



CEP Discussion Paper No 996

September 2010

A Map of Mental Health

Rachel Smithies

Abstract

This paper provides a comprehensive picture of mental health services in England, including staffing and expenditure, and the number of people in need and the number treated. Historically, this information has been split across sub-sections of the health and social services; and the readily available information often appeared to give inconsistent answers. This paper brings together and interprets the available evidence to provide a single coherent map of mental health need and services, from children to older adults and across both health and social care services, in England.

Keywords: mental health, NHS, mental health services, mental health staff, public health, expenditure

JEL Classifications: H51, I19

This paper was produced as part of the Centre's Wellbeing Programme. The Centre for Economic Performance is financed by the Economic and Social Research Council.

Acknowledgements

This paper was made possible by funding from the Charlie Waller Memorial Trust. Rachel Smithies was Research Fellow at the Centre for Economic Performance when writing this paper. Rachel Smithies would like to thank Richard Layard for steering this project, insightful comments and steady support. She also thanks Martin Knapp, Paul McCrone, and Jed Boardman for helpful discussions of their work.

Rachel Smithies is a Research Associate of the Wellbeing Programme at the Centre for Economic Performance, London School of Economics.

Published by
Centre for Economic Performance
London School of Economics and Political Science
Houghton Street
London WC2A 2AE

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission in writing of the publisher nor be issued to the public or circulated in any form other than that in which it is published.

Requests for permission to reproduce any article or part of the Working Paper should be sent to the editor at the above address.

© R. Smithies, submitted 2010

Introduction

How many people in England are suffering from mental problems? Are they getting the treatment they need? What are the services providing this treatment? And how much do they cost?

Anyone concerned with mental health policy wants to know the answers to these questions. But they are not easy to find – certainly not in one place. And answers, once found, are often inconsistent. The purpose of this map is to put together and interpret the available evidence in such a way that it can be readily accessed by those who need it.

We begin in Part I with the need – the number of people with clinically significant problems and the fraction of them who are getting help. We then look at the organisation and staffing of the services for people with different types of need (Part II). We end in Part III with the cost – the cost of the services, and the much greater cost to the economy of so many people with continuous problems of distress.

The map is a map of England.

Part I: How Many in Need and How Many Treated?

How Many in Need?

Adult need

The main source of information on mental health epidemiology and treatment patterns is the Psychiatric Morbidity Surveys. The most recent, known as the APMS (Adult Psychiatric Morbidity Survey), took place in 2007 and covered all adults aged 16 and over.¹ As with much data and literature on mental health, understanding the survey results requires understanding the diagnostic assessment methods used.

To assess the levels of ‘neurotic’ disorders (those in the broad areas of depression or anxiety), interviewers administered a structured assessment questionnaire (the Clinical Interview Schedule – Revised (CIS-R)) that has six diagnostic categories²:

- generalised anxiety disorder (GAD)
- depressive episode
- phobias
- obsessive and compulsive disorder (OCD)
- panic disorder
- mixed anxiety and depressive disorder

Answers to the CIS-R are used to produce scores that measure whether people meet the criteria for specific conditions, and how severe their symptoms are. A score of 12+ is necessary to be diagnosed as having a condition, “indicating a level of neurotic symptom that was significant, but unlikely to warrant treatment”, while a score of 18+ means “symptoms of a level of severity likely to require treatment” (McManus et al, 2009:12).

Other disorders were also examined. Clinical assessment interviews were used to diagnose psychotic disorders and personality disorders. Specialised screening questionnaires were used to assess possible post-traumatic stress disorder, possible eating disorders, and possible attention deficit hyperactivity disorder.³

¹ Earlier surveys took place in 1993 and in 2000. Each of these looked at the mental health of adults in private households – the 1993 survey covered those aged 16-64, the 2000 survey added those aged 65-74, and the APMS 2007 had no upper age limit. It should be noted there have been comparable surveys of children and adolescents (described below), of adults living in institutions and of the homeless.

² The categories are intended to mirror groups of diagnoses from the ICD-10 system. The exception to this is ‘mixed anxiety and depressive disorder’ which is not a standard diagnosis but covers all those who score 12+ but do not meet the criteria for any specific disorder.

³ For a person to be categorised as having a ‘possible’ disorder, they must screen positive on a disorder-specific questionnaire. To make a definite diagnosis would require a full clinical assessment (not done in the APMS 2007) – see Appendix A for more information on measurement issues.

Table 1: Population prevalence of disorders measured by the APMS 2007

	% of population
<i>Any neurotic disorder (population with at least one of the CIS-R disorders, prevalence in past week)</i>	15.1
• Depressive episode	2.3
• Generalised anxiety disorder	4.4
• Phobias	1.4
• Obsessive and compulsive disorder	1.1
• Panic disorder	1.1
• Mixed anxiety and depressive disorder	9.0
<i>Other assessed disorders</i>	
Psychotic disorder (prevalence in past year)	0.4
Borderline personality disorder (prevalence in past year)	0.4
Antisocial personality disorder (prevalence in past year)	0.3
Possible posttraumatic stress disorder (prevalence in past week)	3.0
Possible eating disorder (prevalence in past six months)	1.6
Possible attention deficit hyperactivity disorder (prevalence in past year)	8.2
<i>TOTAL: Any disorder (population with at least one disorder)</i>	23.0

Source: McManus et al (2009).

The results in Table 1 indicate the ‘stock’ of people who had at least one diagnosable mental health problem over a specified time period. There are several further points worth noting.

Firstly, these results come from a single survey and necessarily reflect its measurement methods. In particular, dementia is not measured. Recent estimates suggest that in the population of people aged 65 and over, around 5 per cent suffer from dementia (Knapp et al, 2007)⁴.

Secondly, it is useful to recall that the severity of symptoms will vary within diagnostic groups. For example, of the 15.1 per cent who have a ‘neurotic’ disorder, only half (7.8 per cent) have symptoms severe enough that they are likely to require specialist treatment (indicated by a score of 18+).

Finally, these results leave open the question of how many people develop a new mental health problem over a specific time period (the rate of onset), and how long it takes for people to become well again (the rate of recovery). Of course the answer to this varies by the condition in question; and even for specific groups of conditions there are a range of findings. One illustration of this is the findings on the rate of recovery from ‘neurotic’ mental health problems (depression or anxiety). An earlier Psychiatric Morbidity Survey (2000) found that around 50 per cent of people who had a neurotic disorder at one point in time had recovered 18 months later; but added that this figure is rather lower than most other studies have found – it is often suggested that around 50 per cent of those with a neurotic disorder recover within six months, and 75 per cent within a year (Lewis, 2003, citing Sargeant et al (1990) and Spijker et al (2002)). However, it is rather higher than the recovery rates found in a longer-

⁴ The proportion with dementia is much higher if one looks at only those people aged 65 and over who live in care homes (50-80 per cent) (Knapp et al, 2007).

term follow-up of general practice patients (Boardman et al, 2008), where only a third reported an improved condition at the end of three years.

Child and adolescent need

The main source of need among children and adolescents is a national population survey by the Office of National Statistics, last conducted in 2004 (Green et al, 2005). Findings are given in Table 2.

Table 2: Population prevalence of disorders measured among children and adolescents, 2004

	% of population
<i>Any 'emotional' disorder</i>	3.7
• Depression	0.9
• Anxiety	3.3
<i>Other disorder</i>	
Conduct disorders	5.8
Attention Deficit Hyperactivity Disorder (ADHD)	1.5
Autistic spectrum disorder	0.9
Other less common disorder (eating disorder, tics, mutism)	0.4
<i>TOTAL: Any disorder (population with at least one disorder)</i>	9.6

Source: Green et al (2005).

How Many Treated?

Adults treated

Perhaps it seems obvious to say it, but nonetheless it bears repeating: the level of mental health problems in England is not simply equal to the number of people receiving treatment in the health system for such problems. Instead, only a proportion of those with mental health problems will be receiving treatment for these. The APMS 2007 collected information on treatment patterns, given in Table 3 below.

Table 3: Treatment being received by adults with mental health conditions

	Neurotic disorder	Psychotic disorder	Likely PTSD	Likely eating disorder	Likely ADHD
Not receiving treatment	76%	35%	72%	81%	80%
Receiving treatment	24%	65%	28%	19%	20%
- medication only	14%	17%	18%	8%	10%
- counselling or therapy only	5%	8%	4%	4%	4%
- medication and counselling or therapy	5%	40%	6%	7%	6%

Source: McManus et al (2009).

Overall, around a quarter of those with neurotic disorders receive treatment⁵. Treatment rates increase as the severity of symptoms increase. Among those with a neurotic disorder scoring 18+, 32 per cent are receiving treatment (Deverill and King, 2009:47). Treatment rates also increase over time if the neurotic condition is persistent – the Psychiatric Morbidity Survey of 2000 included a follow-up survey after 18 months which showed that 62 per cent of those who had not yet recovered had received some treatment (King et al, 2003).

Of course, one possible reason why treatment might not be given is because it is judged that the patient would not benefit from it. A survey of people with neurotic disorders attending GPs was able to look at this issue in more detail (Boardman et al, 2004). They assessed whether each patient would benefit from medication or therapy (if yes, they designated this a ‘need’), and then tracked whether they had these needs met. They conclude that 23 per cent have their needs fully met, 4 per cent partially, and 64 per cent not at all; and found that only 9 per cent of patients were in the category where neither medication nor therapy would be appropriate⁶.

For psychotic disorders, treatment rates are much higher; 65 per cent receive some treatment.

Type of service or treatment received

The proportion of people receiving treatment decreases as services become more specialised and resource-intensive. Goldberg and Huxley (1980) were the first to summarise evidence on this; they conceived of services as being in ‘levels’ of increasing specialisation, so at the bottom are services from a GP, then there are specialised community-based services, and finally there are hospital-based (inpatient) services; and they analysed the number of patients at each level, and how they moved between levels.

To begin with, only a proportion of people (in the general community) who have a mental health disorder will choose to seek help from health services. That said, people with neurotic disorders do appear to use general practice services more heavily than those without such disorders; studies have found that around a quarter of people who attend a general practice would meet the diagnosis criteria for a neurotic mental illness (compared to 15 per cent of the general population) (Ustun and Sartorius, 1995; Boardman et al, 2004).

Then, when attending GP consultations, not all will be correctly diagnosed with a mental health disorder. Studies generally find that around 60 per cent of people with a neurotic disorder who attend a GP consultation will be diagnosed with such a disorder (Boardman and Parsonage, 2007; Ustun and Sartorius, 1995). This is partly because “Many patients are consulting for physical reasons and would be scandalised if they were told they were mentally ill, despite having the symptoms which justify a diagnosis” (Goldberg and Goodyer, 2005:25).

The majority of people who receive mental health services stay at the GP level; for example data from Manchester in the 1980s indicated that around 20 per cent of patients who had been diagnosed by a GP with a mental illness went on to receive help from specialist services; and around 16 per cent (of that 20 per cent) go on to be inpatients (Goldberg and Goodyer, 2005).

