Severe mental illness (SMI) in Suffolk

Note: This Mental Health Needs Assessment chapter updates and combines:
- Suffolk QOF Severe Mental Illness (2014)
- Metabolic Syndrome (Jan 2017)

If you only read four things:
1. 6,778 people are recorded as having severe mental illness in Suffolk.
2. 45.6% of the variation in the prevalence of severe mental illness between Suffolk GP practices can be explained by deprivation.
3. Individuals with SMI have three times the risk of metabolic syndrome than the general population.
4. Most Suffolk patients with a severe mental illness received a blood pressure check within the last 12 months, but it is not known how many have been diagnosed with metabolic syndrome, or if they are being effectively supported to manage the syndrome.

Key points
General practices are encouraged to identify patients with severe mental illness (SMI) under the Quality and Outcome Framework (QOF) and to carry out an annual health and medication review with them.

Severe mental illness
Severe mental illness (SMI) includes schizophrenia, bipolar disorder and other psychoses.

Metabolic syndrome
Metabolic syndrome is a term used to describe a group of physical health characteristics including obesity, high blood pressure and insulin resistance. Metabolic syndrome can lead to significant health problems such as Type 2 diabetes, stroke and heart disease.

20-25% of the population are at risk of metabolic syndrome, but the risk is much higher for people with a severe mental illness.

Researchers estimate that 30-40% of people with schizophrenia have metabolic syndrome - though other researchers estimate the risk to be even higher, at 63%. The reasons for the link between severe mental illness and metabolic syndrome are still being explored, but are thought to be a combination of lifestyle factors such as smoking and poor nutrition, reduced attention to physical health needs, and the side effects of necessary psychotropic medications (medicines used to treat severe mental illness).

Parity of esteem
Parity of esteem is a term used in the mental health strategy for England, No health without mental health. The Royal College of Psychiatrists report Whole-person care: from rhetoric to reality. Achieving parity between mental and physical health defines parity of esteem as “valuing mental health equally with physical health” and therefore an approach which aspires to:
- equal access to effective, safe care
- equal efforts to improve the quality of care
- the allocation of resources on a basis commensurate with need
- equal status within healthcare education and practice
• equally high aspirations for service users
• equal status to the measurement of health outcomes
• holistic, integrated care with mental health considered alongside physical health

The numbers

Prevalence by CCG

In 2016/17, 6,778 people in Suffolk (who were registered with a GP) were recorded as having a severe mental illness (such as a psychotic illness or bipolar disorder)\(^{10}\). This is 0.86% of people registered with GPs, significantly lower than that for England as a whole (0.92%).

However, there is variation between the Clinical Commissioning Groups (CCGs) and their Sustainability and Transformation Partnerships (STPs). West Suffolk has the lowest SMI prevalence in the STP; both West Suffolk and Ipswich and East Suffolk have prevalence significantly below England. Prevalence of SMI in Great Yarmouth & Waveney is higher than the overall prevalence for both Norfolk and Waveney STP and England.

Table 1: Severe mental illness recorded prevalence (QOF): % of practice register (all ages) 2016/17, CCG by STP

Table 1a: Suffolk & North East Essex STP

Table 1b: Norfolk & Waveney STP
Prevalence by GP practice
The bar chart below (Figure 1) shows the prevalence in each GP practice, grouped by CCG. Prevalence for GP practices varies from around 0.52% to 1.93%. The published 2016/17 QOF figures are:

- 0.85% for Ipswich and East Suffolk CCG
- 1.01% Great Yarmouth and Waveney CCG
- 0.88% for Waveney District (local calculation based on GP figures, CI 0.86-0.90%)
- 0.79% for West Suffolk CCG
- East of England 0.83%
- England 0.92%
- The visible outlier on the chart is Kirkley Mill Health Centre in Lowestoft, which covers the area with the highest relative levels of deprivation (IMD) of all Suffolk’s GP practices

Figure 1: Patients with schizophrenia, bipolar affective disorder and other psychoses (as a percentage of patients registered with general practices in Suffolk), 95% CI, 2016/17 all ages

