Overview

- The Improving Access to Psychological Therapies for Severe Mental Illness (IAPT SMI) services uses psychological therapies such as Cognitive Behavioural Therapy (CBT) to treat people with psychosis, schizophrenia, bipolar and personality disorders, with the aim of reducing hospitalisation and length of stay, and severity of symptoms;
- The option explored increasing access to IAPT SMI services, based on the model currently delivered at six demonstration sites. Implementing waiting times standards was not considered viable at this point in time, due to lack of evidence because of the infancy of the service;
- Estimated baseline costs: between £1 million and £4 million per year (to provide current service at the six demonstration sites);
- Estimated total cost of national delivery of service: £287 million to £577 million (recurrent) and £23 million to £67 million (non-recurrent), with savings to the NHS of £229 million to £669 million (recurrent);
- Before any implementation of an access standard, we recommend further work to improve the evidence base around the volume of people who would benefit, the type of service to be delivered, and the costs and benefits of such a service to generate a more robust cost/benefit assessment.

Section 1 – Context

1. As stated in the NHS Mandate for 2014/15, “Too often, access to services for people with mental health problems is more restricted and waiting times are longer than for other services, with no robust system of measurement in place even to quantify the scale of the problem. The Department of Health and NHS England are committed to ending this and believe that implementing new access and/or waiting time standards is vital in order to have true parity of esteem. We expect NHS England to work with the Department of Health and other stakeholders to develop a range of costed options in order to implement these standards starting from April 2015, with a phased approach depending on affordability” (paragraph 3.8). This paper is one of a suite of analytical papers examining different options around the measurement and reduction of waiting times or increased access for mental health services.

2. NHS England has a commitment to implementing policy to increase ‘parity of esteem’ of mental health in comparison with physical health. The design and implementation of waiting times standards for mental health, to bring it in line with physical health, would be a significant step towards achieving parity of esteem. It would provide clear expectations for the level of service that the NHS should provide to people with mental health issues in the important aspect of waits for treatment.

3. The Improving Access to Psychological Therapies for Severe Mental Illness (IAPT SMI) project aims to increase access to a range of NICE-recommended therapies, including Cognitive Behavioural Therapy (CBT), for people with psychosis, schizophrenia, bipolar disorder and personality disorders. CBT has been shown to be beneficial in the treatment of depression, anxiety disorders and other conditions, but has been less widely offered or evaluated for with people with schizophrenia and psychoses.

4. It is recognised that CBT is also beneficial for individuals with more severe conditions such as schizophrenia, by helping them cope with unhelpful thoughts and behaviours. However, currently this service is not widely available for people in England. CBT may be helpful in reducing relapse, thus reducing service usage; and may equip individuals with coping mechanisms to return to employment, thus providing wider social and economic benefits.

5. Access to psychological therapies for people with severe mental illness is of concern for both patients and patient organisations. Recent NICE guidelines\(^2\) clearly state that CBT should be provided to people with psychosis and schizophrenia. The guideline covers the treatment and management of psychosis, schizophrenia and related disorders in adults (18 years and older) with onset before age 60 years. It does not address the specific treatment of young people under the age of 18 years; there is a separate NICE guideline that covers the care provided by health and social care services, including child and adolescent mental health services (CAMHS) and early intervention in psychosis services.

6. The Government supports cultural change in the NHS, by encouraging parity of esteem across physical and mental health services. Potential expansion of IAPT SMI not only supports this aim, but also supports improvement of health outcomes for people with SMI, whilst helping to reduce hospitalisation costs.

7. People experiencing psychosis are significant users of mental health services, and use a range of services according to the severity of their symptoms. These are managed in primary care and in secondary mental health services, using crisis services or inpatient stays. Therefore, there is a link between this intervention and the papers considering psychosis and crisis interventions. These may increase, decrease or induce steady state use of IAPT SMI services.

