Health Care Quality Indicators

Mental Health

Information sharing on mental health PROMS and Mental Health Indicator Development

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Note by the Secretariat

1. At the 2017 meeting of health Ministers in Paris the OECD was asked to undertake further work on Mental Health, and look for effective ways to benchmark mental health performance. The Ministerial Statement (OECD, 2017[1]) asked that the OECD develop new health statistics to measure and compare patient-reported experiences and outcomes in health care, and noted the importance of capturing patient reported indicator measures for those experiencing mental ill-health as one of the priorities. The Ministerial Statement (OECD, 2017[1]) also asked that OECD to “develop a system, based on existing data sources, to enable the compilation of tables of health outcomes at country level, and other key indicators of health and health system performance which identify relative strengths in order for all countries to share, and learn from, examples of best practice”, and that this work be “initially targeted at the main health issues – such as cancer, mental health and stroke.”

2. Furthermore, during the Health Ministerial lunch discussion on future directions for OECD work on health Ministers highlighted the significant burden mental ill-health presents for individuals, societies and economies, and the fact that, as of today, interventions to prevent, treat, and manage mental health are woefully insufficient. They reiterated the gaps in effective policies, but also in applying policies that are well-established as effective. The Chair of the Ministerial, the Rt Hon Jeremy Hunt MP (Minister of Health from the United Kingdom), also strongly emphasised the need to tackle mental ill health, including for children and young adults. Many countries have innovative approaches from prevention to treatment, to data and measurement methods. Yet, best-practice policies, treatments and other interventions are not consistently applied. Ministers asked the OECD to carry out further work on mental ill-health, especially to advance international benchmarking, both in the identification of best practices and in the measurement of performance.

3. In light of the clear gaps in understanding, care and services, and outcomes around mental ill-health, and in particular in response to this call from Ministers to undergo further work in this area, the Health Division proposes to develop a benchmarking of mental health policies across OECD countries, mapping these policies to specific indicators of mental health. While this work will include an exploration of best practice policies and innovations in place in countries across the OECD, it will be grounded in a wider range of pertinent indicators which will help to measure and compare performance in mental health care. This work is to be undertaken under the supervision of the Health Committee.
4. The HCQI has had an established a set of Mental Health quality of care indicators since 2003, informed by several scoping data exercises, and having worked through various methodological issues and practical limitations in relation to the capacity of health databases to provide the right data in and across OECD countries. Despite various development attempts the resulting set of indicators on the quality of mental health is still quite restricted, and there are continued ambitions for broadening this data set.

5. This paper sets out two possible approaches to extending the HCQI work on mental health quality of care indicators:

   A. Development of patient reported measures (Agenda Item 6 a)

   B. Review of recent developments in international mental health indicators (Agenda Item 6 b)
A. Development of Patient Reported Quality of Mental Health Care Measures

6. Item 6a on the agenda focusses on information sharing on patient reported measures of the quality of mental health care, as part of the overall program of work under the PaRIS initiative on disease-specific PROM development and implementation internationally.

7. The meeting of Health Ministers in Paris on 17th January 2017 provided a mandate to the Health Committee for its work, and the work of its Expert Groups, over the medium term. The Ministerial Statement signed at the meeting calls on the OECD to support countries in making their health systems more knowledge-based and person-centred by, amongst other things, developing international benchmarks of health system performance as reported by patients themselves. Such data can be used to govern health systems more effectively (in particular, by reducing wasteful care that offers no benefit to the patient); to better understand and plan for complex care needs linked to population ageing; and to better manage new technological developments, including precision medicine.

8. At the HCQI Expert Group’s meeting in November 2016, the Secretariat described how it intends to take the Ministers’ mandate forward through the PaRIS (“Patient Reported Indicators Surveys”) initiative. PaRIS, in broad terms, will comprise two streams of work. First, in patient groups where patient-reported indicators such as PROMs and PREMs already exist (such as in cancer care), the OECD will support countries to accelerate the adoption and reporting of validated, standardised, internationally-comparable patient-reported indicators. Second, in patient groups where patient-reported indicators do not yet exist (such as in the primary care of patients with complex multimorbidity), the OECD will lead and coordinate efforts to develop valid, internationally-comparable PROMs and PREMs, and pilot their collection in countries that wish to participate.

9. The Secretariat emphasised the critical role that collaboration with national and international patient, professional and academic groups will play in the PaRIS initiative. In particular, a Letter of Intention to collaborate has been signed by the OECD and the International Consortium for Health Outcomes Measurement (ICHOM). ICHOM identify sets of outcomes (including PROMs) for particular patient groups, that it recommends be adopted for international comparison. Representatives from the Consortium presented their methods for identifying these “standard sets” to the Expert Group.

10. Subject to countries’ agreement, the Secretariat proposed using ICHOM’s standard sets as a basis for the first stream of work within the PaRIS initiative, described above. The Secretariat proposed that the HCQI Expert Group should examine ICHOM’s recommended PROMs for particular patient groups and, if appropriate, endorse them for international collection and reporting through the PaRIS initiative. This does not preclude the HCQI Expert Group’s examination and endorsement of outcome measures proposed by other institutions or used in specific countries. As with any other HCQ indicator, examination should consider the criteria of:
• validity (evidence that the measure reflects quality of care);

• feasibility (or ease of implementation at national-level within a health system); and,

• actionability (or whether knowing the indicator’s value and comparison against benchmarks can drive change to improve health care quality).

11. The HCQI Expert Group was broadly supportive of the objectives of the PaRIS initiative, and agreed with its two-pronged approach. The Expert Group agreed to a programme of work that examines and, potentially, endorses patient-reported indicators that are proposed by ICHOM and other bodies for inclusion in the PaRIS initiative. The range of conditions, patient-groups and sectors is to be expanded iteratively, subject to guidance from the Health Committee. At its May 2017 meeting the group supported the beginning of work on cancer, and hip or knee osteoarthrits, under the PaRIS initiative. This decision was informed by a paper by ICHOM which identified the best outcomes to measure in patients receiving care for cancer, and for hip or knee osteoarthrits.

12. At the May 2017 meeting experts agreed to consider PROMs in patients who have received care for mental illness at the group’s November 2017 meeting. This document is intended to support the Expert Group’s consideration of appropriate PROMs in patients who have received care for mental ill-health, specifically for anxiety or depressive disorders. The decision to focus attention on PROMs in patients who have received care for mental ill-health reflects the high burden of disease that mental ill-health represents, a shortage of internationally-comparable measures of outcome in this area, and the policy priority given to mental health care by OECD member countries. Indeed at the 2017 meeting of health Ministers in Paris the OECD was asked to undertake further work in this area, and look for effective ways to benchmark mental health performance.

13. Annex 1 describes the methods used by ICHOM to identify the best outcomes to measure in patients receiving care for depression and anxiety, as well as patients’ involvement in this work, current use of these outcome sets in international health systems, and experiences in different linguistic and cultural settings.

14. Item 6 a will also include a presentation from Denmark on developing PROMS indicators for schizophrenia and depression in clinical registers. Experts from Israel and the Netherlands have also been invited to briefly share their countries’ experiences of developing and using mental health PROMS.

15. Delegates are invited to:

• NOTE the current status of international mental health PROMS development and implementation;

• DISCUSS plans and experiences with national mental health PROMS programmes in their country;

• INDICATE their interest in participating in a Working Group on Mental Health PROMS during 2018.
**B. Review of recent developments in international mental health indicators**

16. Item 6b will take a further look at measures of mental health care and recent international mental health indicator development. The HCQI expert group has long recognised the importance of measuring mental health care quality, and has undertaken work in this area multiple times across the past decade.

17. Scoping exercises to explore the availability of information on mental health care in OECD countries were undertaken in 2004 (Richard Hermann, 2004[2]), 2008 (Garcia Armesto, Medeiros and Wei, 2008[3]) and 2010 (see 4 “Chapter Improving quality measurement and data collection for mental health” in OECD, 2014). In the most recent scoping exercise an international expert panel on indicators for mental health care was convened to provide consensus recommendations on mental health care quality indicators to be routinely collected by the HCQI Project. The expert panel decided that the final indicator set ought to cover treatment, continuity of care, co-ordination of care, and patient outcomes; the Secretariat identified a total of 134 indicators from 24 different sources.

18. To reduce this list to a number of indicators that could be reasonably evaluated by the Mental Health Panel, the Chair of the expert panel in collaboration with the OECD Secretariat identified a short list of 24 indicators, which met the key screening criteria around data availability, measurement precision, focus on quality and utility. Five of those 24 indicators met the initial selection criteria, whereas four indicators were rejected using those criteria. The Mental Health Panel evaluated the remaining 15 indicators through a series of conference calls and e-mail discussions and converged on a final list of 12 indicators to cover the four key areas of treatment, continuity of care, co-ordination of care, and patient outcomes (see Table 1). Subsequent work was undertaken with 18 countries to assess the availability of data needed to collect the 12 identified indicators. The availability of data across countries was revealed to be generally very good for some types of data (structure and activity) and weaker for other areas.
Following this scoping and data availability exercise two indicators – re-admission rates for bipolar and schizophrenia disorders – were added to the regular HCQI data collection. In 2013, two additional indicators – excess mortality for bipolar and schizophrenia disorders were added to the data collection.

Since the 2010 scoping and data availability work further refinements have been made to the mental health indicators included in the HCQI data collection. The indicator on re-admission rates for bipolar and schizophrenia disorders was withdrawn following the 2013 collection, primarily due to the Expert Group’s concerns about comparability of the indicator, in particular the difficulty of distinguishing planned from unplanned readmission. Three indicators, on in-patient suicide and suicide after discharge amongst patients with a mental disorder within 30 days and within 1 year were added in 2015. Further efforts to refine the existing indicators, notably led by Denmark and by England, were also undertaken in the period since 2010.

