



# A tool to measure progress and outcome in recovery

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## ABSTRACT

Recovery and the use of routine outcome measurement tools are key topics for mental health nurses. This article reports on research carried out to assess the usability of an outcome measure designed to assess recovery in clinical practice. Results indicate that the Individual Recovery Outcomes Counter (I.ROC) is both easy to use and well liked by services users.

Since the publication of Anthony's (1993) seminal paper, recovery has rapidly become one of the most influential concepts in mental health in the UK. The British literature has been comprehensively summarised by Bonney and Stickley (2008) and Stickley and Wright (2011). It is a cornerstone of the Nursing and Midwifery Council's (NMC) vision for mental health nursing (NMC 2010) and is of overarching importance for the Westminster government (Department of Health, 2011) as well as the devolved administrations in Scotland (Tilley and Cowan, 2011; Bradstreet and McBrierty, 2012), Wales (Welsh Government, 2012) and Northern Ireland (DHSSPNI, 2011). Much of the early literature in the field was concerned with defining the concept and arguing for its acceptance as a counter to prevailing notions of cure and treatment. More recently, as recovery has moved

into the mainstream, the focus of work has changed and diversified. One stream of this work deals with the measurement of recovery. This article reports on the usability of one of such measure, the Individual Recovery Outcomes Counter (I.ROC) (Monger et al 2012).

The I.ROC is a twelve-item facilitated questionnaire that was designed by the Scottish mental health charity Penumbra to measure recovery, and which covers the indicators identified in *Box 1*. It is routinely used on first contact with the service and thereafter on a three-monthly basis.

The I.ROC aims to measure progress made by the individual on the recovery journey while also providing prompts for discussion of future goals and outcomes. The tool is also used as a service level outcome measure, which provides important data for funders in relation to both value for money and quality of service. The routine use of outcome measures in mental health is an important priority for the UK government (Mental Health Network, 2011). This is echoed in a number of other countries where outcome measurement is more commonplace (Trauer, 2010).

Completion of I.ROC enables the participant and their support worker to plot the service user's progress across each of the domains, thereby highlighting areas that may require changes to the level of support. It can be used to assist in care planning and in the development of aims and goals. The key issue here, is that I.ROC is completed as a collaborative venture, which enables the service user and mental health workers to work together as part of the person's recovery. As can be seen in *Figure 1*, data gained from the I.ROC assessment can also be used to provide an easily understandable pictorial account of how things stand for a user at any given time. It is a useful way of providing feedback to the service user and a mechanism by which staff can evaluate the success of their interventions.

A positive initial evaluation of both the reliability and validity of the tool has been undertaken (Monger et al, in press). While reliability and validity are essential for any measurement tool, usability is also critical if the tool is to be of value in the practice setting. This article therefore explores the usability of

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the I.ROC. More specifically, we report on the views of service users in relation to:

- Their ability to engage with the measure
- The extent to which it helped to focus their recovery plans
- The degree to which it helped them make sense of their progress.

## Development of the tool

A detailed account of why the tool was developed has been provided by Monger et al (2012). In terms of process, I.ROC has gone through various iterations. These have taken account of key issues in the recovery literature as well as the views of service users and staff. The final version was developed following a series of focus groups involving key stakeholders, after which both the layout and content of the tool were amended. The main changes made at this point were related to the clarification of wording on specific items as well as the general appearance of the I.ROC. Professional graphic designers were employed with a brief to create something which was user friendly and took account of some of the problems with concentration and processing that have been reported as issues for some users with mental health problems (Bennett, 2011).

## Method

Data collection was carried out by Penumbra staff ( $n=17$ ), all of whom received training from the research team prior to the commencement of the study. One hundred-and-seventy-one service users took part in the study. To assess usability, participants were asked to complete the I.ROC along with two other tools commonly used in outcome/recovery measurement—these were chosen because of their robust and widespread use within recovery and outcome measurement. As such, they can be considered 'gold standards' in recovery focused outcome measurement. As with the I.ROC, both tools use a Likert scale, making answers easily comparable.

The Recovery Scale (RAS) (Giffort et al, 1995; Corrigan et al, 1999) is a 41-item questionnaire, which has been tested against other measures of recovery and has been shown to be both valid and reliable (McNaught et al, 2007). BASIS-32 (Eisen, 1996; Eisen et al, 1999) is a 32-item outcome measurement questionnaire widely used in Australia and New Zealand, where national and state funders require services to collect and use outcome data (Trauer, 2010).

