Measuring the burden of schizophrenia:
A cross sectional analysis of the Mental Health Services Data Set and the English Hospital Episode Statistics data set

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Acknowledgements

Janssen-Cilag Limited have commissioned the publication of this report and will be involved in the distribution.

Published by Commissioning Excellence, Wilmington Healthcare

November 2018
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Executive summary

This schizophrenia report, underpinned by a range of data tables, provides insight to both commissioners and providers into the level of care for patients with schizophrenia and psychosis. It aims to help those involved locally in the planning, commissioning and provision of care for people with, or at risk of, schizophrenia to identify gaps and check that services meet identified needs.

A review of hospital-related activity data highlights all admissions, attendances and out of area placements, from across clinical commissioning group (CCG) level, to a national level, enabling benchmarking and comparisons between different organisations. The report is further enhanced by the review of hospital activity across the recently formed Sustainability and Transformation Partnerships (STP) footprints that will be instrumental in taking forward and implementing the Five Year Forward View for Mental Health agendas (NHS England, 2016a).

The Mental Health Services Data Set (MHSDS) and Hospital Episode Statistics (HES) data set identifies numbers of patients with schizophrenia and psychosis across CCGs and providers from local to a national level. The data demonstrates patients assigned to different care clusters, patient flows and the different patient–clinician relationships, not just in the mental health setting but also in the acute hospital setting.

Hospital care for people with schizophrenia is currently a huge burden on the NHS. The report highlights that:

- In the year 2016/2017 there were 12,612 admissions for patients with schizophrenia with a total indicative cost of £629 million.
- Unplanned non-elective admissions represent 68% of these admissions.
- Aside from a primary diagnosis of schizophrenia, the most common secondary diagnosis reasons for admission to a mental health trust are: non-compliance with medical treatment; mental and behavioural disturbance due to harmful use of tobacco, self-harm, and substance abuse.
- There is wide variation in service performance across the country.
- Although hospital admissions are static, people in some areas are spending a long time as inpatients (average bed days per patient for non-elective admissions are 66 days).
- Out of area placements are a serious issue.
- Better data collection is showing that more people have psychosis.
- Data suggests that moves to treat more people in the community are working as there are fewer contacts with consultants.

The data surrounding out of area placements (OAPs) was new in 2016 and so there should be an element of caution in interpretation which reveals a huge cost in relation to placements. The total recorded cost for OAPs nationally for patients in crisis or ongoing/recurrent psychoses in 2017 is £54.3 million, with considerable regional variation.

An important factor for supporting schizophrenia patients is proactive care which prevents patients going into crisis. However, current care for people with schizophrenia is fragmented and part of a demoralised system that does not deliver the quality of treatment that enables recovery. There is variation in the incidence and prevalence of the illness across England. While some natural variation is to be expected, this does not account for the major variation which occurs in the level of commissioned services and access to safe, quality care in line with National Institute for Health and Care Excellence (NICE) guidelines across all parts of the pathway. It is clear that more needs to be done to enhance information about who to contact and where people should go if they are not feeling well.

A better understanding of schizophrenia both at local, STP and national level, as well as improved data quality, is essential to drive better intelligence. This is vital for two reasons: to develop a logical strategy that supports the wider local health economy transformation partnership plans, and in order to achieve improved outcomes and drive efficiency within the system for those suffering from schizophrenia.
Recommendations

Know your data

It is essential that commissioners and clinicians are familiar with the local data which is available to them, and furthermore that this data is used – not only as a benchmark as to how a locality is performing compared with other similar areas, but also to understand the local population and their specific needs when planning services. STP data is now also available, giving an insight into these new boundaries of care that will play a vital role in evolving services.

Exploring non-elective admissions

A key data question to support change is: what proportion of admissions are non-elective, and moreover what are the reasons for these unplanned stays in hospital?

At a regional level, the picture for non-elective admissions to mental health trusts also highlights a downward trend in all regions, although the trend in London is flatter.

New models of care provision may impact on this, for example West Wakefield Vanguard has developed a focus on mental health with extended operating hours for GP services with plans to roll this out to the other GP networks linked to the vanguard. Other transformational changes include:

- The development of integrated community teams with members from physical health, mental health and social care services, who care for the most vulnerable people
- The HealthPod mobile clinic, which is improving engagement with ‘hard to reach’ groups such as the gypsy/traveller community
- Improved technology for sharing patient information as needed to prevent hospital admission and support earlier discharge.

The vanguard is also creating more ways for people to access healthcare digitally, through an online directory of local services and a library of health apps.

Clustering

The number of patients in the MHSDS is increasing. This may well reflect better collection of data, but may also point to an increase in patients with mental health problems. It is likely the reason is a combination of the two.

Despite this, the proportion of patients who are being allocated a care cluster in a single year has never reached the 50% mark. Clustering is reliant on clinicians clustering patients and not all may see the need the for this. If the whole NHS clustered patients consistently we would have a clearer picture of mental health needs, rather than the piecemeal information we currently have. Without incentives clustering is likely to remain incomplete.
Out of area placements (OAPs)

Reduction in OAPs has become a national priority: they are not good for patients and their families and are very costly to trusts. In their reports published in 2016, both the Commission on Acute Adult Psychiatric Care (CAAPC, 2016) and the Mental Health Taskforce (NHSEngland, 2016) called for an end to the practice of sending acutely ill people long distances for treatment, which leads to poor patient experience and outcomes, and unnecessary costs to the NHS so the increased focus on OAP in 2017 is to be welcomed.

Now that OAP data is being collected, it will be important to monitor for emerging trends as this data become available. This will be of particular use to CCGs to assist with planning for the longer term to ensure appropriate provision of facilities suitable to manage patients with schizophrenia.

Parity of esteem

There is overwhelming economic evidence indicating that if we address mental health with the same urgency that we do physical health, then we can not only improve outcomes for people with mental health problems but also create savings for the NHS.

The Health and Social Care Act 2012 made explicit this need for valuing mental and physical health equally, which was underscored in 2013 by The English Mental Health Strategy, “No Health without Mental Health”. Recommendation 22 in The Five Year Forward View for Mental Health states:

*Introduce standards for acute mental health care, with the expectation that care is provided in the least restrictive way and as close to home as possible and eliminate the practice of sending people out of area for acute inpatient care as a result of local acute bed pressures by no later than 2020/21”.

Planning for the future

Our analysis includes logical assumptions which point towards the indicative costs of services for people with schizophrenia. However, the current system of block contracts stops the NHS from understanding the true cost of care for people with mental health conditions, including schizophrenia, and means that commissioners cannot plan adequately for the future to deliver services to these patients.

Block contracts have not driven efficiency in the system and outcome-based contracts are a potential way forward. The inclusion of CQUINS for physical health monitoring within Mental Health Trust Contracts has driven up the percentage of patients receiving monitoring but contracts need to be for the whole pathway for certain patients e.g. with schizophrenia, not just for when they are inpatients within the community mental health team.

Community Care

The move towards community care is demonstrated through data but this needs to be adequately resourced.

There is an urgent need to improve services for people with schizophrenia and their families. The recommendations above provide important points of focus, and if addressed would go a long way towards improving the care of many of the most vulnerable individuals within our communities. The following report examines the background hospital data in detail and provides a sound basis for moving forward with a clear plan of action on schizophrenia.
1. Mental Health (MHSDs, MHLDs, MHMDs) data sets and the English Hospital Episode Statistics (HES) database are produced by NHS Digital, the new trading name for the Health and Social Care Information Centre (HSCIC). Copyright © 2018, the Health and Social Care Information Centre. Re-used with the permission of the Health and Social Care Information Centre. All rights reserved.

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2.1.1. Data should always be released at a high enough level of aggregation to prevent others being able to ‘recognise’ a particular individual. To protect the privacy and confidentiality of individuals, Wilmington Healthcare have applied suppression to the HES data - '*' represents a figure between 1 and 5, '**' indicates that secondary suppression has been applied to prevent the calculation of a number between 1 and 5.

2.1.2. For data from the Mental Health (MHSDs, MHLDs, MHMDs) data sets, and any Mental Health data linked to HES, the following disclosure control rules have been applied:

- National-level Mental Health figures (excluding Learning Disability figures) are presented unrounded, without small number suppression
- All numbers (except for those mentioned above) between 0 and 5 have small number suppression applied ('*')
- All other numbers have been rounded to the nearest 5
- Percentages are calculated based on unrounded values, but are be rounded to the nearest number

2.1.3. On no account should an attempt be made to decipher the process of creating anonymised data items.

2.2. You should be on the alert for any rare and unintentional breach of confidence, such as responding to a query relating to a news item that may add more information to that already in the public domain. If you recognise an individual while carrying out any analysis you must exercise professionalism and respect their confidentiality.

2.3. If you believe this identification could easily be made by others you should alert a member of the Wilmington Healthcare team using the contact details below. While appropriate handling of an accidental recognition is acceptable, the consequences of deliberately breaching confidentiality could be severe.

2.4. Mental Health (MHSDs, MHLDs, MHMDs) data sets and HES data must only be used exclusively for the provision of outputs to assist health and social care organisations.

2.5. Mental Health (MHSDs, MHLDs, MHMDs) data sets and HES data must not be used principally for commercial activities. The same aggregated Mental Health (MHSDs, MHLDs, MHMDs) and HES data set outputs must be made available, if requested, to all health and social care organisations, irrespective of their value to the company.