There are marked differences in drug prescribing for psychoses and related disorders within the Sustainability and Transformation Partnerships (STPs) that cover Suffolk. Great Yarmouth and Waveney, and North East Essex prescribe a higher number of drug items per 1,000 registered population, while West Suffolk, and Ipswich and East Suffolk, prescribe significantly fewer drugs than the England average.
Figure 2: items for drugs used in psychosis and related disorders per 1,000 patients on the list by CCG (May 2018)

Table 2: GP prescribing of drugs for psychoses and related disorders: items (2017/18 Q4) per 1,000

Table 2a: Suffolk and North East Essex STP by CCG

<table>
<thead>
<tr>
<th>Area</th>
<th>Value</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>62.4</td>
<td>62.3</td>
<td>62.4</td>
</tr>
<tr>
<td>Suffolk and North East Essex</td>
<td>71.1</td>
<td>70.5</td>
<td>71.7</td>
</tr>
<tr>
<td>NHS North East Essex CCG...</td>
<td>95.2</td>
<td>94.1</td>
<td>96.3</td>
</tr>
<tr>
<td>NHS Ipswich And East Su...</td>
<td>59.3</td>
<td>58.5</td>
<td>60.2</td>
</tr>
<tr>
<td>NHS West Suffolk CCG</td>
<td>56.4</td>
<td>55.4</td>
<td>57.5</td>
</tr>
</tbody>
</table>

Source: Public Health England. Severe mental illness

Table 2b: Norfolk and Waveney STP by CCG

<table>
<thead>
<tr>
<th>Area</th>
<th>Value</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>62.4</td>
<td>62.3</td>
<td>62.4</td>
</tr>
<tr>
<td>Norfolk and Waveney</td>
<td>93.3</td>
<td>92.6</td>
<td>93.9</td>
</tr>
<tr>
<td>NHS Norwich CCG</td>
<td>126.6</td>
<td>125.0</td>
<td>128.2</td>
</tr>
<tr>
<td>NHS Great Yarmouth And...</td>
<td>101.9</td>
<td>100.5</td>
<td>103.3</td>
</tr>
<tr>
<td>NHS North Norfolk CCG</td>
<td>89.1</td>
<td>87.6</td>
<td>90.6</td>
</tr>
<tr>
<td>NHS South Norfolk CCG</td>
<td>72.2</td>
<td>71.0</td>
<td>73.5</td>
</tr>
<tr>
<td>NHS West Norfolk CCG</td>
<td>67.9</td>
<td>66.6</td>
<td>69.3</td>
</tr>
</tbody>
</table>

Source: Public Health England. Severe mental illness

Rosie Frankenberg & Alison Matthews 21/09/2018
Public Health, Suffolk County Council
Local factors affecting prevalence
The data relies on the thoroughness of practices in identifying and recording patients with severe mental illness.

The impact
Physical health
People with mental health conditions experience poor outcomes in terms of physical health and mortality rates\(^\text{13}\); so do informal and family carers supporting people at home\(^\text{14}\).

Life expectancy for people with severe long-term mental illness is reduced by 15-20 years compared with the general population, and two thirds of these deaths could be prevented\(^\text{13,15}\). Help targeted at those who have metabolic syndrome (or who are at risk of it because they are obese) can address lifestyle factors, reducing the risk of heart disease or diabetes.

Prescription medication can adversely impact health, through misuse or overdose as well as known physiological side effects. For example, psychotropic medication can make diabetes more difficult to manage\(^\text{16}\), increase the risk of falls, and increase the risk of sudden death\(^\text{17}\). Recent studies also showed an increased risk of death in nursing home residents taking Haloperidol\(^\text{18}\). Polypharmacy can increase the risk of adverse drug events, and reduce the absolute difference of each medicine to life expectancy\(^\text{19}\).