Participants were asked a series of questions about their experience of completing the tools, and were also invited to provide general comments on this. Quantitative data was analysed using SPSS for Windows (version 19). Qualitative data was analysed for key themes.

## Box 1. I.ROC indicators

- Mental health
- Physical health
- Personal network
- Participation and control
- Life skills
- Exercise and activity
- Social network
- Self management
- Safety and comfort
- Employment and skills (now purpose and direction)
- Valuing myself
- Hope for the future

## Participants

Participants consisted of 79 women and 92 men with an age range of 15–79, and a mean age of 50. All were receiving support in the community from Penumbra at the time of data collection. This support ranged from occasional respite care through to 24-hour supported accommodation. Length of time in service ranged from 49 days to 20 years, with 70% receiving support for between six months and two years. 32% were still in their first year of service. There were no exclusion criteria.

Diagnoses were largely self-reported, and ranged from anxiety, through to multiple, complex diagnoses. Between the 171 participants, there were 320 reported diagnoses, with the most common being depression.

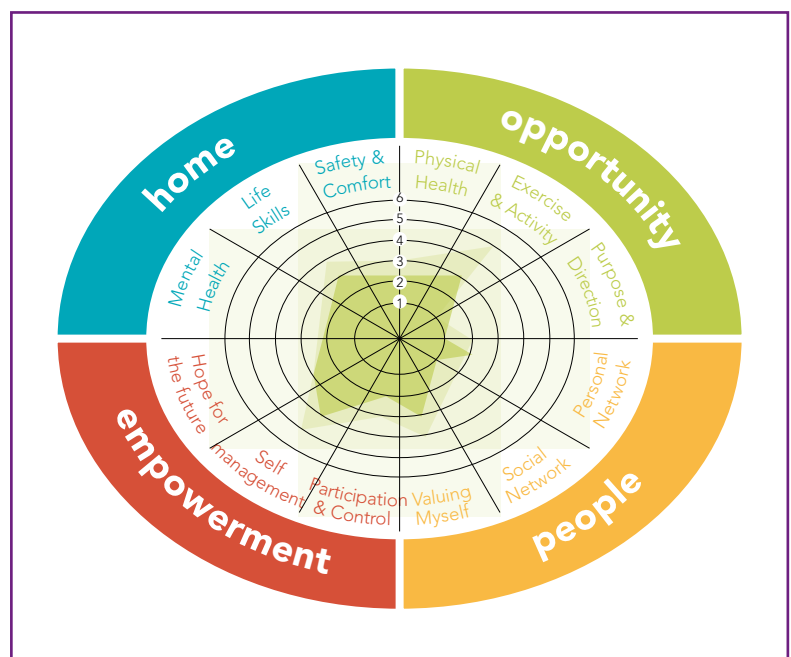


Figure 1. The Individual Recovery Outcomes Counter (I.ROC)

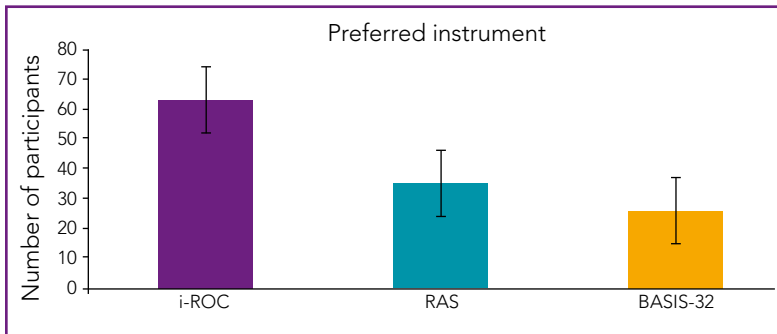


Figure 2.

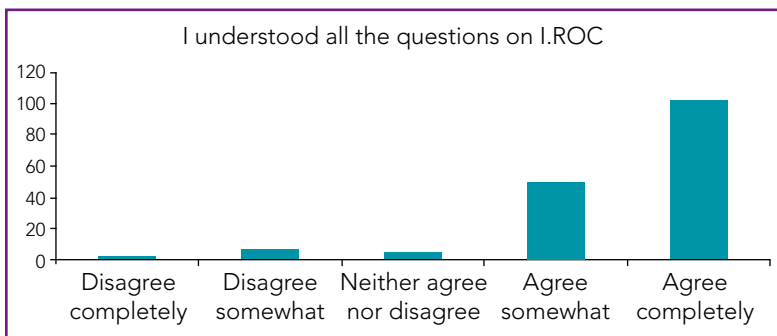


Figure 3.

