MENTAL HEALTH OUTCOME MEASURES

Clinical review and descriptive survey of Psychiatrists' current practice

Sam Ransom 2018
HYMS

Mental Health Outcome Measures:
Clinical Review and Descriptive Survey of Psychiatrists' Current Practices: 2018

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SSIP Paper, Questionnaire and Poster

Introduction

In 2011, the coalition government published a paper titled 'No Health without Mental Health: A Cross-Government Mental Health Outcomes Strategy for People of All Ages'. This strategy aimed to implement a number of changes in an attempt to improve the mental health of the population as well as change the way in which mental health services are funded. It also called for there to be an increased role for outcome measures within the NHS, outlining their key role in monitoring the efficacy of different interventions the government implements. The Short Warwick-Edinburgh Mental-Wellbeing Scale (SWEMWBS), Health of the Nation Scale (HoNOS) and mental health clustering were all specifically mentioned as measures that have a role to play (1). Alongside these there are a number of other mental health outcome measures already being used regularly in clinical practice with others currently being developed. Despite this push calling for greater use of outcomes in mental health practice, there is not a particularly substantial evidence base for their use and more research is needed to determine what their role will be in the future (2).

What is an outcome measure?

An outcome measure is a tool that can be used to measure how effective an intervention is on a patient. It is typically used initially to obtain a baseline reading to give an indication of how a patient is on presentation. It is then repeated after an intervention to determine what effect, positive or otherwise, the intervention has had (3). The most common types of outcome measures are patient reported outcome measures (PROMs), clinician reported outcome measures (CROMS) and patient reported experience measures (PREMS) (4)(5). Some of the outcome measures can also be used a part of a screening for certain conditions from example the use of PHQ-9 and depression (6). Outcome measures can be useful because they allow patient progress to be monitored individually as well as tracking the performance of mental health services between local teams and the rest of the country. The Royal College of Psychiatrists has made several recommendations for what makes a

good outcome measure (7). As many of them are meant to be able to be completed without any assistance, it is important that outcome measures are clearly set out, easy to use and to understand (8). Any data produced by the outcome measure should be immediately available to the health care professional and patient and recorded, preferably electronically, which will allow any results to be used in the treatment decision making process. (9)

Although there is not currently good evidence to demonstrate that the use of outcomes measures improves the standard of mental health services in the NHS, most of the individual outcome measures have been shown to be valid tools with high levels of sensitivity. The Patient Health Questionnaire 9 (PHQ-9) is a commonly used outcome measure for monitoring the progress of depression which has been shown to have a sensitivity of around 88% and specificity of 88%. It has also demonstrated the ability to detect change in patients over time (10). SWEMWBS has been shown to be a valid tool for monitoring the effect of interventions or policies on large populations, but more research is needed to determine whether it is sensitive to change(11)(10). GAD-7 is a seven-item questionnaire that has a sensitivity of 82% and specificity of 89% for diagnosis of generalised anxiety disorder (12). Audit is a questionnaire that was designed to detect excessive alcohol consumption as well as alcohol dependence. It has been proven to be a reliable instrument in detecting drinkers at risk of alcohol dependence and alcoholism (13). Unlike the outcome measures previously mentioned which were all PROMs, the HoNOS is a CROM. It is the most commonly used routine outcome measure used in secondary mental health services in England (7). This outcome scale aims to measure social functioning of patients, as well give an assessment of their mental health. It is a mandatory questionnaire that doctors must complete to cluster patients into 1 of 20 groups which help to determine the level of funding the local region will receive from commissioners (14).

<u>Facilitators to increased use of outcome measure</u>

A number of facilitators for increased uptake of outcome measures have been identified. Outcome measures that are free and easily accessible tend to have a better uptake, due to doctors and commissioning groups being more willing to use them.(3) Training was identified as a major facilitator to uptake of outcome measures. Those outcome measures such as the PHQ-9 and GAD-7 that don't require any training were more likely to be used (2)(3). In those outcomes measures that require specific training, such as HoNOS, doctors who received appropriate training said they would be more likely to use them (2). Outcome measures that are quick for either the clinician or patient to complete and easy to understand are more likely to be used in a clinical setting. A number of studies

found that outcome measures have proved popular with patients, with some reporting that they feel outcome measures result in a more thorough history and facilitate better communications with the clinician (15).

