Is it possible to measure social and occupational functioning in a CMHT?

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Many people with psychiatric disorders are unable to find suitable employment or adequate support to maintain it. The MINI ICF-APP allows for focused monitoring of areas where support is needed. The authors assessed the usability, acceptability and usefulness of the MINI ICF-APP within a community mental health team to establish whether this instrument really can improve identification and the targeting of evidence-based employment interventions for those with psychiatric disorders.

Mental health disorders provide a disproportionate contribution to the impairment of social and occupational functioning compared to other chronic diseases. The World Health Organization currently ranks depression third using the Global Burden of Disease rating system, and consistently predicts it to be the leading worldwide cause of burden by 2030. Impairment of functioning associated with mental health problems is not limited to those with depression, with many people suffering from anxiety disorders or psychoses finding work extremely difficult. The literature demonstrates that many want to work but struggle to find suitable employment or adequate support to maintain it. There is an increasing will to assist those with mental health problems into employment, and the development of services is well advanced. In most areas of the United Kingdom there are individualised services to support people into employment based upon the Individual Placement and Support Model developed and evaluated by Drake and colleagues in the USA. In addition, alterations in social functioning are increasingly used as valuable outcome measures in controlled studies of novel service configurations and pharmaceutical agents.

Despite these facts, social and occupational functioning is often poorly measured and recorded in standard community mental health care. Limited instruments are available to record strengths and weaknesses. This pilot study aimed to assess the usability, acceptability, and usefulness of the MINI ICF-APP, a measure that was developed in Germany and has recently been validated in English in a community sample. While other measures of social functioning exist, these tend to be either very brief single-score ratings – such as the Global Assessment of Functioning (GAF) or the Personal and Social Performance scale (PSP) – or more detailed and specific measures that are difficult to use in routine clinical practice. The MINI ICF-APP has the potential to sit in between and allow for focused monitoring of areas where support is needed while being brief and requiring relatively little training for staff.

This pilot study therefore aimed to build upon the previous German and English language validation studies by:

- Developing a brief, clinically-orientated training package for staff.
- Using the instrument in routine assessment of new referrals to a community mental health team (CMHT).
- Asssessing clinician views regarding the usefulness of the instrument.
- Collecting patient experiences of being assessed using it.
- Evaluating the spread of scores among a non-selected routine sample in order to determine whether it would be useful in allocating resources such as Individual Placement and Support services.

The MINI ICF-APP

The International Classification of Functioning, Disability, and Health (ICF) was endorsed in 2001 by the WHO general assembly and complements the International Classification of Diseases version ten (ICD-10). Its stated aim was to provide a unified and standard language and framework for the description and classification of health and health-related states. In the ICF there is a clear distinction between disorders of function (illness signs and symptoms) and disorders of capacity (limitations in actually executing activities), with no direct relationship between the two. Disorders of function and disorders of capacity...
can directly or indirectly lead to
disorders of participation such as
sick leave (an inability to perform
at work). The ICF is a complex
document and the MINI ICF-
APP was developed to allow the
reliable and rapid measurement
and recording of impairments
of capacity.

The MINI ICF-APP (the Mini
International Classification of
Functionality, Disability and
Health Rating for Activity and
Participation Disorders in
Psychological Illnesses) was devel-
opled in Germany and there are
now also English and Italian
versions. It has been fully validated
in both English and German.12,13
The validation population in the
UK consisted of people under
the care of a CMHT with diagnoses
of depression, psychosis, or
anxiety disorders.

The MINI ICF-APP measures
limitations of capacity in the con-
text of mental disorders. It follows
the structure and dimensions of
the ICF, using the definitions of
the Groningen Social Disabilities
Schedule II.14,15 The instrument
is observer rated and the usual
time scale for rating is the last two
weeks, though this can be varied as
appropriate. Thirteen domains of
capacity are assessed and scored by
the clinician: (1) adherence to reg-
ulations; (2) planning and struc-
turing of tasks; (3) flexibility; (4)
competency; (5) endurance; (6)
assertiveness; (7) contact with oth-
ers; (8) group integration; (9) inti-
mate relationships; (10) non-work
activities; (11) self care; (12)
 mobility; and (13) competence to
judge and decide. Each dimension
is rated on a five-point Likert scale
(0: no impairment; 1: mild impair-
ment; 2: moderate disability; 3:
severe disability; 4: total disability).
Scoring uses all available informa-
tion, including observation from
the interview situation, the
individual’s self-report and case
record. Clinicians use questions to
gain information on how patients
manage with daily activities and
the difficulties they may face; anchor definitions describing
degrees of disability for each
domain are provided in the rating
manual to guide them.

Materials and methods
The protocol was approved by the
Proportionate Review Committee
on 29 May 2012 with the following
reference attached: 12/SC/0315.
The study ran from June 2012 until
December 2012.