People with mental health conditions appear to be less able to self-manage their long-term conditions e.g. by following treatments and attending appointments\(^\text{20,21,22,23–25}\).
People with mental illness have increased likelihood of unhealthy lifestyles including alcohol or substance misuse and smoking. For example, lower cardiovascular fitness predicts incidence of depression. Smoking and mental health, by the Royal College of Physicians and the Royal College of Psychiatrists, reports the impact of smoking on those with mental health conditions:

- reduces life expectancy
- affects quality of life
- increases poverty

A third of people with mental health problems, and 70% of people in psychiatric units are smokers. These people are as keen to want to quit, and as capable of quitting, as the wider population, but are not always offered effective stop smoking treatment. Stopping smoking can lead to improvements in long-term mental health.

The links between diabetes and mental illness (including schizophrenia) have been known for over 100 years (Sir Henry Maudsley, 1897, quoted in World Health Organization. Addressing Comorbidity between Mental Disorders and Major Noncommunicable Diseases).

Diabetes is more common in people with SMI due to:

- the effects of some antipsychotic medications
- links between diabetes and schizophrenia
- cultural/lifestyle factors

Accessing services

People with mental health conditions may not feel able to access preventive and general health care as readily as others. GPs offer an annual health check for those with SMI, and NHS health checks are available for adults aged 40 – 74. However, patients with SMI are less likely to receive full health assessments than the England average.

Health care professionals working in mental health services may not have the knowledge and skills, awareness of pathways and provision, or even the equipment, to support general health care.

People with long-term severe mental illness have specific needs and are likely to require specialist support from staff experienced in mental illness when it comes to identifying, monitoring and addressing risk factors.

The UK government, as part of its commitment to ‘Parity of Esteem’ (giving mental illness the same amount of attention as physical illness) has recently issued guidance to CCGs and mental health services on how to manage the risks associated with metabolic syndrome and the steps that services should take to support people to adopt healthier lifestyles. This guidance, along with clinical guidelines from NICE on the management of schizophrenia and bipolar disorder, stress how important it is that mental health staff and GPs take regular opportunities to monitor metabolic factors – for example by measuring blood pressure and through blood tests.
People with severe mental illness (SMI) such as schizophrenia, have higher risk of physical health problems and early death: 16,26

- increased prevalence of asthma, diabetes, chronic obstructive pulmonary disease (COPD), coronary heart disease (CHD), stroke and heart failure 15
- life expectancy appears to be reduced by 15-20 years compared to the general population 1
- 60% of this excess mortality is estimated to be due to physical illness (not suicide) 26, and is mostly from cardiovascular disease 20
- standardised death rates are three to four times higher for people with schizophrenia than in controls. The conditions responsible include respiratory, endocrine, gastrointestinal and CVD 16
- people with SMI have double the risk of obesity and diabetes 1 and of heart attack or stroke 20
- people with a psychotic illness and diabetes are more likely to die early than people who only have diabetes 20
- evidence tends to suggest that SMI does not increase the prevalence of cancer 1, nor make it more likely that cancer is diagnosed at an advanced stage. However, people with a history of mental illness had significantly worse cancer survival rates: SMI (74% higher risk of death over 4-5 years), depression (30% higher), dementia (66% higher) and substance misuse (42% higher) 35

In 2012/13, the under-75 mortality rate for people with SMI nationally was 1,319 (per 100,000 of the population) compared with 342 for the general population (2011/13). In Suffolk, the rate was significantly higher, at 1,718 per 100,000 12 (compared to 293 per 100,000 for the general population).
Figure 5: Premature (<75) mortality in adults with SMI in Suffolk (age-standardised rate per 100,000 population)


What are the key inequalities?

Figure 6: Prevalence of severe mental illness (SMI) in patients aged 15 to 74 by sex, age group and deprivation

Sex
Analysis of national GP records shows there is higher prevalence of SMI in males (0.9%) than females (0.8%), see Figure 6.

Age
Analysis of national data shows there are higher proportions of SMI patients within the 35-74 age group (1.1%) than 15-34 (0.6%).

The prevalence of physical and mental health comorbidity is generally higher in older people than in younger people. However, health inequalities between people with SMI and all patients are greater in younger age groups, with the highest health inequality for people aged 15 to 34 for asthma, diabetes, hypertension and obesity.