Barriers to the use of outcome measures

The evidence base for barriers and facilitators to the use of outcome measures in healthcare and the research that is available is generally qualitative in nature. Within these papers there are several themes that occur frequently. Time restraints with the outcome measures is considered by several authors to be one of the biggest barriers. Clinicians felt that adding something else to complete would put their consultations under even more strain than they were previously under (7)(9). Lack of familiarity with outcome measures was another key issue that was identified (16). Clinicians stated that being unsure of which outcome measure was the most appropriate to use in a particular scenario had deterred them from using them alongside the belief that using an outcome they hadn't used before would make it less accurate (3). A qualitative study into the opinions of doctors on outcome measures outlined a number of reasons as to why they were resistant to increased use of outcome measures. This study stated that there was a strong belief amongst clinicians that clinical experience was superior to outcome measures, with some stating that their use could harm rapport and impede building a clinical relationship with the patient (15). The belief that outcome measure rarely changes how clinicians treat their patients was also voiced. As every patient is different some felt that using a scoring tool to determine how best to treat a patient is too generic due to differences in an individual's resilience, family support and social situation. When the use of outcomes measures is imposed by an organisation uptake does not necessarily increase and you run the risk that clinicians will resent being made to complete something against their will which can cause usage to decrease (3)(17). Conversely, clinicians seem to be more positive about completing an outcome measure if they themselves have chosen to use it rather than being told to use it (3).

Another apprehension raised by the doctors in the study was a worry that some would fall into the trap of using outcome measures in the place of taking a robust medical history which could result in less skilled doctors (15). A study looking at the validity of SWEMWBS found that of those who completed the questionnaire, more than half required help which could introduce bias into the results. This reinforces a concern that some outcome measures are too complex for patients to follow due to their use of sophisticated words or jargon and was compounded with a belief that people who speak English as a second language may particularly struggle (3)(8). Some doctors felt that the use of outcome measures regularly may cause patients to become disheartened if their

scores do not improve over time or that patients would be overwhelmed with paperwork to complete (18). In some cases, it is the design of outcome measures that can let them down, it is important that outcome measures are relevant to patient's concerns about their condition. A recent review of how PROMs are developed found that patients were only consulted 10.9% of the time about what matters to them about their condition when an outcome measure was being developed (4).

A recent Cochrane review on using outcome measures routinely in mental health services found there to be inadequate evidence to support their use. The studies they looked at to determine this had a high degree of uncertainty and bias. As the data available is of poor quality it is not possible to rule out the use of outcome measures as high quality research is not yet available to make any strong conclusions about them either way (2).

Conclusions

The use of outcome measures has become more widespread in recent years within mental health services, which can be party attributed to a push from the government. This has occurred despite the evidence base for their use lacking. While there is good evidence for individual outcome measures, showing that they perform their intended function and are sensitive to change, there is a lack of evidence that their use improves the delivery of mental health services in the UK.

There is definitely scope for more research to be done into the role outcome measures have to play. The increased usage of outcome measures should help future researchers make more definitive conclusions. Researchers have outlined a number of facilitators and barriers to the use of outcome measures, however, the level of research on the topic is not of a high standard. As well as this, the vast majority of issues identified both for and against the use of outcome measure is qualitative in nature and is therefore not generalisable.

In researching the topic, I could not find any quantitative research into the views of doctors on the use of outcome measures. This resulted in my decision to conduct my SSIP project into the opinions of mental health doctors to see how they feel about the use of outcome measure in mental health practice, despite the lack of a solid evidence base. I am interested in which, if any measures they find to be useful as well as what the drivers for using them are. More specifically, I also want to understand if they feel they are being pressured into using them by others via factors such as payment by results or pressure from superiors.

