexual touching in childhood and 2520 experienced sexual intercourse in childhood
  - 30,183 women experienced sexual touching in childhood and 8232 experienced sexual intercourse in childhood
  - 3969 of males under 18 years old experience sexual touching and 794 experience sexual intercourse
  - 8384 of females under 18 years old experience sexual touching and 2287 experience sexual intercourse
- Rates of referral to social care for abuse of vulnerable persons with learning disability: England 103.1 and Northamptonshire 222.2
- Episodes of violent crime, rate per 1,000: England 13.6 and Northamptonshire 15.1
- Number of domestic abuse incidents recorded by police force area in past 2 years: Ranges from 6.1/1000 in Northamptonshire Central, Northampton East, Northampton North and Northampton South West to 2.8 in South Northants, Daventry and East Northants

#### **4) Numbers in particular groups at higher risk of mental disorder and low wellbeing in Northamptonshire**

This section includes numbers of people from groups at increased risk of mental disorder

##### **A. Numbers of children and adolescents in different higher risk groups in Northamptonshire**

- 735 looked after children
- 1070 primary school children with statements
- 1275 secondary school children with statements
- 3590 children with Special Educational Needs
- 916 children with Autistic Spectrum Disorder known to schools
- 2442 children with learning difficulties known to schools
- Percentage 16 to 18 year olds Not in Employment Education Training: England 6.2% and Northamptonshire 5.4%
- Young offenders:

- % of children and adolescents cautioned or convicted during the year: England 8.7% and Northamptonshire 8.0%
- First time entry rate to the youth justice system: England 749 and Northamptonshire 750
- 627 of 10-17 year olds first time entry rate to the youth justice system in Northamptonshire
- Reoffending: In 2009-10, 1,099 juvenile offenders committed 1,130 re-offences in Northamptonshire. The proven re-offending rate of juvenile offenders is higher at 35.4% than for adult offenders and slightly above the national rate for juvenile offenders (34.8%).

## **B. Numbers from adults higher risk groups**

- New mothers: 9277 births in Northamptonshire
- Adults with no qualifications: England 22.5% and Northamptonshire 22.3% ranging from 17.4% in South Northamptonshire to 27.6% in Corby
- Homeless:
  - Statutory homeless households, rate per 1,000: England 2.0 and Northamptonshire 3.2
  - Statutory homelessness - households in temporary accommodation: England 2.2 and Northamptonshire 0.49 (140 households in Northamptonshire)
- Unemployed and benefit claimants
  - % of people aged 16 and over claiming Jobseeker's Allowance: UK 7.9% and Northamptonshire 6.1%
  - Working age adults who are unemployed per 1,000: England 59.5 and Northamptonshire 19.6
  - Rate model-based estimates of unemployment: UK 8.1% and Northamptonshire 6.6% ranging from 4.6% in South Northamptonshire to 8.9% in Corby
  - Claimants of incapacity benefit with mental or behavioural problems per 1,000: England 27.6 and ranging from 9.1 in South Northamptonshire to 31.0 in Corby.
- Black and minority ethnic groups: England 20.2% and 14.3% in Northamptonshire ranging from 23.4% in Northampton to 5.9% in South Northamptonshire
- Offenders: As of 30/9/12, Northamptonshire Probation Trust managed 3,008 adult offenders of which 2,137 were managed in the community