Section 2 – Issue

8. The NHS spent £2 billion on services for people with psychosis in 2012/13. Over half (54%) of this total was devoted to inpatient care. This means that spending is currently skewed

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towards the more expensive parts of the system, at £350 average cost per day for inpatient care, compared with £13 per day in some community settings.

9. A review of evidence of cognitive behavioural therapy for people with schizophrenia, concluded that CBT can reduce the severity of psychiatric symptoms for both those who are taking antipsychotic medications (Wykes et al, 2008), and for those who do not (Morrison et al, 2014). A review undertaken for the recent NICE guidelines found consistent evidence from 19 controlled trials that CBT for people with schizophrenia was effective compared to care as usual in reducing hospitalisation rates for a period of up to 18 months. Time spent in hospital was also an average of eight days shorter. After 12 months, people who had received CBT were more likely to have reduced depressive symptoms and improved social functioning. Individual-level CBT had more robust positive impacts than group-based CBT.

10. Layard et al (2007) estimated that, even after controlling for the ‘natural rate of recovery’ (i.e. the probability that the patient would have recovered without any intervention) as well as for the probability of relapse, patients can expect to live an extra 13 months without mental health problems in the five year following CBT.

11. However, criticism of the NICE guidelines endorsing CBT “to all people with psychosis or schizophrenia” has suggested that as the evidence is not based on randomised controlled trials, the evidence claimed may be biased because of reviewer bias. As psychological therapies are not routinely provided for people with psychosis or personality disorders, at this point the limited evidence makes it difficult to determine whether these criticisms are unfounded. Therefore, for the purpose of this paper we have assumed that the NICE evidence is sufficiently robust to justify exploring the wider use of this service.

12. Six national IAPT-SMI demonstration sites have been set up to provide improved equitable access to psychological therapies to people with psychosis, bipolar disorder and personality disorder. These are:

- **Psychosis:**
  - Lancashire Care NHS Foundation Trust;
  - South London and Maudsley (SLaM) NHS Foundation Trust.

- **Bipolar Disorder:**

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3 Investing in recovery: Making the business case for effective interventions for people with schizophrenia and psychosis, 2014 [http://www.rethink.org/media/1030280/investing%20in%20recovery.pdf](http://www.rethink.org/media/1030280/investing%20in%20recovery.pdf)


8 [http://www.theguardian.com/science/sifting-the-evidence/2014/apr/02/has-cognitive-behavioural-therapy-for-psychosis-been-oversold](http://www.theguardian.com/science/sifting-the-evidence/2014/apr/02/has-cognitive-behavioural-therapy-for-psychosis-been-oversold)

9 [http://bip.rcpsych.org/content/204/1/20](http://bip.rcpsych.org/content/204/1/20)
Birmingham and Solihull Mental Health Foundation Trust in partnership with Spectrum Centre for Mental Health Research - Lancaster University

- **Personality Disorder:**
  - Somerset Partnership NHS Foundation Trust;
  - North East London NHS Foundation Trust;
  - Barnet, Enfield and Haringey Mental Health NHS Trust.

13. The pathfinders were chosen by working with areas interested in providing talking therapies beyond common mental health problems. Their aim is to test the implementation of talking therapies for SMI, including developing Patient Reported Outcome Measures, to provide lessons for a potential broader roll out across England.

14. Currently, outcome monitoring in SMI services is very poor. Therefore, one of the initial aims of the demonstration sites is to transform SMI services so they can move towards high levels of outcome data completeness, to match those achieved in IAPT services for depression and anxiety disorders. Further aims are to develop more appropriate and deliverable care pathways, and improve the capacity of services to offer talking therapy. The specific talking therapies offered depend on the mental health problem – however the principles of routine outcome monitoring, evidence based service design and expanding access to talking therapy apply in all.