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Appendix I: Qualtrics Questionnaire

1) What is your staff grade (job title)? (eg consultant psychiatrist, trust grade, higher trainee, CT1-3, GP registrar, F1/F2, other, please state)

2) What subspecialty/team do you work in? (eg general adult psychiatry inpatient/community, specialist team, old age, liaison, other)

3) Please state your gender

- ○ Male
- ○ Female
- ○ Prefer not to say

4) How often do you use each of the following measures?

	0 = Not at all	1 = Rarely (less than once a month)	2 = Sometimes (less than once a week)	3 = Regularly (at least once a week)
PHQ-9 (Personal Health Questionnaire) for depression	○	○	○	○
GAD-7 (Generalised Anxiety Disorder) questionnaire	○	○	○	○
SWEMWBS (Short Warwick-Edinburgh Mental Wellbeing Scale)	○	○	○	○
ReQoL -10 (Recovering Quality of Life Questionnaire)	○	○	○	○
Family and Friends Question	○	○	○	○
HoNoS (Health of the Nation Outcomes Scale)	○	○	○	○
Mental Health Clustering Tool (eg for Payment by Results)	○	○	○	○
A validated scale for assessing cognition/dementia eg MMSE, ACE, MOCCA	○	○	○	○
A validated scale for assessing alcohol use eg AUDIT, CAGE	○	○	○	○

5) How useful do you find each of the following outcomes in your practice ?

	0 = Not useful	1 = Somewhat useful	2 = Useful	3 = Very useful
PHQ-9 (Personal Health Questionnaire) for depression	O	O	O	O
GAD-7 (Generalised Anxiety Disorder) questionnaire	O	O	O	O
SWEMWBS (Short Warwick-Edinburgh Mental Wellbeing Scale)	O	O	O	O
ReQoL -10 (Recovering Quality of Life Questionnaire)	O	O	O	O
Family and Friends Question	O	O	O	O
HoNoS (Health of the Nation Outcomes Scale)	O	O	O	O
Mental Health Clustering Tool (eg for Payment by Results)	O	O	O	O
A validated scale for assessing cognition/dementia eg MMSE, ACE, MOCCA	O	O	O	O
A validated scale for assessing alcohol use eg AUDIT, CAGE	O	O	O	O

6) Please rate the importance of each of the following in influencing your use of rating scales and outcome measures

	0 = Not important	1 = Somewhat Important	2 = Important	3 = Very Important
NHS Mandatory & Financial eg Payment by Results, Trust targets	O	O	O	O
Clinical eg useful in assessment, diagnosis or management	O	O	O	O
Professional – eg recommended in NICE guidelines	O	O	O	O
Peer pressure eg other psychiatrists/ team members use them	O	O	O	O
Educational – eg teaching, service evaluation, audit or research	O	O	O	O
The measure itself – eg short, easy to use, validated, relevant	O	O	O	O

7) ANY COMMENTS? Please summarise your attitude towards using rating scales and outcome measures in practice. What are the main barriers to their use? How may your practice change in the future?

SSIP Project Summary (see poster for figures 1 and 2)

Background: An outcome measure (OM) is a tool that can be used to measure how effective an intervention is on a patient over time. They can also be used to assess how well a service is performing and identify what areas need improvement. A 2011 government white paper 'No Health without Mental Health' strongly advocated their use in clinical practice[1].

Objectives

1) To ascertain which rating scales and OM are used by NHS psychiatrists
2) To describe attitudes towards and perceived usefulness of these measures
3) To describe any differences according to grade, gender or subspecialty

Methods

I designed a 7-item questionnaire on Qualtrics based on the themes identified in discussion with my clinical supervisor and a literature review. A draft questionnaire was reviewed by 5 consultant psychiatrists and their feedback on content and formatting was used to develop the final questionnaire. The questionnaire was sent to all 210 psychiatrists from foundation doctor to consultant in the TEWV trust. An e-letter accompanied the questionnaire briefly explaining the project and that all responses would remain completely confidential. Data was analysed using excel. Non-parametric tests were used, including spearman's rank. Themes and responses to qualitative data were collated.