Figure 7: Age-specific prevalence of four physical health conditions, patients with SMI and all patients aged 15 to 74


People with SMI are:
- 3.0 times more likely to be classified as obese for ages 15 to 34 but only 1.6 time more likely for ages 55 to 74
- 1.3 times more likely to have asthma for ages 15 to 34 and 35 to 54 but for ages 55 to 74 the difference is not significant
- 3.2 times more likely to have hypertension for ages 15 to 34 but only 1.3 times more likely for ages 35 to 54
- 3.7 times more likely to have diabetes for ages 15 to 34 but only 1.6 times more likely for ages 55 to 74
Deprivation

Suffolk County Council’s Public Health Knowledge & Intelligence Team have considered the relationship between the numbers of patients with severe mental illness registered in general practices in Suffolk County, in financial year 2016/17, with deprivation.\(^\text{17}\)

Figure 8: Correlation of SMI with deprivation, GPs in Suffolk, 2016/17

A linear regression model fitted to these data indicated a statistically significant association between QOF prevalence of severe mental illness in patients registered with general practices and estimated IMD 2015 scores (P<0.0001).

A total of 45.6% of the variation in prevalence of severe mental illness in patients in these general practices could be explained by deprivation (R\(^2\)=0.4555). This has increased from 29.2% for 2012/13. For each unit increase in deprivation, prevalence of severe mental illness increased by 0.023% (95% confidence interval of slope: 0.017%, 0.029%).

Research by Public Health England\(^\text{15}\) shows that:
- patients who live in more deprived areas have a higher prevalence of SMI
- patients with SMI living in more deprived areas have a higher prevalence of physical health conditions

Socio-economic deprivation is recognised as both a cause and consequence of SMI. People with SMI have a high risk of “social drop-out” including unemployment.\(^\text{15}\)

Ethnicity

The Adult Psychiatric Morbidity Survey\(^\text{38}\) found increased prevalence of psychotic disorder (in the preceding year) among black men (3.2%) than men in other ethnic groups (for example, 0.3% white men, 1.3% Asian men).
People from black ethnic groups are:  
- 44% more likely to be sectioned under the Mental Health Act  
- more likely to come into secondary care from the police and other non-health organisations  
- have lower rates of recovery (this is particularly marked for black ethnic groups, but rates are also lower among other minority ethnicities)

People from minority ethnic groups are more likely to have adverse experiences of hospital mental health services, including excessive restraint and medication. This has led to mistrust of services and fear of inappropriate treatment and delays in seeking care.

**Risks & protective factors**

Links between severe mental illness and metabolic syndrome are still being explored, but are thought to be a combination of lifestyle factors such as smoking and poor nutrition, reduced attention to physical health needs, and the side effects of necessary psychotropic medications (medicines used to treat severe mental illness).  

People with learning disabilities may be at increased risk of metabolic syndrome: a study in the Netherlands recorded prevalence of 46% (against 29% in a population without learning disabilities or antipsychotic drug use). 19% of this variance can be attributed to increased age, poor nutrition and the use of conventional antipsychotics.

People with SMI have double the risk of obesity and diabetes. Eating healthily and doing more physical activity can help avoid or address problems related to metabolic syndrome.

40% of adults with SMI smoke. Smoking increases the risk of cardiovascular disease, and premature death.

Figure 9: Patients with SMI who have received the complete list of physical health checks, by Suffolk CCG, 2014/15

Source: Public Health England. Severe mental illness

Researchers estimate that 30-40% of people with schizophrenia have metabolic syndrome - though other researchers estimate the risk to be even higher, at 63%. Assuming 40% prevalence of
Severe mental illness in Suffolk: MHNA 2018

metabolic syndrome in people with SMI, up to roughly 3,000 people in Suffolk with severe mental illness could be at risk (1,380 Ipswich & East Suffolk CCG, 783 West Suffolk CCG, 1,016 Great Yarmouth & Waveney).

89% (over 4,000) people in Suffolk, with a severe mental illness and registered with a GP, have had a recorded blood pressure result in the preceding 12 months (2016/17). It is not known what proportion of these patients have high blood pressure, whether it is being effectively managed, or if they are receiving support to make positive lifestyle changes.