2.6. Mental Health (MHSDs, MHLDs, MHMDs) data sets and HES data must not be used for, including (but not limited to), the following activities:

2.6.1. Relating data outputs to the use of commercially available products. An example being the prescribing of pharmaceutical products

2.6.2. Any analysis of the impact of commercially available products. An example being pharmaceutical products

2.6.3. Targeting and marketing activity
2.7. Mental Health (MHSDS, MHLDOS, MHMDS) data sets and HES data must be accessed, processed and used within England or Wales only. These data outputs must not be shared outside of England or Wales without the prior written consent of Wilmington Healthcare.

2.8. If Mental Health (MHSDS, MHLDOS, MHMDS) data set and HES data outputs are subject to a request under the Freedom of Information Act, then Wilmington Healthcare and NHS Digital must be consulted and must approve any response before a response is provided.

3. Please note that this Mental Health (MHSDS, MHLDOS, MHMDS) analysis does not include any information relating to compulsory detentions under the Mental Health Act so the inpatient information presented is incomplete.

4. 2015/16 Mental Health (MHSDS, MHLDOS, MHMDS) data sets are provisional and may be incomplete or contain errors for which no adjustments have yet been made. Counts produced from provisional data are likely to be lower than those generated for the same period in the final dataset. This shortfall will be most pronounced in the final month of the latest period, e.g. September from the April to September extract. It is also probable that clinical data are not complete, which may in particular affect the last two months of any given period. There may also be errors due to coding inconsistencies that have not yet been investigated and corrected.


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Introduction

This report is about the care of people with schizophrenia and the variation in performance between mental health trusts, CCGs, and STP footprints in England. The purpose of the report is to highlight hospital admissions for people living with schizophrenia and the reasons they occur. The report will also demonstrate where there could be opportunities for reducing the number of people living with schizophrenia being admitted to hospital in crisis.

Psychosis is a set of mental health conditions characterised by hallucinations, delusions and a disturbed relationship with reality. It is associated with diagnoses of schizophrenia, bipolar disorder and psychotic depression, and onset is most often in later adolescence and early adult years.

This report focuses on schizophrenia, a condition which mainly affects younger people. The average age of onset is between 15 and 35 years, affecting men and women in equal numbers. (Royal College of Psychiatrists, 2017)

Schizophrenia is a severe neurodevelopmental disorder with a worldwide prevalence of around 0.3–0.7% (van Os, 2009). Robust estimates of prevalence for schizophrenia remain scarce. A 2002 systematic review estimated a one-year prevalence rate for schizophrenic disorders of 6 per 1000 people (Goldner et al, 2002). Another review of schizophrenia reported rates of 6.21 and 5.38 for males and females respectively (Saha et al, 2005). Based on this, McCrone et al (King’s Fund, 2008) estimate a rate of 5 per 1000 for the adult population, which equates to 210,450 people with schizophrenic disorders in England. The same report recognises that prevalence rates differ according to ethnicity (higher in black and some minority ethnic groups) and age, with a marked difference in age distribution by gender illustrated in the figure below. (King’s Fund, 2008).

![Prevalence of schizophrenic disorders per 1,000 population](Fig 1)

Source: King’s Fund (2008)
Paying the price: The cost of mental health care in England to 2026.
The aetiology of schizophrenia is unknown but it is thought to result from a combination of complex genetic and environmental factors. This includes physical factors, for example complications during pregnancy and birth, infection, and autoimmune disease; as well as psychological factors that may trigger psychosis like stress and drug abuse (Dean, 2005). Several neurotransmitter systems are thought to be involved in the pathogenesis including dopamine, glutamate, gamma-aminobutyric acid (GABA), and acetylcholine.

Schizophrenia is a serious and often highly debilitating mental health condition. Symptoms are generally classified as positive (including lack of insight, hallucinations, delusions and thought disorder) and negative (including social withdrawal, self-neglect, emotional blunting, paucity of speech, loss of motivation and initiative). (Picchioni and Murray, 2007)

Schizophrenia varies in severity from person to person. Some people have only one psychotic episode while others have many episodes during a lifetime but lead relatively normal lives in between. Other individuals with this disorder may experience a decline in their functioning over time with little improvement between full blown psychotic episodes. Schizophrenia symptoms seem to worsen and improve in cycles known as relapses and remission. For every five people with schizophrenia:

- One will get better within five years of their first obvious symptoms
- Three will get better, but will have times when they get worse again
- One will have troublesome symptoms for long periods of time.

(Royal College of Psychiatrists, 2017)

In England today, people with psychosis and their families on average experience the illness for two and a half years before they are referred for diagnosis and receive treatment. Additionally, those with severe mental illness such as schizophrenia are at increased risk of poor physical health, dying on average 15 to 20 years earlier than the general population. While individuals with schizophrenia constitute a relatively low number of the population, they do consume a disproportionately high amount of resource across many care settings in the local health economy. The estimated annual cost of care for people living with schizophrenia to the NHS is nearly £11.8 billion with breakdown of costs shown in the figure below (Schizophrenia Commission, 2012). To put this in context, mental health problems account for 23% of the burden of disease but only 13% of NHS spending (Layard, 2012).
This report provides unique insight into the current outcomes and cost of managing people with schizophrenia in England. It draws information from two key NHS Digital datasets and will provide this to the NHS at hierarchies not currently available. This analysis will highlight the opportunities to reduce variation in the management and treatment of this long-term mental health condition which in turn should better support people living with schizophrenia and their carers alike.

This report will be of primary interest to policy makers as well as a number of health and social care professionals, mental health trust management and commissioning groups. General practitioners (GPs), mental health nurses, psychiatrists and CCGs can benefit from understanding where effective management of people with schizophrenia can be improved and how it will serve to enhance treatment and decrease the burden and cost to the NHS.

Schizophrenia: key facts

- Schizophrenia and psychosis cost society £11.8 billion per year
- Increasing numbers of people are having compulsory treatment, in part because of the state of many acute care wards
- Only 1 in 10 of those who could benefit get access to true cognitive behavioural therapy
- Only 8% of people with schizophrenia are in employment
- Only 14% of people receiving social care services for a primary mental health need are receiving self-directed support
- Families who are carers save the public sector £1.24 billion per year
- 87% of service users report experiences of stigma and discrimination

Source: Schizophrenia Commission, 2012

Mental health in the NHS

The focus on mental health has intensified over the last few years with the government’s mental health plan Achieving better access to mental health services by 2020 (Department of Health, 2014a); the introduction of waiting time targets and the publication of Closing the Gap: priorities for essential change in mental health (Department of Health, 2014b) and importantly, the Five Year Forward View for Mental Health (NHS England, 2016a).

According to Achieving better access to mental health services by 2020 there has been a ‘persistent failure’ in access to treatment. There is also a tendency for health services to see physical and mental health as separate things with a lack of integration between services. Mental health policy is working to address these issues.

The publication of these documents has incited change including: enabling patients to choose mental health services, introducing Care Quality Commission (CQC) inspections for mental health services, expanding the improving access to psychological therapies programme (IAPT) and publishing the Mental Health Crisis Care Concordat (Department of Health, 2014c) which aims to help people in mental health crisis.

This comes at a time when the number of ambulance call-outs in England for people experiencing mental health crisis has risen by nearly a quarter in two years. Data obtained under the Freedom of Information Act by the Labour MP Luciana Berger shows paramedics assisted over 30,000 more patients (172,799) in crisis in 2016/17 compared with 140,137 in 2014/15, which represents a rise of 23%. An additional 55,000 hours were spent supporting people with their mental health last year, compared with 2014/15 – up by 32%. In London, the time spent rose by 45%. (Guardian, 2017)
A further focus has been on achieving parity of esteem between physical and mental health services (Royal College of Psychiatrists, 2013; Panday, 2016). ‘Parity of Esteem’ was enshrined in law by the Health and Social Care Act 2012. To achieve this, the NHS needs to improve data and monitoring of mental health services to enable analysis of care pathways, outcomes and performance and integrate physical and mental health.

The Community Mental Health Survey 2016 (Care Quality Commission, 2016a) results show that almost a third of respondents (32%) said that they do not know who to contact out of office hours if they had a crisis. Furthermore, of those respondents who knew who to contact out of office hours if they have a crisis, and had tried to contact that person or team within the last 12 months, almost a quarter (24%) said that they did not get the help they needed. This compares to 21% in 2014.

There has been a large volume of policy and positive intent but the real question is how that has translated to budgets on the frontline of care. An indicator of this is the ongoing pressure on mental health providers due to the growth in patient numbers being seen by crisis teams and the ongoing growth in numbers of patients being treated out of area. This is a result of previous policy to treat patients in the community but without a consistent shift of resources to provide the necessary infrastructure to support their care.

**Reading this report**

For those not familiar with the terminology around hospital admissions and data it may be useful to read the glossary at the end of this report first. The rest of the report is structured as follows:

- **Section A** gives a national overview of mental health services, showing overall trends in hospital admission numbers and costs between 2012/13 and 2016/17.
- **Section B** presents the regional overview of mental health services for schizophrenia, including hospital admissions and outpatient care by commissioning region.
- **Section C** gives a regional overview of mental health trusts.
- **Section D** looks at the STP footprints and gives a data analysis split by these regions.