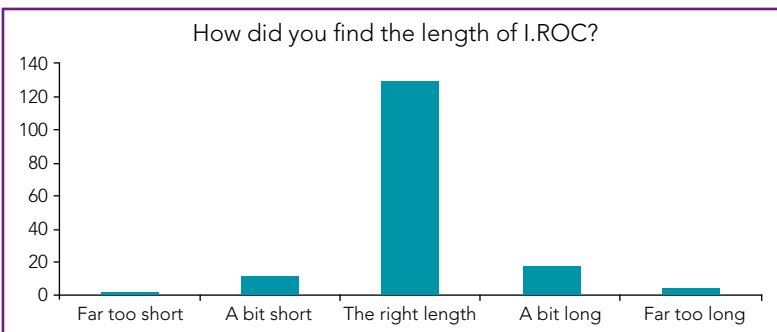


Figure 4.

## Ethical issues

The study was reviewed and approved by the School of Social and Health Sciences Ethics Committee at the University of Abertay.

## Results

In terms of preference, *Figure 2* indicates that the I.ROC was the most popular measure, with significantly more participants selecting it than either RAS ( $t=5.996, p<0.001$ ) or BASIS-32 ( $t=7.245, p<0.001$ ) as their preferred questionnaire. Conversely, the BASIS-32 was found to be the least popular questionnaire with significantly more participants selecting it as their least preferred questionnaire when compared with either the I.ROC ( $t=-4.49, p<0.001$ ) or RAS ( $t=-4.173, p<0.001$ ).

Approximately 50% or more of participants with a diagnosis of schizophrenia, anxiety (52%) or depression (49%), who selected a favoured

questionnaire, chose the I.ROC. This trend was repeated irrespective of number of previous I.ROCs completed (percentage of participants who preferred I.ROCs: 0 previous I.ROCs: 40%; 3 previous I.ROCs: 60%; 7+ previous I.ROCs: 74%). Participants who had been with Penumbra less than 6 months (0–6 months: 57%) preferred the I.ROC, although not to a statistically significant degree (ANOVA (Welch):  $F=3.25, df=2.39, p=0.59$ ), as did those who had been with the organisation for 6 years (49–72 months: 58%;  $F=3.808, df=2, 33, p<0.05$ ).

## Service user views of the I.ROC

To further understand the usability of the I.ROC, participants were asked a series of questions about specific aspects of the tool. The first of these asked users to comment on the extent to which they understood each of the twelve individual questions. *Figure 3* indicates that less than 10 of the 171 participants had difficulty understanding the meaning of questions. The second question asked participants to comment on the length of the tool. As illustrated in *Figure 4*, the vast majority found this to be acceptable with much smaller numbers finding it either too short or too long. The former is probably fairly easy to address in routine use if staff can be encouraged to consider offering users the opportunity to expand upon their answers. The latter is more problematic and may indicate difficulties referred to earlier in terms of comprehension and processing and which are often a feature of severe mental health problems. With regard to this group, it may be that more time needs to be taken with some users, or that completion should be carried out over more than one meeting.

The ease with which the I.ROC can be completed was the most frequent theme in participants' comments about why they liked this particular tool, accounting for a quarter of all comments. People said that the I.ROC was easier than the other questionnaires. Participants described the I.ROC as 'easy to understand', 'clear' and 'simple'. As one participant said, 'easier, really easy to understand. Simplest one out of the three.' This is likely to be an important factor in the popularity of the tool, as for the questionnaire to be completed accurately, the questions must be fully comprehended. Further, it is important that users do not find the task too onerous as this opens up a greater possibility of misunderstanding and error. It may also increase the likelihood of users avoiding or skimming over specific issues.

*Figure 5* demonstrates the participants' views on the acceptability of the questions. Very few participants felt uncomfortable answering any of the questions on the I.ROC. They also commented on the questions within the I.ROC, saying that they liked both the



format and the content. People particularly liked the breadth of the questions, feeling that the I.ROC 'covers a lot of ground and appears very effective.' Participants also liked the wording, 'Liked the way it was worded', and could identify with specific questions, particularly the mental health question, 'the mental health part was important to me.'