- Long term illness:
  - Percentage of the population with a limiting long term illness: England 16.9% and Northamptonshire 14.6%
  - Coronary Heart Disease QoF prevalence 2010/11: England 3.4 and 3.1 in Northamptonshire ranging from 2.7 in East/ Southern Northamptonshire to 3.4 in Kettering
  - Diabetes QoF Prevalence: England 5.7 and 5.4 in Northamptonshire ranging from 4.9 in DSN South to 6.4 in Wellingborough
  - Chronic Obstructive Pulmonary Disease QoF Prevalence: England 1.7 and 1.6 in Northamptonshire ranging from 1.2 in Central Northamptonshire to 2.5 in Corby
  - Asthma QoF Prevalence: England 5.9 and 6.4 in Northamptonshire ranging from 5.8 in Western Northampton to 6.9 in Kettering
- Lesbian, Gay, Bigender: Applying DTI (2005) figures to Northamptonshire suggest that 33,245 people are Lesbian, Gay or Bigender.
- Deaf people: 675 people in Northamptonshire are registered as deaf while 2370 are registered as hard of hearing
- Learning disability
  - Adults with learning disability known to GPs in Northamptonshire: 2616
  - Proportion of eligible adults with a learning disability having a GP health check: England 48.6% and Northamptonshire 62.1%
  - Proportion with a learning disability who live in stable and appropriate accommodation: England 59.0% and Northamptonshire 50.5%
  - Proportion with a learning disability in paid employment: England 6.3% and Northamptonshire 6.3%

## **5) Population size for Northamptonshire**

694,000 people (342,300 male, 351,600 females)

## **6) Estimated local levels of mental disorder including in higher risk groups**

### **A. Local levels of child and adolescent mental disorder**

- Among 5-16 year olds in Northamptonshire
  - 3351 are estimated to have emotional disorder
  - 5299 are estimated to have conduct disorder
  - 2049 are estimated to have hyperkinetic disorder
  - 1% have less common disorders (including autism, tics, eating disorders & selective mutism)
- Self-harm: National rates of self-reported self-harm are 7% for 11-16 year olds but several times higher in those with emotional disorder (28%), conduct disorder (21%) and ADHD (18%). Applying national rates to Northamptonshire would mean that 2940 11-16 year olds would report self-harm
- Applying national rates of use of alcohol, illegal drugs and tobacco to Northamptonshire indicates that:
  - 5040 of 11-15 year olds reported drinking alcohol in the previous week
  - 5040 of 11-15 year olds used illegal drugs in the past year and 2540 in the previous month
  - 2100 of 11-15 year olds were regular smokers and 3360 of 11-15 year olds had smoked in the previous week
- Mental disorder among higher risk child and adolescent groups:
  - 331 looked after children in Northamptonshire are estimated to have a mental disorder
  - 1580 children with Special Education Needs in Northamptonshire are estimated to have a mental disorder
  - 879 children with learning difficulties in Northamptonshire are estimated to have a mental disorder
  - 3324 children from one parent families in Northamptonshire are estimated to have a mental disorder
  - 4058 children living in poverty in Northamptonshire are estimated to have a mental disorder

## B. Estimated local levels of adult mental disorder

- Common mental disorder

Applying national figures to the population of Northamptonshire aged 18 and over (536,348) gives a total of 86,888 adults affected by common mental disorder. Numbers with different common mental disorder are:

- mixed anxiety and depressive disorder (52,025)
- generalised anxiety disorder (25,208)
- depressive episode (13,945)
- all phobias (13,945)
- obsessive compulsive disorder (6973)
- panic disorder (6436)
- PTSD (16,090)

- Psychosis:

Applying national figures to the population of Northamptonshire aged 18 and over (536,348) indicates

- Numbers of new cases of psychosis each year (annual incidence) are:
  - 171 cases for all psychotic disorder
  - 80 cases for schizophrenia
  - 64 cases for affective psychosis
  - 20 cases of bipolar affective disorder
- Number of new cases of At Risk Mental State in Northamptonshire is 513 each year
- 2145 people in Northamptonshire experience a psychotic disorder each year (annual prevalence of 0.4%)

- Dementia

- Applying national figures for prevalence of dementia indicates that 5302 people aged over 65 are estimated to have dementia which is 1.0% of the adult population
- People with dementia on QOF register adults (18+): 0.6% in England and 0.5% in Northamptonshire with rates varying from 0.33 in East/ Southern Northampton to 0.64 in Wansford & Oundle