**Abbreviations used in this report**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>A&amp;E</td>
<td>Accident and emergency</td>
</tr>
<tr>
<td>CCG</td>
<td>Clinical commissioning group</td>
</tr>
<tr>
<td>CPA</td>
<td>Care programme approach</td>
</tr>
<tr>
<td>CQC</td>
<td>Care Quality Commission</td>
</tr>
<tr>
<td>FCE</td>
<td>Finished Consultant Episode</td>
</tr>
<tr>
<td>HCP</td>
<td>Health care professional</td>
</tr>
<tr>
<td>HES</td>
<td>Hospital Episode Statistics</td>
</tr>
<tr>
<td>HoNOS</td>
<td>Health of the Nation Outcome Scales</td>
</tr>
<tr>
<td>HRG</td>
<td>Healthcare resource group</td>
</tr>
<tr>
<td>IAPT</td>
<td>Improving access to psychological therapies</td>
</tr>
<tr>
<td>ICD-10</td>
<td>International Classification of Diseases Version 10</td>
</tr>
<tr>
<td>MHCT</td>
<td>Mental Health Clustering Tool</td>
</tr>
<tr>
<td>MHLDs</td>
<td>Mental health and learning disabilities services</td>
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</table>
Methodology

Sources of data

This report utilises data from the Hospital Episode Statistics (HES) and Mental Health Services Dataset (MHSDS) which were prior to January 2016 known as the Mental Health and Learning Disability Data Sets (MHLDDS). The HES database is a cleaned and audited version of Secondary Uses Service (SUS) data which is produced by NHS Digital.

HES contains around one billion records of patients who have been treated in hospital trusts in England. This includes inpatient, outpatient, accident and emergency (A&E) and critical care activity. The inpatient data splits out elective activity (planned care) and non-elective activity (unplanned care). All hospital patient care activity is recorded but not always as accurately as it could be. Inpatient activity is recorded using the International Classification of Diseases version 10 (ICD-10) to record clinical diagnoses, and Office of Population Censuses and Surveys, classification of procedures and interventions version 4 (OPCS-4). Outpatient attendances are recorded as either a first outpatient or follow-up appointment. It should be noted that outpatient procedures are also coded using OPCS-4.

The main condition treated or investigated in the inpatient healthcare episode is considered the primary diagnosis, and up to 19 other conditions coexisting or arising alongside the primary diagnosis may be coded for – known as secondary diagnoses. The information within this report refers, except where stated, to patients with a primary diagnosis.

In line with the NHS Digital data reuse licence, and to protect individuals’ privacy and confidentiality, data suppression is applied to small numbers deemed potentially identifiable. ‘*’ represents a small, potentially identifying number between one and five. Appropriate secondary suppression is also applied, and indicated with a ‘**’, to numbers that may allow other small numbers to be calculated. Where data used in calculations had primary suppression applied, a nominal value of three is used for calculations.

Cost data is derived from Payment by Results National Tariff data (PbR), the payment system in England under which commissioners pay healthcare providers for each patient seen or treated, considering the complexity of the patient’s healthcare needs. PbR currently covers most acute care in hospitals (Department of Health, 2012). The currency for admitted patient care is the healthcare resource group (HRG) National Tariff. HRGs are clinically meaningful groups of diagnoses and interventions that consume similar levels of NHS resources (Department of Health, 2012). The cost of the admission is based on the HRG assigned.
Normally for other conditions we would use PbR National Tariff to derive costs but because most admissions to a mental health trust do not carry a HRG (because they are off-tariff) we are not able to use the PbR. Therefore, we have made broad estimates of the cost of admissions based on length of stay. Admission costs have been estimated based on the number of bed days in episodes where schizophrenia is a primary diagnosis. A ‘unit cost per occupied bed day’ has been applied based on the average for psychosis care clusters (published in the NHS National Schedule of Reference Costs 2014/15 to 2015/16).

**Care cluster allocation**

The Mental Health Clustering Tool (MHCT) is a dataset of 18 scales captured for each service user receiving mental health services in England. Twelve of the scales are identical to those recorded in the Health of the Nation Outcome Scales (HoNOS [Working age adults]) assessment. The other six, known as the Summary Assessment of Characteristics (SAC), consider problems from a historical perspective. These will be problems that occur in episodic or unpredictable ways. While they may not have been experienced by the individual during the two weeks prior to the rating date, clinical judgement would suggest that there is still a cause for concern that cannot be disregarded. The MHCT is used by clinicians to support their decision to allocate a service user to a care cluster. The care clusters are intended to be used as the national currency for PbR in mental health. The information standard for mental health care clusters is defined in ISB 1509/2010 (Information Standards Board, 2010).

**Limitations of data**

There are limitations caused by lack of detail in the data record. Providers submit clustering data on a monthly basis. The quality of this data varies from trust to trust and clinician to clinician. As highlighted previously, there are inconsistencies in the way that service users are clustered. The cluster criteria are explicit, however, there may be variation in the way clinicians interpret these. So there may need to be greater consistency in the way clusters are recorded and a drive for more consistency within coding.

This is the first year of reporting mental health spend at programme level. Some CCGs have had difficulties extracting costs for specific services that they commission because of block contract arrangements for mental health services. As a result there are some CCGs that show zero spend for mental health programmes, which is being reported as N/A in this data. For this reason the England and regional totals are not presented here, as they do not accurately reflect the total picture. Where appropriate, i.e. if these services are commissioned by these CCGs, the CCGs will be asked to identify spend as part of in-year financial reporting and to report the split of spend in their forecast outturn (NHS England “Mental Health Five Year Forward View Dashboard”, 2017).
Secondary Care Data is taken from the English Hospital Episode Statistics (HES) database produced by NHS 
Digital, the new trading name for the Health & Social Care Information Centre (HSCIC www.hscic.gov.uk/hes). 
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How data is presented in this report

Snapshots of data are presented in separate sections at national, regional, mental health trust and STP 
footprint levels – the domains are outlined in Figure 3. Further supporting data sets are contained within 
the appendix.

Comparators of care

As a comparator of care, two leading mental health trusts have been used to benchmark what quality of 
care for people with schizophrenia could look like.

The trusts Northumberland, Tyne and Wear NHS Foundation Trust, and East London NHS Foundation 
Trust became the first two NHS mental health trusts in England to be awarded overall ratings of 
outstanding by the Care Quality Commission in 2016. Dr Paul Lelliott, Deputy Chief Inspector of 
Hospitals (lead for mental health) at the Care Quality Commission said:

“We hope that other providers will learn from these two outstanding trusts and that 
Northumberland, Tyne and Wear and East London will serve as models for what ‘outstanding’ 
mental healthcare looks like.”

Source: Care Quality Commission, 2016b.

These two mental health trusts have been selected to provide some context against which to measure 
other trusts. They have been compared against two other anonymous but matched trusts in this report 
as a benchmark for highlighting variation in outpatient appointments and A&E attendances.
Patient cohort methodology

Inpatient data

Inpatient patient count
A count of unique patients who have had a hospital inpatient admission to a mental health trust with a primary diagnosis of schizophrenia (ICD-10 code F20) in the first episode.

Inpatient admissions
A count of all hospital inpatient admissions to mental health trusts where a primary diagnosis of schizophrenia has been recorded in the first episode.

The analysis includes a map of non-elective hospital admissions where schizophrenia is a primary diagnosis (normalised by patient register per 1,000,000 patients) at CCG level. Patient registers have been taken from ONS Mid-2016 Population Estimates for CCGs in England by Single Year of Age and Sex.

Inpatient costs
Costs have been estimated based on the number of bed days in any episode where schizophrenia is a primary diagnosis. A ‘unit cost per occupied bed day’ has been applied based on the average for Psychosis Care Clusters, as published in the National Schedule of Reference Costs 2015-16 (for fiscal years 2012/2013 to 2015/2016, the National Schedule of Reference Costs 2014-15 was used as the source as this was the latest available at time of analysis).

Bed days in episode
Bed days in episode is simply the number of bed days in the first episode of a spell where there is a primary diagnosis of schizophrenia.

Mean length of stay
Mean length of stay is calculated by dividing the number of bed days in the first episode of a spell by the total number of admissions. The analysis presents mean length of stay for all inpatient admissions to a mental health trust where a primary diagnosis of schizophrenia has been recorded in the first episode.

Bed days in year
This is a calculated field which sums the total number of bed days which have occurred within the given fiscal year. Please note that where spells run over a particular year, any bed days that occurred either prior to the start of the fiscal year or following the end of the fiscal year are not counted in the overall total.

Bed days per patient
Bed days per patient has been calculated by dividing bed days in year by the number of unique patients, wherever a primary diagnosis of schizophrenia has been recorded within the first episode of an inpatient admission to a mental health trust.

Excess bed days and cost
Excess bed days are the number of days in a spell above trim point, designated using the National Tariff Payment System. Trim Points are dependent on the Healthcare Resource Group (HRG) code assigned to the spell. Please note that the vast majority of inpatient admissions to mental health trusts are not assigned a valid HRG and therefore excess bed days cannot be calculated in these cases. For this reason, the analysis is only shown at national level.

Costs have been estimated by applying a ‘unit cost per occupied bed day’ based on the average for Psychosis Care Clusters, as published in the National Schedule of Reference Costs 2015-16 (for fiscal years 2012/2013 to 2015/2016, the National Schedule of Reference Costs 2014-15 was used as the source as this was the latest available at time of analysis).
years 2012/2013 to 2015/2016, the National Schedule of Reference Costs 2014-15 was used as the source as this was the latest available at time of analysis).

**Zero day admissions**

Zero day admissions are defined as any non-elective admission where the date of admission and date of discharge are the same.

The analysis presents a count of all zero day admissions to mental health trusts where there is a primary diagnosis of schizophrenia recorded in the first episode. Please note that costs for zero day admissions cannot be estimated as bed days are always equal to zero.

**Readmissions and costs**

Readmissions are defined as all non-elective admissions which occur within 28 days of a previous admission with the same primary diagnosis.