⁵ This varies by diagnostic group: both phobias and depression have higher treatment rates (phobia is the highest, at 57 per cent receiving treatment), followed by OCD, GAD, and panic disorders [number]; it is the ‘mixed anxiety and depressive disorder’ group that has particularly low treatment rates (15 per cent receiving treatment), below the average for all neurotic disorders. (McManus et al, 2009)

⁶ Numbers calculated by author from the population prevalence rates given in Boardman et al (2004).

It should also be noted that a small proportion of patients skip GP services altogether and go directly to more specialised services. This might happen, for example, if a patient presented to A&E and was referred from there to a crisis team. It has been estimated that this is true of about 10 per cent of people receiving treatment for mental health problems (Goldberg and Goodyer, 2005).

Tables 4 and 5 give information from the AMPS 2007 on the use of health services by adults with mental health disorders.⁷

Table 4: Health service use by adults with neurotic or psychotic disorders

	Neurotic disorder (%)	Psychotic disorder (%)
GP consultations		
- in the past year	38	67
- in the past two weeks	10	32
Hospital services		
Inpatient (in the past quarter)	0	3
Outpatient (in the past quarter)	4	23
Community care services (past year)		
- Psychiatrist	3	21
- Psychologist	2	7
- Community psychiatric nursing	3	22
- Other nursing	4	2
- Social worker	4	17
- Self help / support	3	12
- Home help / home care worker	1	-
- Outreach worker	2	10
Day services (past year)		
- in the past year	5	45
Any counselling or therapy treatment	10	48

Source: McManus et al (2009)

⁷ The data in Table 5 is less detailed because sample sizes for these conditions were too small to allow the calculation of further details.

Table 5: Health service use for other disorders measured in the APMS 2007

	Likely PTSD (%)	Likely eating disorder (%)	Likely ADHD (%)
Health care services (GP in past year, hospital in past quarter)	44	24	31
Any community care services (in past year)	22	16	15
Day services (in past year)	10	7	8
Any counselling or therapy treatment	10	11	10

Source: McManus et al (2009).

Looking at variations in service use within the ‘neurotic disorder’ category, service use is generally highest for phobia, depression and OCD. It is somewhat lower for panic disorders and GAD, and lowest for the ‘mixed anxiety and depression’ group.

An earlier iteration of the Psychiatric Morbidity Survey (in 2000), recorded whether respondents had ever had particular services offered, and turned them down. Among those with a neurotic disorder, 9 per cent had; for psychotic disorders the figure is 7 per cent (Singleton et al, 2001).

Children and adolescents treated

The 2004 Office of National Statistics survey of mental health among children and adolescents collects some limited information on treatment patterns (Green et al, 2005). It asks whether parents sought any help with their child’s condition (and if yes, from whom), and whether the child takes medication for the condition. The type of help received (if any), other than medication, is largely not detailed.

Table 6 shows the percentage of parents who sought professional help⁸, the percentage who sought help specifically from a mental health professional, and the percentage of children taking medications.

⁸ ‘Professional’ covers a range of services and people, including teachers, general practitioners, social workers, mental health specialists and others.

Table 6: Health service use for children and adolescents with mental health disorders, 2004

	'Emotional' disorder (%)	Conduct disorder (%)	ADHD (%)	Autistic spectrum disorder (%)
Professional help sought	64	76	93	86
Mental health specialist help sought	24	28	52	43
Taking medication	7	9	43	13

Source: Green et al (2005).

Part II: The Structure of Services

England's mental health services are structured along two main dimensions: firstly, the age of patients; and secondly, how specialised and intensive treatment is.

Broadly, services are divided into three groups based on client age: child and adolescent services for those aged up to 18; adult services; and specialist older adult services for people aged 65 and over. The borderline between child and adult services tends to be fluid – for example, a 17 year old who is not in education or training but is employed full-time could often be seen in adult services. The borderline between adult and specialist older adult services is even more fluid; while most trusts do have separate services for both groups, people over 65 may still be treated in the mainstream 'adult' services. This depends partly on the nature of their illness - for example, dementia-related problems tend to be handled in specialist older adult services – and partly on how the transition between the services is handled.

Within each service group, there is a hierarchic structure of services based on the severity, complexity and persistence of both the mental illness in question and the treatments offered. The first level of services is treatment within primary care, usually under the supervision of a GP. The second level of services is called secondary care, and includes a wide range of more specialised services such as community-based care teams and outpatient services. Finally there are those services often referred to as tertiary care, which includes inpatient services, day hospitals, and some particularly specialised outpatient services.

Guidelines from the Department of Health specify the mental health services which must be provided, and suggest how to implement those services⁹. Within this framework, most services are organised and commissioned by local Primary Care Trusts and Local Authorities. (Often, the Primary Care Trusts further delegate sub-contracting to specialist Mental Health Trusts.) The Department of Health guidelines give substantial flexibility to Trusts and Local Authorities to decide how exactly local services are designed¹⁰.

⁹ Until recently, the overall framework came from the 1999 National Service Framework for Mental Health (Department of Health, 1999), and subsequent detailed 'mental health policy implementation guides' such as the Mental Health Policy Implementation Guide: Dual diagnosis good practice guide (Department of Health, 2002). In 2009 the successor framework strategy document was published, *New Horizons: A shared vision for mental health* (Department of Health, 2009).

¹⁰ There is a handful of services commissioned nationally rather than through local bodies: the main one is the high secure hospitals; another example is funding provided towards national telephone help-lines such as the Samaritans.

Key data source: the Service Mapping databases

A key source of information on the range of services across the country, and how services are staffed, is the Service Mapping exercise. This is based on annual surveys funded by the Department of Health. It includes all services that are locally commissioned, by Primary Care Trusts or Local Authorities¹¹.

There are in fact three maps. First is the ‘adult’ map, which includes all services for adults which are either restricted to working age adults (under age 65) or for all adults with no upper age limit. Second is the specialised ‘older adult’ services map, which includes only those services designated as specialising in older adults, i.e. aged 65 and over. These two, the adult and older adult maps, actually come from a single surveying exercise, but results are documented separately. Finally, there is the map of child and adolescent mental health services; the survey for this is conducted as part of a wider survey of child health and maternity services.

Paralleling the Service Map is an annual Finance Map. Results from this are detailed in Part III.

Unless otherwise specified, data in this section come from the 2008 service maps. The adult and older adult maps were downloaded in early 2009 from the on-line database at <http://www.mhcombinedmap.org/Directory.aspx>.¹² The child and adolescent map data come from Barnes et al (2007).

The service maps use a system of categorisation of service types that forms the basis of the categorisations used in this report; but this report groups services somewhat differently than is done in the standard reporting of service map data.

¹¹ The services can be fully funded by the commissioner, or partly funded. Not included are Learning Disability Services, services that are provided and funded nationally (principally, high secure hospital services), and standard Drug and Alcohol services. In recent years, some information has also been collected on local services that are not commissioned by the health Trusts or Local Authorities – but this data is not reliable, as local areas are not obliged to provide it but may do so on a voluntary basis.

¹² There is an alternative source of data on staffing of health services – the NHS annual workforce censuses – which is not used here. It is not used because quirks in how the data is recorded across different types of professions mean that it is not possible to identify the total numbers of staff working in mental health services (Association of Public Health Observatories, 2007:92).

Overall Pattern of Services and Staffing

In total, some 189,123 staff provide services to address mental health problems in England. How this figure is calculated is explained in more detail below. All staffing figures are calculated on a full-time equivalent basis (rather than a headcount basis), unless specifically noted.

Of the total, some 157,323 staff are specialised in providing mental health services¹³. The majority work in adult services (64 per cent), around a third in older adult services (29 per cent), and the balance in child and adolescent services (7 per cent).

Only a small number of these specialised staff are based at the primary care level. Some 2,500 staff are employed solely to help GPs support and treat people with mental health problems, in roles such as mental health nurse practitioners and graduate primary care mental health workers. One must add to this total those staff who specialise in providing psychological therapy at primary care level. Unfortunately, their number is not well-recorded.¹⁴ The best estimate suggests it is at least 2,915 people (Barnes et al, 2008).¹⁵ In total, then, under 4 per cent of staff specialising in mental health services are based at the primary care level.

There is also a group of staff who provide some mental health services without specialising in these; this group includes GPs and other general practice staff. It is estimated that around 30 per cent of their time is spent on mental health problems; this represents some 31,800 staff on a full-time equivalent basis – 9,270 GPs and 22,530 other practice staff¹⁶.

Tables 7 and 8 show how these staff are distributed across types of services, and across types of staff groups. All of these are discussed in detail in the pages that follow.

¹³ This includes services fully or partly commissioned by local health Trusts or Local Authorities (from the national service mapping surveys), and staff working at high secure hospitals. It excludes staff working in any other nationally commissioned mental health services, for whom little reliable data is available. It also excludes those working in services that are not commissioned by Primary Care Trusts or Local Authorities, such as privately funded services.

¹⁴ This is because the national service mapping database collects information on psychological therapy services without distinguishing the level at which they work.

¹⁵ The estimation approach is discussed further in the section on psychological therapy at primary care level, later in Part II.

¹⁶ For calculations and sources see the section later in Part II on general practice.

Table 7: Staff distribution across types of mental health service

Service group	Staff FTE	Staff %
Adult and older adult specialist services		
Ward-based and live-in services		
▪ Inpatient clinical services	27,024	14.3
▪ Secure or high dependency inpatient services	14,437	7.6
▪ Continuing care services	16,745	8.9
Community-based and hospital outpatient services		
▪ Community Mental Health Team	22,652	12.0
▪ Specialised community-based teams (AO, EIP, CRHT)	10,096	5.3
▪ Crisis and emergency services (acute sector)	2,774	1.5
▪ Social support services	18,777	9.9
▪ Psychological therapy ¹⁷	6,675	3.5
▪ Other community and/or hospital specialist services	7,920	4.2
Specialists in primary care services (excluding psychological therapy)	1,878	1.0
Accommodation services	18,012	9.5
Child and adolescent specialist services		
Tier 4 staff	2,276	1.2
Tier 2 and 3 staff (excluding specialists in primary care services)	7,440	3.9
Specialists in primary care services (excluding psychological therapy)	617	0.3
GPs and practice staff providing mental health care to all ages¹⁸		
General practitioners	9,270	4.9
Practice staff	22,530	11.9
Total	189,123	100

Source: Service Mapping surveys (2008), Barnes et al (2008), Barnes et al (2007), TIC (2008), MACA (1999), Winterton (2005), website for Rampton high secure psychiatric hospital.

¹⁷ This figure includes both those operating at secondary or tertiary levels, and those operating within primary care. For more detail on how the total number was derived, see the section later in part II on psychological therapy in primary care.

¹⁸ For calculations and sources see the section later in Part II on general practice.