- Alcohol use disorder:
  - Applying national figures for alcohol dependence to Northamptonshire indicates that:
    - 31,645 adults (22,790 men and 9055 women) were alcohol dependent
    - For men, 20,432 showed mild dependence, 2096 showed moderate dependence and 262 severe dependence
  - % binge drinking in people aged 16 and over: England 20.1% and ranging from 19.1% in Wellingborough to 21.7% in Northampton
  - % higher risk drinking in people aged 16 and over: England 6.7% and ranging from 6.3% in Corby to 6.9% in Northampton
  - % increasing risk drinking in people aged 16 and over: England 20.0% and ranging from 19.1% in Wellingborough to 21.6% in South Northamptonshire
  - Admission episodes for alcohol-attributable conditions: Rates of 1895/100,000 in England and ranging from 1249 in South Northamptonshire to 2075 in Corby
- Drug use disorder
  - Applying national figures for drug misuse to Northamptonshire indicates that:
    - 39,876 of adults aged 16-64 had used an illegal drug
    - 30,915 of adults aged 16-64 had used cannabis
    - 13,441 of adults aged 16-64 had used class A drugs (9857 cocaine and 6273 ecstasy)
    - 15,073 of 16-24 year olds had taken an illicit drug
    - 12,261 of 16-24 year olds had used cannabis
    - 4920 of 16-24 year olds had used class A drugs
    - 1562 of 16-24 year olds had used amphetamine
  - Rate of opiate or crack use per 1000: 8.9 for England and varies between 12.8 for Corby and 2.0 for South Northamptonshire
  - Drug dependence: Applying national levels to Northamptonshire indicates that 18,236 adults (11,788 men and 6311 women) were drug dependent in the previous year.

- Tobacco dependence: 20.0% for England and varies between 11.2% in South Northamptonshire and 25.5% in Corby. Applying the 20% figure to Northamptonshire suggests that there are 107,270 smokers in Northamptonshire
- Personality disorder: Applying national prevalence figures to Northamptonshire indicates that 14,146 men and 9329 women have a diagnosable personality disorder while 1609 people have antisocial personality disorder.
- Eating disorder: Applying national prevalence figures to the Northamptonshire population indicates that 34,326 adults screened positive for a possible eating disorder in the previous year while 8582 adults screened positive and also reported that their feelings about food had a significant negative impact on their lives
- Suicide rate: 7.58 for Northamptonshire and 7.87 for England

### **Levels of mental disorder in adult higher risk groups**

- New mothers:
  - During pregnancy, 12.7% of mothers experience depression which has increased to 22% a year after giving birth.
  - Applying these figures to Northamptonshire indicates that 1178 women are depressed during pregnancy and 2041 a year after birth.
- Learning disability: Of the 2324 adults with learning disability in Northamptonshire, 120 are predicted to have depression and 27 have schizophrenia
- Homeless people: Applying rates of mental disorder to the 910 homeless people in Northamptonshire indicates that 55 have psychosis, 295 common mental disorder, 91 alcohol dependence and 137 drug dependence.
- Unemployment: Being unemployed is associated with 2.7-fold increased risk of common mental disorder and 4.3-fold increased risk of disabling mental disorder
- Offenders: Applying national rates of mental disorder to the 3008 offenders in Northamptonshire, the following numbers are affected by different mental disorder:
  - Anxiety and depression: 1414 adult prisoners had 1-5 symptoms of anxiety and depression while 1113 had 5-10 symptoms
  - Suicide and self-harm: In the year before prison, 241 adult prisoners attempted suicide and 181 self-harmed
  - Psychosis: 301 prisoners have a psychotic disorder