The analysis presents a count of readmissions at mental health trusts and estimated costs. Costs have been estimated by applying a ‘unit cost per occupied bed day’ based on the average for Psychosis Care Clusters, as published in the National Schedule of Reference Costs 2015-16 (for fiscal years 2012/2013 to 2015/2016, the National Schedule of Reference Costs 2014-15 was used as the source as this was the latest available at time of analysis).

**Outpatient data**

A cohort of patients with schizophrenia was established based on any patient who has had an inpatient admission between 2012/2013 and 2016/2017 (inclusive) with a diagnosis of schizophrenia in any position and at any type of trust.

The analysis presents a count of total outpatient attendances at mental health trusts by this cohort of patients each year as well as a count where the working consultant specialty is restricted to ‘Adult Mental Illness’ only.

**A&E data**

A cohort of patients with schizophrenia was established based on any patient who has had an inpatient admission between 2012/2013 and 2016/2017 (inclusive) with a diagnosis of schizophrenia in any position and at any type of trust.

The analysis presents a count of all A&E attendances at all trusts (including acute and mental health) by this cohort of patients in 2014/15, 2015/16 and 2016/17.

The data also shows the percentage of A&E attendances that led to an admission based on where the field ‘AEATTENDISP’ is either ‘01 = Admitted to hospital bed / became a lodged patient of the same health care provider’ or ‘07 = Transferred to other healthcare provider’.

**Out of Area Placements (OAPs)**

Limitations of the data (as stated by NHS Digital)
This report only contains OAPs that started on or after 17 October 2016 (the date this OAPs collection launched). Due to this starting point, this report is estimated to only include around 95% of all OAPs active during the collection period, if all providers in scope had submitted data. The limitations section of the report sets out how this estimation was made.

For the latest month we publish participation in this report. Ninety-five percent of the organisations in scope are participating in this collection. A participating organisation is one that is considered to be in scope and to have done at least one of the following three things during this period:

- To have created a new OAP
- To have discharged an OAP
- To have confirmed that they had no OAP to discharge or create.

It is unclear how many of the non-participating organisations would have data to submit and how many will have no data. Not all organisations within scope are expected to have data every month.

The ability to confirm that you have no data to record was introduced for the December 2016 collection and its usage is expected to increase over time.

We do not produce participation for the information covering the rolling three-month period and the rolling year.

The OAPs data should be considered provisional as submitting organisations are able to amend and submit their data after the end of the period (unless the record is closed down by entering the actual discharge date). Therefore, the data contained in this report may not match that which has been previously published for the same time period.

The number of recorded OAPs nationally is very low which means that the figures are susceptible to random variation (chance). As the geographic area decreases the potential for chance to have impacted the numbers increases. As such, caution is advised when comparing two different geographies, e.g. region.

The OAPs data collection requires that most data items be returned and as such has 100% completeness in many fields. However, a completed field is not necessarily a valid field, for example 100% of records have a postcode but four per cent of the returned postcodes cannot be used to calculate a distance.

Patients with an average cost of £0 or £10 are not considered to have a cost recorded. A patient that has an OAP within the same organisation is considered to have a cost of £0.

All cost figures are the total cost of the OAP. If the OAP ended there would still be a cost involved in the care of that patient. As such the cost figures should not be interpreted as potential savings.

Suppression of OAP data
The OAP data is suppressed as follows to minimise the risk of individuals being identified:

- All counts of people or placements are rounded, including national totals. Numbers between one and seven are rounded to five and all other numbers are rounded to the nearest 5.
- Zeroes are shown unsuppressed.
• Percentages are calculated using rounded numbers. This can lead misleading figures when dealing with small numbers so where the denominator is less than 20 the percentage is suppressed.

• Other calculations such as averages are rounded to the nearest whole number.

MHSDS data

All patients assigned a care cluster
A count of the number of patients in the MHSDS assigned to any care cluster (0 to 21 inclusive) following a Mental Health Clustering Tool (MHCT) assessment in 2014/2015.

Full descriptions of the 21 can be found in the Mental Health Clustering Booklet.

Patients in psychosis care clusters (10 to 17)
The total number of patients assigned to one of the psychosis care clusters (10 to 17 inclusive) following a MHCT assessment in 2014/2015.

There is also a breakdown by individual care cluster. Please note that a patient may appear in more than one cluster during a mental health care spell.

Patients with an inpatient diagnosis of schizophrenia
A count of the number (and %) of patients in the psychosis care clusters in 2014/2015 who have had at least one hospital inpatient admission with a diagnosis of schizophrenia between 2012/2013 and 2014/2015 (inclusive).

The data is presented as a total and by individual care cluster.

Patients who have had an inpatient admission
A count of the number of patients in the psychosis care clusters in 2014/2015 who have had at least one hospital inpatient admission with any diagnosis between 2012/2013 and 2014/2015 (inclusive). Of these patients, the percentage who have had at least one diagnosis of schizophrenia is shown.

Contacts with healthcare professionals by team type
A count of all contacts with healthcare professionals that have been recorded during a mental health care spell where a patient has been assigned one of the psychosis care clusters, split by the type of service or team within a mental health service that a patient was referred to.

Contacts with healthcare professionals by location
A count of all contacts with healthcare professionals that have been recorded during a mental health care spell where a patient has been assigned one of the psychosis care clusters, are split by the location of the contact.

Average contacts per patient in psychosis care clusters
The average number of contacts per patient in a psychosis care cluster recorded during a mental health care spell where a patient has been assigned one of the psychosis care clusters.
Section A National overview of mental health services for schizophrenia

1. Care cluster allocation

1.1 Care clustering tool

The Mental Health Clustering Tool (MHCT) is a dataset of 18 scales captured for each service user receiving mental health services. See the methodology above for more detail about this.

Figure 4 shows a graphic representation of the care clusters, which are broadly split into non-psychotic (clusters 1 to 8), psychotic (clusters 10 to 17) and organic (clusters 18 to 21), and sub-groups relating to complexity.

Looking at psychosis, cluster 10 represents first episode presentations. Clusters 11 to 13 are distinguished by severity of psychotic symptoms and impact on role functioning. Cluster 11 suggests successful management of mental health problems/suitable for primary care. Clusters 12 and 13 require more active management by treatment teams.

Cluster 14 relates to psychotic crisis requiring intensive intervention. Cluster 15 is psychotic depression. Clusters 14 and 15 have four-week review intervals to reflect case management. Common features of clusters 16 and 17 are chaotic lifestyles, substance misuse and engagement problems. Level of substance misuse distinguishes 16 from 17.

Note that we have counted patients who have had a clustering review in that particular year. For patients in psychosis clusters, they are meant to be reviewed every 12 months at the very least (depending on specific cluster) but it may be that some patients had an assessment in previous years but have not been reviewed since.

Decision tree
(relationship of care clusters to each other)

[Diagram showing care clusters]

Fig 4
It is essential that people are not only assessed and clustered at the point of referral but also re-assessed and re-clustered periodically at the intervals suggested for each cluster. In practice this will equate to assessing and clustering people at:

- The point of referral
- Planned care programme approach (CPA) or other formal reviews
- Any other point where a change in planned care is deemed necessary (e.g. unplanned reviews, urgent admissions etc.)

### 1.2 Clustering trends

The percentage of patient clustering is highly variable between trusts and less than half of all patients in the MHSDS are assigned a care cluster. It is noticeable that the rate of patients clustered has remained under 50% nationally and has not improved over time during the three-year period.

Clustering in itself is not inherently good or bad, but it is important to recognise that not all trusts and clinicians are clustering patients appropriately, nor are they reassessing a patient’s cluster classification at the prescribed intervals. Clustering is reliant on clinicians clustering patients appropriately and not all professionals may see the need for this and so they are not actively clustering patients. The government has issued a ‘health warning’ in relation to this issue, but it remains the case that not all trusts are allocating clusters appropriately. With the clustering rate never having reached 50%, it may be important to question whether clustering works and whether perhaps a fresh approach is needed instead.

![Proportion of MHSDS patients assigned a care cluster at national level, 2012/2013 to 2014/2015](image)

<table>
<thead>
<tr>
<th></th>
<th>All patients in the MHSDS</th>
<th>All patients assigned a care cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>% of total</td>
</tr>
<tr>
<td>England, 2014/2015</td>
<td>1,514,169</td>
<td>673,153</td>
</tr>
<tr>
<td>England, 2013/2014</td>
<td>1,438,824</td>
<td>660,695</td>
</tr>
<tr>
<td>England, 2012/2013</td>
<td>1,371,098</td>
<td>640,841</td>
</tr>
</tbody>
</table>

*Fig 5 National proportion of patients assigned a care cluster*
1.3 Patients in psychosis care clusters and percentages with schizophrenia

At a national level in 2014/15 of those patients assigned a care cluster there were 673,153 patients and of these 171,575 or 25% were in psychoses care clusters 10–17.

The number of mental health inpatients is declining, including the number of patients in care cluster 11; however, Figure 7 shows that contacts in care clusters 12, 13 and 14 with more severe psychosis are increasing.

Approximately 12% of patients were in cluster 14–15 which represent psychotic crisis; overall nationally only 44% of patients were clustered (Figure 5). This is illustrative of a high burden and shows that a large proportion of the population of patients with schizophrenia are in crisis. Considering that this is based on an underrepresented number, the true number of people struggling is unknown. With contacts in care clusters 12 and 14 increasing, a vital question is: do the mental health services have the resources in the right localities to support these patients.
Unless a patient is identified for and allocated to a care cluster, there is a possibility that they will not receive the appropriately funded care. Care clusters must link service users to packages of care so that the cluster allocation meaningfully reflects their needs and the interventions they receive. Clustering ensures that a care package can be costed accurately so that local tariffs can be determined reliably within the current block contracting arrangements. Only then can providers and commissioners know the true cost of mental health care. At the moment it appears many are in the dark about how much packages of care for these patients truly cost, which is essential when planning budgets. Effective treatment can ensure people with schizophrenia are afforded every opportunity to make personal recoveries and to be socially included – but never at the expense of continuity of care, personal safety, or quality of life (Capita, 2014).