15. The demonstration sites are expected to report their finding towards the end of 2014. Funding to continue and expand the services has not yet been secured beyond this. Initial findings from the demonstration sites suggest that there are benefits for patients and the system from the introduction of an IAPT SMI service, in terms of the potential for increased health benefits and reduced hospitalisation

### Section 3 – Options

**Option 1**

16. Do nothing (baseline).

**Option 2**

17. Expand currently delivered model of service at the six (demonstration) sites to provision across England.

### Section 4 – Options Appraisal

**Option 1: Do nothing (baseline)**

**Costs**
18. Currently, IAPT SMI services are only provided at the six demonstration sites above. Therefore, to estimate the current spend on this service, we have used the available preliminary data from three of the six demonstration sites.

19. Information from the Lancashire Psychosis IAPT SMI site shows annual spend on workforce of around £250,000, for approximately 162 referrals per year. Assuming that around 50% of referrals are treated\textsuperscript{10}, the unit cost is of IAPT SMI is around £3,000 per person treated. Lancashire has an area cost-adjustment of one (ie it has exactly average English wage and rent levels).

20. Evidence from the Somerset Personality Disorders IAPT SMI site showed that it spends approximately £915,000 on patients from primary care pathways, and £527,000 on patients from secondary care pathways, which buys treatment for 668 and 200 patients respectively. This gives a unit cost for patients through primary and secondary care pathways of approximately £1,400 and £2,600 respectively. Somerset also has an area cost-adjustment of one. This is not out of line with estimates from the national clinical lead for IAPT SMI personality disorders, ie that they believe treatment of patients with less severe cases of personality disorders costs around £1,700, whilst more serious cases cost around £3,700.

21. Evidence from the South London and Maudsley NHS Foundation Trust (SLaM) showed that it spends around £3,500 (or £3,700 if family interventions are needed) per treated patient. It treated 191 patients over a 14 months period. South London has a 1.1972 cost adjustment index (ie labour and rent costs are 19.72% higher than the England average).

22. Based on information from Lancashire Psychosis IAPT SMI Demonstration Site, Somerset Personality Disorders IAPT SMI site, and South London and Maudsley (SLaM) IAPT-SMI Demonstration Site for Psychosis, we estimate that the cost-adjusted and activity-weighted average cost of IAPT SMI per treated patient ranges between £1,962 and £2,852 depending on whether or not the service accepts patients with personality disorders through primary care routes. The latter figure reflects service users who are already in touch with secondary mental health services (more severe end of the spectrum), while the former one reflects service users whose mental health needs are identified by primary care services (less severe end of the spectrum).

23. The above figures suggest a baseline cost for current provision at three of the six sites of approximately £2 million per year. Therefore, assuming similar costs across the remaining three sites, current costs for the six sites are in the region of £4 million per year. The IAPT project leads believe the sites were originally allocated £1 million to support this service. Therefore, the cost of the current provision of IAPT SMI could be anywhere between £1 million and £4 million.

**Option 2: Introduce national access standard**

**Costs of running the services**

24. Based on clinical advice, we assume that the minimum number of people that will benefit from extending the model of provision at the demonstration sites to a national service is 403,000\textsuperscript{11}. Assuming that people will manage their conditions without requiring extra treatment in the two years following treatment in IAPT-SMI\textsuperscript{12}, and that around 50% of people will not accept the offer of this service\textsuperscript{13}, in our ‘minimum’ scenario we expect around 101,000 people to receive treatment in IAPT SMI each year. This translates into a minimum estimated cost of £287 million\textsuperscript{14} per year.

25. The maximum number of people that would benefit is based on the assumption that IAPT-SMI should cover everyone who has psychosis and/or personality disorders, although we recognise that this may not be realistic. According to the Psychiatric Morbidity Survey (2000), approximately 0.5% of the adult population have some kind of psychosis and approximately 4.4% of the adult population had some kind of personality disorder. Taking into account that a large number of people with psychosis also have some kind of personality disorder\textsuperscript{15}, the proportion of adults with psychosis, a personality disorder, or a combination of the two is 4.53%. This is equivalent of about 1,960,000 people in England.