Table 8: Staff distribution across occupations

Staff group	Staff FTE	Staff %
Specialist services		
Managers	7,919	4.2
Nurses	50,637	26.8
Social workers	7,803	4.1
Psychiatrists	7,313	3.9
Psychologists	4,185	2.2
Psychotherapists	962	0.5
Counsellors	1,480	0.8
Psychological therapists, unknown professional type ¹⁹	1,778	0.9
Staff employed in high secure psychiatric hospitals, unknown professional type	5,138	2.7
Occupational therapists	4,384	2.3
Other therapists (art, speech, complementary, physiological)	1,222	0.6
Officers (day care, employment, education)	1,757	0.9
Carer support workers	4,431	2.3
Gateway workers	344	0.2
Support care workers	27,965	14.8
Support time recovery workers	3,341	1.8
Graduate primary care mental health workers	1,367	0.7
Development workers	455	0.2
Community development workers	421	0.2
Administrative staff	10,504	5.6
Volunteer staff	4,637	2.5
Other	9,280	4.9
General practice		
General practitioners	9,270	4.9
Practice staff	22,530	11.9
Total	189,123	100

Source: Service Mapping surveys (2008), Barnes et al (2008), Barnes et al (2007), TIC (2008), MACA (1999), Winterton (2005), website for Rampton high secure psychiatric hospital.

Primary Care

General practitioners

The network of general practice surgeries across the country are known as the ‘primary care’ level of the National Health Service (NHS). They are directly contracted by the NHS to provide specified services to patients, and are paid on the basis of performance against

¹⁹ For more details on the derivation of this number, see the section later in Part II on psychological therapy in primary care. Essentially, this represents the estimated number of people who a) offer psychological therapy in primary care services, b) were not captured in the annual service mapping survey, and c) were captured in the survey by Barnes et al (2008). Their specific professional types are not known because Barnes et al (2008) does not collect this data.

service targets. England has 30,900 GPs working for the NHS, arranged into some 12,200 practices (TIC, 2008b)²⁰.

The median number of consultations of all types a patient has per year is 5.2 (across all registered patients; Hippisley-Cox et al, 2007). According to the UK general practice workload survey, GPs have an average of 103 consultations per week, lasting 12 minutes each (on an FTE basis; TIC, 2007a).

A widely-cited statistic holds that GPs spend an average of 30 per cent of their time on mental health problems. This statistic comes from a 1999 survey of GPs (MACA, 1999) and is likely to include a relatively wide definition of ‘mental health problems’, ranging from diagnosed clinical mental illness to socio-behavioural issues. The statistic is widely cited because it is the only source of information on what proportion of a GP’s time is spent on mental health problems; however, it gives at best a broad approximation, since the survey achieved only a 17 per cent response rate and it could be assumed that GPs with greater interest in mental health issues are more likely to respond to a survey on the topic.

It is supported by some smaller surveys of GP time. For example, a small 1997 survey found that UK GPs diagnosed psycho-social issues in 34 per cent of consultations (Verhaak et al, 2004)²¹. Patients filled out pre-diagnosis questionnaires on the reason for their visit; 11 per cent of patients said one of the reasons for the visit was psychological or psycho-social and almost all of these patients received such a diagnosis. The remaining 23 per cent of consultations where psycho-social issues were diagnosed involved patients who had not identified such issues as the reason for their visit.

General practice surgeries typically employ a range of staff to support and augment GP services – around 2.4 extra staff members per GP, or a total of 75,100 practice staff; mainly administrative staff and nurses (TIC, 2008b)²². Practice nurses account for some one-third of all patient consultations with primary care staff (Hippisley-Cox et al, 2007), and there is evidence that they are involved in some mental health care, particularly giving information and advice, and administering medications (Gray et al, 2001). Non-clinical staff are responsible for organising consultations, referrals, and repeat prescriptions (TIC, 2007a). Finally, there are a currently very small, but growing, number of ‘nurse practitioners’, registered nurses who can diagnose and treat patients independently of GPs; this includes some who are specialised in mental health.

General practice surgeries’ contracts with the NHS are partly based on the extent to which a set of performance measures²³ are met, including two related to mental health. Unfortunately the mental health measures are among the lowest-scoring of the performance measures (for more details see TIC, 2007c).

²⁰ This is a full-time equivalent figure, for 2007. As some GPs work part-time, the GP headcount is higher – 33,400. There are also a further 2,500 GP registrars – people in their final years of GP training working in an approved practice.

²¹ Note that this survey had a relatively small sample size – 27 GPs, and 441 patients.

²² This is a full-time equivalent figure, for 2007. A substantial proportion of practice staff work part-time, so the total headcount is 117,400.

²³ The performance measures are known collectively as the ‘Quality and Outcomes Framework’ (QOF).

Psychological therapy at primary care level

There is a dearth of information on primary care level psychological therapy services. By this we mean staff working directly to general practices (not those accessed through secondary or tertiary services, even if these were to be delivered at a general practice office for outreach reasons).

Over the years, a number of surveys have sought to collect reliable data. Early surveys looked at the number of ‘counsellors’ available to GP practices; in 1992, 31 per cent of practices had access to counsellors, and by 2001 this had risen to 51 per cent (NHS Centre for Reviews and Dissemination, 2001). This counselling was provided by a range of staff types, not always qualified to the level recommended by the British Association for Counselling and Psychotherapy (NHS Centre for Reviews and Dissemination, 2001).

More recently, Barnes et al (2008) have conducted a fuller survey of the psychological therapy services available at primary care level. It proved to be enormously difficult to even draw up a comprehensive list of services to survey. The researchers began by contacting primary care trusts and asking them to list the psychological therapy services operating in their area, but trusts had such poor records that a consultant had to be engaged to update and revise the list using a cascade approach. As the researchers explain, it is hard to know how definitive the final list is.

They estimate there are around 265 psychological therapy services in England providing primary care level treatment. The estimation methodology is relatively conservative, so this is likely the lower bound estimate of the true number²⁴. There are also some staffing groups known to be under-represented in the survey (Barnes et al, 2008:11, 23).

Services employ an average of 11 staff; the lower bound estimate of the total number of staff is therefore 2,915 in England. The precise professional mix is not known²⁵.

Another possible data source on psychological therapy services at the primary care level is the national service mapping survey. It does not distinguish between staff working at primary care level and staff working at secondary or tertiary levels, so it cannot provide direct information. However, one can use the service map to derive some estimates, as is done here below.

The service map finds a total of 4,897 staff (FTE) work in psychological therapy services; relating this to the findings from the Barnes et al (2008) survey suggests that 60 per cent of all psychological therapy staff in England are operating at the primary care level (that is, 2,915 out of 4,897). But this estimate is probably too high; it assumes that all the staff captured in the survey are also successfully captured in the service map, when in fact the survey found that local trusts had poor knowledge of the therapy services operating at the

²⁴ The estimate is calculated as follows. Responding services are matched to the primary care organisations (PCO) they fall within. This gives an average of 1.7 services per PCO (for those PCOs with any services responding at all). The total number of PCOs in the country is then multiplied by this factor, to reach the estimate of total number of services. The difficulty with this is that it assumes that, for those PCOs represented at all, the numbers of services in those PCOs were accurately captured. However since information is collected via individual services, not via the PCOs, it is likely that, for some PCOs who are represented, not all their services have been captured. This implies that the resulting estimate is a lower bound of the true number.

²⁵ The survey does collect some information on which professions ‘are represented’ in each service – that is, whether each service has any staff at all from each professional group.

primary care level in their area and so probably did not include them all in their service mapping.

The estimate can be improved by further estimating the degree to which the two surveys overlap. We assume that 39 per cent of those captured in the Barnes et al survey are also captured in the national service map. This equals the proportion of staff Barnes et al found were directly employed by local primary care or mental health trusts²⁶ - since they are employed by the trusts themselves, presumably they are recorded in those trusts' service mapping.

On the basis of this estimate, we calculate that around 44 per cent of all the psychological therapy staff in England operate on the primary care level²⁷. An earlier service map (2003) found that 34 per cent of psychological therapy services operated at the primary care level (Glover et al, 2004).

Psychological therapy staff tend to be available to any one GP practice on a part-time basis; they usually cover a set of practices. For example, the UK general practice workload survey finds that each counsellor works a median of 7.4 hours per week at any one practice (TIC, 2007a).

Other staff at primary care level

Almost 2,500 other staff specialise in helping GPs support and treat people with mental health problems. The majority of this group – 71 per cent - are categorised as working with general adults; a smaller percentage – 4 per cent - specialise in older adults. Staff types include graduate primary care workers (just under a third of the total), nurses, and others. While these staff are not psychological therapy specialists (who are discussed in the previous section), they are often trained in brief therapy techniques and can deliver or facilitate brief interventions and self-help as well as mental health promotion²⁸.

The remaining 25 per cent of this group specialise in children and young adults²⁹. These staff provide an early intervention interface between specialist Child and Adolescent Mental

²⁶ The rest are variously employed by general practices (9 per cent), self-employed (22 per cent), from the voluntary sector (28 per cent) or employed by a private company (2 per cent).

²⁷ The full calculation is as follows. The national service map finds 4,897 staff in psychological therapy services in England. The Barnes et al (2008) survey finds 2,915 staff in psychological therapy services at the primary care level in England, 31 per cent of whom (1,137) are very likely to have been captured by the service map, on the basis that they are employed directly by local primary care or mental health trusts. This leaves 61 per cent or 1,778 people who are recorded by Barnes et al but who may not have been captured successfully in the national service map. Adding this number to the original service map number gives us 6,675 staff working in psychological therapy services (4,897+1,778). Of this total, 2,915 or 44 per cent work at the primary care level (i.e. the number found by Barnes et al), and the balance of 3,760 or 56 per cent work at the secondary or tertiary care level.

²⁸ It may be that there is a small amount of overlap between this group and those staff captured by Barnes et al (2008) in their survey of psychological therapy services at the primary care level. However, the degree of overlap is likely to be small. The largest professional group represented here are graduate primary care workers, while Barnes et al comment that they have very few graduate primary care mental health workers in their survey (2008:11); similarly, nurses are a substantial group represented here while they appear to be relatively uncommon in the Barnes et al survey. It is difficult to be more specific because the Barnes et al survey does not give precise numbers for different professional staff types.

²⁹ We have estimated their number. The CAMHS service map does not explicitly gather information on staff at the primary care level, so we use the number of graduate primary care workers as a proxy. However, this is likely an over-estimate. We see from the adult and older adult service maps that, given the option to choose, the majority of graduate primary care staff are designated as working in primary care services, but some are in

Health Services (CAMHS), and both primary care health services (GPs, health visitors) and education services (schools etc.) (Barnes et al, 2007).

Secondary and Tertiary Care for Adults

We now consider the services provided in the secondary and tertiary sectors which are commissioned by Trusts, Local Authorities, or the central NHS³⁰.

Historically, adult services have been split into two groups – those which specialise in older adults only (usually specifying a minimum age of 65), and all others. This ‘all others’ group includes both services which catered for all adults independent of age, and those which focus on working age adults or some sub-set of this (examples include only adults up to the age of 35; or working age adults plus those aged 65-70). Most of the available data is still collected on the basis of this two-way split.³¹

We combine these two categories here to give an overall picture of adult services. We also describe services according to this established split – that is, according to the two main categories of ‘general or working age adult services’ and ‘specialised older adult services’.

In practice, local health trusts tend to have a variety of services – some for older adults, some for working age adults, and some for all adults - with variation between trusts in how transition between services is managed (Beecham et al, 2008; Healthcare Commission 2009).

The structure of separate services can lead to a difference in service availability for older adults – the Healthcare Commission (2009) interviewed and visited a sample of trusts and found that older adults had relative difficulty accessing out of hours and crisis services, alcohol and substance misuse services, and occasionally psychological therapy services.