Figure 10: Patients in Suffolk with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 12 months (2016/17)

Patients of all ages registered with general practices in Suffolk County; financial year 2016/17

Costs

Figure 11: Cost of GP prescribing for psychoses and related disorders, Net Ingredient Cost (£) per 1,000 population (quarterly), CCGs covering Suffolk

Figure 11a: Ipswich and East Suffolk CCG

Figure 11b: West Suffolk CCG

Figure 11c: Great Yarmouth & Waveney CCG

Source: Public Health England. Severe mental illness

Table 3: Year-on-year anticipated investment and expected savings

<table>
<thead>
<tr>
<th>Funding type</th>
<th>2016/17</th>
<th>2017/18</th>
<th>2018/19</th>
<th>2019/20</th>
<th>2020/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCG baseline allocations for improving the physical healthcare of people living with SMI</td>
<td>-</td>
<td>£41m</td>
<td>£83m</td>
<td>£83m</td>
<td>£83m</td>
</tr>
<tr>
<td>Expected savings: physical healthcare for people with SMI</td>
<td>-£27m</td>
<td>-£81m</td>
<td>-£108m</td>
<td>-£108m</td>
<td></td>
</tr>
</tbody>
</table>

Source: NHS England. Improving physical healthcare for people living with severe mental illness (SMI) in primary care: Guidance for CCGs. 2018

The annual cost to the NHS of treating smoking-related illnesses in people with mental health problems was estimated at £720 million a year in 2013. Smoking also reduces the effectiveness of some anti-psychotic medication, so dosage must be increased to be effective. This is estimated to increase drug costs by up to £40 million.
What are we doing?

Suffolk’s specialist mental health services are provided by the Norfolk and Suffolk NHS Foundation Trust (NSFT). Their mental health staff are required to carry out NHS Health Checks for people in their care, and to report that they have done this to commissioners. This means that they should be routinely monitoring people with SMI for metabolic syndrome risk factors such as blood pressure, cholesterol, weight and smoking status.

North East Essex CCG is not covered by NSFT, and is working with partners across Essex, including its specialist mental health provider Essex Partnership University (EPUT), to deliver “a year on year reduction in premature mortality among people with severe mental health problems through public health initiatives and integration with physical health”\(^4\) by 2021.

GPs are required to monitor risk factors for metabolic syndrome annually for people with a diagnosis of schizophrenia, bipolar disorder or other psychotic illness (see “The Numbers” above).

Studies have demonstrated the benefit of tailored services to support healthy lifestyles (such as smoking cessation)\(^1\). One Life Suffolk, which provides NHS Health Checks in Suffolk, has been commissioned to support people with SMI to stop smoking, lose weight and become more physically active. Patients can self-refer to this service, or GPs and Mental Health staff can complete a professional referral form with the patient’s consent.

What else could we do?

Rethink Mental Illness, in the report *Lethal Discrimination*\(^4\) looked at smoking levels, obesity, accessing health care and physical health monitoring. The report recommends:

- people with mental illness should be offered tailored support to quit smoking
- patients should be told about the side-effects of antipsychotic medication, so they can look out for warning signs, and GPs should monitor their physical health closely
- all mental health professionals should receive basic physical health training as part of their mandatory training
- commissioners and service providers need to be clear about the respective responsibilities of primary and secondary care services for monitoring and managing the physical health of people with mental health problems

All people taking psychotropic medications should be monitored for metabolic syndrome through NHS Health Checks, including those who use the Care Programme Approach (CPA).

Psychiatrists prescribing psychotropic medications and staff providing health checks must provide follow-up support so that people with severe mental illness can make positive changes such as giving up smoking, losing weight and becoming more physically active.

It is important to prevent risk accumulating in people who are not yet identified as having metabolic syndrome or some of its risk factors – for example, those newly diagnosed with severe mental illness. The best way to do this is to help people adopt healthy lifestyles from the start.