In the 2017 HCQI data collection the following mental health indicators were included, and are available on OECD.Stat and will be published in Health at a Glance 2017 (OECD, 2017[4]):

### Table 1. Mental health quality indicators recommended by the 2010 HCQI Mental Health Panel

<table>
<thead>
<tr>
<th>Area</th>
<th>Indicator name</th>
<th>Number of countries readily available</th>
<th>Not available (number of countries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient outcomes</td>
<td>Mortality for persons with severe psychiatric disorders</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Treatment</td>
<td>Hospital re-admissions for psychiatric patients</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Use of anti-cholinergic anti-depressant drugs among elderly patients</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Length of treatment for substance-related disorders</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Visits during acute phase treatment of depression</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Continuous anti-depressant medication treatment in acute phase</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Continuous anti-depressant medication treatment in continuation phase</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Co-ordination of care</td>
<td>Case management for severe psychiatric disorders</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>Timely ambulatory follow-up after mental health hospitalisation</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Continuity of visits after hospitalisation for dual psychiatric/substance related conditions</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Racial/ethnic disparities in mental health follow-up rates</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Continuity of visits after mental health-related hospitalisation</td>
<td>6</td>
<td>12</td>
</tr>
</tbody>
</table>

• In-patient suicide among patients diagnosed with a mental disorder (15 OECD countries reporting);
• Suicide within 1 year after discharge among patients diagnosed with a mental disorder (10 OECD countries reporting);
• Suicide within 30 days after discharge among patients diagnosed with a mental disorder (10 OECD countries reporting);
• Excess mortality for patients diagnosed with schizophrenia (9 OECD countries reporting);
• Excess mortality for patients diagnosed with bipolar disorder (8 OECD countries reporting);
• Excess mortality for patients diagnosed with severe mental illness (5 OECD countries reporting).

22. The HCQI recognises that the field is not static and that OECD health information infrastructure is evolving and initiatives are being taken to progress and further develop capacity to measure the quality of mental health care at both the national and international levels. Even in the two year period between the 2015 and 2017 HCQI data collections there was an increase in the number of countries able to report on one or more of the mental health indicators.

23. In light of continuing improvements in individual countries’ mental health data systems, and in light of the prioritisation given to this area of work by OECD Health Ministers and subsequently the Health Committee, the HCQI may wish to consider revisiting this indicator set and examining whether it has become possible to collect an expanded or enhanced set of indicators of mental health care quality and outcomes.

24. To aid the group in their reflections Annex 2 ‘NHS Benchmarking And IIMHL International Mental Health Comparisons - Summary Paper for OECD November 2017’ sets out one ongoing international initiative, led by NHS Benchmarking in the context of ongoing work of the International Initiative for Mental Health Leadership (IIMHL), to compare mental health care and collect internationally comparable indicators. The Annex provides a summary of this group’s work since 2008 and notes that a further stage of work will now take place in late 2017 and early 2018 to explore a range of additional indicators.

25. Experts are invited to:

- **NOTE** the recent development in work on internationally comparable mental health indicators;
- **COMMENT** on priority indicators for development for their own countries;
- **COMMENT** on progress in the data systems for measuring indicators on mental health quality in their own countries;
- **DISCUSS** any additional opportunity for expanding mental health indicator development and data collection by the OECD, including further consideration to specific indicators in the NHS Benchmarking Group set of indicators (e.g. Community Follow-up, Use of Seclusion or Use of Restraint).
References


Annex 1: Patient-Reported Outcomes in ICHOM’s Standard Sets for Depression and Anxiety

This document describes the patient-reported outcomes within ICHOM’s “standard set” for patients receiving care for depression and anxiety, as well as patients' involvement in the developmental work underlying the standard set, current use of these outcome measures in international health systems, and experiences in different linguistic and cultural settings.

The text was prepared by Dr. Vikram Devalia, ICHOM & Aneurin Bevan University Health Board Clinical Fellow, Ms. Léa Marais, ICHOM Implementation Project Leader and Dr. Charlotte Roberts, ICHOM Vice President for Standardisation

ICHOM’s Objectives

26. The International Consortium for Health Outcomes Measurement (ICHOM) was founded in 2012 as a not-for-profit organisation by leaders at Harvard Business School, Boston Consulting Group and the Karolinska Institutet. ICHOM’s mission is to develop Standard Sets of outcome measures for the world’s medical conditions and to then drive their adoption by healthcare institutions. This systematic measurement of Standard Sets of outcomes by institutions around the world will enable, for the first time, global outcome comparisons. ICHOM believes this will catalyse a new wave of learning for healthcare professionals as we will be able to identify where the greatest outcomes are achieved, learn from processes supporting those outcomes, and promote dissemination of best practices – ultimately elevating standards of care for patients across the globe. Since 2012 ICHOM has created Standard Sets of outcomes that matter most to patients for over 21 medical conditions including; cataracts, cancers, Parkinson’s Disease, and stroke. In 2017, ICHOM and the Organisation for Economic Cooperation and Development (OECD) signed a letter of intent to collaborate on the collection, analysis and publishing of patient-reported outcomes for international comparison, starting with musculoskeletal and cancer condition areas as well as exploring areas of overall health and mental health.

27. ICHOM have developed globally agreed upon Standard Sets of outcomes, striving to cover 50% of the global disease burden by 2017. Historically, metrics of care for these medical conditions tended to capture processes and costs, and do not
measure whether they achieve the outcomes which matter most to patients. Developing core outcomes sets for patient populations will enable the measurement of important outcomes for, and then compare, in a consistent manner, with other countries around the world. ICHOM believes that outcomes-driven comparison has the potential to minimise modifiable variation in care by illustrating to practitioners where the greatest outcomes are being achieved and how they can improve, all the while increasing transparency to better inform patient choice.

ICHOM’s Working Methods

28. To develop a Standard Set, ICHOM facilitates and organises meetings with a Working Group comprised of clinical, policy and data collection experts in the field, and patient representatives. During meetings, the Project Team comprising a Project Leader, Research Fellow, and Working Group Chair facilitate discussions to debate proposals. Following the call, the Project Leader administers surveys to assess the degree of consensus in the group. This process involves the following steps:

- Defining how to classify the population of patients.
- Compiling a list of outcome measures including outcomes that matter to patients, outcomes in use by existing measurement efforts, outcomes used by leading programmes and validated patient-reported outcomes.
- Defining a minimum list of outcomes that assess success from the patient’s perspective.
- Agreeing on the best available instrument or definition to measure each domain
- Defining baseline case-mix adjustment variables in order to make comparisons
- Developing a reference guide that describes instruments that should be used, and that provides users with the necessary information to adopt the Standard Set
- Presenting the Standard Set of outcomes in leading journals and conferences
- Making the Standard Set accessible and freely available to all

29. All ICHOM Reference Guides and Flyers can be downloaded from www.ichom.org.

Scope of the ICHOM Depression and Anxiety (D&A) Standard Set

30. The total number of people in the world living with depression or anxiety is estimated to be in the region of 322 million and 264 million respectively (WHO Global Health Estimates, 2017). Treatment of depression and anxiety disorders remains one of today’s most important health challenges. Combined, these two conditions represent the most years lived with disability of any disease (Vos et al., 2012). Their direct treatment and indirect impact on other conditions contributes to a substantial portion of health care spending (Ferrari et al., 2013). According to recent data, depression in the United States alone costs society $210 billion per year, including direct medical costs (45%), suicide-related mortality costs (5%),
and workplace costs (50%) (Greenberg et al., 2015). A variety of treatment options have been proven effective in reducing symptom burden and improving functioning for patients with depression or anxiety (Cuijpers et al., 2014). These include several types and combinations of psychological interventions and antidepressant medications (Middleton et al., 2005). Although the general effectiveness of these treatments has been established, the questions of what works for whom and how to sequence and combine treatments remain to be addressed (Fonagy 2010).

31. When defining the scope of the ICHOM D&A Standard Set, the D&A Working Group first defined the target disorders. The group decided to not limit the recommendations to a single disorder but to consider the following spectrum of diseases: Major Depressive Disorder, Depressive Disorder—Not Otherwise Specified, Adjustment Disorder/ Depressive Adaptive Disorder, Dysthymia, General Anxiety Disorder, Social Anxiety Disorder, Agoraphobia, Panic Disorder, Post-Traumatic-Stress Disorder, and Obsessive Compulsive Disorder. The aim was that the suggested outcome variables should be responsive to therapy effects from established interventions. Recommendations were limited to adults including adolescents above the age of 14 years as there was agreement across working group members that onset of depression in younger people often occurs before the age of 18 years. The evidence suggests good validity for common adult measures for adolescents.

32. The Working Group aimed to focus on defining outcomes measures for patients with depression or anxiety regardless of disease severity, treatment, or type of provider; enabling continuous assessment over the entire course of the disease. This is aligned with the fundamental framework of value-based health care delivery (Porter, 2010) and challenges healthcare systems in how to collect the data by stimulating providers from different healthcare delivery settings to coordinate their activities around the patient as opposed to conducting isolated interventions. This continuity of care and longitudinal outcome measurement should create consistency over the full care pathway (Porter, 2010) which benefits the patient.

**PROMs in the ICHOM D&A Standard Set**

33. There is a growing awareness that the outcomes of a clinical intervention obtained by the patient, or patient-reported outcomes (PROs), are significant, in addition to the more traditional clinical, physiological or caregiver-reported outcomes (U.S. Food and Drug Administration [FDA], 2007). A PRO is any report of the status of a patient's health condition coming directly from the patient, without interpretation of the patient's response by a clinician or anyone else (U.S. FDA, 2001).

34. PROs are systematically collected via questions, surveys, or instruments called Patient Reported Outcome Measures (PROMs). PROMs can generally be categorised into three distinct types: generic, domain specific, or condition specific. Generic PROMs are comprised of global assessments, which can be utilised across patient populations regardless of medical conditions experienced (e.g. overall health-related quality of life), but do so at the cost of less detail and
sensitivity to clinically significant changes. Domain-specific PROMs include comprehensive measures around a specific domain item (e.g. pain), however, providing this level of detail and precision can come with a higher assessment burden (time for patients to complete). Additionally, condition specific PROMs provide highly relevant clinical information regarding a specific condition (e.g. sexual function among men with prostate cancer), but the narrow focus is unlikely to detect more systemic changes or unanticipated effects of treatment and cannot be compared to populations with different conditions.