Overall, among staff at secondary and tertiary levels of the health service, some 32 per cent of staff work in specialised older adult services and the balance of 68 per cent work in general or working age adult services.

secondary services (this can happen because ‘graduate primary care worker’ is an individual job title, rather than the title of a type of service – so a GPCW could in fact work in a Community Mental Health Team and so be designated as part of the secondary care system). It seems likely the same applies to CAMHS workers.

³⁰ It should be noted there is limited information on central NHS spending on commissioning mental health services, due to how the published figures are disaggregated. The largest central spend is on secure inpatient services, which are included in this section; but other costs, such as the funding that goes towards national helplines, are not included.

³¹ The main data source is the service map surveys, which are described in more detail in the box at the start of Part II.

Table 9: Staff distribution across secondary and tertiary care services - adults (including specialised older adults)

	General and working age adults (FTE)	Older adults (FTE)	Total (FTE)	Staff %
Ward-based and live-in services				
Inpatient clinical services	16,121	10,903	27,024	19.0
Continuing care services	6,799	9,946	16,745	11.8
Secure or high dependency inpatient services	14,437	-	14,437	10.2
Community-based and hospital outpatient services				
Community Mental Health Team	15,925	6,727	22,652	15.9
Specialised community-based teams (AO, EIP, CRHT)	10,096	-	10,096	7.1
Crisis and emergency services (acute sector)	2,554	220	2,774	2.0
Social support services	12,145	6,632	18,777	13.2
▪ <i>Day drop-in / resource centres</i>	4,614	1,583	6,197	
▪ <i>Home support services</i>	2,366	4,254	6,620	
▪ <i>Other support services</i>	3,713	795	4,508	
▪ <i>Employment schemes</i>	1,451	-	1,451	
Psychological therapy ³²	3,582	178	3,760	2.6
Other services	6,413	1,507	7,920	5.6
▪ <i>Outpatient clinical services</i>	712	647	1,359	
▪ <i>Offender services</i>	1,541	-	1,541	
▪ <i>Carers' services</i>	1,110	671	1,781	
▪ <i>Personality Disorder services</i>	383	-	383	
▪ <i>Mental health promotion services</i>	79	-	79	
▪ <i>Other community and/or hospital specialist services</i>	2,588	189	2,777	
Accommodation services	10,492	7,521	18,012	12.7
Total	98,564	43,634	142,198	100

Source: Service Mapping surveys (2008), Barnes et al (2008), TIC (2008), MACA (1999), Winterton (2005), website for Rampton high secure psychiatric hospital.

What follows is a more detailed description of the services available for adults and older adults within the secondary and tertiary care sectors. Services are grouped within overall categories as per Table 9 above, and are presented in the order they occur in that Table.

³² These figures include only our estimate of the number of psychological therapy staff based in secondary or tertiary level services (it does not include those we estimate are based at the primary care level). For more detail on the derivation of this estimate, see the section earlier in Part II on psychological therapy in primary care services. The total (3760) is split between 'general/working age adult' and 'specialised older adult' on the basis of the relative proportions found in the 2008 service map.

Inpatient clinical services

The main inpatient clinical services between them account for around 20 per cent of staff (27,024) in adult secondary and tertiary care services.

This broad category is made up of the following services (brackets give staff numbers):

- General and working age adult services:
 - Acute inpatient unit or ward, including some ‘mother and baby’ facilities (12,548)
 - Day care facilities (910)
 - Psychiatric liaison service (259)
 - Peri-natal services (101)
 - And a catch-all category of ‘other specialist mental health services’ (2,303)

- Specialist older adult services:
 - Acute inpatient care (9,175)
 - Day care facilities (1,490)
 - Psychiatric liaison service (238)
 - Memory assessment service (329)

Much the largest inpatient clinical services are the acute inpatient wards, which provide residential care and intensive nursing support for patients in periods of acute psychiatric illness. They are largely staffed by nurses, with support from psychiatrists and support care workers.

Day care facilities (also known as day hospitals) sit between inpatient admission and community services. Patients attend during the daytime only and the focus is on rehabilitation. The largest staff groups working here are nurses and occupational therapists.

Continuing care services

The category of ‘continuing care services’ covers live-in supported housing options, where the ‘support’ in question is nursing care mainly.³³ This set of services employs 16,745 staff, or around 12 per cent of all staff working in adult secondary and tertiary care services.

The specific services are (brackets give staff numbers):

- General and working age adult services:
 - Residential rehabilitation unit (3,445)
 - Nursing care home – non NHS provided (1,389)
 - Nursing care home – NHS provided (1,076)
 - Rehabilitation or continuing care team (779)
 - Other (111)

- Specialist older adult services:
 - Nursing Care home (5,989).
 - Inpatient older adult continuing care (3,038)
 - Intermediate care (919)

³³ If the services do not offer nursing care, but only assistance with the tasks of day-to-day living (practical or social care), they are designated as either ‘accommodation services’ or ‘home support services’.

The largest group of services here are nursing care homes, which provide 24-hour nursing care on a long-term basis. They can be provided by the voluntary or private sector or by the NHS itself.

The second largest group are the non-acute live-in facilities provided by the NHS for those judged too unwell for a residential place in the community, but not sufficiently so to be placed in an acute inpatient ward. These are variously labelled as ‘residential rehabilitation units’ and ‘inpatient continuing care’. Patients are under the care of a psychiatric consultant, and treatment and rehabilitation is provided, as well as 24 hour nursing care. They are not designed for permanent residence.

Secure or high dependency inpatient services

These services are designed to give inpatient support for people who require secure care because they present a high risk to others, or to themselves, in conjunction with having a mental illness, a learning disability, or a personality disorder.

There are a variety of grades of such services, which include (brackets give staff numbers)³⁴:

- High secure psychiatric hospital (5,138)
- Regional medium secure services (2,662)
- Local medium secure service (1,289)
- Low local secure service (2,570)
- Local psychiatric intensive care unit (2,642)
- Other (135)

There are three high secure psychiatric hospitals: Broadmoor, Ashworth and Rampton. They offer the highest level of security, for patients judged to ‘pose a grave and immediate danger to the public’ (Rutherford and Duggan, 2007). Access is normally from the courts or prison, or can be from transfers from lower levels of secure mental health care. The high secure services are largely male-only; there is a dedicated service for women at Rampton. Adding to the general services, both Rampton and Broadmoor have ‘Dangerous and Severe Personality Disorder’ services. It should be noted it is difficult to get precise current staffing information for the high secure psychiatric hospitals³⁵.

Medium secure units cover people who ‘pose a serious danger to the public’ (Rutherford and Duggan, 2007). They can be provided by the NHS or the independent sector. Access usually comes via the courts, or transfer down from high secure care.

Low secure units generally cover those who are detained directly from the community under the mental health act, or people stepping down from high or medium secure services. It is

³⁴ Most of this data comes from the national service mapping survey 2008. However, this survey covers only locally commissioned services, and the high secure psychiatric hospitals are commissioned centrally at national level. As such, data for high secure psychiatric hospitals comes from two alternative sources, detailed in the text (Winterton, 2005; website for Rampton high secure psychiatric hospital).

³⁵ This is for two reasons. Firstly, they are not included in the national service mapping survey, because they are centrally commissioned services (rather than locally commissioned services). Secondly, from 2005 each hospital operates within its local NHS trust, and these trusts do not publish staffing breakdowns that allow these hospitals to be isolated. The latest available figures therefore come from 2004: Ashworth had 1,843 staff, and Broadmoor had 1,395 staff (Winterton, 2005). There is more recent data for Rampton, which had approximately 1,900 staff in 2009 (website for Rampton high secure psychiatric hospital).

intended to cover people who ‘pose a significant danger to themselves or others’ (Rutherford and Duggan, 2007).

Local psychiatric intensive care units are for patients compulsorily detained, who are in an acute disturbed phase of a severe mental disorder with an associated loss of self-control capacity, and cannot be safely treated in a general acute ward. Length of stay varies but is normally relative short – not exceeding two months.

Community Mental Health Team

Community Mental Health Teams (CMHTs) account for 16 per cent (22,652) of staff in adult secondary and tertiary care services.

CMHTs provide community- and home-based services including assessment, treatment and care, and liaison with primary care services. They are multidisciplinary teams, designed to integrate services across the health (NHS) and social care (local authority) sectors and as such the two largest staff groups are nurses (from the health side) and social workers (from the social care side). Most CMHTs also have psychiatrists, psychologists and occupational therapists as part of the team, and the teams tend to be large (an average of staff of 19 per team).

They tend to have defined caseloads – that is, potential patients are assessed as to whether they are suitable for being taken on as part of the CMHT caseload, and those who are judged suitable are assigned an individual care manager. A study in the late 1990s found of all referrals to CMHTs 28 per cent were referred back to the GP, 40 per cent offered crisis support, and 26 per cent offered ongoing support (more than 3 follow-up appointments) (McEvoy et al, 2002).

CMHTs tend to focus on those with severe and enduring mental illness, although this focus has varied over the past two decades (Gournay 1999, 2000, 2005).

A substantial proportion of CMHTs specialise in services for older adults – overall, 30 per cent (6,727) of CMHT staff work in such services.

Specialised community-based teams

This category groups together three types of specialised community-based team. Each focuses on a particular patient type and/or a specific mental health need. The teams are (brackets give staff numbers):

- CRHT: Crisis resolution home treatment team (5,267)
- AO: Assertive outreach team (2,962)
- EIP: Early intervention in psychosis team (1,867).

Crisis resolution home treatment (CRHT) teams provide intensive support for people in mental health crisis, in their own homes or a crisis house. They are designed to be available 24 hours a day, 7 days a week. The intervention is usually intensive (seeing service users at least once on each shift) and short term – until the crisis is resolved. The approach is team-based; that is, not personal care management by a single staff member but rather support from various team members, who often visit service users in pairs. Teams are multidisciplinary, with nurses as the largest staff group and most teams having social workers and psychiatrists also. One aim of CRHTs is to avert hospital admission where possible. The

nature of the intervention means teams often act as gatekeepers to other services like acute inpatient care, or longer-term follow up care.³⁶

Assertive outreach (AO) teams focus on severely mentally ill people who are difficult to engage in more traditional services. Their caseloads are usually well-defined – specific people with whom planned ongoing working is intended. They aim to maintain contact and improve treatment engagement and compliance. They can offer practical support, care coordination, and therapeutic services. As with CRHTs, the approach is team-based. Work usually takes place in service users' homes or community settings. The service is designed to be available 8am to 8pm, seven days a week, with 24 hour access to on-call workers. All AO teams employ nurses, and most employ social workers and psychiatrists.

Early intervention in psychosis (EIP) teams treat people experiencing a first onset of psychosis, usually early in life. They give assessment and care. All EIP teams employ nurses, and most employ psychologists, psychiatrists, social workers and occupational therapists.