- Alcohol misuse: 1053 adult prisoners reported heavy drinking.
- Drug misuse: In the four weeks before custody, 1233 prisoners used heroin, cocaine powder or crack cocaine. In the year before custody, 2075 had used at least one drug, 1624 had used cannabis, 963 crack cocaine, 933 heroin and 752 cocaine powder.
- Personality disorder: 1835 prisoners had a personality disorder
- People with long term illness:
  - 2–3 fold increased risk of depression compared to people in good physical health (NICE, 2009).
  - Those with two or more chronic physical conditions are more than seven times increased risk of depression
- Lesbian, Gay, Bisexual (LGB) and Transgender people: Of the estimated 33,245 LGB adults in Northamptonshire, the following numbers experience different mental disorder:
  - 7314 with common mental disorder
  - 2992 have attempted suicide
  - 332 have psychosis
  - 3325 have alcohol dependence
- Black and Minority Ethnic groups
  - Rates of schizophrenia are 5.6 times higher in black Caribbean’s, 4.7 times higher in black Africans and 2.4 times higher in Asian groups.
  - Non-affective psychosis: Incidence rates are 4 times higher in the black Caribbean group. 3.5 times higher in black African group and 1.6 times higher in the South Asian population group
  - Affective psychosis: Black Caribbean, black African and non-British white groups had 2-3 fold higher rates of affective psychosis than the white British population
- Unemployment: Being unemployed is associated with 2.7-fold increased risk of common mental disorder and 4.3-fold increased risk of disabling mental disorder (Melzer et al, 2004)

## 7) Proportion with mental disorder who receive treatment

### A) Children and adolescents

- CAMHS:
  - 776 referrals to CAMHS: Source of referrals were GPs (430 referrals), paediatrician (56 referrals), schools (50 referrals), Northampton General Hospital (49 referrals), Kettering General Hospital (35 referrals)
  - Numbers with different diagnoses: Other inc. not established (308), anxiety disorder (287), eating disorders (42), childhood development disorders (excl. autism) (34), depression (14),
- Data about parent interventions was only available for one quarter during which:
  - 16 families received parenting skills
  - 51 families where a member of the family was receiving specialist mental health support
- If national treatment rates are assumed (Green et al, 2005)
  - 20% of parents of children with conduct disorder received NICE first line intervention of parenting interventions
  - 30–40% of children and adolescents who experience clinically significant mental disorder have been offered evidence-based interventions at the earliest opportunity for maximal lifetime benefits
- Child and adolescent admissions for mental disorder (2010/11): Northamptonshire 69.3 compared to England 93.7. Total number of admissions were anxiety disorders (15), eating disorders (11), depression (9), disorders of social functioning (7)
- Under 18s admitted to hospital with alcohol specific conditions per 100,000: England 55.8 with rates varying between 24.6 for Daventry and 88.7 for Corby
- Child and adolescent admissions for self-harm per 100,000 (2010/11): Northamptonshire 169.9 compared to England 124.8
- Hospital admissions caused by unintentional and deliberate injuries in <18s per 100,000 (2009/10): Northamptonshire 95.6 compared to England 123.3

## B) Adults

- Common mental disorder:
  - Nationally, 24% of adults with CMD received intervention, 15% of older people with depression discuss symptoms with GP while less than half of these receive adequate treatment
  - 86,888 adults affected by common mental disorder (see page 14)
  - In Northamptonshire, proportion of adults on the QoF depression register was 14.3% compared to 11.7% in England. This equates to 80,020 adults in Northamptonshire.
  - Psychological therapy: In Northamptonshire PCT during 2012/13:
    - 13,793 people were referred for psychological therapies with similar rates of referral to England
    - 8289 people entered psychological therapies
    - 380 people moved off sick pay and benefits
  - Hospital admissions for depressive disorders: Northamptonshire (30.4) compared to England (32.1)
- Psychosis
  - Nationally, 65% of people with psychotic disorder in the past year received treatment
  - Number on primary care SMI register was 5,355 people (0.7% of people registered to primary care in Northamptonshire). This is much higher than the 2145 people in Northamptonshire estimated to experience a psychotic disorder each year (annual prevalence of 0.4%) and is likely to be due to people remaining on the register even though they haven’t been psychotic in the previous year.
  - 84 of the estimated 171 new cases of psychotic disorder were served by Early Intervention Psychosis services
  - 1052 episodes were managed by Crisis Resolution Home treatment
  - No information could be found on early intervention for At Risk Mental States which precede psychosis
  - Hospital admissions for schizophrenia, schizotypal and delusional disorders: Northamptonshire (37.2) compared to England (57.5)