People with severe mental illness should be made aware of the support available from OneLife Suffolk and be supported in making positive lifestyle changes (the service outcomes). This data may be challenging to collect, because it is not routinely collected and may be subject to coding irregularities. However, the service outcomes could be periodically measured in a randomly selected sample of patients, as part of the audit process.
The importance of healthy lifestyle choices should be emphasised to patients prior to their exposure to the risk factor (i.e. psychotropic medication), to achieve the most effective form of prevention. It is the responsibility of all healthcare professionals involved in the care of people with severe mental illness to promote awareness of these issues, and to adopt a “Making Every Contact Count” approach. Providing “Making Every Contact Count” training to Mental Health staff could be one way of improving provision of health and lifestyle advice within Mental Health services and increasing awareness of the services provided by OneLife Suffolk. Such an approach would be a step towards greater integration of mental and physical healthcare.

The NHS recommends that CCGs provide proactive outreach, using peer support, care navigators, and voluntary organisations to help individuals to attend appointments and engage in activities to improve their physical health. This may include access to existing social prescribing services.1 Although local Mental Health services and GPs are monitoring risk factors for metabolic syndrome, the number of people who are then referred to OneLife Suffolk is not recorded, nor whether this pathway has successfully supported people with severe mental illnesses to make positive lifestyle changes.

Collecting this data is likely to be challenging, because information on people with severe mental illness is collected and coded in different ways for example sometimes by diagnosis, other times by care needs. Ideally, there would be recording and reporting of the proportion of patients taking psychotropic medications who have either attended an NHS Health Check, or had their risk factor status documented, identify any short-falls in this service provision, and address them, followed by a continuous process or re-audit.

Managing physical health in patients with mental illness

High levels of morbidity and mortality amongst people with mental illness can be improved through smoking cessation programmes and by improving access to health checks29. Suggestions include:

- people with mental illness should be prioritised for healthy lifestyle services, NHS health checks and smoking cessation schemes13
- support to stop smoking should be available in mental health service settings27

Recommendations

- Improve access to care and lifestyle interventions for people with severe mental illness e.g. NHS health checks for hard to reach groups1, support for physical health in mental health settings1
- Monitor people taking psychotropic medications for metabolic syndrome through NHS Health Checks.
- Psychiatrists prescribing psychotropic medications and staff providing health checks must provide follow-up support so people with SMI can improve their physical health.
- Emphasise the importance of healthy lifestyle choices before patients start taking psychotropic medication, to prevent metabolic syndrome.
- Ensure people with severe mental illness are aware of the support from OneLife Suffolk and are successful in making positive lifestyle changes. This data may be challenging to collect, because it is not routinely collected and may be subject to coding irregularities. However, the service outcomes could be periodically measured in a randomly selected sample of patients, as part of the audit process.
• Provide “Making Every Contact Count” training to Mental Health staff to improve provision of health and lifestyle advice within Mental Health services and increase awareness of the services provided by OneLife Suffolk.
• The NHS recommends CCGs provide proactive outreach, using peer support, care navigators, and voluntary organisations to help individuals to attend appointments and engage in activities to improve their physical health. This may include access to existing social prescribing services.¹
• Improve data recording to measure how many people have been referred to OneLife Suffolk, and whether this pathway has successfully supported people with severe mental illnesses to make positive lifestyle changes. Ideally, there would be recording and reporting of patients taking psychotropic medications who have either attended an NHS Health Check, or had their risk factor status documented, identify any short-falls in this service provision, and address them, followed by a continuous process or re-audit.

Useful links
Related Suffolk mental health needs assessment (MHNA) topics
• Physical health and mental health
• Mental health and lifestyle
• Common Mental Disorders
• Projecting the prevalence of mental health problems

Related Suffolk needs assessment topics:
• Stroke (forthcoming)
• Diabetes (www.healthysuffolk.org.uk/jsna/reports/jsna-topic-reports/diabetes)

Other resources
• RightCare CVD prevention pathway for people with SMI (forthcoming)

References
27. NICE. *Smoking cessation in secondary care: acute, maternity and mental health services.* (2013).


33. Psychosis and schizophrenia in adults: prevention and management | Guidance and guidelines | NICE.

34. Bipolar disorder: assessment and management | Guidance and guidelines | NICE.