Crisis and emergency services

This category covers the acute sector crisis and emergency services.³⁷ These are (brackets give staff numbers):

- General and working age adult services:
 - Approved Social Worker scheme (731)
 - A&E mental health liaison (426)
 - Emergency duty team (393)
 - Crisis accommodation (302)
 - Emergency clinic / walk-in clinic (150)
 - Other (553)
- Specialist older adult services:
 - A&E mental health liaison (9)
 - Rapid response service (211)

A large element of emergency and crisis services is the process of assessing and admitting people for inpatient care, including compulsory admission under the Mental Health Act. Until recently, this role was carried out by 'Approved Social Workers', social workers who have the power to apply for compulsory admission³⁸. There are 731 people employed directly under the Approved Social Worker scheme, and a further 393 people in 'emergency duty teams' (provided by local authority social services departments) which must have Approved Social Workers amongst their staff.

Social support services

While, in total, social support services employ a large number of staff (18,777, or 14 per cent of all staff in adult secondary and tertiary care services), the category is comprised of a rather wide range of services that often, individually, are relatively small. We have grouped these

³⁶ It should be noted that crisis resolution functions can also be provided within a CMHT team; only discrete services are recorded here.

³⁷ Crisis Resolution Home Treatment teams also provide crisis / emergency care, but they operate as a community-based team and so are included in the category of 'specialised community-based teams'.

³⁸ This role has been reformed under the Mental Health Act of 2007; the role is now called 'Approved Mental Health Professional' and can be applied for by people from non-social worker backgrounds also.

services into three sets: those that offer day services centred on social and therapeutic activities; those that provide practical support to help people to live independently (i.e. in their own homes and communities); and those focussed on providing advice, information, advocacy, and enabling self-help.

Specifically, social support services cover (brackets give staff numbers):

- General and working age adult services:
 - Day drop-in/resource centres
 - Day centres / resource centres / drop-ins³⁹ (4,231)
 - Education and leisure opportunities (383)
 - Home / community support service (2,366)
 - Other support services
 - Advice and information services (724)
 - Advocacy services (640)
 - Befriending and volunteering schemes (604)
 - Patient Advice and Liaison Service (PALS) (55)
 - Self-help and mutual aid groups (343)
 - Service user groups (353)
 - Staff-facilitated support groups (245)
 - Other support services (749)
 - Employment schemes (1,451)
- Specialist older adult services:
 - Day drop-in/resource centres (1,583)
 - Home support services
 - Day care at home (63)
 - Care and repair (99)
 - Assistive technology and telecare (349)
 - Home care services (3,743)
 - Other support services (795)
 - Advice and information services (270)
 - Advocacy services (38)
 - Befriending and volunteering schemes (278)
 - Self-help and mutual aid groups – older adult (135)
 - Lunch clubs (9)
 - Older Person's Group (65)

Overall, around a third of social support services are specialised older adult services (35 per cent, 6,632). Most of these staff (4,254) work in home support services.

Psychological therapy

We estimate that 3,760 staff are employed in psychological therapy services that operate in secondary or tertiary care sectors⁴⁰. Only services that are commissioned (or part-commissioned) directly by a primary care trust or local authority are considered here; in other words, people offering psychological therapy in private practice are not covered.

³⁹ This includes women-only community day services, who employ 30 staff across 17 services.

⁴⁰ This estimate is based on the 2008 service mapping survey, and a survey by Barnes et al (2008) which looked at the provision of psychological therapy in primary care. For more detail on how the estimate was derived, see the section earlier in Part II on psychological therapy in primary care services.

Only a small proportion (under 5 per cent) of these staff offer specialised older adult services.

The service mapping survey provides some detail on the types of services that are offered. The largest group, accounting for 52 per cent of staff, are NHS-provided ‘psychological therapies and counselling services’, largely staffed by psychologists and counsellors.

The second largest group, at 30 per cent of staff, are ‘counselling or psychotherapy services’ provided by the voluntary and private sector, and largely staffed by volunteers and counsellors.

The smallest group are ‘specialist psychotherapy services’ (12 per cent of staff), staffed by psychotherapists, followed by psychologists and psychiatrists.

Other services

Grouped together in this category are a wide range of services which are individually small (each accounting around 1 per cent or less of adult secondary and tertiary care staff): outpatient clinical services; offender services; carers’ services; personality disorder services; mental health promotion services; and other community and/or hospital services.

In detail, these services are as follows (brackets give staff numbers):

- General and working age adult services:
 - Outpatient clinical services:
 - Psychiatric outpatient clinics (712)
 - Other community and/or hospital services
 - Community development workers – Black and Minority Ethnic (309)
 - Support time and recovery workers (168)
 - Homeless mental health service (128)
 - Gateway workers (74)
 - Other community or hospital based professional teams or specialists who cannot be allocated to any other service type (1,908)
 - Offender services:
 - Community forensic service (37)
 - Prison psychiatric in-reach service (327)
 - Criminal justice liaison and diversion service (205)
 - Other (637)
 - Carers’ services:
 - Carers’ support service (588)
 - Short-term breaks / respite care services (218)
 - Carers’ support workers (206)
 - Carers’ support group (63)
 - Self help or mutual aid group for carers (34)
 - Personality Disorder services (383)
 - Mental health promotion services (79)
- Specialist older adult services:
 - Outpatient clinical services:
 - Psychiatric outpatient services (318)
 - Memory assessment service (329)
 - Other community and/or hospital services

- Services for older people with learning disabilities and mental health difficulties (17)
 - Services for young onset dementia (172)
- Carers' services:
 - Carers' support service – older adult (205)
 - Carers' support group – older adult (36)
 - Short-term breaks / respite care services (431)

Outpatient clinics provide assessment, treatment and review by psychiatrists and senior registrars (and staff acting under their supervision) for people not under the supervision of another part of the mental health system (i.e. who are not inpatients, not in day hospitals, not in Community Mental Health Teams, etc.). They can be based in a hospital or an alternative setting.

Community forensic service teams work with people with a mental health problem and a history of offending (or who are at risk of offending) but who are not in mental health forensic units. Prison in-reach teams offer prisoners the same sort of care as they would have in the community from a Community Mental Health Team. Criminal justice liaison and diversion services include a range of schemes operating with the police or courts; they work with people with mental health problems who come into contact with the criminal justice system.

Accommodation services

The category of 'accommodation services' covers live-in supported housing options, where the 'support' in question is assistance with the tasks of day-to-day living, rather than nursing care. If the services were to be offering ongoing nursing care, they would be designated 'continuing care' services.

It is the fourth-largest group of services in adult secondary and tertiary care, accounting for 13 per cent of staff (18,012). This is particularly due to the high numbers of staff working in specialist older adult accommodation services (7,103).

The specific services are (brackets give staff numbers):

- General and working age adult services:
 - Care home (4,478)
 - Supported housing (4,128)
 - Hostel (579)
 - Staffed group home (516)
 - Adult / family placement scheme (167)
 - Unstaffed group home (102)
 - And a catch-all category of 'other' accommodation (521)⁴¹.
- Specialist older adult services:
 - Care home (7,103)
 - Extra care housing (310)
 - Sheltered housing scheme (108)

⁴¹ This includes board and lodgings schemes, but in practice there are very few of these.

Most of these housing options are staffed by support care workers (around two-thirds of all staff across the category of accommodation services). They can be provided by voluntary or private organisations, or by the local authority itself.

Child and Adolescent Services

Generally when Child and Adolescent Mental Health Services (CAMHS) are discussed, this means the specialist CAMHS services labelled as Tiers 2-4:

- Tier 2: a range of professionals (psychologists, paediatricians, nurses and psychiatrists) who work individually, offering consultation, assessment and treatment.
- Tier 3: secondary services for more severe, complex and persistent disorders, usually working in teams or clinics.
- Tier 4: tertiary services for those who are severely ill or at suicidal risk, including day units, inpatient units, and highly specialised outpatient teams.

Of course, there are also a wide range of other people who work with children – such as teachers, health visitors and GPs – who handle the bulk of less severe problems; as such, they are sometimes referred to as Tier 1 of CAMHS. However, specific data on these groups is not collected. The only data that is collected about CAMHS primary care provision is the number of primary care mental health workers, which is 617 staff (Barnes et al, 2007).

Within the specialist Tiers 2-4, a total of 9,716 staff are employed. Services are categorised as follows (brackets give staff numbers)⁴²:

- Tiers 2 and 3:
 - Generic multi team (5,180)
 - Generic single team (289)
 - Targeted teams (1,636)
 - Dedicated teams/staff (335)
- Tier 4 (2,276)

Generic teams are teams that provide for a wide range of problems in a defined geographic area. ‘Multi’ teams include a mix of professional types, while ‘single’ teams only have staff with one clinical profession or discipline (often therapists). Targeted teams are those which focus on specific subsets of problems. Dedicated teams or staff are specialist staff embedded in settings with a non-mental health focus, such as youth offending teams or specialist education.

A substantial proportion of the time of Tiers 2-3 is spent in supporting Tier 1 work; including providing advice, consultation, supervision and training. Across all clinical staff types, around a tenth of time was spent on this (Barnes et al, 2007).

⁴² Data source: CAMHS Service Map 2008 (Barnes et al, 2007). This total excludes the 617 staff who are designated primary care mental health workers. It has been assumed that these 617 staff are spread across generic multi teams and generic single teams in the same ratio as the overall staffing of these teams – that is, 95 per cent in generic multi teams (586), and 5 per cent in generic single teams (31).

Tier 4 services are for cases whose treatment or care require more than can be provided in weekly or twice-weekly sessions. Their services can be whole or half day, inpatient, or outreach based.

Table 10 details the distribution of staff types across Tiers 2-4.

Table 10: Staff in CAMHS services by occupation

Staff group	Staff FTE	Staff %
Nurses	2,268	23.3
Doctors	1,141	11.7
Clinical psychologists	1,147	11.8
Educational psychologists	49	0.5
Social workers	657	6.8
Psychotherapists	265	2.7
Occupational therapists	177	1.8
Family therapists	325	3.3
Other qualified therapists	342	3.5
Other qualified staff	353	3.6
Other unqualified staff	280	2.9
Management staff	314	3.2
Administrative staff	1,557	16.0
Other staff	839	8.6
<i>Total</i>	<i>9,716</i>	<i>100</i>

Source: Barnes et al, 2007.

Patient caseloads

Thus far this report has looked at overall treatment patterns for people with mental health problems (Part I) and at the types of services and their staffing (Part II). An obvious further question is: what are the specific caseloads for each type of service?

The degree to which such information is available varies by service. Further, it is unclear how reliable much of the available information is. For example, the service mapping exercise asks services to report on their caseloads, but it appears that many services do not do so or do not do it accurately, leading to implausible findings such as that staff members of crisis resolution home treatment teams each see an average of two patients per year (PSSRU, 2008)⁴³.

In an attempt to address this situation, a new data collection system was begun in 2003, with the resulting database being known as the Mental Health Minimum Data Set (MHMDS). In theory, the MHMDS collects together all patient records across all NHS-provided secondary and tertiary services, and should allow the tracking of an individual's pathway across services. In practice, a great deal of data is not yet able to be released due to poor data quality.⁴⁴

⁴³ If one does wish to look at the data on caseloads that can be derived from the service mapping exercise, the best sources are PSSRU (2008) for the adult and older adult maps, and Barnes et al (2007) for the child and adolescent map.

⁴⁴ Data not yet able to be released includes figures on diagnoses, specific treatments, and contacts with some community and outpatient services, for example day care services. It is also not yet possible to track patients accurately either within or across services.