Outcomes Assessed

Frequency of use and perceived comparative clinical utility of mental health measures: PROMS: PHQ-9, GAD-7, SWEMWBS, ReQoL-10. Comparison with PREMS (Family & Friends Q), CROMS: dementia (MMSE, MOCHA), alcohol (CAGE, AUDIT) and mandated NHS Service Measures: HoNOS, Mental Health Clustering Tool

Results

The response rate was 62/210 (29.5%). The most common factors affecting use of outcome measures were reported as perceived clinical usefulness, followed by properties of the tool itself (eg short, easy to use), whether use of the tool was mandatory (eg clustering) and professional factors. Clustering tools and cognitive screens were the most frequently used OM with 44% using them at least once a month. PHQ-9 and ReQol were the least frequently used with only 16% and 4% respectively. There was no statistically significant relationship between the most frequently used OM and the OM deemed most useful ρ(-0.21).

There was no statistically significant relationship between which OM were used frequently by juniors compared to consultants ρ(0.37, men compared to women ρ(0.60) or between general adult psychiatrists and other specialities ρ(0.35). On assessing which OM they found useful there was a statistically significant relationship between juniors and consultants ρ(0.83), men and woman ρ(0.8) and general adult and other specialities ρ(0.88). Cognitive screens were found to be the most useful, with 69% finding them to be useful or very useful. Clustering tools were found to be the least useful with 60% finding them not at all useful.

Fig 1 (see poster) shows the relationship between outcomes frequently used and outcomes found to be useful. Fig 2 shows the factors that affect OM usage. 51% of respondents commented. The most commonly occurring comments about OM was about the time they take up (24%) and a belief that OM shouldn't be used as an alternative to clinical judgement (14%).

Conclusions

A recent Cochrane review which concluded that there is inadequate evidence that using outcome measures leads to improved outcomes but cited the need for higher quality research. In this study, despite there being a statistically significant relationship between respondent subgroups about which OM they found useful, this did not seem to relate to how frequently they are used. This supports the idea that there are a range of factors other than clinical utility that determine why respondents use outcome measures in daily practice.

Dissemination **HYMS Poster Presented SSIP Conference, 13th April 2018:**

Mental Health Outcome Measures:
Clinical Review and Survey of Psychiatrists' Current Practice

Sam Ransom Year 3 Medical Student, HYMS & Paul Blenkiron, SSIP Mentor, 2018

Background

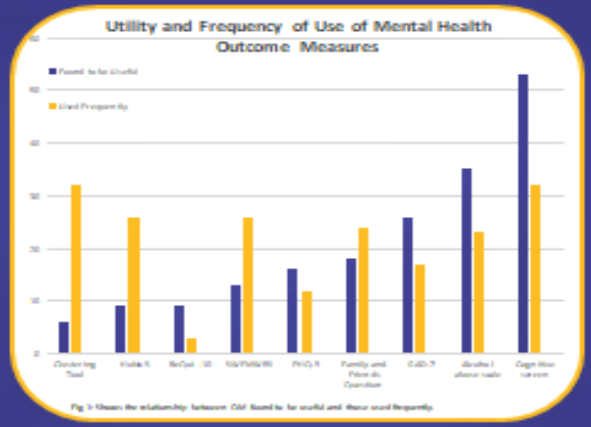
An outcome measure (OM) is a tool that can be used to measure how effective an intervention is on a patient over time. They can also be used to assess how well a service is performing and identify what areas need improvement. A 2011 government white paper 'No Health without Mental Health' strongly advocated their use in clinical practice[1]. A recent Cochrane review concluded that there is inadequate evidence to support their use but stated the need for higher quality research before making any definitive conclusions[2].