A total of 38,925 patients had an inpatient diagnosis of schizophrenia and were within these clusters. The estimated prevalence of schizophrenic disorders is 5 per 1000, so with only 38,925 patients with a recorded inpatient diagnosis of schizophrenia this would suggest a level of underestimation, either due to under diagnosis or people who are not in contact with services.

The pie chart in Figure 8 represents psychosis patients who have had an inpatient admission. The pie is split between those who had a schizophrenia diagnosis and those who did not. There was a total of 91,621 psychosis patients in the MHSDS that have had an historical inpatient admission, of which 38,925 had a diagnosis of schizophrenia, which equates to 42%. There were 171,575 psychosis patients in 2014/15 so the 91,621 represented by this pie chart is 53% of the total who had an inpatient admission.
2. National overview of contacts with healthcare professionals by location

The overall number of patient contact from healthcare professionals (HCPs) between 2012/13 to 2014/15 has remained static between 6.3 and 6.4 million. During this period however, of those patients assigned to a cluster, care cluster 14 (patients in crisis) contacts have increased from 784,245 to 938,238, a percentage increase of 20% over the three years. The data indicates that patients are being seen less regularly overall, but those seen in care cluster 14 (i.e. those in crisis) who are psychotic have had more contact with healthcare professionals.

2.1 Location of contacts

In 2014/15 there were 6,250,298 patient contacts by HCPs with a recorded location. The location of the contact point subdivided into: 26% at the patient’s main residence, 21% in hospital, no location was recorded for 22%. Figure 9 outlines lower percentage locations.

2.2 Contacts per patient

Of the 171,575 patients in psychosis care clusters 10–17 over six million contacts were made with healthcare professionals. This equates to CCGs having an average of 36.4 contacts per patient with the national variance for CCGs between 5.0 and 144.8. Nationally the median number of contacts is 22 per patient, interquartile 8 to 25, which represents a high number of contacts and a significant variation in care.
2.3 Contacts with HCPs by team type

There are a range of mental health teams who are managing people with schizophrenia; these include the variety of team roles identified in Figure 12.

Crisis resolution teams had 2 million contacts with patients in 2014/15 who were in psychosis care clusters 10–17. This was the most common team for contact at 34%. Community mental health teams (CMHT) were the second most frequent contact for patients, closely followed by the crisis resolution teams/home treatment service. Crisis resolution teams have a much larger turnover of patients than a standard CMHT as they tend to be time limited to two to three weeks, usually dealing with an immediate crisis which is designed to prevent the need for inpatient admission. Whereas the CMHTs tend to have a caseload of patients and a more established cohort of patients who are on the caseload of the community psychiatric nurse (CPN) and get much longer-term care.
3. Hospital admissions for schizophrenia

3.1 Trends in hospital admissions

The five-year trend in schizophrenia admissions to mental health trusts is split into non-elective and elective admissions for which the total indicative cost for the latest full data year (2016/17) is considerable at £629 million.

The average cost per patient of an admission to a mental health trust is £52,234. These overall figures represent 12,612 admissions for 12,034 unique patients.

A ‘unit cost per occupied bed day’ value of £366 has been applied based on the average for psychosis care clusters, as published in the National Schedule of Reference Costs 2015-16. The cost estimates here are based on very broad assumptions as a starting point for calculations.

<table>
<thead>
<tr>
<th>Patient and admission counts to mental health trusts with a primary diagnosis of schizophrenia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016/2017</td>
</tr>
<tr>
<td>Patient count</td>
</tr>
<tr>
<td>Admissions count</td>
</tr>
<tr>
<td>Admissions cost</td>
</tr>
</tbody>
</table>

3.2 Elective hospital admissions

The term ‘elective care’ refers to routine or planned care, which can be planned or booked following a referral by a GP or an outpatient clinic.

<table>
<thead>
<tr>
<th>Elective inpatient admissions to mental health trusts with a primary diagnosis of schizophrenia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient count</td>
</tr>
<tr>
<td>Admissions count</td>
</tr>
<tr>
<td>Cost</td>
</tr>
<tr>
<td>Bed days in episode</td>
</tr>
<tr>
<td>Mean length of stay</td>
</tr>
<tr>
<td>Bed days in year</td>
</tr>
<tr>
<td>Bed days per patient</td>
</tr>
</tbody>
</table>
Elective inpatient admissions show some decline from 5,959 to 4,035 over the latest five-year trend, which is reflected by decreased indicative costs from £411,261,316 to £321,783,725. Mean length of stay has fluctuated, with an overall change from 121 to 127 from 2012/2013 to 2016/2017. Bed days in year are going down (from 472,461 to 381,183); however, bed days per patient have increased from 80 to 90.

Elective hospital admissions are generally declining over the five-year trend across all commissioning regions and this trend may indicate that more mental health services are being delivered in community settings. However, we should note that some patients will still need an elective admission so they are safe and supported until completion of treatment or resolution of crisis.

### 3.3 Non-elective hospital admissions

Non-elective admission is an NHS term for an unplanned, often urgent admission (frequently via A&E), which occurs when a patient is admitted at the earliest possible time; generally understood to include at least one overnight stay at short notice because of clinical need or because alternative care is not available.

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Patient count</td>
<td>10,712</td>
<td>10,342</td>
<td>9,839</td>
<td>9,497</td>
<td>8,495</td>
</tr>
<tr>
<td>Admissions count</td>
<td>10,865</td>
<td>10,324</td>
<td>10,142</td>
<td>10,040</td>
<td>8,577</td>
</tr>
<tr>
<td>Admissions cost</td>
<td>£391,086,419</td>
<td>£360,852,468</td>
<td>£335,054,891</td>
<td>£353,553,278</td>
<td>£306,801,956</td>
</tr>
</tbody>
</table>

Non-elective admissions count and indicative costs are reducing (8,577 in 2016/2017 with costs of £306,801,956) but not as much as elective admissions which as seen above are showing a greater decline.

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</thead>
<tbody>
<tr>
<td>Bed days in episode</td>
<td>580,620</td>
<td>507,158</td>
<td>490,265</td>
<td>539,929</td>
<td>444,271</td>
</tr>
<tr>
<td>Mean length of stay</td>
<td>53</td>
<td>49</td>
<td>48</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Bed days in year</td>
<td>657,625</td>
<td>639,589</td>
<td>609,268</td>
<td>619,788</td>
<td>564,642</td>
</tr>
<tr>
<td>Bed days per patient</td>
<td>61</td>
<td>62</td>
<td>62</td>
<td>65</td>
<td>66</td>
</tr>
<tr>
<td>Excess bed days</td>
<td>183</td>
<td>939</td>
<td>10,496</td>
<td>12,323</td>
<td>6,576</td>
</tr>
<tr>
<td>Excess bed days cost</td>
<td>£67,046</td>
<td>£344,021</td>
<td>£3,845,420</td>
<td>£4,514,778</td>
<td>£2,411,222</td>
</tr>
</tbody>
</table>
Mean length of stay has decreased slightly from 53 to 52 during the five-year period, with average bed days per patient increasing – these are significant and greater than two months at 66 days, which represents an increase from 61 in 2012/2013. Bed days in year are declining (564,642 bed days in 2016/2017).

### Non-elective inpatient admissions to mental health trusts with a primary diagnosis of schizophrenia

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Zero day admissions</td>
<td>89</td>
<td>86</td>
<td>88</td>
<td>65</td>
<td>74</td>
</tr>
<tr>
<td>Readmissions</td>
<td>39</td>
<td>27</td>
<td>32</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>Readmissions - bed days</td>
<td>1,029</td>
<td>825</td>
<td>949</td>
<td>1,267</td>
<td>1,015</td>
</tr>
<tr>
<td>Readmissions cost</td>
<td>£376,995</td>
<td>£302,255</td>
<td>£347,685</td>
<td>£464,191</td>
<td>£372,170</td>
</tr>
</tbody>
</table>

Zero day admissions have decreased from 89 to 74 (a zero day admission is defined as any non-elective admission where the total length of stay for the spell is less than one day). Readmissions have decreased by about a quarter but the accompanying bed days and costs have remained relatively stable. Total readmissions in 2016/2017 was 29 with 1,015 bed days at an indicative cost of £372,170.

Figure 16 shows that there is a significant variation in non-elective admissions between areas. This variation does not follow the typical trends usually seen in admissions for other long-term physical health conditions. Further insight into the models of care in different parts of the country is needed to better understand the reasons for this.
Secondary Care Data is taken from the English Hospital Episode Statistics (HES) database produced by NHS Digital, the new trading name for the Health & Social Care Information Centre (HSCIC www.hscic.gov.uk/hes). Copyright 2018, reuse with the permission of NHS Digital. All rights reserved.

Reviewing the split between elective and non-elective admissions, non-elective admissions represent 68% of the hospital admissions for schizophrenia and have an indicative cost to the NHS of £307 million, and elective admissions represent 32% of the total admissions at an indicative cost of £322 million. The elective admissions cost results because the mean length of stay for these admissions is more than double that of non-elective admissions.