In 2008 an initial set of limited ‘experimental’ statistics were released (TIC, 2008c). Key findings for the 2006/07 period included:

- Over 1.1 million people in contact with NHS specialist mental services – one in fifty of the population of England.
- Around eight in ten (936,600) of these people had contact with services that did not include time as hospital inpatients.
- Around one in ten of these people, 106,600 people, spent time as an inpatient (one in four of those - 28,200 - were compulsorily detained⁴⁵).
- Around one in ten of these people did not have any specific direct contacts with services recorded. It is unclear whether this is an over-count – it may be they did have contacts that were not accurately recorded; or it may be that they should have been removed from administrative databases but this was not done.

One traditional way of measuring inpatient activity is to look at the average number of daily occupied beds. The MHMDS found 22,100 average daily occupied beds. Comparing this with other data sources – particularly the Count Me In Census, and KHO3 returns - suggests this is an undercount. In 2005-06 (the last year on which data from all three sources was available), the MHMDS captured just over 90 per cent of the beds found in the other two data sources.⁴⁶

There were some further details in the MHMDS for community and outpatient contacts in 2006/07⁴⁷, including:

- 4.8m patient contacts by community psychiatric nurses
- 1.6m patient contacts by consultant psychiatrists
- 1.1m patient contacts by occupational therapists
- 0.9m patient contacts by social workers
- 0.7m patient contacts by clinical psychologists.

One area where the experimental MHMDS data was able to provide some detail is on the use of the Care Programme Approach (CPA). While the CPA is intended to apply to all people who are in contact with secondary and tertiary mental health services, the data shows only about a third of all service users are actually on the CPA. It is unclear whether this low proportion is due to data quality problems or is an accurate reflection of the use of the CPA.

The MHMDS does not cover mental health services provided by local authority social service teams⁴⁸. There is some separate information available on this (TIC, 2008a); for 2006/07 there were:

⁴⁵ It should be noted that the MHMDS is not a good guide to absolute numbers of patients compulsorily detained; this is because it does not collect information from independent hospitals and learning disability services. (Also, it looks at the number of individuals detained during the year, whereas other sources look at the number of detentions during the year and will count an individual multiple times if they have multiple admissions during the year). The most reliable source for absolute numbers is the data derived from the annual KP90 return, which for 2006/07 found 48,083 formal detentions (TIC, 2007b).

⁴⁶ It should also be noted that ‘average daily occupied beds’ does not equal the total number of beds available (occupied or not). The KHO3 returns from 2005-06 suggest that around 14 per cent of available beds are unoccupied at any one time.

⁴⁷ Note that this indicates the total volume of activity, not the individual number of people seen (i.e. one person might be counted multiple times).

- 109,000 new social care assessments (15% of these were for dementia)
- 256,000 clients receiving community-based services
- 5,100 clients receiving local authority provided residential services
- 40,000 clients receiving independently provided residential services
- 20,000 clients in nursing care homes.
- 21% of services were for dementia.

⁴⁸ The MHMDS also does not cover services provided by independent and voluntary sector organisations – notably, this includes high secure psychiatric hospitals. There is alternative data on this also, see Rutherford and Duggan (2007) and Ministry of Justice (2009).

Part III: The Cost

Cost of Services

No single data source gives a complete picture of spending on mental health services. Therefore, an estimate has to be pieced together from a range of sources.

Here we go through the various key sources of spending information, piecing together the overall picture. The total arrived at is £14.60b. This is composed of the following key elements: GP services £2.12b, other health services £9.13b, and social services of £3.35b. There are two main sources of financial information: Department of Health expenditure outturn figures on NHS spending and on personal social services spending; and a ‘financial mapping’ exercise carried out annually.

Government NHS services expenditure

The 2006/07 NHS spend on mental health was £9.13b⁴⁹ (Department of Health, 2008a), excluding GP service costs.

This covers services for all ages. It is known that 8 per cent of this goes to child and adolescent mental health (£0.72b)⁵⁰. The remaining 92 per cent, or £8.38b, goes to working age adults and older adults (those aged 65 and over)⁵¹. It includes medication, which costs £0.71b (TIC, 2008d)⁵².

To arrive at total health spending, we need to add in also the amount spent on GP costs. As is discussed in more detail in Part II, it is estimated that 30 per cent of GP consultations are for mental health problems. On this basis, one can estimate that 30 per cent of the cost of GP services is due to mental health problems; since the total cost of GP services in 2006/07 was £7.26b this suggests a mental-health-related spend of £2.12b (Department of Health, 2008a; SCMH, 2003b).

This gives us the total NHS services spending of £11.24b. This total is 13 per cent of the gross NHS operating costs (£84.19b in 2006/07 (Department of Health, 2008a)).

Government social services budget

For working age adults with mental health needs the 2006/07 spend on social services was £0.99b (Department of Health, 2008a). Approximately a third of this total is spent on each of

⁴⁹ This is the gross expenditure calculated on a programme budgeting basis (also known as the ‘Resource Account Budgeting’ or RAB expenditure).

⁵⁰ Figure supplied by the Care Services Improvement Partnership at the Department of Health, drawing on detailed RAB expenditure figures.

⁵¹ Unfortunately it is not possible from the data to separate out spending on each of these two adult groups. This is because older adults use both services which specialise in older age patients only, and services which are open to adults of all ages, and the latter do not consistently collect data on the ages of patients.

⁵² The cost of mental health medication is calculated as: the sum of the ‘net ingredients costs’ of medications falling into the following categories of the British National Formulary: ‘Hypnotics and anxiolytics’ (4.1) £61.72m, ‘Drugs used in psychoses and related disorders’ (4.2) £269.61m, ‘Antidepressants’ (4.3) £276.11m, ‘CNS [Central Nervous System] stimulants and other drugs for attention deficit disorder’ (4.4) £33.43m and ‘Drugs for dementia’ (4.11) £70.42m. The selection of categories is based on the approach of the Scottish NHS, detailed in ISD Scotland (2007).

assessment and care management, residential care, and non-residential care (House of Commons Health Committee, 2008).

For older adults, spending on social services due to mental health needs is not known, because government data does not disaggregate the spending on older adults by the need being met. We estimate as a minimum of £2.36b. This estimate is calculated as follows⁵³: it is known that from 50-80 per cent of people in residential care for older people suffer from dementia (Knapp et al, 2007); taking the lower bound of 50 per cent, and with the simplifying assumption that the dementia is the central need being met, this suggests spending of at least £2.36b (50 per cent of the total expenditure on residential care for older people, which was £4.71b in 2006/07 (House of Commons Health Committee, 2008)). This estimate does not even take account of the costs of assessment and care management, and the costs of non-residential care, so it may underestimate the true total.

Government learning disabilities budget

Generally, spending on services for people with learning disabilities is not included in calculations of the total spend on mental health problems. But the key spending figures are given here to provide a counterpoint to the mental health spend, and because some mental health trusts also provide services for people with learning disabilities and so the information may be of interest.

In 2006/07, £2.49b was spent on NHS services for this group of people; a further £3.12b was spent by local authorities on social services for them (Department of Health 2008a).

Financial mapping of mental health services

The alternative source of information on government mental health spending is the ‘financial mapping’ exercises carried out annually, as part of the Department of Health’s ‘autumn review’ process. They consist of each local area filling out a survey on their intended annual spending and submitting financial files, in categories that mimic those used in the related ‘service mapping’ exercises. Both health services (funded through the NHS) and social services (funded through local authorities) are included. Only services provided through local commissioning are included – those which are funded centrally, such as high security psychiatric hospitals, are excluded⁵⁴.

The financial mapping exercise is not a good source for data on overall spending. This is partly because it does not cover central spending, and partly because it does not yet provide information on services specialising in older adults (this information has begun to be collected but is not yet publicly available). However, it is extremely useful for understanding the finer grain of working age and general adult mental health services, giving detailed breakdowns of the distribution of spending between types of services, who commissions services, and who provides services. The following sections cover these topics.

⁵³ With thanks to Martin Knapp for suggesting this approach.

⁵⁴ The expenditure on high security psychiatric hospitals in 2005/06 was £0.23b (Warner, 2006).

The distribution of spending across types of mental health services

Table 11 below shows how mental health spending, as captured in the working age adult financial mapping exercise, breaks down between different service types⁵⁵. Please note this only includes direct service spending⁵⁶.

Table 11: Spending on adult mental health (excluding specialised older adult services) by service types

Service	Spend (£m)	Spend as % of total
Ward-based and live-in services		
▪ Inpatient clinical services	777	17.3
▪ Secure or high dependency inpatient services	860	19.2
▪ Continuing care services	497	11.1
Community-based and hospital outpatient services		
▪ Community Mental Health Team	667	14.9
▪ Specialised community-based teams (AO, EIP, CRHT)	408	9.1
▪ Crisis and emergency services (acute sector)	64	1.4
▪ Social support services	310	6.9
▪ Psychological therapy	161	3.6
▪ Other community and/or hospital specialist services	270	6.0
Specialists in primary care services (excluding psychological therapy) ⁵⁷	44	1.0
Accommodation services	429	9.6
Total	4,488	100

Source: Mental Health Strategies (2008).

There is only a small amount of information available on the breakdown of services for children and adolescents. In 2007/08, the total expenditure captured by the CAMHS mapping exercise was £0.57b. Of this, 74 per cent (£0.42b) was known to go to services in tiers 2 and 3; 19 per cent (£0.11b) went to tier 4 services; and the balance could not be disaggregated (Barnes et al, 2007).

Who commissions and who provides

The NHS is responsible for most commissioning of mental health services. The working age and general adult financial mapping exercise shows that 82 per cent of spending was

⁵⁵ Note that the foregoing sections have used mapping data from 2006/07 in order to remain consistent with, and allow comparison to, the latest available Department of Health expenditure data. However from this point forward all references to mapping data use 2007/08 data, in order to get the most recent picture possible of the details of spending across types of services.

⁵⁶ Direct service spending is 81 per cent of the total spend included in the financial mapping; the remaining 19 per cent of spending goes on indirect costs, overheads, and capital charges, and is not allocated to specific service types.

⁵⁷ Note that this category differs somewhat from that used in the service mapping and in Part II of this report. In the financial mapping it includes only Primary Care Mental Health Workers, while in the service mapping it includes a slightly wider range of services.

commissioned by the NHS, and 18 per cent by local authorities⁵⁸. Table 12 below shows a more detailed breakdown of who commissions specific services⁵⁹.

Table 12: Commissioning adult mental health services

Service	% of commissioning that is the responsibility of:	
	NHS	Local authorities
Access and crisis services	86	14
Accommodation	27	27
Carer's services	28	72
Clinical services	99	1
CMHTs	73	27
Continuing care	87	13
Day services	39	61
Direct payment	17	83
Home support	24	76
Mental health promotion	84	16
Mentally disordered offenders	89	11
Other community and hospital professionals	86	14
Personality disorder services	100	-
Psychological therapy	99	1
Secure and high dependency services	99	1
Support services	59	41

Source: Mental Health Strategies (2008)

The NHS is also the main provider of services, at 70 per cent; it is followed by the non-statutory sector who provide 22 per cent of services, and finally local authorities who provide 8 per cent. Table 13 below details this further⁶⁰.