26. We expect that 30% of this prevalence will require and will seek treatment in IAPT-SMI. This is based on the assumptions that:

- not all of these people will have conditions severe enough to require treatment in IAPT SMI (eg some may receive treatment by their GPs or not receive treatment at all); and
- not all of these people are willing to engage with treatment.

27. Furthermore, as these people do not usually require treatment every year, we assume that only 50% of them (of the 30% of people who seek treatment) will be treated in IAPT-SMI each year following a national roll-out. This translates into 294,000 patients per annum with an estimated cost of £577 million\textsuperscript{16} per year.

Transition costs

\textsuperscript{11} 403,000 is the number of people in Mental Health Care Clusters 5-17 in 2011/12. These clusters include people with the following mental health condition diagnoses: 05: Non-psychotic (very severe); 06: Non-psychotic disorders of over-valued ideas; 07: Enduring non-psychotic disorders (high disability); 08: Non-psychotic chaotic and challenging disorders; 10: First episode psychosis; 11: Ongoing recurrent psychosis (low symptoms); 12: Ongoing or recurrent psychosis (high disability); 13: Ongoing or recurrent psychosis (high symptom and disability); 14: Psychotic crisis; 15: Severe psychotic depression; and 16: Dual diagnosis; 17: Psychosis and affective disorder (difficult to engage).

\textsuperscript{12} We have been told by Dr. Louise Johns, from South London and Maudsley (SLaM) IAPT-SMI Demonstration Site for psychosis (who is also a senior lecturer at the Department of Psychology of Kings College London) that patients who receive treatment by IAPT SMI services are unlikely to return within two years and even after that are more likely to require a ‘booster’ input rather than a full course of treatment.


\textsuperscript{14} Using the £2,852 secondary-care-pathway-only unit cost estimate.

\textsuperscript{15} The PMS 2000 suggests that up to 75% of people with psychosis have a comorbid personality disorder.

\textsuperscript{16} Using the £1,962 unit cost estimate for patients entering through both primary and secondary care pathways.
28. Based on clinical advice from South London and Maudsley (SLaM) IAPT-SMI Demonstration Site for Psychosis, we assume that in our minimum scenario, training costs\(^{17}\) would be around £23 million each year during the roll-out; whereas in our maximum scenario training costs would be around £67 million\(^{18}\) each year during the roll-out.

29. The above estimates are based on the following assumptions:

- the number of people that IAPT-SMI will be applied to, and the maximum scenario is what ideally we would like to happen (recognising that this may not be realistic);
- health benefits and savings from hospitalisation refer to people with schizophrenia; they may differ for people with other SMIs;
- based on the opinion of IAPT-SMI programme leads, we assumed that improving access to CBT among people with serious mental illnesses would not require the training of extra therapists. Instead, they argued that these therapists would be recruited from secondary health services, whose work-load would decrease due to national roll-out of the model.

**Benefits**

30. Knapp et al (2014)\(^{19}\) estimates that CBT for people with psychosis offers a 0.067 larger QALY gain than traditional treatment\(^{20}\) (it does not report its baseline values). This may be evaluated at £60,000, giving a £4,000 additional benefit per patient compared to the traditional treatment. QALYs estimated were incremental comparing usual service and usual service plus CBT. Therefore, they are more relevant to people who are already in the system (minimum scenario). Using these figures gives an estimated monetised health benefit of between £405 million and £1,182 million per year (health benefits\(^{21}\))

31. To estimate potential savings from reduced hospitalisation we used the figure of £2,300\(^{22}\). This was based on a simple economic modelling used by NICE, drawn from five randomised control trials\(^{23}\). Based on the minimum and maximum patient number scenarios above, this gives an estimate of between £229 million and £669 million per year cost savings to the NHS.

\(^{17}\) This is based on the assumption that for each patient treated, services require a 0.03 whole-time equivalent (WTE) Grade 8A therapist, a 0.015 WTE assistant, and a 0.003 WTE supervisor. The two-year training of a Grade 8A therapist costs £12,500, whereas training a supervisor costs an additional £7,500.