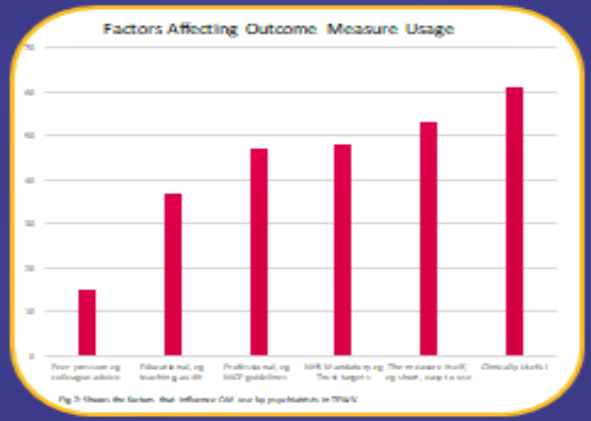
Objectives

1) To ascertain which rating scales and OM are used by NHS psychiatrists
2) To describe attitudes towards and perceived usefulness of these measures
3) To describe any differences according to grade, gender or subspecialty

Methods

I designed a 7-item questionnaire on Qualtrics based on the themes identified in discussion with my clinical supervisor and a literature review. A draft questionnaire was reviewed by 5 consultant psychiatrists and their feedback on content and formatting was used to develop the final questionnaire. Under the HRA classifications this project is deemed to be a service evaluation which does not require any ethical approval this was also double checked with HYMS. The questionnaire was sent to all psychiatrists from foundation doctor to consultant in the TEWV trust. An e-letter accompanied the questionnaire briefly explaining the project and that all responses would remain completely confidential. Data was analysed using excel. Non-parametric tests were used, including spearman's rank. Themes and responses to qualitative data were collated.





Results

Clustering tools and cognitive screens were the most frequently used OM with 44% using them at least once a month. PHQ-9 and ReQol were the least frequently used with only 16% and 4% respectively. There was no statistically significant relationship between the most frequently used OM and the OM deemed most useful ρ(-0.21).

There was no statistically significant relationship between which OM were used frequently by juniors compared to consultants ρ(0.37, men compared to women ρ(0.60) or between general adult psychiatrists and other specialities ρ(0.35). On assessing which OM they found useful there was a statistically significant relationship between juniors and consultants ρ(0.83), men and woman ρ(0.8) and general adult and other specialities ρ(0.88). Cognitive screens were found to be the most useful, with 69% finding them to be useful or very useful. Clustering tools were found to be the least useful with 60% finding them not at all useful. Fig 1 shows the relationship between outcomes frequently used and outcomes found to be useful. Fig 2 shows the factors that affect OM usage.

51% of respondents wrote in the comments box. The most commonly occurring comments about OM was about the time they take up (24%) and a belief that OM shouldn't be used as an alternative to clinical judgement (14%).

Conclusions

Despite there being a statistically significant relationship between respondent subgroups about which OM they found useful it doesn't seem to relate to how frequently they are used. This could mean something apart from clinical utility is informing why respondents use OM. These could include the factors outlined in Fig 2.

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From: Samuel Ransom [mailto:hysr8@hyms.ac.uk]
Sent: 21 March 2018 17:19
To: BLENKIRON, Paul (TEES, ESK AND WEAR VALLEYS NHS FOUNDATION TRUST)
Subject: Re: SSIP Sam Project and the Conference 13th April 2018

Hi Paul, All going well thanks! The poster deadline was a few days ago, managed to get everything submitted successfully on time. I have attached my poster. There were some interesting findings such as clustering being the most commonly used outcome measure as well as the one found to be the least useful. ….

Thanks very much for all of your help with the project you have really been a very supportive mentor.

Best wishes,

Sam

Certificate of Mentoring - Awarded to Dr Paul Blenkiron
For mentoring Phase II students
On the HYMS SSIP Programme during the academic year 2017-18
Dr Angela Hoye, Academic Lead for SSIP (Phase II), HYMS