The two questions that attracted most negative comment were those on purpose and direction ( $n=8$ ) and hope for the future ( $n=9$ ). A small amount of discomfort in answering questions could be argued to show that the questions are targeting important issues, it is important to understand why these specific areas attracted negative comment. While this is not entirely clear from the current data set, some participants gave an indication of what the issues might be; '[I.ROC was my] least favourite because it tries to get too in depth'; 'I felt like the I.ROC was a bit personal.'

Given the fact that the majority of participants were unemployed and had long-term mental health problems, it might be that discomfort around these areas reflects genuine difficulty, which is often outside the control of individuals, is very hard to change and thus, touches individuals deeply.

The results paint a picture of a tool that is found by the vast majority of participants to be usable. *Figure 6* sheds further light on this issue by asking service users to comment on the usefulness of the tool in relation to their own personal recovery. The spread of answers clearly indicates that participants find the tool both meaningful and useful in terms of helping them to think about their own recovery. As one participant said, 'I felt this questionnaire was pertinent to my progress or evaluation of how I see myself'.

Participants were also asked how they felt about the fact that they would be asked to complete the I.ROC again as part of their ongoing support. As indicated in *Figure 7*, almost everyone indicated that they would be happy to do this. This has also been illustrated by comments from participants, who found the I.ROC useful. One participant commented, 'I like doing them and I'm interested in my results' Another agreed that the I.ROC 'makes you look back as to how you felt and helps you focus on what to work towards.'

As the tool has been designed to provide ongoing feedback on the individual's recovery journey and is likely to be completed on more than one occasion, this is an important finding.

## Discussion

Where many studies report on the reliability and validity of tools designed to measure some aspect of the service user experience, this study sought to establish the usability of a tool. Usability is crucial in everyday clinical practice if service user and staff

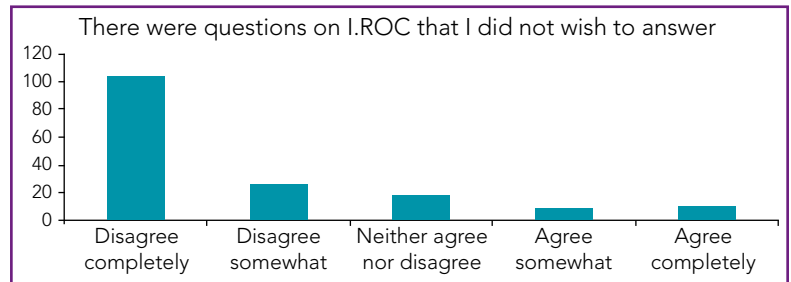


Figure 5.

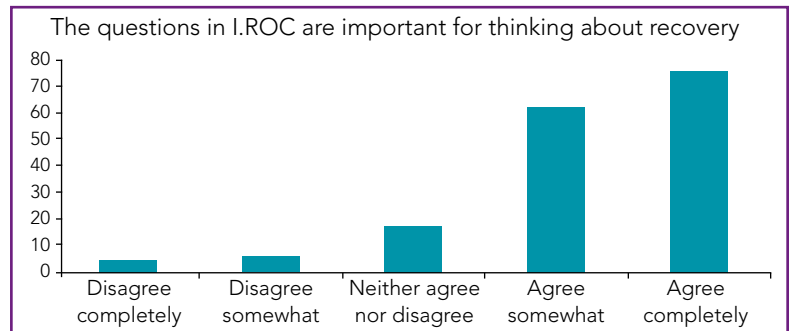


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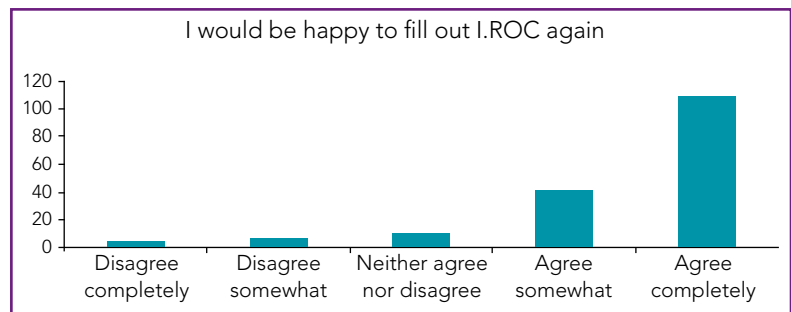