35. The Standard Set wheel in Figure 1 illustrates the key outcome domains covered by the ICHOM D&A set.

**Figure 1. ICHOM Depression and Anxiety Standard Set Key Domains**

![Standard Set wheel illustrating key domains](image-url)

*Source: [www.ichom.org](http://www.ichom.org)*

36. The D&A Standard Set Working Group focused on outcome domains in the D&A Standard Set listed in Table 2, which are all outcomes which matter most to patients with Depression or Anxiety. Table 2 illustrates which outcome domains are collected using PROs or using clinician-reported data.
**Table 2. Outcome domains by patient-reported or clinician-reported source included in the D&A Standard Set**

<table>
<thead>
<tr>
<th>Outcome domain</th>
<th>Patient-reported</th>
<th>Clinician-reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptom Burden</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Functioning</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Disease Progression and Treatment Sustainability</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Potential Side Effects of Treatments</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Optional Variables (specific symptoms)</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: www.ichom.org

37. By using PROMs to collect information, various types of outcomes domains can be measured such as physical function, symptoms, global judgments of health, psychological and social well-being, satisfaction with care, and health related quality of life (HRQOL). It is important to analyse key concepts prior to recommending PROMs; the specific goals and intended use of the PROM (e.g. in clinical trials or routine clinical care), conceptual frameworks, endpoints and endpoint models, and conceptual equivalence (Acquadro et al., 2001; Pashos, et al., 1998; U.S. FDA, 2009). When selecting PROMs to recommend for inclusion in ICHOM Standard Sets, Project Teams and Working Groups consider the relative benefits and disadvantages of each PROM; often selecting a combination of tools in order to provide a balanced overview of health while maintaining enough detail to support clinical interventions. ICHOM refers to the International Society for Quality of Life Research (ISOQOL) recommended minimum standards for patient-reported outcome measures used in patient-centred outcomes and comparative effectiveness research (Reeve et al., 2013) to aid analyses. Working Groups consider outcome domain coverage (e.g. symptom burden, functional status, health-related quality of life), psychometric properties (e.g. validity, reliability, sensitivity), feasibility to implement (e.g. length, translation availability, fees), and ability to interpret scores in a clinically meaningful way.

38. The outcome domains and the rationale for the selected PROM tool for D&A are listed in Table 3.
Table 3. Outcome domains covered by PROMs for D&A.

<table>
<thead>
<tr>
<th>Outcome domain</th>
<th>Definition &amp; rationale for selection</th>
<th>Time point(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptom Burden</strong></td>
<td>PHQ-9 and GAD-7:</td>
<td>Baseline</td>
</tr>
<tr>
<td>(symptoms of depression and general anxiety)</td>
<td>Excellent psychometric properties</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Large amounts of translations available</td>
<td>Anually</td>
</tr>
<tr>
<td></td>
<td>Availability of population norms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cross cultural validation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acceptance in scientific community</td>
<td></td>
</tr>
<tr>
<td><strong>Functioning</strong></td>
<td>WHODAS 2.0:</td>
<td>Baseline</td>
</tr>
<tr>
<td>(physical, social and occupational functioning)</td>
<td>- Availability in many languages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- General Population reference data</td>
<td></td>
</tr>
<tr>
<td><strong>Work Status and Absenteeism</strong></td>
<td>Work Status and Absenteeism:</td>
<td>Anually</td>
</tr>
<tr>
<td></td>
<td>- A primary driver of overall economic costs</td>
<td></td>
</tr>
<tr>
<td><strong>Medical Outcomes Study – Social Support Survey</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- To capture social support</td>
<td></td>
</tr>
<tr>
<td><strong>Disease Progression and treatment sustainability</strong></td>
<td>Reliable Change Index:</td>
<td>Ongoing</td>
</tr>
<tr>
<td>(time to recovery, overall success of treatment, recurrence of depression)</td>
<td>- Helps determine whether changes in instrument score are clinically meaningful</td>
<td>Anually</td>
</tr>
<tr>
<td><strong>Single item additions</strong>:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Patients’ self-report of depressive episodes during the past year</td>
<td></td>
</tr>
<tr>
<td><strong>Treatment Side Effects</strong></td>
<td>Developed our own single item assessment:</td>
<td>Baseline</td>
</tr>
<tr>
<td></td>
<td>- To improve clinician awareness of side effects and project which side effects patients are most likely to experience</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>Optional variables for patients</strong></td>
<td></td>
<td>Baseline</td>
</tr>
<tr>
<td></td>
<td>- SPIN for symptoms of Social Phobia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- MIA for symptoms of Agoraphobia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- ESR for symptoms of PTS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- DPDSS-SR for symptoms of PDSS-SR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- OCI-R for symptoms of OCD</td>
<td></td>
</tr>
</tbody>
</table>

Source: [www.ICHOM.org](http://www.ICHOM.org)

39. In summary, the D&A Working Group recommended PROM tools deemed most appropriate for the population and intended outcome use, and clinician-reported tools or questions to cover all key outcome domains determined to be most important to patients.

**Patient involvement in the D&A Standard Set**

40. Nelson et al. (2016) describe an unmet potential for use of patient experiences and outcomes data to be collected successfully across health systems worldwide. Reuben and Tenetti (2012) suggest that many condition registries have limited patient involvement in their design, oversight, or operations. A recent BMJ review of studies describing the development of 193 different PROMs found that only 21 (10.9%) had patient involvement when deciding which outcomes should be measured (Coulter, 2017). Patient engagement in research is now formally required for funding from several programmes in the US (e.g. Patient-Centred Outcomes Research Institute [PCORI]) and is encouraged in Canada (e.g.
Canadian Institutes of Health Research and the new Canadian Strategy for Patient-Oriented Research) and the UK (e.g. INVOLVE and the National Institute for Health Research) (Haywood et al., 2015).

41. Regarding the development of the PROMs recommended within the D&A Standard Set, patients were involved in contributing to the development of the PHQ-9 (Spitzer et al., 1999), GAD-7 (Spitzer et al., 2006) and WHODAS 2.0 (Ustun et al., 2010) questionnaires. However, development of the MOS-SSS did not directly involve patients (Holden et al., 2015).

42. However, to ensure the outcomes that matter to patients was central to the development of the D&A Standard Set, the D&A Working Group was made up of 24 condition experts from 12 countries, including 2 patients with depression or anxiety from Canada and the United Kingdom. These patients not only contributed towards the development of the Set but also voted for outcomes to be included. Following the development of the first ten ICHOM Standard Sets (which includes the D&A Standard Set), the rigour of ICHOM’s methodology improved, with more involvement of diverse patient groups throughout the Standard Set development process. All Standard Sets developed after 2015 continued to include patient representatives on the Working Group, but also incorporate focused patient advisory groups comprised of 6 to 10 patients. These help guide the Working Group early on by identifying domains which are the most important from the patient perspective. Additionally, patient validation surveys are distributed globally towards the end of the development process to ensure final recommendations are still aligned with the values of diverse patient populations. All Working Group members, including patients take part in the discussions through the process as well as voting to include or exclude outcomes and measurement tools. Steering Committees oversee ongoing revisions to the Standard Sets and continue to feature patient representatives, ensuring all developed Sets receive sustained patient input.

Current use of the outcomes in the D&A Standard Set

43. The work of the D&A Standard Set Working Group represents the first internationally-developed core set of outcomes that matter to patients, allowing for comparison of outcomes in clinical practice across providers, regions, and countries. ICHOM supports institutions, hospitals, and organisations in implementing Standard Sets of outcomes, examples of which have been described in further detail in case studies (Bijlsma, Berenbaum & Lafeber, 2011; Dieppe & Lohmander, 2005; Perruccio et al., 2012).

Evidence of use at a system or national level

44. There are a number of reasons why the empirical assessment of mental health domains is less common compared to the assessment of biomedical markers for other conditions. Several methodological issues have been discussed, including insufficient measurement precision, limited measurement range, high respondent burden, inadequate physician reports, and the impracticality of using paper-and-pencil assessments within daily clinical routine (Rose et al., 2009). Another important issue is that for many of the most relevant mental health domains there are several competing tools, and even if the same constructs are measured, results
from different instruments are difficult to compare (Wahl et al., 2014). Like in many other fields, lack of standardization seriously hinders communication among patients, practitioners, and scientists.

45. To date, one of the most comprehensive effort to initiate standardized outcome assessments for the treatment of mental health disorders has come from the United Kingdom (“Improving Access to Psychological Therapies” [IAPT]). This national program involved routine collection of patient-reported outcomes, coupled to a new program of expanding access to psychotherapists (Gyani et al., 2013). The success of the program (63.7% of patients who completed the IAPT program achieved reliable improvement or recovery) was celebrated, and has supported the case for its funding and led to similar initiatives in other health systems (Boswell et al. 2015, Kramer et al. 2001).

46. A similar effort is the WeMind Mental Health Clinic which is a mental health provider based in Stockholm. It contracts with four of the five largest county councils in Sweden (Stockholm County Council, Gothenburg County Council, Southern Sweden County Council and Uppsala County Council) to receive tens of thousands of referrals for patients with mental health diagnoses. Since inception, WeMind have been using patient-centred outcomes measurement as the basis for guiding the selection and evaluation of interventions and monitoring of patient progress. The core dataset on which their outcomes measurement efforts are based is the ICHOM D&A Standard Set, which WeMind started implementing in early 2016.

47. In 2013, the Swedish government developed the ‘Sveus’ programme – a national collaboration for VBHC across multiple medical conditions. This did not, however, include any mental health conditions. The WeMind team subsequently secured support from Vinnova - a research and development government funding agency - to develop a parallel programme for psychiatric care, Samverkan för värdebaserad vård i psykiatrin (SVIPS). In 2015, WeMind brought together a core group of institutions - two patient charities (Balans and Nationell Samverkan för Psykisk Hälsa - NSPH), two university hospitals (Sahlgrenska University Hospital in Gothenburg and Akademiska University Hospital in Uppsala), and the research institute IVBAR (The Institute for Value Based Reimbursement) to develop SVIPS, starting with the use of standardised quality indicators – the ICHOM D&A Standard Set - and additional indicators for Patient Reported Experience Measures (PREMs). SVIPS is now being implemented in the organisations of the core group of institutions and 2,000+ patients have been included at the time of writing. This group has also developed an open-access template database for other institutions to use for data collection, and are in the process of launching a national web application that would facilitate electronic data collection for the common dataset at every individual site. In 2017, SVIPS was made available for all mental health providers in Sweden.

Evidence of use for international comparisons

48. The global burden of mental health disorders, specifically depression and anxiety is enormous. The total number of people in the world living with depression or anxiety is estimated to be in the region of 322 million and 264 million respectively (WHO Global Health Estimates, 2017). This has contributed to the
alarming suicide-related mortality rates that are measured and compared internationally today (ibid), with one person in the world committing suicide every 40 seconds. As with many conditions, whilst we do have mortality data and can make comparisons of this worldwide, there are still significantly limited examples of international comparative work of additional patient-centred and patient-reported outcomes that matter to people with these conditions, in addition to mortality.