⁵⁸ Around 13 per cent of services are only part-funded by their main commissioning body (i.e. by the NHS or by the local authority). The remainder of their funding might come from the remaining body, or it may come from external sources (e.g. charitable donations; user fees) – further detail is not available.

⁵⁹ Table 12 groups services in a slightly different manner than is done elsewhere in this report (e.g. in Table 11 above, or in Part II). This is due to limitations in the published data.

⁶⁰ Table 13 groups services in a slightly different manner than is done elsewhere in this report (e.g. in Table 11 above, or in Part II). This is due to limitations in the published data.

Table 13: Providing adult mental health services

Service	% of provision done by:		
	NHS	Social services	Non-statutory providers
Access and crisis services	87	11	2
Accommodation	11	20	69
Carer's services	12	34	54
Clinical services	94	-	6
CMHTs	80	19	1
Continuing care	46	2	52
Day services	27	31	42
Direct payment	7	34	59
Home support	10	29	61
Mental health promotion	51	10	39
Mentally disordered offenders	76	8	16
Other community and hospital professionals	80	8	12
Personality disorder services	77	-	23
Psychological therapy	90	-	10
Secure and high dependency services	66	1	33
Support services	15	11	74

Source: Mental Health Strategies (2008)

Such detailed breakdowns are not available for services for children and young adults, though it is known that 80 per cent of CAMHS spending is commissioned by the NHS (Barnes et al, 2007).

Alternative estimations of total spend

Because of the difficulties in using official spending data to determine the amount spent on mental health problems, other attempts have been made to estimate the total spend.

These analyses usually model expected spending from scratch. They begin with known patterns of service use by different population subgroups (e.g. by age group; or by mental health condition). The next step is to construct information on the typical service package which would be received by each person who is actively receiving services. Finally, the treatment patterns are costed. In this way, a picture is built up of the estimated total spend. Of course such estimates are only as good as the survey evidence and analyses they are based on; for some subgroups relatively full national information is available, while for others the estimates might have to rely on a small-scale survey conducted ten years earlier as the only existing source of detailed information⁶¹.

The most recent example of this type of modelling exercise which seeks to give a comprehensive overview of the totality of mental health spending is the 'Paying the Price' report commissioned by the King's Fund (McCrone et al, 2008). This report modelled

⁶¹ Some of the key recent publications collecting together information on the unit costs for different types of services are PSSRU (2008), Department of Health (2008a), and Kendrick et al (2006).

existing spending in 2007 and concluded that direct services costs (NHS and social care) were about £16.13b.

Such modelling allows estimation of the relative service costs for different mental illnesses, and for different demographic groups. One of the key findings of McCrone et al (2008) is that dementia accounts for the largest proportion of mental health spending (60 per cent), largely due to high residential care costs.

Is the funding sufficient to meet needs?

The key analysis of this issue is by Boardman and Parsonage (2007), published by the Sainsbury Centre for Mental Health.

Boardman and Parsonage look at each of the care standards in the National Service Framework, and use prevalence data and known patterns of service use to calculate the numbers of people each applies to. They then use DoH guidance on implementing each of the standards, and actual implementation patterns, to calculate the staff and services required.

At the time, they concluded that an increase in staffing of 38.4 per cent was needed (together with a proportionate increase in non-pay costs; they assume that pay accounts for three-quarters of the total mental health spend). Converting this into funding terms, they find that an increase in funding of 53 per cent would be needed to achieve the NSF standards (from a 2005/06 baseline). Looking at the likely spending patterns until 2010/11 (the year when the NSF is concluded) they argue that funded capacity for adult mental health care would be at around 80 per cent of its required level. A revised projection incorporating actual spending information from 2006/07 and 2007/08 lowered the estimate slightly to 77.5 per cent (SCMH, 2008).

Wider Cost

The actual cost to society of mental health problems is wider than just the amount spent by government to provide health and social care services. Wider costs which have been examined in the literature include those related to lost employment potential, the loss in quality of life for sufferers, and the costs of services provided by unpaid carers. There is no single accepted approach to how one should present these costs in economic terms, or which costs should be included.

The report by McCrone et al (2008) discussed above estimates full economic costs by adding two further costs to the direct service costs: an allowance for the costs of informal care; and an estimate of earnings lost through non-employment. The former they estimate at £6.4b, the latter at £26.1b. Their estimate of the full economic cost in 2007 is thus £48.6b – which is approximately three times the direct service cost.

A well-known earlier attempt to capture the full economic costs of mental illness is the analysis by the Sainsbury Centre for Mental Health (2003a). It begins with public expenditure on mental health services, and adds to this private expenditure on mental health services, and the cost of informal care, to derive the total health and social care cost. Then it estimates the output losses, including those related to sickness absence, non-employment, effects on unpaid employment, and those related to premature mortality. Finally, it estimates the ‘human cost’ of mental illness, i.e. the loss in quality of life, in economic terms. The final

estimate of the full economic cost in 2002/03 is thus £77.4b – approximately six times the health services and social care services cost. More than half the total cost is due to the ‘human cost’; if one excludes this and looks only at spending (including informal care) and output losses, the Sainsbury Centre estimate is similar to that of McCrone et al (2008).

Layard et al (2007) build on the Sainsbury Centre analysis to argue that increased provision of psychological therapy services would be cost-saving to the Exchequer when set against the total cost to the Exchequer of lost employment (i.e. benefits paid out and reduction in taxes received).

Appendix A: Measurement Issues in Determining the Number in Need

There are two main taxonomies of mental disorders in common use – the World Health Organisation’s International Classification of Disease, tenth edition (the ICD-10), and the American Psychiatric Association’s Diagnostic and Statistical Manual, fourth edition (DSM-4). These two taxonomies have differences in the diagnoses available and also in how one distinguishes between a person being a ‘case’ (suffering from a mental health problem) or ‘not a case’ (not suffering from any problem).

Adding to the complexity, there are different methods of assessment. The ‘gold standard’ is by clinical interview – that is, a detailed interview, conducted by someone trained to a high level (normally a psychiatrist) who gives a diagnosis based on the interview and their own knowledge and training. This method is often used in specialised mental health services. The alternative assessment method is to use a structured assessment instrument – a standardised set of questions which assign diagnoses based scores derived from the patient’s answers. This can be administered by a person with no specific mental health training, or self-administered, because both the questions to be asked and the way to interpret the answers are pre-specified. Because structured assessment instruments are less resource-intensive (they take less time and can be administered by a wider range of people) there are the method generally used in national surveys of mental health.

Due to their relative simplicity, structured assessment instruments cannot give as precise a diagnosis as is possible via clinical interview. Because of this, most structured assessment instruments have their own set of diagnostic categories; these overlap with but are not strictly equivalent to the more detailed taxonomies. Further, instruments are often more generous in assigning ‘case’ status than clinical interviews are – that is, more people are diagnosed with a mental health problem than would be if clinical interviews were used (King et al, 2003:128). Because of this, interpretation of the results of structured assessment instruments sometimes talk about two types of ‘cases’: firstly, all those who the instrument finds to be a case; and secondly a subset whose symptoms are severe enough that they have a ‘clinically significant’ level of distress (symptoms of a severity requiring active treatment by a specialist).

The end result of these intricacies of diagnosis is a lack of clarity on the number of people who suffer from mental health problems: it will vary depending on the taxonomic system used and on the method used to conduct the assessment.

Statistics vary, of course, according to the time period under examination. Most surveys look at the number of people who are ill at one point in time, for example during the fortnight that a survey is being conducted (this is called a period prevalence). If you widen the period of time under examination, for example to a year (called an annual prevalence), you will find more ill people. This is because you include both all the people ill during the shorter period and add all the people who become ill over the course of the longer time period. A third approach is to look only at the onset rate; this is the number of people who become ill over a set time period (excluding those who are already ill at the start of the period).

Bibliography

Association of Public Health Observatories (APHO) (2007), *Indications of Public Health in the English Regions 7: Mental Health*, York: APHO.

Barnes, D., Hall, J., and Evans, R. (2008), *Survey of the Current Provision of Psychological Therapy Services in Primary Care in the UK*, London: Artemis Trust.

Barnes, D., Parker, E., Wistow, R., Dean, R. and Thomson, C. (2007), *A Profile of Child Health, Child and Adolescent Mental Health and Maternity Services in England 2007*, Durham: Durham University School of Applied Social Sciences.

Beecham, J., Knapp, M., Fernandez, J., Huxley, P., Mangalore, R., McCrone, P., Snell, T., Winter, B. and Wittenberg, R. (2008), 'Age Discrimination in Mental Health Services', PSSRU Discussion Paper No. 2536.

Boardman, J., Henshaw, C. and Willmott, S. (2004), 'Needs for Mental Health Treatment Among General Practice Attenders', *British Journal of Psychiatry*, 185: 318-327.

Boardman, J., Henshaw, C. and Willmott, S. (2008), 'Surveying the Needs for Mental Health Treatment in Primary Care – the MiCK Study', Mimeo (received from Boardman, 15 May 2008).

Boardman, J. and Parsonage, M. (2007), *Delivering the Government's Mental Health Policies – Services, Staffing and Cost*, London: Sainsbury Centre for Mental Health.

Department of Health (DH) (1999), *National Service Framework for Mental Health*, London: DH.

DH (2002), *Mental Health Policy Implementation Guide: Dual Diagnosis Good Practice Guide*, London: DH.

DH (2008a), *Department of Health departmental report 2008 – The health and personal social services programmes* London: DH.

DH (2008b), *Reference Costs 2006/07*, London: DH.

DH (2009), *New Horizons: A Shared Vision for Mental Health*, London: DH.

Deverill, C. and King, M (2009), 'Common Mental Disorders', in S. McManus, H. Meltzer, T. Brugha, P. Bebbington and R. Jenkins (eds), *Adult Psychiatric Morbidity in England, 2007 – Results of a Household Survey*, Leeds: The NHS Information Centre for Health and Social Care (25-52).

Glover, G., Barnes, D., Wistow, R. and Bradley, S. (2004), *Mental Health Service Provision for Working Age Adults in England 2003*, Durham: Centre for Public Mental Health, University of Durham.

Goldberg, D. P. and Huxley, P. J. (1980), *Mental Illness in the Community – The Pathway to Psychiatric Care*, London: Tavistock.

Goldberg, D. and Goodyer, I. (2005), *The Origins and course of Common Mental Disorders*, Hove: Routledge.

Gournay, K. (1999), 'Future Role of the Nurse in Primary Mental Health Care', in M. Tansella and G. Thornicroft (eds.), *Common Mental Disorders in Primary Care: Essays in Honour of Professor Sir David Goldberg*, London: Routledge (92-101).

Gournay, K. (2000), 'Role of the Community Psychiatric Nurse in the Management of Schizophrenia', *Advances in Psychiatric Treatment*, 6: 243-251.

Gournay, K (2005), 'The Changing Face of Psychiatric Nursing', *Advances in Psychiatric Treatment*, 11: 6-11.

Gray, R., Parr, A., Plummer, S., Sandford, T., Ritter, S., Mundt-Leach, R., Goldberg, D. and Gournay, K. (2001), 'A National Survey of Practice Nurse Involvement in mental Health Interventions', *Journal of Advanced Nursing*, 30(4): 901-906.