The initial phase of the project
was the development of the train-
ning package. The principles from
which we worked were that any
instrument that is used in routine
clinical or research practice must
be relatively straightforward to train
people to use. Those that require
high levels of training and/or edu-
cation are likely to be relatively
infrequently used due to the com-
mitment involved. The training ses-
sion was 2 hours long and consisted
of the elements in Table 1.

Eight members of staff – includ-
ing psychiatrists, psychiatric nurses
and social workers – attended the
training and subsequently took
part in the pilot study. This repre-
sented the majority of available
team members.

Once the training session was
completed, a convenience sample
of 40 ‘new’ patients was recruited
to the study over a period of five
months. These were patients
undergoing initial assessment fol-
lowing referral to the South East
Oxon Community Mental Health Team.
Eligible patients who gave
written informed consent took
part. Patients’ social and occupa-
tional functioning was rated using
the MINI ICF-APP as part of their
holistic initial assessment. The
scoring of the MINI ICF-APP was
not linked to specific referral

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<thead>
<tr>
<th>Description</th>
<th>Time</th>
<th>Resources</th>
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<tbody>
<tr>
<td>Presentation: introduction to the concept and explanation on how to score the MINI ICF-APP</td>
<td>30 mins</td>
<td>Powerpoint</td>
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<tr>
<td>Role plays: 1. Stop-start demonstration. Enabling discussion of scoring individual employment domains 2. Demonstration of a complete assessment. Groups of 2s to discuss and agree scoring and totals 3. Three written case vignettes provided for pairs to role play and score</td>
<td>45 mins</td>
<td>Handout packs Actor’s briefs for 2 scenarios 3 written scenarios</td>
</tr>
<tr>
<td>Closure: summary of learning points. Time for questions and clarification</td>
<td>15 mins</td>
<td>Powerpoint</td>
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Table 1. Training session for the MINI ICF-APP occupational functioning tool
guidelines that clinicians were advised to adhere to. However, referrals for specialist employment support, support within the existing CMHT service, signposting, or no support were recorded for this group and compared to a matched sample of referrals from 12 months previously who had not been assessed using the MINI ICF-APP.

Following the assessment, each patient was asked to complete a brief evaluation questionnaire of their experience of the interview. Clinicians were surveyed at the end of the pilot to gather their opinions regarding the ease of use and usefulness of the instrument. These results are presented below.

Descriptive analysis of the data was carried out using the Stata 9.2 statistics program.

Results

The baseline demographic data of the study population compared to a matched sample of routine referrals to the CMHT one year previously are displayed in Table 2. There are marked similarities between the groups, suggesting that the study population is representative. The median age of patients in both groups is just under 40 years, with a greater proportion of women presenting for assessment than men at a ratio of approximately 3:2. Almost one-fifth of patients assessed in both groups lived in supported accommodation and half were in a long-term relationship.

Staff feedback regarding the training they received to begin using the MINI ICF-APP was positive. Seven out of eight clinicians completed the questionnaire regarding their experience of using the instrument. They overwhelmingly reported that they found it easy to learn how to use the MINI ICF-APP (6/7), that it was straightforward to use (6/7), and that it was not embarrassing to administer (5/7). Five out of seven reported that it was helpful in guiding management and 4/7 stated that it increased their awareness of employment needs. Qualitative comments regarding the strengths of the MINI-I CF-APP included: ‘It raised my awareness of the employment needs of my patients and the potential barriers to returning to work’; ‘Very useful and informative’; and ‘[MINI ICF-APP] is very quick to use and practically based so was well tolerated by patients’.

One clinician stated that completing the MINI ICF-APP identified the range of social and occupational difficulties that patients experience, and led them to consider specific interventions as an alternative to generic CMHT support that would provide benefit to their mental health.

There were very few free text comments from clinicians identifying drawbacks. One clinician expressed that it was initially cumbersome to administer but it became smoother with use. A second stated that the extra time taken for assessments was a factor professionals needed to take into account, but was outweighed by the benefits granted.

Thirteen patients (33%) completed the evaluation form. While low, this is approximately the level of response that is typical in this group of patients. Out of this group, all (13/13) reported that the questions were easy to understand and none (0/13) reported that it ‘took too much time’. Nine out of 13 felt listened to with regard to their employment needs. Only 3/13 reported that some questions were awkward or embarrassing to answer. Free text comments from patients indicated that the MINI ICF-APP integrated into their initial assessment.

The MINI ICF-APP assessed the level of disability within 13 separate domains contributing to the ability of study individuals to engage in the workplace. When comparing the relative disability levels within the study population (Figure 1), domains of physical ability are least impaired. These include the capacity to perform activities of daily living (‘Self-care’), and the capacity to move around wherever necessary (‘Mobility’). There was a relatively high level of disability within the cognitive domains of ‘Endurance’ (the capacity to maintain an activity and a continuous level of performance over time), and ‘Flexibility’ (the capacity to adjust to changing situations, persons, or demands in an adaptive way). Specific levels of disability at domain level within individuals may be able to provide clinicians greater focus in targeting barriers to occupational functioning.