49. One example is a study in Asia which examined the impact of anxiety symptoms on depression-related outcomes in patients with Major Depressive Disorder (Novick et al., 2016). This study enrolled patients across six East Asian countries and regions, measuring outcomes at baseline visits and 3 months post-treatment. Although different tools to the those proposed in ICHOM’s standard set were used (17-item Hamilton Depression Scale [HAMD-17], and EuroQOL Questionnaire-5 Dimensions [EQ-5D]) to assess and compare outcomes, conceptually, this is one of very few example of how efforts could be aligned at an international level.

50. The lack of standardisation and efforts to achieve meaningful, global utilisation of PROMs in the field of mental health further demonstrates the need and potential impact of an ICHOM and OECD collaborative effort in this area.

For countries which have embedded D&A outcomes within their systems, what hurdles have been identified?

51. As detailed earlier, factors such as; insufficient measurement precision, limited measurement range, high respondent burden, inadequate physician reports, and the impracticality of using paper-and-pencil assessments within daily clinical routine (Rose et al., 2009), are all hurdles to the successful implantation of outcome capture programs. The lack of standardisation between tools often trying to measure the same outcomes also hinder these efforts.

52. Several authors have described barriers to implementation of PROMs. (Lipscomb, Gotay & Snyder, 2007; Wolpert, 2014). These challenges are of two main types: whether the data provide an accurate picture of performance across different treatments or providers; and whether the data can be presented in a useable form so that the potential benefits of PROMs are realised and sustained (Williams et al., 2016).

53. Nelson et al. (2016), contend that today’s registries have brought us toward improving healthcare and that tomorrow’s registries (patient-centred learning systems registries) unite patients, clinicians, and researchers to strive for optimising health, coproducing high value services, and bring new knowledge that can be rapidly deployed to benefit individual patients and the public. Nelson identifies seven challenges for patient-centred learning systems:

- motivating participation
- organising, governing, and sharing power and influence
- finding ways to collect, display, and use “dashboards” into clinical workflows without adding extra work
empowering patients to make decisions and self-manage

- efficiently collecting valid patient-reported and clinical data in busy practices across different electronic platforms
- using data for learning, transparent reporting, and quality improvement
- spreading and sustaining the system

54. New methods are emerging to address challenges in collecting consistent and complete longitudinal data in D&A.

55. This is problematic because continuous long-term measurement and follow-up of patients is critical for tracking progress beyond the core intervention period. At WeMind in Sweden, compliance with post-intervention PROMs completion was 72% before collecting the full ICHOM Standard Set. When redesigning patient pathways, the WeMind team shortened the initial follow-up data point from 6-12 months to 3-6 months, with additional text messaging prompts when previously, prompts were only provided by email. Compliance with PROM completion subsequently increased to over 90%.

Use of the outcomes in the ICHOM D&A Standard Sets in different linguistic and cultural settings

56. Recognising the intention for international comparability of outcomes, one of the key criteria Working Groups consider when selecting PROMs is whether the tools have been validated in diverse patient populations, and are available in multiple languages. Recommended tools therefore typically have well-established histories of validation across diverse settings and references are listed in Appendix A. Appendix B provides an overview of available translations for each PROM included in the D&A Standard Set.

57. The D&A Working Group recognised the international variance in PROMs tools used for assessment of D&A, and because of this variation, the following were recommended:

- **Symptom Burden:** The PHQ-9 (measuring depressive symptoms in depressive disorders) and its subset GAD-7 (measuring anxiety symptoms in patients with anxiety spectrum disorders) have both been validated for use in patients with D&A (Spitzer et al., 1999). These scales were selected due to their excellent psychometric properties, the large amount of translations available, the availability of population norms, cross-cultural validation for a large number of languages (44 for PHQ-9, 40 for GAD-7) and their acceptance in the scientific community. This in theory, will enable future efforts at international benchmarking.

- **Functioning:** The WHODAS 2.0 is short and thus feasible to implement in routine care, and has been translated into 9 different languages.

- **Disease Progression and Treatment sustainability:** ICHOM have developed single item PROM’s that can be readily translated and used in different settings.

- **Potential Side effects of treatment:** ICHOM have developed single item PROM’s that can be readily translated and used in different settings.
Optional variables for patients with specific symptoms: All tools (SPIN, MIA, IES-R, PDSS-SR and OCI-R) have been validated for use in at least English and Spanish.

58. When a PROM is translated into a different language to that it was developed in, it is recommended to validate the translation. There are many professional services which can both translate and validate new translations. To ensure validity of translation, the following processes are conducted:

- **Step 1:** Translation of the original instrument into the target language (forward translation)
- **Step 2:** Translation back into the original language (backward translation)
- **Step 3:** Review of the new version with the developer(s) of the original instrument to ensure intended purpose and construct of the measurements are preserved within the new version
- **Step 4:** Test new version with patients living in the target region
- **Step 5:** Conduct cognitive interviews with patients to ensure the questions’ meaning was read as intended.
- **Step 6:** Review of proposed new version by a panel of experts and finalisation of the translation. (Acquadro, Bayles & Juniper, 2014)

59. In conducting linguistic translations, it is imperative that the authors of the PROM instrument are consulted and permission sought as appropriate. The translation process can be expensive and the originating author of the PROM is typically the owner of the intellectual property. Please refer to Appendix B for the list of tools with validated linguistic translations in the D&A Standard Set.

**Conclusion**

60. ICHOM aims to internationally standardise outcomes measurement through the development of Standard Sets for different conditions and sub-populations. ICHOM works with many organisations who are adopting more and more PROMs and ICHOM Standard Sets, and facing some of the limitations and challenges of measuring the same outcome in different ways across conditions, which limits communication and ease of implementation. ICHOM are therefore developing a core set of outcomes measures that would cut across conditions and form the basis of all adult health Standard Sets. This harmonization of outcomes measures will support the scaling of implementation and data analysis across multiple Standard Sets and condition areas. ICHOM also see how PROMs for use in routine care are improving and exciting measurement models are being developed. ICHOM’s Standard Sets will adapt and evolve as the field of measurement develops and over 2017-2019 ICHOM is leading the development of seven new Standard Setting the field of mental health aligned with this harmonised structure.

61. ICHOM Standard Sets to date mostly recommend the measurement of PROs through ‘legacy’ instruments. These are instruments which are internationally recognised, validated, and widely translated, however can have sub-par psychometric properties compared to more modern outcome measurement
techniques and tools. These legacy instruments are also not developed within a comprehensive framework with consistent measurement properties across domains. ICHOM intends to develop a ‘overall adult health’ Standard Set which will look to recommend domain-based measures constructed using item response theory (IRT) (an example of this include the Patient Reported Outcomes Measurement System [PROMIS®]) for capturing outcomes which matter most to this population, for example, physical function. These measures are a much more efficient and precise way of capturing outcomes, with fewer questions per participant (Hanmer et al 2015). There is also increasing evidence for their use making comparisons across different clinical populations (Ameringer et al 2016, Katz et al 2016, Lee et al 2016) as well as clinical trials (Shalhoub et al 2016, Katzan et al 2016). ICHOM will then map the common domains between the ‘Overall Adult health’ Standard Set with existing ICHOM Standard Sets and develop interoperability guidance in these areas of common domains, building on existing or to-be-developed linkages.

62. For ICHOM to achieve its ultimate aim of value-based health care, many methodological questions remain to be answered for both Standard Sets that have been developed already, and for those which will be developed in the future. In addition to harmonizing domain-level measures between legacy and modern instruments, these include; factors influencing the successful implementation of PROMs in clinical practice; evidence to support the linkage of PROM scores to clinical decision making; cross-walking between PROM scores, and the development of appropriate risk-adjustment methodologies for PROMs in public reporting applications; international translations; and international calibrations of ICHOM-recommended tools.

63. Moving forward, ICHOM see a shift towards more domain-based measurement so that a health system treating a patient with multiple conditions can use similar measures over time to assess core health domains like physical functioning or depression. This is still in an early stage in the field, but ICHOM is actively working with organisations including PROMIS®, ISOQOL and the OECD to make streamlined measurement across conditions and care settings a reality. ICHOM also proposes to use its many relationships with other institutions further ahead on this path to study and inform implementation across other institutions.
Appendix A: 
Publications addressing the validation of various PROMs instruments that measure quality of life in patients with depression and/or anxiety


Appendix B: Translations available for tools within ICHOM D&A Standard Set

<table>
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<th>Tool</th>
<th>Translations</th>
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<tbody>
<tr>
<td>PHQ-9</td>
<td>Afrikaans, Arabic, Assamese, Bengali, Bulgarian, Cebuano, Croatian, Czech, Danish, Dutch, English, Filipino, Finnish, French, German, Greek, Gujarati, Haitian Creole, Hebrew, Hindi, Hungarian, Indonesian, Italian, Japanese, Kannada, Korean, Lithuanian, Malay, Malaysian, Chinese Mandarin, Marathi, Norwegian, Oriya, Polish, Portuguese, Punjabi, Romanian, Russian, Serbian, Slovakian, Spanish, Swahili, Swedish, Tamil, Telugu, Thai, Turkish, Ukrainian</td>
</tr>
<tr>
<td>GAD-7</td>
<td>English, Afrikaans, Arabic, Bulgarian, Cebuano, Chinese Mandarin, Croatian, Czech, Danish, Dutch, English, French, Filipino, Finnish, German, Greek Gujarati, Hebrew, Hindi, Hungarian, Indonesian, Italian, Kannada, Korean, Lithuanian, Malay, Malaysian, Marathi, Norwegian, Polish, Portuguese, Punjabi, Romanian, Russian, Slovakian, Spanish, Swedish, Tamil, Telugu, Thai, Turkish, Ukrainian, Urdu</td>
</tr>
<tr>
<td>SPIN</td>
<td>English, Spanish, Portuguese, Mandarin Chinese, Italian, Finnish</td>
</tr>
<tr>
<td>MI</td>
<td>Dutch, French, German, Hebrew, Japanese, Portuguese, Spanish, Swedish, Italian, Russian, Greek, English</td>
</tr>
<tr>
<td>IES-R</td>
<td>English, Chinese Mandarin, Japanese, Korean, Spanish, French, German</td>
</tr>
<tr>
<td>PDSS-SR</td>
<td>Spanish, Portuguese, Italian, Hungarian, Finnish, Serbo-Croatian, Japanese, Korean, Turkish, English</td>
</tr>
<tr>
<td>OCI-R</td>
<td>English, German, Spanish, Icelandic, Turkish, Brazilian Portuguese, Chinese Mandarin</td>
</tr>
<tr>
<td>WHODAS 2.0</td>
<td>Bangala, Mandarin Chinese, Danish, English, French, German, Serbian, Spanish</td>
</tr>
<tr>
<td>MOS-SSS</td>
<td>English, Greek, Chinese Mandarin, Spanish, French, Malay, Italian</td>
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References


World Health Organisation (2017). Depression and Other Common Mental Disorders: Global Health Estimates
Annex 2:
*NHS Benchmarking and IIMHL International Mental Health Comparisons - Summary Paper for OECD November 2017*’
International Mental Health Comparisons
Summary Paper for OECD - November 2017

NHS Benchmarking Network

Raising standards through sharing excellence
Executive summary and future plans

The International Initiative for Mental Health Leadership (IIMHL) initiated a project in 2008 with an aim of developing a consensus framework for mental health quality and performance indicators. The work continues and has published a series of papers that explore performance issues in country level mental health systems and the opportunities for standardising approaches to performance and quality measurement across a range of countries.