Green, H., McGinnity, A., Meltzer, H., Ford, T. and Goodman, R. (2005), *Mental Health of Children and Young People in Great Britain, 2004*, London: Office for National Statistics.

Healthcare Commission (2009), *Equality in Later Life: A National Study of Older People's Mental Health Services*, London: Commission for Healthcare Audit and Inspection.

Hippisley-Cox, J., Fenty, J. and Heaps, M. (2007), *Trends in Consultation Rates in General Practice 1995 to 2006: Analysis of the QRESEARCH Database – Final Report to the Information Centre and Department of Health*, London: The NHS Information Centre for Health and Social Care and QRESEARCH.

House of Commons Health Committee (2008), *Public Expenditure on Health and Personal Social Services 2008 – Memorandum Received from the Department of Health Containing Replies to a Written Questionnaire from the Committee*, HC 1190 London: The Stationary Office.

ISD Scotland (Information Services, NHS National Services Scotland) (2007), *Medicines Used in Mental Health*, Statistical Publication Notice 18 December 2007.

Kendrick, T., Simons, L., Mynors-Wallis, L., Gray, A., Lathlean, J., Pickering, R., Harris, S., Rivero-Arias, O., Gerard, K. and Thompson, C. (2006), 'Cost-Effectiveness of Referral for Generic Care or Problem-Solving Treatment from Community Mental Health Nurses, Compared with Usual General Practitioner Care for Common Mental Disorders', *British Journal of Psychiatry*, 189: 50-59.

King, M., Bebbington, P. and Nur, U. (2003), 'Treatment', in N. Singleton and G. Lewis (eds), *Better or Worse: A Longitudinal Study of the Mental Health of Adults Living in Private Households in Great Britain*, London: The Stationary Office and the Office for National Statistics (31-44).

Knapp, M., Prince, M., Albanese, E., Banerjee, S., Dhanasiri, S., Fernandez, J., Ferri, C., McCrone, P., Snell, T. and Stewart, R. (2007), *Dementia UK: A Report into the Prevalence and Cost of Dementia Prepared by the Personal Social Services Research Unit (PSSRU) at*

the London School of Economics and the Institute of Psychiatry at King's College London, for the Alzheimer's Society, London: Alzheimer's Society.

Layard, R., Clark, D., Knapp, M. and Mayraz, G. (2007), 'Cost-Benefit Analysis of Psychological Therapy', *National Institute Economic Review*, 202: 90-98.

Lewis, G. (2003), 'Recovery from Common Mental Disorders', in N. Singleton and G. Lewis (eds), *Better or Worse: A Longitudinal Study of the Mental Health of Adults Living in Private Households in Great Britain*, London: The Stationary Office and the Office for National Statistics (31-44).

MACA (Mental Health after Care Association) (1999), *First National GP Survey of Mental Health in Primary Care*, London: MACA.

McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton-Smith, S. (2008), *Paying the Price: The Cost of Mental Health Care in England to 2026*, London: Kings Fund.

McEvoy, P., Colgan, S. and Richards, D. (2002), 'Gatekeeping Access to Community Mental Health Teams', *Psychiatric Bulletin*, 26: 56-58.

McManus, S., Meltzer, H., Brugha, T., Bebbington, P. and Jenkins, R. (2009), *Adult Psychiatric Morbidity in England, 2007 – Results of a Household Survey*, Leeds: The NHS Information Centre for Health and Social Care.

Mental Health Strategies (2008), *The 2007/08 National Survey of investment in Mental Health Services*, London: Department of Health.

Ministry of Justice (2009), *Statistics of Mentally Disordered Offenders 2007 England and Wales*, London: Ministry of Justice.

NHS Centre for Reviews and Dissemination (2001), 'Counselling in Primary Care', *Effectiveness Matters*, 5(2).

PSSRU (Personal Social Services Research Unit) (2008), *Unit Costs of Health and Social Care 2008*, Canterbury: Personal Social Services Research Unit, University of Kent.

Rutherford, M. and Duggan, S. (2007), *Forensic Mental Health Services: Facts and Figures on Current Provision*, London: The Sainsbury Centre for Mental Health.

Sainsbury Centre for Mental Health (SCMH) (2003a), *Money for Mental Health – A Review of Public Spending on Mental Health Care*, London: SCMH.

SCMH (2003b), *The Economic and Social Costs of Mental Illness – Policy Paper 3*, London: SCMH.

SCMH (2008), *Spending on adult mental health services in England – An update on the calculations features in 'Delivering the government's mental health policies' (published in January 2007)*, London: SCMH.

Sargeant, J.K., Bruce, M. L., Florio, L. P. and Weissman, M. M. (1990), 'Factors Associated with 1-year Outcome of Major Depression in the Community', Archives of General Psychiatry, 47: 519-527.

Singleton, N., Bumpstead, R., O'Brien, M., Lee, A. and Meltzer, H. (2001), *Psychiatric Morbidity Among Adults Living in Private Households, 2000*, London: The Stationary Office and the Office for National Statistics.

Spijker, J., Bijl, R. V., de Graaf, R. and Nolen, W. A. (2001), Determinants of Poor 1-Year Outcome of DSM-III-R Major Depression in the General Population: Results of the Netherlands Mental Health Survey and Incidence Study (NEMESIS), Acta Psychiatrica Scandinavica, 103: 122-130.

TIC (The NHS Information Centre) (2007a), *2006/07 UK General Practice Workload Survey*, Leeds: TIC.

TIC (2007b), *Inpatients Formally Detained in Hospitals Under the Mental Health Act 1983 and Other Legislation, NHS Trusts, Care Trusts, Primary Care Trusts and Independent Hospitals, England: 1996-97 to 2006-07*. Leeds: TIC.

TIC (2007c), *National Quality and Outcomes Framework Statistics for England 2006/07*, (Bulletin IC 2007 13), Leeds: TIC.

TIC (2008a), *Community Care Statistics 2007-08: Referrals, Assessments and Packages of Care for Adults, England: National Summary*, Leeds: TIC.

TIC (2008b), *General and Personal Medical Services – England – 1997-2007*, Leeds: TIC.

TIC (2008c), *Mental Health Bulletin: First Report and Experimental Statistics from Mental Health Minimum Dataset (MHMDS) Annual Returns, 2003-2007*, Leeds: TIC.

TIC (2008d), *Prescription Costs Analysis: England 2007*, Leeds: TIC.

TIC (2009), *Investment in General Practice 2003/04 to 2007/08 England, Wales and Northern Ireland*, London: TIC.

Ustun, T. B. and Sartorius, N. (1995), *Mental Illness in General Health Care*, Chichester: Wiley.

Verhaak, P. F. M., van den Brink-Muinen, A., Bensing, J. M. and Gask, L. (2004), 'Demand and Supply for Psychological Help in General Practice in Different European Countries', European Journal of Public Health, 14: 134-140.

Warner, Lord (2006), House of Lords Hansard Written Answers for 22 June 2006 – Prisoners: Medical Treatment – question HL6245.

Website for Rampton high secure psychiatric hospital, accessed October 2009: <http://www.nottinghamshirehealthcare.nhs.uk/our-services/forensic-services/rampton-hospital/>

Winterton, R. (2005), House of Commons Hansard Written Answers for 26 Jan 2005 (pt 21)
– Special Hospitals – question 210899.

CENTRE FOR ECONOMIC PERFORMANCE
Recent Discussion Papers

- | | | |
|-----|---|--|
| 995 | Kristian Behrens
Gregory Corcos
Giordano Miron | Trade Crisis? What Trade Crisis? |
| 994 | Stephen Redding | Theories of Heterogeneous Firms and Trade |
| 993 | Jordi Blanes I Vidal
Mirko Draca
Christian Fons Rosen | Revolving Door Lobbyists |
| 992 | Susan Scott
John Van Reenen
Markos Zachariadis | The Impact of the Diffusion of a Financial Innovation on Company Performance: An Analysis of SWIFT Adoption |
| 991 | Sergey Lychagin
Joris Pinkse
Margaret E. Slade
John Van Reenen | Spillovers in Space: Does Geography Matter? |
| 990 | Luis Garicano
Rosa Lastra | Towards a New Architecture for Financial Stability: Seven Principles |
| 989 | David Marsden | The Growth of Extended 'Entry Tournaments' and the Decline of Institutionalised Occupational Labour Markets in Britain |
| 988 | Zack Cooper
Stephen Gibbons
Simon Jones
Alistair McGuire | Does Hospital Competition Improve Efficiency? An Analysis of the Recent Market-Based Reforms to the English NHS |
| 987 | Guy Michaels
Ashwini Natraj
John Van Reenen | Has ICT Polarized Skill Demand? Evidence from Eleven Countries Over 25 Years |
| 986 | J. M. C. Santos Silva
Silvana Tenreyro | Currency Unions in Prospect and Retrospect |
| 985 | Fabian Waldinger | Quality Matters – The Expulsion of Professors and Ph.D. Student Outcomes in Nazi Germany |
| 984 | Brian Bell
Stephen Machin
Francesco Fasani | Crime and Immigration: Evidence from Large Immigrant Waves |
| 983 | Nicholas Bloom
Carol Propper
Stephan Seiler
John Van Reenen | The Impact of Competition on Management Quality: Evidence from Public Hospitals |

- | | | |
|-----|---|---|
| 982 | Nicholas Bloom
John Van Reenen | Human Resource Management and Productivity |
| 981 | Alan Manning | Imperfect Competition in the Labour Market |
| 980 | Ana Fernandes
Heiwai Tang | The Determinants of Vertical Integration in Export Processing: Theory and Evidence from China |
| 979 | Stephen Machin
Olivier Marie
Sunčica Vujić | The Crime Reducing Effect of Education |
| 978 | Andrew B. Bernard
J. Bradford Jensen
Stephen Redding
Peter K. Schott | Intra-Firm Trade and Product Contractibility (Long Version) |
| 977 | Albrecht Ritschl
Samad Sarferaz | Crisis? What Crisis? Currency vs Banking in the Financial Crisis of 1931 |
| 976 | Joshua D. Angrist
Jörn-Steffen Pischke | The Credibility Revolution in Empirical Economics: How Better Research Design is taking the Con out of Econometrics |
| 975 | Holger Breinlich
Alejandro Cuñat | Trade Liberalization and Heterogeneous Firm Models: An Evaluation Using the Canada – US Free Trade Agreement |
| 974 | Facundo Alborno
Hector Calvo-Pardo
Gregory Corcos
Emanuel Ornelas | Sequential Exporting |
| 973 | Marco Fugazza
Frédéric Robert-Nicoud | The ‘Emulator Effect’ of the Uruguay Round on US Regionalism |
| 972 | Andreas Georgiadis
Christos N. Pitelis | The Interrelationship between HR, Strategy and Profitability in Service SMEs: Empirical Evidence from the UK Tourism Hospitality and Leisure Sector |
| 971 | John T. Addison
Alex Bryson
Paulino Teixeira
André Pahnke | Slip Sliding Away: Further Union Decline in Germany and Britain |
| 970 | Nicholas Bloom
Raffaella Sadun
John Van Reenen | Recent Advances in the Empirics of Organizational Economics |