- Dementia:
  - Proportion of recorded cases of dementia on the GP register compared to expected rates was 44% compared to 42% for England
  - Hospital admissions for Alzheimer's and other related dementia: Northamptonshire (79.6) compared to England (80.3)
- Alcohol dependent adults:
  - Nationally, 14% received treatment. Still awaiting local data was available so applying national figures to Northamptonshire suggests that 4,430 of the 31,645 adults with alcohol dependence received any intervention.
  - Alcohol associated admissions per 1000: Northamptonshire (19.4) compared to England (22.1)
  - Hospital stays for alcohol related harm per 100,000: England 1895 and Northamptonshire 1664 with rates varying between 1248 for South Northamptonshire and 2075 for Corby
- Drug dependence:
  - Nationally, 14% of cannabis dependent adults and 36% of adults dependent on other drugs received treatment.
  - In Northamptonshire, the estimated number of adults drug dependent in the previous year received treatment is 18,236
  - Proportion of adults in drug treatment (per 1000): Northamptonshire 3.57 compared to England 5.19
  - Successful completion of drug treatment: Northamptonshire 5.6 compared to England 12.3
  - Hospital admissions for substance misuse age 15-24 years: Northamptonshire (66.1) compared to England (63.5)
- Tobacco dependence: there are 107,270 smokers in Northamptonshire.
  - Rates of NRT prescription per 100,000 are higher in Northamptonshire (5571) compared to England (4848)
  - Applying national prevalence figures to the population of Northamptonshire aged 18 and over (536,348) means that there were 29880 prescriptions for NRT.
  - Rates of successful quits at 4 weeks per 100,000 were 3387 for Northamptonshire compared to 3068 for England
  - Cost per successful quitter were lower in Northamptonshire (£144) compared to nationally (£220)

- Self-harm: Emergency hospital admissions for self-harm per 100,000: England 212.1 and Northamptonshire 246.8 with rates varying between 151.1 for South Northamptonshire and 355.9 for Corby

### **Use of adult secondary care mental health services**

- People using adult & elderly NHS secondary mental health services, rate per 100: Northamptonshire (2.82) compared to England (2.55)
- Contacts with Community Psychiatric Nurse rate per 1000: Northamptonshire (226) compared to England (169)
- Numbers of people on a Care Programme Approach, rate per 1,000: Northamptonshire (9.27) compared to England (6.39)

### **Hospital admissions for mental disorder**

- Hospital admissions for mental health: Northamptonshire (178.9) compared to England (172.3)
- In-year bed days for mental health, rate per 1,000: Northamptonshire (192.8) compared to England (192.9)

### **8) Costs of mental disorder**

Annual cost of mental disorder in England is £105 .2 billion CMH, 2010)

#### **Cost of mental disorder during childhood and adolescence**

Average annual UK costs for each child with mental disorder range from £11,030 to £59,130 (Suhrccke et al, 2008). One study of children with severe & complex mental health problems estimated that overall average costs of their care to health, social care, education and criminal justice agencies amounted to more than £1,000 a week per child (Clark et al, 2005).

For conduct disorder:

- Lifetime costs of a one year national cohort of children with conduct disorder (6% of child population) have been estimated at £5.2 billion (£150,000 per case) (Friedli & Parsonage, 2007).
- Crime is responsible for 71% of the costs of conduct disorder with 13% due to mental illness in adulthood and 7% due to lost lifetime earnings (Friedli & Parsonage, 2007).
- Applying these costs to the 5299 5-16 year olds with conduct disorder in Northamptonshire gives lifetime costs of £794.85 million for each one year cohort
- £60 billion annual cost of crime in England & Wales by adults with a conduct disorder and sub-threshold conduct disorder during childhood and adolescence (SCMH, 2009).