There was a wide distribution of sum scores from 0–36 on the MINI ICF-APP. The median score

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<th>Study sample (using MINI ICF-APP)</th>
<th>Matched sample (standard assessment)</th>
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<tbody>
<tr>
<td>Median age (interquartile range)</td>
<td>38 (29–47)</td>
<td>39 (28–49)</td>
</tr>
<tr>
<td>Male</td>
<td>17 (42.5%)</td>
<td>15 (37.5%)</td>
</tr>
<tr>
<td>Female</td>
<td>23 (57.5%)</td>
<td>25 (62.5%)</td>
</tr>
<tr>
<td>Supported housing</td>
<td>7 (17.5%)</td>
<td>7 (17.5%)</td>
</tr>
<tr>
<td>Independent housing</td>
<td>31 (77.5%)</td>
<td>33 (82.5%)</td>
</tr>
<tr>
<td>Stable relationship</td>
<td>19 (47.5%)</td>
<td>19 (47.5%)</td>
</tr>
<tr>
<td>Single/divorced/widowed</td>
<td>20 (50%)</td>
<td>21 (52.5%)</td>
</tr>
</tbody>
</table>
was 14 (interquartile range 9–21). This is represented in Figure 2.

Comparison with a sample of referrals to the same service 12 months previously revealed no marked differences in patterns of support offered with regard to employment. Three-quarters of patients did not receive any specific employment intervention, and there were low rates of targeted employment support in both groups (Table 3).

Discussion

This small pilot study was conducted to assess the feasibility of using a novel measure of social and occupational functioning (the MINI ICF-APP) in routine clinical care. Key factors promoting the introduction and usefulness of instruments are practicality of training, level of professional expertise required, patient acceptance, and staff perceptions of usefulness and any difficulties.

This study suggests that the MINI ICF-APP is an instrument that can be effectively taught to clinicians from a range of professional backgrounds. The training required for staff took 2 hours and general feedback was positive. Its use was valued and viewed as acceptable by patients. Clinicians reported that the MINI ICF-APP was brief and straightforward to administer, and provided a helpful contribution to assessing social and occupational needs.

In order to be clinically meaningful, a measure must have a range of scoring that allows discrimination between different levels of impairment to direct interventions appropriately. In this study, the MINI ICF-APP was able to detect widely varying levels of impairment within the CMHT population. We propose three broad groups of scoring based on the distribution of sum scores and aligned to graduated need for more specialised employment intervention. These cut offs are represented by vertical red dashed lines in Figure 2. Sum scores between 1 and 13 represent mild impairment where simple advice or signposting to other agencies could be considered. Scores between 14 and 26 represent moderate disability and may benefit from targeted CMHT input concerning employment. Significant disability is represented by scores of 27 or above. This group of individuals may be considered for referral to specialist employment services.

The referral rates for ongoing support were low in both the study population and the matched sample, and the study was not large enough to detect differences in referral patterns. However, the use of referral guidance based upon sum disability scores from
the MINI ICF-APP could lead to greater and more targeted referral with improved outcomes as a consequence.

Conclusions
This pilot study suggests that the MINI ICF-APP is a potentially useful instrument in the assessment of social and occupational functioning in routine UK community mental health care. As the information needed to rate the MINI ICF-APP is largely contained within what would be gathered routinely, it readily formed part of a ‘standard’ new patient assessment in the CMHT context.

Employment in those with mental health problems is increasingly being prioritised with significant investment both in health care services such as Individual Placement and Support and by the Department of Work and Pensions through the national network of Job Centres. Measurement of impairments remains patchy and incomplete, however.

We believe that the widespread use of brief measures would improve identification and the targeting of evidence-based interventions such as Individual Placement and Support. The Mini ICF-APP is such an instrument, with demonstrable ease of training and use and positive feedback both from those who use it and those with whom it is used.

Further research is needed to examine the change in awareness of employment needs and impact on occupational functioning when the MINI ICF-APP score is linked to referral guidelines, and utilised within larger populations of patients.

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Table 3. Referral outcomes for employment support in the study population (n=40) compared to a matched sample (n=40)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Study sample (using MINI ICF-APP)</th>
<th>Matched sample (standard assessment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No specific action</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Signposting to other agencies</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Targeted CMHT employment support</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Referral to specialist employment support services</td>
<td>0</td>
<td>1</td>
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CMHT = community mental health team.

Declaration of interests
No funding was received for this study. AM has received educational grants from Janssen-Cilag Ltd. AM is the originator of the English language training package for the Mini ICF App.

References