![Fig 16](image16.png)
Non-elective hospital admissions where schizophrenia is a primary diagnosis (normalised by patient register per 1,000,000) at CCG level, 2016/17

![Fig 17](image17.png)
All admissions where schizophrenia is a primary diagnosis, by admission type, 2016/17
3.4 Comorbidity

From the comorbidity issues highlighted in Figure 18 one can see that non-compliance with medication and use of tobacco, alcohol and substance abuse are factors in hospital admission. Additionally, however physical health issues are causing problems and are a common cause of comorbidity in inpatients. People with schizophrenia are twice as likely to have problems with cardiovascular disease and three times more likely to have respiratory problems. Parity of esteem between physical and mental health is key to improving health and life expectancy (Royal College of Psychiatrists, 2013).

<table>
<thead>
<tr>
<th>Top 20 comorbidities when a patient is admitted to a mental health trust with a primary diagnosis of schizophrenia</th>
<th>Admissions count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z911 - Personal hist noncompliance with med treatment and regimen</td>
<td>3,948</td>
</tr>
<tr>
<td>F171 - Men &amp; behav dis due use tobacco: harmful use</td>
<td>3,635</td>
</tr>
<tr>
<td>Z915 - Personal history of self-harm</td>
<td>1,871</td>
</tr>
<tr>
<td>F191 - Men &amp; behav dis multiple/psychoact drug: harmful use</td>
<td>1,079</td>
</tr>
<tr>
<td>Z864 - Personal history of psychoactive substance abuse</td>
<td>1,022</td>
</tr>
<tr>
<td>F121 - Mental &amp; behav dis due use cannabinoids; harmful use</td>
<td>724</td>
</tr>
<tr>
<td>E119 - Non-insulin-depend diabetes mellitus without complication</td>
<td>676</td>
</tr>
<tr>
<td>I10X - Essential (primary) hypertension</td>
<td>668</td>
</tr>
<tr>
<td>Z818 - Family history of other mental and behavioural disorders</td>
<td>667</td>
</tr>
<tr>
<td>J459 - Asthma, unspecified</td>
<td>442</td>
</tr>
<tr>
<td>F101 - Mental and behav dis due use of alcohol: harmful use</td>
<td>395</td>
</tr>
<tr>
<td>Z590 - Homelessness</td>
<td>288</td>
</tr>
<tr>
<td>E780 - Pure hypercholesterolaemia</td>
<td>256</td>
</tr>
<tr>
<td>F172 - Men &amp; behav dis due use tobacco: dependence syndrome</td>
<td>243</td>
</tr>
<tr>
<td>Z598 - Other problems related to housing and economic circumstances</td>
<td>230</td>
</tr>
<tr>
<td>Z721 - Alcohol use</td>
<td>227</td>
</tr>
<tr>
<td>E669 - Obesity, unspecified</td>
<td>224</td>
</tr>
<tr>
<td>Z560 - Unemployment, unspecified</td>
<td>223</td>
</tr>
<tr>
<td>Z722 - Drug use</td>
<td>218</td>
</tr>
<tr>
<td>F603 - Emotionally unstable personality disorder</td>
<td>212</td>
</tr>
</tbody>
</table>

Fig 18
Top 20 comorbidities when a patient is admitted to a mental health trust with a primary diagnosis of schizophrenia, 2016/17
3.5 Outpatient attendance

Nationally outpatient attendance has increased over the five-year analysis trend from 381,016 to 411,314. It is essential that some follow up is provided to patients with schizophrenia to ensure individuals are coping and compliant with medication regimes. Too often crises can occur when monitoring slips.

The majority of community patients only see a consultant once every 6 to 12 months providing they are stable. Community service models have been established where the team comprises mainly nurses, occupational therapists, social workers with only a part-time consultant, and these teams take over the monitoring of patients.

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendances by any working consultant speciality</td>
<td>381,016</td>
<td>403,404</td>
<td>372,251</td>
<td>309,973</td>
<td>411,314</td>
</tr>
<tr>
<td>Attendances by adult mental health working consultant speciality</td>
<td>328,168</td>
<td>348,627</td>
<td>321,561</td>
<td>267,260</td>
<td>291,854</td>
</tr>
</tbody>
</table>

The number of patients being admitted through A&E departments with an inpatient diagnosis of schizophrenia has been relatively static over the three-year period from 2014/15–2016/17 and represents only a small proportion of patients. However, A&E departments may not be the best place for patients who have psychotic episodes and further exploration of reasons for attendance at a local level may be useful. 24-hour crisis response teams who can support patients could be a solution and are increasingly utilised.

*The Five Year Forward View for Mental Health* (NHS England, 2016a) is calling for a national push for liaison psychiatry in each A&E department which may help to reduce readmissions through A&E. The national average cost of an A&E attendance in 2012/13 was £115 according to NHS Reference Costs.

There is also a need for clearer information and signposting for patients so they know where to access crisis services instead of attending A&E. Patients that do visit A&E can experience long waits to access appropriate care so it would be preferable to ensure psychotic patients are referred directly to appropriate care and emergency call handlers (responding to 999 and 111 calls) as well as patients, carers and the public are more aware of services and support that exist locally for patients with a mental health emergency.
### 3.6 Other system contacts

Forensic mental health services are 'low volume and high cost' services (i.e. they work with a smaller number of individuals with typically more complex needs and consequently higher related care costs). They are provided for individuals with a mental disorder (including neurodevelopmental disorders) who pose, or have posed, risks to others where that risk is usually related to their mental disorder.

These services demonstrate effectiveness in reducing serious re-offending in individuals discharged from secure inpatient services and individuals may be placed in hospitals (particularly secure hospitals), the community or prison.

Forensic services work collaboratively with other mental health professionals, GPs, social care staff and agencies working in the criminal justice system.

#### A&E attendances for patients with an inpatient diagnosis of schizophrenia

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All attendances</td>
<td>97,759</td>
<td>98,563</td>
<td>96,961</td>
</tr>
<tr>
<td>A&amp;E attendances leading to an admission</td>
<td>32,408</td>
<td>32,861</td>
<td>32,348</td>
</tr>
<tr>
<td>% A&amp;E attendances leading to an admission</td>
<td>33.2%</td>
<td>33.3%</td>
<td>33.4%</td>
</tr>
<tr>
<td>Attendances at mental health trusts</td>
<td>2,576</td>
<td>2,489</td>
<td>2,350</td>
</tr>
</tbody>
</table>

#### Contacts with healthcare professionals by team type

<table>
<thead>
<tr>
<th>Team type</th>
<th>All psychosis care clusters (10 to 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forensic mental health service</td>
<td>50,936</td>
</tr>
<tr>
<td>Other mental health service - out of scope of national tariff payment system</td>
<td>0</td>
</tr>
<tr>
<td>Forensic learning disability service</td>
<td>30,093</td>
</tr>
<tr>
<td>Substance misuse team</td>
<td>11,894</td>
</tr>
<tr>
<td>Criminal justice liaison and diversion service</td>
<td>7,683</td>
</tr>
<tr>
<td>Prison psychiatric in reach service</td>
<td>3,240</td>
</tr>
<tr>
<td>Total contacts</td>
<td>6,371,206</td>
</tr>
</tbody>
</table>

From 2014/15 onwards, for every 1,000 patients in a psychosis care cluster there were 352 contacts with the forensic mental health service; however; MHSDS patients assigned a care cluster is less than 50% and this figure is reducing annually.
Section B Regional overview of mental health services for schizophrenia

NHS England is promoting the RightCare approach to health services to encourage every health economy in England to embed this approach at the heart of their transformation programme. The programme is trying to tackle variation by making sure that the right person has the right care, in the right place, at the right time by making best use of available resources. Waiting times for first appointments and the right follow-on support for people with schizophrenia are unacceptably long. Developing the RightCare approach here could address variation in the provision of consistent, high quality services for people living with schizophrenia. Basic interventions are in short supply and services are under pressure with thresholds for access being raised.

Because of this, people’s needs often escalate and they can become acutely unwell or experience a crisis, resulting in poorer outcomes and a reliance on higher cost care. While there are pockets of good practice, this variation is something that mental health services need to urgently address at a regional level in relation to schizophrenia. The Mental Health Taskforce for the Five Year Forward View for Mental Health recommended ensuring adequate inpatient resource is maintained while preparations are made to support people who are ready to transition into community-based services (NHS England, 2016). This should result in people with acute mental health needs being able to access appropriate care, as inpatients or through community team.

4. Data analysis by region

4.1 Hospital admissions

Elective hospital admissions, as with the national picture, are generally declining over the five-year trend across all commissioning regions and this trend may indicate that more mental health services are being delivered in community settings. However we should note that some patients will still need an elective admission so they are safe and supported until completion of treatment or resolution of crisis.

Fig 22
Elective admissions to mental health trusts where schizophrenia is a primary diagnosis, by commissioning region.
At a regional level, the picture for non-elective admissions to mental health trusts also highlights a downward trend in all regions, although the trend in London is flatter.

**Fig 23**
Non-elective admissions to mental health trusts where schizophrenia is a primary diagnosis, by commissioning region

**4.2 Mean length of stay**

Mean length of stay (MLOS) is calculated by dividing the number of bed days in the first episode of a spell by the total number of admissions. The MLOS for non-elective admissions is fairly stable over time. However, after several years of decline there is an increase in elective admission MLOS in 2016/17 shown in Figure 24, which is consistent with the significant spike in the South of England in terms of non-elective admissions.