### Cost of mental disorder during adulthood

- Depression: Annual costs of depression in England are £7.5 billion (£1.7 billion health service costs and £5.8 billion lost earnings) although this does not include informal care or other public service costs (McCrone et al, 2008). Lower productivity accounts for an estimated further £1.7–£2.8 billion and human costs for £9.9–£12.4 billion, bringing the total annual cost of depression to £20.2–23.8 billion a year.
- Anxiety: Annual cost of anxiety disorders in England is £8.9 billion with £1.2 billion due to health service costs and the remainder due to lost employment (McCrone et al, 2008).
- Psychosis: Annual UK costs of psychosis are £13.8 billion (Kirkbride et al, 2012).
- Dementia: Annual UK costs of dementia are estimated as £17 billion (Knapp and Prince, 2007)
- Personality disorder: In 2007, service costs for people with diagnosable personality disorder in contact with primary care were estimated as £704 million, and projected to rise to £1.1 billion by 2026 (McCrone et al, 2008). These figures increase to £7.9 billion and £12.3 billion respectively if lost employment costs are included.
- Suicide: Average lifetime costs of each suicide by someone of working age in England are £1.7m at 2009 prices Knapp et al, 2011). In 2008 the total estimated annual costs of the 4200 suicides that occurred that year was £7.1 billion.
- Alcohol misuse:
  - Annual wider cost of alcohol misuse is estimated to be £20–£55 billion (NICE, 2010)
  - In Northamptonshire:
    - Alcohol costs the economy £139 million each year including £37.8 million NHS costs and £30.6 crime costs (Sharpe, 2012)
    - Absenteeism and reduced employment due to alcohol costs £36m each year (Sharpe, 2012)
    - Alcohol costs £34m of Northamptonshire’s Adult Social Care budget.
    - However, the Northamptonshire Partnership Strategic Assessments 2012-13 estimated that overall cost of alcohol related harm was £271 million each year.
- Smoking: Annual wider cost of smoking is £13.7 billion (Nash & Featherstone, 2010).

- Drug use:
  - Annual economic and social cost of class A drug use was £15.4 billion in England and Wales in 2003/04 (Gordon et al, 2006).
  - In the absence of drug treatment, the cost of drug related crime in Northamptonshire could exceed £45 annually (Sharpe, 2012). Drug treatment has a crime reduction cost benefit of £29 million over 3 years
- Employer costs: Mental ill health cost UK employers £28.3 billion at 2009 pay levels (NICE, 2009), with a further £31 billion due to people not currently in work owing to mental health problems (based on McCrone et al, 2008).
- Co-morbidity: The impact of mental disorder on people with existing physical illness leads to 45% higher health care costs (Naylor et al, 2012). Furthermore, 12-18% of all NHS expenditure on long term (physical) conditions is linked to poor mental health and wellbeing amounting to £8-13 billion in England each year.

#### **9) Economic savings of intervention for mental disorder**

- Parenting interventions for parents of children with conduct disorder result in net returns of:
  - £8 for each £ invested (Knapp et al, 2011)
  - £7334 per family for group intervention
  - £6250 per family for individual intervention.
- Early detection and treatment of depression at work results in total returns of £5 for every £1 invested with net savings starting by year 1 (Knapp et al, 2011).
- Early intervention of psychosis results in total returns of £18 for every £1 invested with net savings starting by year 1 (Knapp et al, 2011).
- Early intervention during pro-drome preceding psychosis results in total returns of £10 for every £1 invested with net savings starting by year 2 ((Knapp et al, 2011).
- Screening and brief interventions in primary care for alcohol misuse result in total returns of £12 for every £1 invested with net savings starting by year 1 (Knapp et al, 2011).

## **10) Spend on mental health**

In 2010/11, £11.9 billion was spent on NHS services to treat mental disorder, equivalent to 11.1% of the NHS budget (DH, 2012) although mental disorder causes almost 23% of disease burden in the UK (WHO, 2008).