The most recent publication from the project was in February 2017 which formed the basis for a two-day seminar in Canberra Australia, hosted by the Australian Institute for Health and Welfare. This paper provides a summarised version of the report discussed at the Canberra seminar and also updates readers on the progress made since this seminar and plans for future stages of international mental health system comparisons.

The report highlights a range of structured comparisons that were developed by the project's reference group and participating countries. The benchmarking process used structured like for like comparisons underpinned by supporting data definitions and consistency of data collection. Contextual differences between countries were noted and highlighted in the commentary provided back to countries in a series of bespoke reports. These country specific reports were used locally in discussions with policy makers to highlight the benefits of international comparisons and performance themes relevant to each country.

The comparisons explored in the most recent stage of analytics were carefully selected to explore strategic issues evident in mental health service provision. Amongst the areas benchmarked were; provision of mental health inpatient services by main specialty, admission rates, use of detention, average length of stay, bed occupancy, and the quality and safety of inpatient provision. The project also explored parallel issues around access to community based mental health care and high level outcome indicators including overall population suicide rates.

The findings from the work were shared with policy makers in each participant country and confirmed momentum for further stages of comparisons across countries. A further stage of work will now take place in late 2017 and early 2018 to explore a range of additional indicators. These will include wider policy issues such as: overall health and care system funding, the level of expenditure on mental health services, the number of people accessing mental health services, and patient experience of care. Countries will also be invited to contribute to themed deep dive studies into Children and Young Peoples mental health, and Forensic mental health services. The findings from the next stage of work will be discussed at a seminar in Stockholm in May 2018.

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Additional Papers

Appendix A: Data specification

Appendix B: Supporting publications
Background and originating IIMHL study

The International Initiative for Mental Health Leadership (IIMHL) initiated a project in 2008 with an aim of developing a consensus framework for mental health quality and performance indicators. This work has been led by Professor Harold Pincus and team at Columbia University. The work has continued through to 2016 and published a series of papers that explore the performance schemes used and the opportunities for standardising approaches to performance and quality measurement across a range of countries.

The IIMHL project has received contributions from IIMHL member countries and a number of other interested countries. Three phases of work have been undertaken so far with the following objectives:

**Phase I (2008 - 2009)**
- A survey of mental health indicators used across countries (national/region/state/province)
- The identification of themes, methods and definitions including observations on the development of indicators
- Literature review of indicators and programmes

**Phase II (2010 – 2012)**
- Development of an overarching shared framework
- Review of features of data sources and information systems
- Development of a consensus on a potential indicator set

**Phase III (2013 – 2015)**
- Piloting of the indicator set and framework to enable cross-country comparisons
- Collecting and analysing initial data
- Reviewing data definitions and issues around interpretation
- Considering the potential for further cycles of data collection

NHS Benchmarking Network
The IIMHL project has achieved considerable success in a number of areas. The IIMHL work has identified the most highly ranked mental health indicators in terms of both importance and validity. The project was able to conclude that existing performance schemes can be inconsistent, do not cover all relevant domains, are not always valid, can have cultural biases, and do not always enable practical data collection and analysis. Participants used the findings from the project's initial phases of work to develop a common set of measures that could support the evaluation of the quality of mental health services. This supports an overall aim of facilitating the transformation of mental health services and improving service quality and outcomes for service users and carers. A list of publications from the originating IIMHL work is provided at Appendix B.

The presentation of the Phase III work took place in New York City in September 2015 and sparked debate about a wide range of issues including data definitions, data quality, and the extent of variation in service delivery and performance between participant countries.

The New York City meeting acted as a platform for reviewing the potential for a more detailed analysis of performance metrics in mental health care. One of the main catalysts for the interest in a more detailed review was the early findings from the Phase III work which identified levels of variation between countries.

A number of countries expressed interest in taking part in a targeted “deep-dive” project that would explore a number of high value indicators to further understand the extent of variation that exists between countries.

The group of interested countries agreed a number of guiding principles for this work:

- That it should focus on a small number of indicators
- That these indicators should be highly material in nature with an impact on service quality, patient safety, and use of resources
- That the work should be tightly scoped
- That the project could be undertaken quickly
- That the work could inform the wider IIMHL work programme

**NHS Benchmarking Network**
Discussions amongst participant countries confirmed that the UK NHS Benchmarking Network would facilitate the deep-dive work in partnership with participant countries.

It was agreed that all data and analysis from the project would be shared with Professor Harold Pincus' team and IIMHL participant countries, with an aim of informing IIMHL's wider project on mental health indicators. The wider IIMHL project will continue and report on its progress at the 2017 IIMHL exchange in Sydney.

This report summarises the findings from the "deep dive" project into high value indicators in mental health care.
Project scope and acknowledgements

The project aims to explore the characteristics and performance of mental health systems across a group of developed countries. The project’s focus on the most material indicators includes the following content:

Strategic benchmarking topics, to cover ten main headings;

1. Average length of stay (using the NHS Benchmarking Network’s taxonomy of bed types)
2. Detention systems in place in each country
3. Readmission rates (standardised on either 28 or 30 day readmissions)
4. Use of restraint in inpatient settings (classified by type of restraint where possible)
5. Use of seclusion in inpatient settings
6. Out of hospital care – extent of community services provision
7. Community follow-up post-discharge
8. Survey of outcome measures used
9. Suicide rates and extent of suicide reduction
10. Survey of data transparency arrangements in each country

Participants agreed that the project would attempt to use the most up to date information on each of the ten indicators. For most countries this relates to data collected during 2015.

NHS
Benchmarking Network
The project received expressions of interest to participate from nine countries. We are grateful to the following countries and project leads for their participation:

- Australia (Dr Grant Sara)
- Canada (Dr Elliot Goldner, Wayne Jones, Pamela Prince, Diana Ridgeway, Nawaf Madi, Harry Kang)
- England (Tracy White, Sarah McClinton, Emily Antcliffe, Amiti CanagaRetna)
- Netherlands (Chris Nas, Dung Ngo, Saskia Boonzajer Flaes)
- New Zealand (Robin Shearer, Robyn Byers, Richard Woodcock, Mark Smith)
- Norway (Professor Torleif Ruud)
- Scotland (Dr John Mitchell)
- Sweden (Dr Martin Rödholm)
- Wales (Sian Richards, Dr Sarah Watkins)
Process

From initial discussions and expressions of interest at IIMHL September 2015 the work has progressed in a structured manner through the following phases:

- Building the project’s participant constituency – through telephone and e-mail discussions agreement was reached with nine countries to provide data to the project
- Teleconference meeting of participants – scoping discussions have taken place with participant countries to agree project terms of reference, coverage, and the data items and definitions to be used in the project
- Development of robust definitions – detailed work was undertaken to agree a set of definitions that are meaningful across countries and use terminology that is consistent with country specific data dictionaries. A draft data specification was developed which was issued for consultation to all participants on 4th March 2016.
- Comments were received from participants and a final data specification was agreed and used for the data collection launch in mid-March.
- Mapping of each country’s service model against definitional standards – the wider health and care system models used in each country have been referred to in interpreting the data provided.
- Collection of benchmarking data – the project launched for data collection on 15th March 2016. The initial deadline for data submissions was 13th April 2016. A number of data collection extensions were provided to participants to maximise the amount of data that the project could use. Final data submissions were received in May 2016.
- Analysis of data and validation of first cut comparisons – all data was profiled on receipt and validated with participants to remove any outliers. Analysis was conducted in a number of ways and included the development of benchmarks to compare provision, practice, and performance across countries.
- Reporting – first draft reports were made available to participants in June 2016. Final reports will be produced following discussion of draft findings with participants. Final reports are expected to be available in July 2016.

NHS
Benchmarking Network
Project content and definitions

The project aimed to concentrate on the most clinically and financially material items that could be supported by robust data across participant countries. A series of data definitions were agreed to support each data item. These are detailed at Appendix A. Some of the ten indicators had a number of sub-indicators which allowed for expansion of the analysis to include or exclude specific data constituents (for example, in exploring the impact of leave days on average length of stay). Adjustments made to each data item are noted as follows:

1. Average length of stay (using the NHS Benchmarking Network’s taxonomy of bed types), was profiled for both mean and median positions adjusted for the impact of leave days. The bed taxonomy explores the following bed categories;
   - Acute inpatient
   - Psychiatric Intensive Care Unit
   - Perinatal Mental Health
   - Eating Disorders
   - Secure Services (low, medium and high secure)
   - Rehabilitation (high dependency and longer term complex care)
   - Old Age Psychiatry
   - Child and Adolescent Psychiatry
   - Substance misuse and addictions

2. Legal detention systems in place in each country – exploring the length of time associated with different types of legal detention, and the overall rates for detention (i.e. the percentage of admissions that were involuntary)
3. Admissions and Readmission rates – the analysis of admissions to inpatient care by bed type, per 100,000 population. Readmissions were standardised on either 28 or 30 day unscheduled readmission rates.
4. Use of restraint in inpatient settings – number of incidents of restraint classified by type of restraint, identifying prone restraint as a separate data field. Data was also collected on the number of patients restrained.
5. Use of seclusion in inpatient settings – number of incidents of seclusion and the number of patients who experienced seclusion
6. Out of hospital care – the extent of community services provision quantified by the number of people in receipt of community based mental health care and the number of interventions delivered
7. Community follow-up post-discharge – an exploration of the number of people who received a community based follow-up appointment within the locally mandated period following discharge from inpatient care
8. Survey of outcome measures used – an exploration of the outcomes recording system used in each country
9. Suicide rates and extent of suicide reduction – population suicide rates (using World Health Organisation data)
10. Survey of data transparency arrangements in each country

The data analysis therefore used a large number of metrics which could explore inpatient provision and quality by specialty bed type. Community service based metrics were generally applied at the level of whole population denominators.