**Fig 24**
Trend in mean length of stay for elective and non-elective admissions where schizophrenia is a primary diagnosis
There is a large difference in the MLOS between the regions which is especially pronounced for elective admissions. Figures 25 and 26 show the wide variation in MLOS for non-elective and particularly elective admissions, among the commissioning regions.

Fig 25
Mean length of stay of elective admissions to mental health trusts where schizophrenia is a primary diagnosis, by commissioning region

Fig 26
Mean length of stay of non-elective admissions to mental health trusts where schizophrenia is a primary diagnosis, by commissioning region

4.3 Outpatient attendances for patients with an inpatient diagnosis of schizophrenia

A cohort of patients with schizophrenia was established based on any patient who has had an inpatient admission between 2012/2013 and 2016/2017 (inclusive) with a diagnosis of schizophrenia (ICD-10 code F20). This was achieved by identification of patients with an inpatient admission with a diagnosis of schizophrenia who were then tracked by outpatient and A&E attendance.
The analysis presents a count of total outpatient attendances at mental health trusts by this cohort of patients in 2016/17 as well as a count where the working consultant specialty is restricted to ‘Adult Mental Illness’ only.

Outpatient attendances appear stable in the Midlands, East of England and North of England regions. The South of England has seen an increase of 26,391 (+53%) during the whole five-year period, while the London Commissioning Region has seen an increase of 10,947 (7%) and the Midlands and East of England has decreased by 4,062 (-7%). Further investigation is needed to understand the reasons for these considerable changes.

<table>
<thead>
<tr>
<th>Attendance count by any working consultant speciality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>London Commissioning Region</td>
</tr>
<tr>
<td>Midlands and East of England Commissioning Region</td>
</tr>
<tr>
<td>North of England Commissioning Region</td>
</tr>
<tr>
<td>South of England Commissioning Region</td>
</tr>
</tbody>
</table>

### 4.4 Out of area placements

OAPs can present a huge burden both on the person with schizophrenia and their family because of the distance and isolation resulting from the placement. For the healthcare economy this is also an expensive way to manage patients but the lack of appropriate services and support locally is often a deciding factor.

There have been monthly reports of OAPs for the full calendar year of 2017. These should however be interpreted with a level of caution (*see methodology*). Figures in this report only include OAPs which started on or after 17 October 2016. Due to this it is estimated that this report includes around 95% of all OAPs active during the collection period if all providers in the scope had submitted data.
<table>
<thead>
<tr>
<th>Region</th>
<th>OAPs started in period</th>
<th>OAPs ended during period</th>
<th>Total number of OAP days over the period</th>
<th>Percentage of OAP days with cost recorded</th>
<th>Total recorded costs over the period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(Suspected) First episode psychosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>London Commissioning Region</td>
<td>20</td>
<td>20</td>
<td>680</td>
<td>100%</td>
<td>£384,613</td>
</tr>
<tr>
<td>Midlands and East of England Commissioning Region</td>
<td>115</td>
<td>115</td>
<td>3,855</td>
<td>72%</td>
<td>£1,425,527</td>
</tr>
<tr>
<td>North of England Commissioning Region</td>
<td>175</td>
<td>160</td>
<td>4,905</td>
<td>48%</td>
<td>£1,373,847</td>
</tr>
<tr>
<td>South of England Commissioning Region</td>
<td>60</td>
<td>60</td>
<td>1,480</td>
<td>79%</td>
<td>£703,776</td>
</tr>
<tr>
<td>Unknown Region</td>
<td>10</td>
<td>10</td>
<td>190</td>
<td>38%</td>
<td>£4,3180</td>
</tr>
<tr>
<td><strong>Drug and alcohol difficulties</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>London Commissioning Region</td>
<td>40</td>
<td>40</td>
<td>730</td>
<td>86%</td>
<td>£340,122</td>
</tr>
<tr>
<td>Midlands and East of England Commissioning Region</td>
<td>50</td>
<td>45</td>
<td>1,780</td>
<td>72%</td>
<td>£710,279</td>
</tr>
<tr>
<td>North of England Commissioning Region</td>
<td>70</td>
<td>70</td>
<td>1,365</td>
<td>77%</td>
<td>£575,968</td>
</tr>
<tr>
<td>South of England Commissioning Region</td>
<td>50</td>
<td>50</td>
<td>970</td>
<td>79%</td>
<td>£441,897</td>
</tr>
<tr>
<td>Unknown Region</td>
<td>*</td>
<td>*</td>
<td>50</td>
<td>33%</td>
<td>£14,760</td>
</tr>
<tr>
<td><strong>In crisis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>London Commissioning Region</td>
<td>565</td>
<td>520</td>
<td>10,925</td>
<td>97%</td>
<td>£5,807,865</td>
</tr>
<tr>
<td>Midlands and East of England Commissioning Region</td>
<td>516</td>
<td>490</td>
<td>14,330</td>
<td>90%</td>
<td>£6,709,392</td>
</tr>
<tr>
<td>North of England Commissioning Region</td>
<td>640</td>
<td>585</td>
<td>10,865</td>
<td>27%</td>
<td>£1,597,008</td>
</tr>
<tr>
<td>South of England Commissioning Region</td>
<td>535</td>
<td>540</td>
<td>14,830</td>
<td>69%</td>
<td>£5,285,309</td>
</tr>
<tr>
<td>Unknown Region</td>
<td>30</td>
<td>30</td>
<td>1,285</td>
<td>19%</td>
<td>£124,976</td>
</tr>
<tr>
<td><strong>Ongoing or recurrent psychosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>London Commissioning Region</td>
<td>415</td>
<td>410</td>
<td>14,415</td>
<td>99%</td>
<td>£7,989,804</td>
</tr>
<tr>
<td>Midlands and East of England Commissioning Region</td>
<td>530</td>
<td>520</td>
<td>23,020</td>
<td>81%</td>
<td>£10,022,974</td>
</tr>
<tr>
<td>North of England Commissioning Region</td>
<td>635</td>
<td>630</td>
<td>18,495</td>
<td>56%</td>
<td>£5,763,247</td>
</tr>
<tr>
<td>South of England Commissioning Region</td>
<td>695</td>
<td>695</td>
<td>17,885</td>
<td>88%</td>
<td>£9,481,227</td>
</tr>
<tr>
<td>Unknown Region</td>
<td>40</td>
<td>40</td>
<td>3,075</td>
<td>87%</td>
<td>£1,479,983</td>
</tr>
</tbody>
</table>
OAP data has only just started to be collected for the first time, and already it highlights the high cost of OAPs to mental health services – especially in relation to patients in crisis and with ongoing or recurrent psychosis – and this fledgling data helps give an indication of the aspects of their condition where people need to receive more support. OAPs are very costly to services and are not an ideal situation for patients or their families. This issue is a new national priority and it is essential that CCGs investigate why people are being placed out of area.

**Fig 30**
Total number of OAP days in 2017

**Fig 31**
Total recorded costs of OAPs in 2017

It will be important to continue monitoring this data to see what trends emerge as further data becomes available and what else it can tell us as time goes on. This will be of particular use to CCGs when planning for the longer term to ensure there is adequate provision of facilities that are suitable to manage these patients. Patients with an average cost of £0 or £10 are not considered to have a cost recorded. A patient that has an OAP within the same organisation is considered to have a cost of £0.
Section C Regional overview of mental health trusts

Variation between providers is always going to occur and is not necessarily a negative issue because healthcare can vary in several ways; quality, outcomes and the types of service available. The ability to analyse variation however does allow recognition of variation between providers and ability to use the analysis for change and improvement.

5. Data analysis by mental health trust

5.1 Admissions count

There was a total of 12,612 admissions to mental health trusts for schizophrenia in 2016/17 (HES data). Admission count is defined as all hospital inpatient admissions to mental health trusts where a primary diagnosis of schizophrenia (ICD-10 code F20) has been recorded in the first episode. Elective admissions variation was between 6 and 886 in HES year 2016/17. Trusts with an admission count below five have been removed for patient suppression/confidentiality reasons. Elective admissions arranged in advance and may be part of a planned care mental health programme which could be an indicator of stability within the care of these patients within the pathway or system.

Non-elective admissions vary between 12 and 854 in the HES year 2016/17.
If we compare one of the outstanding rated CQC trusts with an anonymised mental health trust requiring improvement in England (referred to here as MHT1 and MHT2) there is a 1:2 versus 1:9 variation in the ratio of elective versus non-elective care in the CQC rated mental health trusts. MHT1 had 399 elective admissions versus 854 non-elective (1:2 ratio), and MHT2 (CQC rating requires improvement) had 47 elective admissions versus 422 non-elective (1:9 ratio).

Non-elective admissions impact on mental health trust capacity, reducing a trust’s ability to admit patients for elective admissions and at certain times when beds are fully occupied could result in out of area bed usage.

5.2 Bed days per patient

There was a large variation in bed days per patient in HES year 2016/17. Bed days per patient has been calculated by dividing bed days in year by the number of unique patients, wherever a primary diagnosis of schizophrenia has been recorded within the first episode of an inpatient admission to a mental health trust. Elective bed days per patient range between 7 and 184 between trusts. Length of stay and bed blocking is a major cost to the NHS. However, for people living with a diagnosis of schizophrenia it is important to ensure they are stable before discharge into the community to ensure readmission or crisis is less likely to occur.
The number of non-elective bed days per patient ranges from 16 to 119.

If we examine the same two anonymous mental health trusts as previously, the outstanding trust is nearer half the comparator trust on elective to non-elective for average bed days per patient. MHT1 had 78 elective bed days per patient and 52 non-elective. MHT2 had 184 elective bed days per patient compared to 85 non-elective.