### **Mental health expenditure in Northamptonshire**

Allocated average spends for mental health per head: Northamptonshire £164.11 compared to England £182.85

Estimated Programme Budgeting Expenditure per 100,000 population is £22.45m (2010/11)

- Prevention and promotion: £380,000
- Primary care: Primary prescribing & pharmaceutical services: £2.21m
- Secondary care:
  - Inpatient elective and day case: £8.26m
  - Inpatient: Non-elective: £490,000
  - Outpatient: £190,000
  - Other secondary care: £6.19m
- Urgent / emergency care: £70,000
- Community care: £1.63m
- Health and social care provided in other settings: £2.02m
- Non-health/ social care: £1.03m

#### **1) Preschool/ early education programmes**

- proportion of under 5’s attending pre-school programmes (97% for Northamptonshire compared to 86% for England)

#### **2) School based smoking prevention**

- a) proportion of school children receiving interventions to prevent uptake of smoking such as school based internet interventions
  - Kick Smoking into Touch (KSIT) a school based, youth smoking prevention programme for 10-11 year olds, delivered in collaboration with Northampton Saints Rugby Club continued into 2011/12. This programme was delivered to

over 600 children in primary schools within areas of high prevalence. The aim is to educate children through interactive activities on the dangers and risks to health from smoking. The dangers of second-hand smoke are also emphasised, in order to cascade learning to their families.

- In partnership with Healthy Schools, 23 Year 9 children received a 2-day training from QUIT a national charity to become ‘Smoking Prevention Peer Mentors’. This programme provides them with skills to take back into their schools and advise their fellow pupils about the issues of smoking and how they can stop.

b) proportion of parent smokers who receive smoking cessation intervention; No data from GEM

**3) Violence prevention: proportion of school children receiving:**

- a) school based universal and targeted violence prevention programmes: Nil
- b) school based sexual abuse prevention programmes: Nil
- c) school based bullying prevention programmes: Nil
- d) family Nurse Partnership intervention
- e) whose parents receive parent training programmes

**4) Sexual health**

Proportion receiving sexual health education:

% age 12-15 years who find information and advice received in school on sex & relationships helpful 2009/10

	Percentage	Estimated Receive	Sig.
Northamptonshire	47%	95%	none
England	53%		

From sexual balance scorecard and local knowledge

<http://www.apho.org.uk/default.aspx?RID=117795&TYPE=FILES>

## **12) Economic savings from mental health promotion and disorder prevention**

### **Economic savings from mental health promotion**

- **Preschool programmes:** Net benefits of the pre-school educational and home visiting programme for 3 and 4 year olds with low IQ and low income are £17 for each pound invested (Karoly et al, 2005). Highest risk people benefit most from early childhood programmes which have clearest evidence of cost benefit (average economic return ratio of 6:1 (NICE, 2009)
- **School based programmes:** The school based Good Behaviour Game results in savings of £25 for each £ invested just from reduced tobacco use while the Caring School Community scheme can result in returns of £28 for each £ spent even when only taking into account reduced drug and alcohol problems (Aos et al, 2004)
- **Work based mental health promotion** can result in total returns of £10 for every £1 invested after one year (Knapp et al, 2011).
- **Debt advice services** result in total returns of £3.55 for every £1 invested with net savings beginning by year 2 (Knapp et al, 2011).
- **Physical activity:** Brief physical activity interventions cost £20-440 per QALY (NICE, 2006). Walking and physical activity programmes in older people to promote mental well-being cost £5,000 - £12,000 per QALY while group exercise programmes cost £4915 per QALY (Windle et al, 2008).
- **Befriending services:** if resulting improved quality of life measures are included, the net savings are £225 per person each year (Knapp et al, 2011).
- **Time banks** use hours of time as community currency, with participants contributing practical help or resources in return for services provided by other timebank members. Net savings per time bank member are £850 each year (Knapp et al, 2010)
- **Community navigators** are volunteers from the community trained in reaching out to vulnerable groups of people and providing them with emotional, practical and social support and skills. Costs of such a service are £300, to which should be added the costs of visits to Citizens’ Advice Bureau or Job Centre Plus (estimated as £180) (Knapp et al, 2010). However, economic benefits are £900 per person in the first year with therefore £420 net savings in the first year.
- **Targeted promotion interventions** include:
  - **Employment support:** Individual Placement Support for people with severe mental illness results in annual savings of £6,000 per person (CSED, 2010)
  - **Supported housing** for men with enduring mental illness can save £11,000–£20,000 each year per person (CSED, 2008).