A supplementary data specification with supporting data definitions was also used to allow countries with access to detailed data the ability to profile inpatient data by major diagnosis group. This element of the project focused on analysis of length of stay and community support by ICD major condition type as follows;

- Psychosis
- Affective Disorder
- Organic mental illness
- Substance misuse
- Childhood behavioural disorders
- Other mental disorders

**NHS Benchmarking Network**
Interpreting project findings

The project's aims are ambitious given the scope of the project and the extent to which objectives can be influenced by a range of factors present in the characteristics of each country's health system. The extent to which each country's contextual factors will influence the project's findings are identified in outline form in this report. Further input is welcomed from individual countries on how local contextual factors impact on the project's findings.

The need to contextualise findings by health system model is an essential part of the process of discussing and understanding project findings. However, the theme of variation is an inevitable part of the project's work and project participants have identified the need to understand and explain the factors that contribute to variation in different country's mental health systems.

A large number of reasons exist for variations in provision and performance and some of the main factors contributing to variation are identified below. These factors can be used in applying a framework to the exploration of the project's data and the variation that exists between countries;

- Data quality - including the completeness and accuracy of data submitted by participants
- Service scopes - for example, whether data covers all providers operating in a country or just public sector providers where data may be more readily available
- Service definitions - the project uses a standard taxonomy for sub-specialties and bed types which have a high degree of recognition across participants, however, important distinctions exist between countries (for example in Sweden general psychiatry is a recognised broad specialty and bed type rather than a model which separates general adult psychiatry and the specific care of older people with organic illness which is a more typical approach in the UK).
- Service scope – important distinctions exist in service scope which need to be acknowledged. For example, the Netherlands and Sweden have service models which integrate addictions and mental health care, whilst UK models explicitly separate substance misuse care from mental health services.

- Case mix – acuity and case mix present differently across systems and are closely linked to service capacity and eligibility criteria. Countries with more inpatient capacity are observed to provide more inpatient care for people with affective disorders. Countries with more limited bed capacity have a higher percentage of capacity devoted to providing care for people with psychosis. Resource levels – countries have access to different levels of resource for specialised mental health care which impacts directly on each system and effects both inpatient capacity and the extent to which outpatient services and community based support can be provided.

- Clinical processes – the application of nation specific clinical pathways influences each country’s position within the benchmarking comparisons. This can include a wide range of factors such as; the impact of different legal systems and detention arrangements, the extent of the scope and provision in the justice / penal system, attitudes and approach to community based care, and the extent to which a range of treatments are available including both psychiatry and psychological therapies.

- Reporting measures – the measures used in this report apply specifically to the terminology and definitions used for this project and may not align with other published material from countries which may use different specifications.

- Validation – each country has had an opportunity to review and validate the data used in this report and can therefore be interpreted as being generally representative of the country’s position.
This framework for understanding variation should also note the following country specific issues that impact on the data reported by each country:

- Australia – the data relates primarily to New South Wales and all data relates to public (state operated) rather than private health services. The New South Wales data has been collected using the terminology and definitions relating to this project and may not align with other published material due to the use of these new definitions.

- Canada – data has been sourced from available national metrics including from the Canadian Institute for Health Information (CIHI) and Statistics Canada. This has been supplemented by data provided to the IIMHL indicators project. The Canadian data has been presented using per capita statistics but does not include every Canadian province in each indicator.

- England – the data has been collected from both public and private sector providers and covers a complete position for general psychiatry inpatient and community services. The data is generally complete for other sub-specialty areas although it should be noted that some gaps exist in data relating to inpatient forensic services where not all private sector was available at the time the study took place.

- Netherlands – service model includes integrated mental health and substance misuse services. The data only covers care provided under the Health Insurance Act. Data has been collected using the terminology and definitions agreed for this specific project, and may not align with other published material due to new definitions.

- New Zealand – uses data supplied to the IIMHL indicators project

- Norway – uses some data supplied to the IIMHL indicators project, this was supplemented with data source from the Norwegian Patient Register for 2015
- Scotland – uses data available to the Scottish Health system at national level for high level indicators. This merges some specialties into a composite position for the country so where data is sensitive to specialty circumstances (e.g. on average length of stay), data has instead been substituted from one of Scotland’s largest Health Boards to provide an illustrative specialty based position.

- Sweden – data for working age adults and older people is combined, data also relates to integrated substance misuse and mental health services

- Wales – the data has been formed from a consolidated position across the seven Health Boards in Wales that provide mental health services. Wales does not access all clinical specialties within its national boundaries (e.g. Perinatal and High Secure services are not available within Wales). Similarly, a small amount of additional capacity is acquired from independent sector providers based in England.
Summary findings

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Raising standards through sharing excellence
Specialty structure to findings

The project adopted a pragmatic approach to applying analysis to different layers of data. Not all countries could collect data at the level of each sub-specialty bed type so a hierarchy of bed types was developed to allow profiling at either main specialty level (e.g. General Psychiatry), or lower sub-specialty level if the data was available (e.g. Psychiatric Intensive Care as a sub-specialty of General Psychiatry).

- Top hierarchy – e.g. General Psychiatry, Forensic, Rehabilitation, Other bed types
- Specialty drill-down of General Psychiatry – Adult Acute, PICU, Perinatal, Eating Disorders
- Specialty drill-down of Forensic – Low, Medium, and High Secure
- Specialty drill-down of Rehabilitation – High Dependency Rehabilitation, Longer-Term Complex and Continuing Care
- Specialty drill-down of Other Beds – Older Adult, Child and Adolescent, Substance Misuse
The ability to identify and count mental health inpatient beds is a useful start point for the comparative analysis as this describes the capacity of each country’s health and care system to support inpatient admission.

The data is incomplete from some countries due to the lack of publicly available data from some private sector providers.

The data reveals a mean average of 51 General Psychiatry beds per 100,000 population in the working age adult group aged 18-64. The highest bed numbers are reported by Norway and the lowest by England and Wales (which both reflect complete data positions for each country).

1 Sweden figure also includes general old age psychiatry
2 Canada figure Canada figure includes geriatric psychiatry, child and adolescent psychiatry, forensic psychiatry, mental health rehabilitation, and addictions beds.
Some countries distinguish between different General Psychiatry bed types. Where this data was available we have profiled the sub-specialty mixes which demonstrate choices on specialisation in the inpatient setting.

Psychiatric Intensive Care is a recognised sub-speciality with dedicated beds in four countries and accounts for around 10% of capacity in these countries, recognising the different physical nature of these ward environments and more intensive models around staffing and therapy.

Separate specialist Perinatal and Eating Disorders inpatient capacity was only identified separately by two countries (England and Scotland).
This chart demonstrates the ability to undertake a further level of analysis in profiling the range of data within specific countries. Data at this level was provided by England and shows the range in adult acute psychiatry beds per 100,000 registered catchment population covered by providers.

The mean level of provision in England is 20 beds per 100,000 population, with a four fold range between providers from 9 to 37 beds. Thus some areas of England have larger numbers of beds for their local population than others. Patients may travel to access beds in other areas if a local bed is not available, but care as close to home as possible is usually viewed as desirable to enable a patient to remain part of their community and increase the ease of reintegration post-discharge.

The considerable range evident in the data illustrates the need to reflect on local area data in interpreting the project’s findings.
The chart on the next page demonstrates the ability to profile data by main clinical diagnosis. The chart shows the main diagnosis categories for patients occupying General Psychiatric beds serving ages 18-64 and reveals interesting variation between countries. The beds shown here include Adult Acute, PICU, Perinatal and Eating Disorder beds.

Sweden and the Netherlands who report higher levels of beds per capita, have less bed occupancy attributed to psychotic disorders and provide more capacity for treatment of co-morbid psychiatry and addictions.

All six countries shown have similar provision percentages for affective disorders. The main differentiating factor appears to be the percentage of total beds dedicated to treating psychosis. Countries with fewer beds (England, Australia and New Zealand), tend to devote more of their bed capacity to the treatment of acute psychosis.

The small percentage of bed days attributed to organic mental illness and childhood behavioural disorders reflect the bed types included in this overview (acute beds for working age adults). If beds for children and adolescents, and those for older people, were also included here these diagnosis groups would show greater numbers.
Diagnosis Profile – Example
Occupied Bed Days by Diagnosis Group
General Psychiatry Beds for ages 18-64

Psychotic Disorders
Affective Disorders
Organic Mental Illness
Substance Misuse
Other Diagnosis
Incl. Personality Disorder & Childhood Behavioural Disorders

England
- 60%
- 18%
- 4%
- 7%

Scotland
- 41%
- 26%
- 3%
- 11%
- 18%

New Zealand
- 50%
- 20%
- 2%
- 5%
- 8%

Netherlands
- 29%
- 25%
- 2%
- 23%
- 19%

Australia (NSW)
- 12%
- 23%
- 3%
- 7%
- 19%

Sweden
- 26%
- 20%
- 1%
- 16%
- 25%

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Involuntary Treatment

Involuntary treatment refers to the legal right to detain a patient for compulsory mental health care when circumstances show this is warranted.

Procedures differ between countries, and local legislation defines the procedure for detention (such as how many clinicians must be consulted) and the length of time for which people can be held without formal review of their detention.

Each country was asked to summarise the arrangements they have for providing involuntary treatment. There is a high degree of consistency between countries with all countries demonstrating an ability to hold a patient involuntarily while an emergency assessment of clinical needs takes place. The typical time period for assessment is between 1 and 3 days although some countries extend this to up to 10 days. Holding patients to receive treatment typically allows a period of one month to provide this care with an ability to extend this arrangement for up to 6 months. Some countries allow greater flexibility than others in how local Acts are interpreted. Variations in clinical practice will also exist within countries with some clinicians and institutions more likely to use legal arrangements than others.