5.3 Admission costs

Admission costs have been estimated based on the number of bed days in episodes where schizophrenia is a primary diagnosis. A 'unit cost per occupied bed day' has been applied based on the average for psychosis care clusters (published in the National Schedule of Reference Costs 2015-16). Elective admission costs vary from £10,267 to £40,475,968 per mental health trust.
Non-elective admission costs range from £11,733 to £18,591,269.

Examining our two anonymous mental health trusts, the outstanding CQC rated trust’s (MHT1) non-elective care cost 71% of the amount their elective care cost, whereas the other trust’s (MHT2) non-elective schizophrenia care cost 103% of their elective care cost. MHT1’s admission costs for elective care were £25,023,027 versus non-elective £17,751,228 (71%), whereas MHT2 had elective costs £17,282,990 versus non-elective £17,746,095 (103%).

If we relate this back to the admission counts for elective and non-elective, there is a huge variation in the cost of care per admission and the resources required by the NHS. [MHT1 (good CQC rating) had 399 elective admissions versus 854 non-elective (1:2 ratio) and MHT2 (CQC rating requires improvement) had 47 elective versus 422 non-elective (19 ratio)].
5.4 Contacts per patient

The average number of contacts per patient in a psychosis care cluster is recorded during a mental health care spell where a patient has been assigned to one of the psychosis care clusters. Variation from the MHSDS dataset shows an average number of contacts with healthcare professionals between 8 and 119 in 2014/15 by mental health trust.
Section D Sustainability and Transformation Partnerships footprint

STPs were developed as part of the Five Year Forward View and are a critical element of the future NHS. STPs working across the 44 geographical areas, or ‘footprints’, have been tasked to think more holistically across the NHS to integrate services. STPs could bring major changes to the way that the NHS operates since they will require all NHS healthcare providers, primary to specialist and social care, to work together within the ‘footprints’. This presents many opportunities to shape the way that mental health services are being delivered by working with a variety of different stakeholders, many of whom they may have had limited, or no contact with, in the past, such as local authorities, charities and patient groups.

Some of the footprints cover traditional county boundaries; others, particularly in urban areas, follow new boundaries arrived at by looking at the mix of providers in an area and how they could be rationally divided to get the most out of local resources.

NHS England has also developed 50 Vanguards (NHS England “About Vanguards”, 2017) to lead on the development of new care models that are to be a blueprint for the NHS:

1. Integrated primary and acute care systems (PACs) which join up GP, community, mental health and hospital services.
2. Multispecialty community providers (MCPs) which aim to move services out of hospitals and into the community.
3. Models of enhanced care in care homes which aim to improve services for older people, joining up health, care and rehabilitation.
4. Acute care collaborations which includes multi-hospital chains, multi-speciality franchises and accountable clinical networks. Specifically in mental health this includes MERIT (Birmingham and Solihull) (Mental Health Accountable Clinical Network).
5. Urgent and emergency care.

Nine integrated primary and acute care system vanguards are now working on joining up GP, hospital, community and mental health services so that mental and physical healthcare will be on an equal footing in these local areas.

6. Data analysis by STP footprint

The data analysis in this section gives STPs a picture of the situation in areas that are within their remit.

6.1 Admissions costs

Total admission costs varied from £57,369,555 to £447,704 across the STP footprints in England. Dividing the admission costs with the patient count to give an average cost of admission per patient, the England average is £56,784 per STP footprint with a variance of £560,383 to £25,786.
6.2 A&E attendance

A cohort of patients with schizophrenia was established based on any patient who has had an inpatient admission between 2012/13 and 2016/17 (inclusive) with a diagnosis of schizophrenia (ICD-10 code F20).

The analysis presents the change in the annual count of all A&E acute trust attendances by this cohort of patients between 2015/16 and 2016/17.

The biggest increase in A&E attendances for patients with an inpatient diagnosis of schizophrenia was recorded as 219, while the largest decrease was -183. It is not clear why this may be but may relate to the impact of psychiatric liaison – further investigation is required.
Conclusion

It is essential that mental health trusts work on ensuring that patients with schizophrenia receive early intervention through treatment by community care teams who are well placed to reduce the burden of hospitalisation among this patient cohort.

Trusts could benefit from taking a different stance, which focuses on the future of services, and how new financial flows can make services better. Service redesign is at the heart of a new vision for mental health and moves towards integrated budgets could, within accountable care systems and organisations, help break down historical barriers between mental and physical health.

Sustainability and Transformation Partnerships and their accompanying footprint organisations are at the heart of moving beyond the current challenges.

Burden

Admissions for patients where schizophrenia is the primary diagnosis accounted for 34% of all admissions to mental health trusts in 2016/17 and yet schizophrenia places a significant burden on society. The cost for hospital admissions alone in 2016/17 was £629 million but there are wider costs that are not captured here which include social and personal costs plus community, outpatient and emergency care.

Clustering

The number of people in clusters is currently under-represented and the true number is not known. Given that clustering supports a shared understanding of case mix, workload, skill mix and costs for contracting between commissioners and providers, the declining proportion of patients being clustered may mean that contract volumes and value do not accurately reflect the pressures facing providers.

Compliance

The main co-morbidity reasons for admission to hospital are non-compliance in medication regimes. There are a range of interventions that could address non-compliance such as home delivery, selection of long-acting therapy, and nurse follow up.

Physical health

Tobacco, alcohol and substance abuse are also key factors in hospital admission, and physical health issues like respiratory, cardiovascular disease and diabetes are additional causes of admission. People with schizophrenia are twice as likely to have problems with cardiovascular disease and three times more likely to have respiratory problems, therefore parity of esteem between physical and mental health is key.

Planned care

Elective inpatient admissions show a decline from 5,959 to 4,035 over the latest five-year trend but bed days per patient have increased from 80 to 90 and the overall admission cost is £322 million.
Unplanned care

Non-elective admissions represent 68% of the hospital admissions for schizophrenia and have an indicative cost to the NHS of £307 million. Average bed days per patient is greater than two months at 66 days.

Out of area placements (OAPs)

The high level of unplanned admissions may put trusts under pressure and lead to OAPs. For commissioners and providers, having unforeseen costs for OAPs must be challenging. The new information from MHSDS is invaluable for horizon scanning. The burden of OAP days during 2017 equalled 129,125 bed days for patients in crisis or ongoing/recurrent psychoses. The cost of this within the dataset is £54,261,785.

Crisis response

The numbers of patients being admitted through A&E departments with a diagnosis of schizophrenia has been relatively static, nevertheless A&E departments may not be the best place for patients who have psychotic episodes and further exploration of reason for attendance at a local level may be useful. 24-hour response teams who can support patients could be a solution as is A&E liaison psychiatry (NHS England, 2016).
References


Royal College of Psychiatrists. “Schizophrenia”, viewed 10 April 2017 http://www.rcpsych.ac.uk/healthadvice/problemsdisorders/schizophrenia.aspx


Appendix

Bed days per patient ranges from 40 to 108. The average days are 64.

**Outpatient attendance**

A cohort of patients with schizophrenia was established based on any patient who has had an inpatient admission between 2012/13 and 2016/17 (inclusive) with a diagnosis of schizophrenia (ICD-10 code F20).

The analysis presents a count of total outpatient attendances at mental health trusts by this cohort of patients in 2016/17.
### Contacts with healthcare professionals by location

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient main residence or related location</td>
<td>1,755,017</td>
<td>1,793,377</td>
<td>1,638,840</td>
</tr>
<tr>
<td>N/A</td>
<td>1,566,295</td>
<td>1,472,241</td>
<td>1,358,426</td>
</tr>
<tr>
<td>Locations on hospital premises</td>
<td>1,457,424</td>
<td>1,398,526</td>
<td>1,338,664</td>
</tr>
<tr>
<td>Other locations</td>
<td>656,558</td>
<td>826,444</td>
<td>961,661</td>
</tr>
<tr>
<td>Resource centre premises</td>
<td>308,806</td>
<td>345,176</td>
<td>406,640</td>
</tr>
<tr>
<td>Health centre premises</td>
<td>264,690</td>
<td>284,628</td>
<td>239,746</td>
</tr>
<tr>
<td>Public locations</td>
<td>194,417</td>
<td>196,478</td>
<td>174,753</td>
</tr>
<tr>
<td>Day centre premises</td>
<td>58,329</td>
<td>65,798</td>
<td>49,356</td>
</tr>
<tr>
<td>Nursing and residential homes</td>
<td>49,652</td>
<td>38,720</td>
<td>37,392</td>
</tr>
<tr>
<td>General practitioner and ophthalmic medical practitioner premises</td>
<td>36,012</td>
<td>38,913</td>
<td>27,094</td>
</tr>
<tr>
<td>Justice and Home Office premises</td>
<td>20,118</td>
<td>17,836</td>
<td>15,073</td>
</tr>
<tr>
<td>Educational, childcare and training establishments</td>
<td>1,453</td>
<td>1,927</td>
<td>1,639</td>
</tr>
<tr>
<td>Hospice premises</td>
<td>921</td>
<td>728</td>
<td>488</td>
</tr>
<tr>
<td>Walk in centres, out of hours premises and emergency dental services</td>
<td>1,461</td>
<td>499</td>
<td>474</td>
</tr>
<tr>
<td>Dedicated facilities for children and families</td>
<td>53</td>
<td>46</td>
<td>52</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,371,206</strong></td>
<td><strong>6,481,337</strong></td>
<td><strong>6,280,298</strong></td>
</tr>
</tbody>
</table>

**Fig 43**
Contacts with healthcare professionals by location