\(^{18}\) We are less confident of applying the training costs of a psychosis service to the scenario where people through primary care pathways also receive treatment.

\(^{19}\) Investing in recovery: Making the business case for effective interventions for people with schizophrenia and psychosis, 2014 [http://www.rethink.org/media/1030280/investing%20in%20recovery.pdf](http://www.rethink.org/media/1030280/investing%20in%20recovery.pdf)

\(^{20}\) This result also suggests that CBT would still be cost-effective if it cost £2,000 more than traditional treatment (using the £30,000 upper threshold of NICE to evaluate cost-effectiveness).

\(^{21}\) Please note that these figures refer to the monetary value of the *additional* health benefit on top of the traditional treatment. Whereas in the case of the minimum estimates, we can reasonably assume that all (most) people would come from secondary services, the maximum estimates would inevitably include people who are not currently treated and therefore the £1,182 million is likely to be an underestimate.

\(^{22}\) ‘Effective interventions in Schizophrenia: The economic case’ report produced by the London School of Economics (2014)

\(^{23}\) The most recent trial reported in 2003. To obtain a relative risk ratio of hospitalisation of 0.74 for CBT plus standard care compared to standard care alone, with a 95% confidence interval of 0.61 to 0.94 was used.
32. If CBT does improve outcomes and prevent relapse in schizophrenia, this may lead to an increase in employment, in turn leading to additional benefits, both to the Exchequer and to society. However, few studies could be identified that included employment as a measured outcome. Gumley and colleagues (2003)\textsuperscript{24} found employment increased 2.1 times more from baseline in the CBT group than in the treatment as normal group, but this was not statistically significant at conventional levels. Therefore, although there might be some further employment benefits, for the purpose of this analysis we did not assume any.

**Section 5 – Options Summary**

| **Option 1:** Do nothing (baseline) |  |
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| **Costs (recurrent)** | **Costs (non-recurrent)** | **Benefits (recurrent)** |
| Between £1 million and £4 million (estimated current spend on demonstration sites) |  |  |

| **Option 2:** Extending access to IAPT SMI |  |
| --- | --- | --- |
| **Costs (recurrent)** | **Costs (non-recurrent)** | **Benefits (recurrent)** |
| Between £287 million and £577 million (in total) | Between £23 million and £67 million (in total) | Between £229 million and £669 million per year (in cost savings to the NHS) |

**Section 6 – Conclusion**

33. The IAPT SMI service is still in its relative infancy, being delivered at six demonstration sites across the country, so available data is very limited. Because of this it is very difficult to generalise what the effects of this option would be as there are only a handful of pilots and they are further sub-divided into specific conditions, as well as being in different locations.

34. The costs and benefits estimated above refer to an embryonic current service with waiting times of approximately nine weeks. Reducing the waiting time for this treatment has associated higher costs. However, because of lack of current provision and fuller evidence of the benefits of national provision of this service, the concept of introducing waiting times is not considered here.

35. There may be some overlap of this area with Early Intervention in Psychosis (EIP), and potentially with Crisis Resolution Home Treatment. These overlaps need to be investigated further so that we can identify any double counting in terms of impacts of different types of interventions for psychosis.

\textsuperscript{24} ‘Effective interventions in Schizophrenia: The economic case’ report produced by the London School of Economics (2014)
36. The infancy of this service and evidence means we have limited confidence in the costs and benefits set out here. Taking an IAPT approach in adult mental health services, with routine outcome monitoring and access to evidence-based treatment will revolutionise them. However, any programme to implement a standard would need to be phased over several years, and require an adaptive approach based on ongoing findings. Initial costs could be in the order of tens of millions, with further roll out based on their results.

37. Therefore, we recommend that before considering implementation, further work is done on the evidence base to support the development of a robust cost/benefit analysis. This would include incorporating the findings of the full evaluation of the service delivered at the demonstration sites.