The following pages lay out details of different countries’ detention arrangements.
Australia (NSW)

Mental Health Legislation is the responsibility of State and Territory governments and therefore differs from state to state. All states have mechanisms for judicial review of clinical decisions, and all have provision for involuntary community care.

New South Wales example

Patients may be held for up to 3 working days on a brief order.

Patients may be held for up to 3 months on an initial order, but the period of detention is typically much shorter than this.

Continuing orders may be made, and require review every six months.

New Zealand

New Zealand’s Mental Health (Compulsory Assessment and Treatment) Act 1992 has a number of sections, the most important of which are sections 29 (community treatment orders), section 30 (inpatient treatment orders) and section 31 (leave treatment orders).

A patient may be detailed under section 30 for up to 6 months. Following this, extensions can be granted for a further 6 months at a time.

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Canada

Legislation and practices vary within Canada. The provinces and territories of Canada each have their own legislation regarding the procedures, requirements and terms for holding a patient in a facility without his/her consent for psychiatric assessment or care.

Netherlands

An Acute Involuntary Admission (AIA) is used in case of imminent danger. A Psychiatrist has to examine the individual if an AIA is necessary. Within 24 hours of issuing an AIA, an individual is put into detention. When an individual is detained, the public prosecutor decides (within one working day of detainment) whether or not further detainment (preliminary detention, up to three weeks) is necessary.

Regular placement under a Court Order (CO) is used when there is no emergency. The first CO, also known as preliminary CO, will last up to six months. After six months, the judge may prolong the CO for a maximum of one year at a time. After five years, the judge can prolong the CO for a maximum of two years each time.

Where involuntary detention is used, approximately 35% of the time this will be in the form of an AIA, and 65% of the time via a Court Order.
England and Wales

The Mental Health Act (2007) includes a number of sections which allow detention in different circumstances.

The following are civil sections:

Section 2: Detain in hospital for assessment; hold for up to 28 days. 75% of admissions under the MHA fall into this category.

Section 3: Detain in hospital for treatment; hold for up to 6 months*. 25% of admissions under the MHA fall into this category.

Section 4: Emergency assessment, hold for up to 72 hours. Consent to treatment is not possible under this section which is therefore rarely used. Patient management tends towards section 2 with around 75% of detentions using this arrangement with a consequent impact on average length of stay.

Section 5: Emergency assessment, short-term detention for patients in physical healthcare facilities who need a mental health assessment prior to a consent to treatment order being secured

Section 136: ability to take a person to a health based place of safety where mental health needs can be assessed

Community Treatment Order: Supervised community treatment for up to 6 months*

- Section 3 and CTOs can be renewed for a further period.

A range of criminal sections also exist within the Mental Health Act in England and Wales (s 35, 37, 41, 47, 48, 49)
Mental health detention in Scotland happens under the Mental Health (Scotland) Act 2015. It is overseen by the Mental Welfare Commission for Scotland (MWC) who protect and promote the human rights of people with mental health problems, learning disabilities, dementia and related conditions. The MWC does this by monitoring use of mental health legislation, inspecting services and doing investigations. The MWC publishes an annual report with detention activity - http://www.mwcscot.org.uk/media/240677/mha_monitoring_report_2014-15.pdf

The Mental Health Tribunal service in Scotland provides decision in relation to longer term detention requests, reviews and appeals.

Emergency detention last for up 72 hours and is certified by a fully registered medical practitioner with mental health officer (MHO) consent. Mental health officers are specially trained social workers. Their consent is not mandatory.

Short term detention last for up to 28 days and is certified by a trained senior psychiatrist with mandatory MHO consent.

Compulsory treatment orders granted by the Tribunal provide for up to 6 months compulsory treatment. They can be extended. They can provide authority for community and/or hospital treatment. Compulsion orders are the forensic equivalent granted by a court.
Norway

Up to 10 days – detention for observation

Undefined length – detention for treatment

Review of detention for treatment each three months

Sweden

Up to 24 hours - detention for observation

Up to 4 weeks – initial statutory detention

Review / renew 4 months after first detention, after that every 6 months

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Involuntary admissions are frequently subject to a minimum detention period which will impact on the length of stay in an inpatient bed. Where bed numbers are smaller, it is likely that the percentage of admissions that are involuntary will be higher, as thresholds for admission rise, and patients detained under local Mental Health Act legislation make up a larger proportion of the inpatient cohort.

England has seen this measure increase while bed numbers have declined. England has the 2nd highest use of detention arrangements for adult acute general psychiatry patients with 33% of patients involuntarily detained. Australia has marginally higher rates at 34% of people detained but demonstrates more flexible use of its Mental Health Acts with people typically detained for shorter periods. This impacts on average length of stay with Australia reporting average lengths of stay of 11 days. Patients who are sectioned under the Mental Health Act in England typically stay 50% longer than patients who are not detained. In England, mean length of stay for all Adult Acute patients is 33 days. Mean length of stay for Adult Acute patients sectioned under the Mental Health Act is 46 days.
Involuntary Treatment

This chart illustrates the potential to extend further the "deep dive" analysis to profile data at provider level within individual countries. This chart shows the English NHS, where involuntary admissions demonstrate considerable range. The chart illustrates the range in detention rates across English mental health Trusts around the 33% mean position for Adult Acute admissions.

The quartile ranges extend from 23% to 41%. Seven Trusts use the Mental Health Act in fewer than 20% of Adult Acute admissions. Four Trusts use the Mental Health Act in 50% or more of admissions.

Analysis of variation within former Strategic Health Authority areas reveals a wide range in use of the Mental Health Act. The West Midlands (45%) has the highest percentage use of the Mental Health Act and the East of England the lowest (16% of admissions).
Rates of admission may directly reflect both available bed numbers and length of stay.

Here the countries with the most general psychiatry beds typically report more admissions. While Australia reported a low position for bed numbers, the shorter length of stay means greater numbers of admissions can occur within the existing bed stock.

England’s relatively low number of admissions per 100,000 population relates to England’s low number of beds and average length of stay.

\* Sweden figure also includes general old age psychiatry
\* Canada figure Canada figure includes geriatric psychiatry, child and adolescent psychiatry, forensic psychiatry, mental health rehabilitation, and addictions beds.
Admissions per bed

The number of times a bed can be used during a year will be influenced by the length of inpatient stay and the bed occupancy rates.

Scotland and England report a turnover that is less frequent than once per month, which corresponds with longer lengths of stay in these nations.

With a length of stay that is 3 times shorter, Australia is able to handle more admissions per bed per year than UK countries.
Emergency Readmissions are characterised by an unplanned / unexpected readmission to a ward within a defined period (e.g. 28 or 30 days) of time following discharge from an inpatient unit, for a problem that is the same or similar to the original complaint for which the patient was treated.

Emergency Readmissions may occur if a patient was discharged too early or if their support in the community following discharge was inadequate. For example, a package of care may not have been intensive enough to support a patient in a community setting. There may also be a correlation between higher rates of bed occupancy and lower readmissions, regardless of perceived need for these, as it may be difficult to access a bed when availability is tight.

Emergency admissions are not always avoidable and can reflect a relapse in clinical symptoms and illness triggered by other events.
The Netherlands reports very low emergency readmissions at 6%, with Norway the highest at 20% suggesting a different model of care and freer flow in and out of beds.

Not all countries were able to exclude planned readmissions from this data (e.g. Australia) whose rates therefore include both planned and unplanned readmissions.

Data for the Netherlands is an approximate value based on the percentage of readmissions that would be typically be unplanned.

England’s position of 8% readmissions is the lowest of the UK countries and very similar to the rates reported in physical acute healthcare services in England.

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5 Norway readmission rate across all general psychiatry  
6 Australia includes planned and unplanned readmissions  
7 Netherlands estimation based on % of readmissions likely to be unplanned
Length of Stay & England Illustration

Mean length of stay excluding leave = 33 days
Mean length of stay including leave = 37 days
Median length of stay excluding leave = 17 days
Median length of stay including leave = 19 days

Length of stay can be measured in different ways, with different results as the above example from England shows.

A mean length of stay is the average for all patients discharged during the period. In England this figure is 33 days if days spent on authorised leave from hospital are excluded. Where leave days are included, this rises to 37 days.

A mean average will be affected by any outliers with particularly long or short lengths of stay, therefore a median position can also be helpful. The median LOS for England was 17 days excluding leave, and 19 days when leave was included. Additional in country profiling has suggested that approximately 45% of patients stay less than 14 days. A small subset of patients who are medically more complex or whose discharges are more complicated may have prolonged lengths of stay of several months, and it is these patients who have the greatest impact on raising the mean length of stay.

The following comparisons use mean length of stay as the comparison base as this is the indicator that could be collected by most countries.

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A number of factors can influence length of stay, including bed availability, patient acuity, rates of involuntary detention and models of community care to facilitate a prompt discharge.

A three-fold variation is demonstrated, with England reporting the longest lengths of stay, and Australia and Netherlands the shortest.

The data focuses on Adult Acute discharges and explicitly excludes psychiatric intensive care unit provision in each country. The impact of authorised leave is also shown as a red area on the chart.

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*LOS including leave across all general psychiatry beds*
Length of Stay - England

Analysis of Adult Acute length of stay within England demonstrates variation around the 33 day mean position.

The quartile ranges extend from 27 days to 39 days with three Trusts reporting length of stay in excess of 50 days.

Three English Trusts report average length of stay at 20 days or less.

The Trusts identified in green and red on the chart illustrate the position for one former Strategic Health Authority area and highlights the variation that exists within local areas.
The use of the Mental Health Act impacts on average length of stay positions both across countries and within countries.

Using England as an example, the chart opposite illustrates the 46 day mean length of stay evident for Adult Acute admissions under the Mental Health Act (i.e. length of stay for patients who were admitted on an involuntary basis).

The quartile ranges extend from 36 days to 54 days. Two Trusts have an average length of stay of below 20 days and seven Trusts an average length of stay of 60 days or longer.

**Inpatient Adult - ALOS (Excluding Leave) - Mean length of stay for patients admitted under Mental Health Act section:**
**UNADJUSTED FOR OUTLIERS (IN DAYS)**
Length of stay for older adults can be several months longer than for patients of working age. This is linked to the complexity of organic mental health conditions and also the presence of functional illness and co-morbid frailty.