- Supported housing for women with multiple complex needs can save local authorities and the NHS £120,000 each year per person excluding costs from ambulance use, police and courts (CSED, 2008).

### **Economic savings from prevention**

- School-based interventions to reduce bullying: £14 saved for each pound spent (Knapp et al, 2011)
- Prevention of conduct disorder through school-based social and emotional learning programmes: £84 saved for each pound spent (Knapp et al, 2011)
- School-based violence prevention programmes with net savings of £829 at six years and £6,446 ten years after the programme began (Beecham et al, 2010)
- Suicide prevention through GP training results in net savings of £44 for every £1 invested (if offered to all GPs in England, it could deliver net savings of £568m after one year) (Knapp et al, 2011)
- Smoking cessation: NHS savings of £380 million each year (Callum, 2008). It is important to target people with mental disorder, as 42% of adult tobacco consumption is by people with mental disorder (McManus et al, 2010).

### **13) Outcomes**

This document includes the following public health outcomes

Wider determinants of health

- children in poverty
- school readiness pupil absence
- 16- to 18-year-olds not in education, employment or training
- first-time entrants to the youth justice system
- people in prison who have a mental illness
- people with mental illness or learning difficulty/ disability in settled accommodation:
  - Proportion of adults receiving secondary care mental health services in settled accommodation
  - Proportion of adults with learning disability in stable accommodation
- employment for people with a long-term condition including with a learning difficulty/ disability or mental illness

- Proportion of adults receiving secondary care mental health services in paid employment
- Proportion of adults with learning disability in paid employment
- domestic abuse
- violent crime (including sexual violence): episodes of violent crime per 1000 population
- re-offending levels: % of offenders who re-offend (1.13i) and average number of re-offences per offender (1.14i)
- statutory homelessness: homelessness acceptances (1.15i) and households in temporary accommodation (1.15ii)
- utilisation of green spaces for exercise/health reasons
- fuel poverty

#### **Health improvement**

- low birth weight of term babies:
- breastfeeding
- smoking status at delivery
- child development at 2–2.5 years
- emotional well-being of looked-after children
- hospital admissions caused by unintentional and deliberate injuries in under-18s
- hospital admissions as a result of self-harm
- smoking prevalence in 15-year-olds
- smoking prevalence in adults (over-18s)
- successful completion of drug treatment
- numbers entering prison with untreated substance dependence
- alcohol-related admissions to hospital
- NHS admissions with a primary diagnosis wholly or partially attributable to alcohol by SHA

- Alcohol admissions for alcohol related harm
- Hospital stays for alcohol related harm
- Emergency admissions for alcohol attributable conditions
- self-reported well-being
  - Self-reported wellbeing - people with a low satisfaction score (2.23i)
  - Self-reported wellbeing - people with a low worthwhile score (2.23ii)
  - Self-reported wellbeing - people with a low happiness score (2.23iii)
  - Self-reported wellbeing - people with a high anxiety score (2.23iv)

**Public health outcomes to preventing premature mortality**

- excess winter deaths
- dementia and its impacts

Outcomes not covered earlier

- excess mortality in adults under 75 years with serious mental illness: Northamptonshire (1041.5) compared to England (921.2)
- suicide
  - suicide rate (provisional)
  - Standardised Mortality Rate for suicide and undetermined injury: Northamptonshire 90.0 compared to England 100