Variation is also evident with this measure, with average length of stay in Australia typically being almost one month shorter than comparative admissions in England and Wales.
Bed Occupancy is a measure of how occupied a ward or unit was over a period. Typically calculated over a 12 month period, this compares the number of possible bed days that could have been occupied against the number of bed days that were occupied. A bed that was available for a full year would have 365 available bed days. On occasion, a bed may close for a period of time and not be available for a patient to occupy, for example during an outbreak of sickness on the ward or due to staffing shortages or ward reconfigurations.

Most health systems will report high levels of bed occupancy as inpatient facilities tend to be accessed whenever available for use. Comparative occupancy is therefore not an indicator of patient acuity but of wider demand for healthcare services. Bed occupancy data needs to be seen in the context of wider data on bed numbers and the extent to which community based alternatives are available.

The UK Royal College of Psychiatrists advises "A bed occupancy rate of 85% is seen as optimal. This enables individuals to be admitted in a timely fashion to a local bed, thereby retaining links with their social support network, and allows them to take leave without the risk of losing a place in the same ward should that be needed. Delays in admission, which result from higher rates of bed occupancy, may cause a person’s illness to worsen and may be detrimental to their long-term health.”

1 RCPsych “Do the right thing: how to judge a good ward”, June 2011

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While not every country was initially able to supply data on bed occupancy, it is interesting to see the relatively small amount of variation on this measure. In five of the 6 countries shown, occupancy rates are above the 85% target outlined by the UK Royal College of Psychiatrists.

When leave days are included in the position bed occupancy exceeds 100% in England and Australia.
Analysis of the bed occupancy rate within England shows much less variation than with all other benchmarking indicators. Occupancy is consistently high in England with the lower quartile rate at 88% and upper quartile rate at 96%.

Five English Trusts report 100% bed occupancy illustrating the pressure that exists on beds in the English NHS.

All of these positions exclude the use of leave days as a bed management strategy. Including leave days in the model increases the median bed occupancy position for England to 104% of available bed days.
Seclusion

Restrictive practices used to manage challenging behaviour include the use of restraint and seclusion, and different countries will have different policies on these.

This data shows the number of incidences of seclusion reported per 100 admissions across all bed types. Although their health systems are similar in many ways, the data suggests England has a much higher use of seclusion than Wales.

A more effective indicator of the tendency to use seclusion as a management tactic would be to compare seclusion rates against occupied bed days (to be developed in a further iteration of this report). Seclusion rates per 1,000 occupied bed days take into account the frequency of seclusion within inpatient episodes. This data was not available for enough countries to produce this more robust measure of the use of seclusion.

10 In Norway seclusion involves a patient held in a separate room, but with staff...
In addition to measuring total rates of seclusion usage, measuring the number of patients who experience seclusion can be a useful indicator. Typically the majority of patients will not be placed in seclusion at any point during their inpatient stay, but a small number will be and for these patients the use of seclusion may be a recurrent occurrence.

Although Sweden reported relatively low rates of seclusion, this chart shows that for patients placed in seclusion this will occur on average 3.6 times each.

In comparison, rates of seclusion per patient secluded in Australia are less than half this.

England reports a rate of 2.4 for the frequency of seclusion use for each patient who is secluded.
Use of Restraint

The use of restraint to manage challenging behaviour and de-escalate a dangerous situation on a ward remains a subject of much debate. Guidance from the English NHS is clear that restraint should be used only when there is immediate or imminent risk of harm to self or others (including staff and other patients). The English NHS also has a clear commitment to minimising the use of prone restraint.

Where restraint is used in England this averages 3.7 times per patient who is restrained. This confirms a trend evident in data from other countries where a small number of patients will typically account for a high proportion of total restraints.

For every patient in Wales who experienced restraint, the average number of times restraint was used was 4.3. This compares to Australia who reported the lowest rates of restraint per patient restrained, at 2.4 occurrences.
Community Follow Up
* 7-14 day community based follow-up post discharge

Countries were asked for the period during which they aim to offer a first follow up appointment for patients discharged from inpatient care. This was typically reported as within 7 days or within 14 days of discharge. Countries are shown here for their attainment against their local measure. Not all countries have explicit targets relating to speed of community follow-up after discharge and this may impact on both the completeness and quality of data, and also on the behaviour of each country’s mental health system.

In some cases this data includes patients who received a follow up only by specialist mental health community services and excludes patients whose follow up within 7 or 14 days took place with their GP.

England reports the highest rate of community based follow up care with 96% of patients followed up by a specialist mental health practitioner within 7 days of discharge. England also follows the best standard evident in the participant country group with patients needing to be followed up by a mental health specialist rather than a general physician or care worker.

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Community mental health services are essential for a developed mental health system in providing wide and speedy access to mental health services. Community mental health services provide most mental health interventions in developed countries and also support the process of minimising hospital admissions. In England around 97% of mental health service users at any time are being supported by specialist mental health services in community teams, rather than occupying inpatient beds.

The intensity of community support can be measured through the number of contacts from specialist mental health care staff that a patient might receive over the course of a year.

England reported an average position of 19 community contacts for each service user accessing community mental health services. Australia reported the most intense community support, with 22 contacts per patient per year. In Sweden rates were almost 3 times lower, at 8 per year, however many patients will receive care from other community services, not specialist mental health providers.
Community Caseloads - England

Wider analysis of data from the NHS in England illustrates variation in the level of community care provided to local populations.

The NHS average position is around 1,700 people are on community mental health team caseloads per 100,000 people aged 16 or over. There is a four fold variation from highest to lowest numbers of people supported. This variation can be cross-referenced to both differing levels of need and extent of reliance on bed based models of care. Health systems that rely more on bed based models typically have reduced capacity to support larger numbers of people in the community setting.
Data from England shows the levels of activity different patient cohorts receive will differ based on their 'cluster' or diagnosis group.

A patient on an English community mental health team who has a Psychosis will typically receive more contacts per year from community teams than a patient with Affective Disorder. And, while older people receiving support from memory services or specialist older peoples community team represent 31% of all patients on community caseloads, they receive around 14% of all activity delivered in the community. This profile illustrates how patient acuity, and psychosis in particular, influences the extent to which community based care is provided.
Suicide data has been provided by countries for the most recent year available (2013 or 2014). This data is also generally consistent with that available from the World Health Organisation’s Global Health Observatory (2012).

This data considers whole population suicide rates and is not exclusive to those in contact with mental health services. Data from the UK suggests that approximately 26% of suicides annually are from those in contact with specialist mental health services.

There is generally little variation on this metric between the countries surveyed and England has the 4th lowest suicide rate of the 9 country group at 10.3 per 100,000 general population per annum. Scotland report the highest suicide rate at 12.6 per 100,000 population but this has fallen by around 20% in recent years due to targeted suicide reduction initiatives.
Conclusions

The project’s work has been interesting on a number of levels and has engaged countries in the debate about mental health data, definitions, interpretation and analysis.

The aspiration of undertaking international mental health service comparisons has been met and interesting variations have emerged in the comparative data. The reasons for this variation are numerous and include issues around; data completeness, data quality, ability to produce data in line with the project’s definitions, the contextual position of each country’s health system, resource levels, and performance variations that might exist both within and between countries. Participants in the project have had an opportunity to discuss the findings from the work at a teleconference meeting in late June 2016. Further observations on the project’s findings are welcomed from both participants and commentators. Findings will also be shared with the International Initiative for Mental Health Leadership (IIMHL) at their February 2017 meeting.

In understanding the data, one of the main observations about the differences that exists in service models relates to the inclusion of substance misuse / addictions services within the data from Sweden and the Netherlands. The inclusion of this cohort adds to the bed numbers reported for both countries and the number of people in receipt of community based care. The widening of services to include people with broader problems of substance misuse also dilutes the average acuity of people in receipt of services in these countries.

The project’s findings show coherence on a number of areas. Perhaps the strongest elements of the analysis relate to the data on usage of general psychiatric services. Within this main specialty area, data on; admissions, readmissions, average length of stay, and bed utilisation by diagnosis category perhaps offer the most robust comparisons. These are framed by comparative data on detention systems which confirms a reasonable degree of consistency exists between countries on legal arrangements for involuntary treatment. However, the frequency of use of involuntary treatment between countries does vary with the highest use reported by Australia, England, Scotland and Wales where inpatient bed numbers are lowest. This higher incidence of detention is linked to patient acuity and confirms that countries with lower numbers of beds will have more concentrated acuity, often driven by the prevalence of psychosis service users in available general psychiatry beds.

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Conclusions (cont)

The frequency of use of involuntary detention may link to observations about the overall acuity of the inpatient cohort being associated with the extent of bed availability. Countries with the fewest numbers of beds tended to report a higher concentration of psychosis patients occupying these beds. In countries with more beds, similar numbers of psychosis patients appear to be admitted, but the overall share of bed numbers is lower due to bed capacity also being used to support larger numbers of patients with affective disorders and addictions care. Bed occupancy data suggests little variation exists between countries with high demand for beds in each nation. Bed occupancy averaged 90% in countries where data could be provided.

Average length of stay data demonstrates a three-fold range between countries with shortest and longest stays. Much of this variation can be attributed to bed numbers and the range in acuity of patients who access care. However, the performance range evident between UK countries and Australia is perhaps the most interesting with similar bed numbers available but a 2-3 fold variation in length of stay reported. It was not possible to collect data relating to service quality within the inpatient environment (use of seclusion and restraint) from all countries. These data items will therefore benefit from additional data submissions which may be possible in future iterations of this project.

Data relating to community based care is fascinating and has been made available by six countries. Initial analysis of this data suggests that models for community based services differ across participant countries. Countries reporting high levels of community based care (Australia and UK countries) typically report using fewer inpatient beds for mental health care. The speed of community follow-up post discharge also shows variation across countries. The countries with the quickest community response are those who have adopted specific targets such as a 7-day target in England and 14-day response in the Netherlands. England demonstrates particularly strong performance on community services in terms of the extent to which care is available and the speed of follow-up post discharge.

It is acknowledged that suicide rates are multi-factorial and not solely related to the extent to which mental health care is available. Norway has the lowest general population suicide rate of participant countries and Scotland the highest.

Comments on this report are welcomed and can be addressed to either Stephen Watkins or Zoë Morris of the NHS Benchmarking Network via s.watkins@nhs.net or zoe.morris@nhs.net.

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