Figure 7.

are to use objective measures on a routine basis as recommended by Trauer (2010), and Trauer, Callaly and Herrman (2009)

In this study participants expressed a clear preference for I.ROC over the other two measures. This preference clearly increased with familiarity. Further work should explore this with a view to establishing a better understanding of the relationship between these two factors. Specifically, does familiarity determine preference or is the relationship between the two more complex? There is evidence to suggest the latter, in that with very few exceptions, participants found the I.ROC easy to complete with a clear layout and an engaging format. Moreover, the questions made sense to the participants, and were also deemed to be relevant to their recovery journey. This indicates that preference is not simply a matter of familiarity.

These points are also critical if an outcome measure is to become embedded in practice and used on a routine basis. The brevity of I.ROC, was also deemed to be a strength. This is another important issue when considering usability. This is particularly the



## KEY POINTS

- Outcome measurement in recovery is an important issue
- As well as being reliable and valid, a measurement tool must also be usable in routine practice
- Data suggests that the I.ROC is an easy-to-use tool, which is well-liked by most service users—regardless of diagnosis
- Mental health nurses should consider the I.ROC as a means of assessing and measuring recovery.

case when working with service users with multiple needs. Their ability to concentrate and process information as a result of their mental health problem makes engagement in the assessment process more challenging than it might otherwise be (Barker, 2004)

## Limitations of the study

Participants were all receiving support from Penumbra at the time of the study. In addition, Penumbra staff facilitated engagement with the I.ROC. It could be argued that a combination of these factors made it more likely that they would express a preference for this tool over the others.

In addition, participants were drawn from a group receiving support in the community. It may be that this group is different from those who are

receiving inpatient care, and so generalising to a non-community population might be difficult. Both of these issues would be addressed by testing the tool with service users with no contact with Penumbra and with a sample receiving inpatient care. At the time this study was carried out, there was little published data on the psychometric properties of the more widely used Recovery Star (Dickens et al, 2012). Data is now available (Killaspy et al, 2012), and it would now be appropriate to benchmark the usability of these two tools.

## Conclusion

This paper builds on previously published work, which has demonstrated the reliability and validity of the I.ROC as a measure of recovery in mental health. It demonstrates that the great majority of participants in this study found the tool easy to use, helpful in its own right and also when compared with two other popular measures of recovery.

In light of the current focus on the importance of routine outcome measurement and the need for tools to be both rigorously evaluated and easy to use, mental health nurses should consider the use of the I.ROC as a means of assessing the services user's position on their journey to recovery, as an aid to care and support planning, and a means of focusing therapeutic interactions. **BJMHN**

## References

- Anthony A (1993) Recovery from mental illness: the guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal* **16**(4): 11–23
- Barker P (2004) *Assessment in Psychiatric and Mental Health Nursing: In Search of the Whole Person*. Nelson Thornes, London
- Bennett P (2011) *Abnormal and Clinical Psychology: An Introductory Textbook*. Open University Press, Maidenhead
- Bonney S, Stickley T (2008) Recovery and mental health: a review of the British Literature. *J Psychiatr Ment Health Nurs* **15**(2): 140–53
- Bradstreet S, McBrierty R (2012) Recovery in Scotland: beyond service development. *Int Rev Psychiatry* **24**(1): 64–9
- Corrigan PW, Gifford D, Rashid F, Leary M, Okeke I. (1999) Recovery as a psychological construct. *Community Ment Health J* **35**(3): 231–9
- Department of Health (2011) *No Health Without Mental Health: A Cross-government Mental Health Outcomes Strategy for People of All Ages*. DH, London
- Department of Health, Social Services and Public Safety: Northern Ireland (2011) *Service Framework for Mental Health and Wellbeing*. DHSSPSNI, Belfast
- Dickens G, Weleminsky J, Onifade Y, Sugarman P (2012) Recovery star: validating user outcomes. *The Psychiatrist* **36**: 45–50
- Eisen SV (1996) Behavior and Symptom Identification Scale (BASIS-32). In: Sederer LI, Dickey B, eds. *Outcomes Assessment in Clinical Practice*. Lippincott Williams and Wilkins, Philadelphia, PA: 65–9
- Eisen SV, Wilcox M, Leff HS, Schaefer E, Culhane MA (1999) Assessing behavioral health outcomes in outpatient programs: reliability and validity of the BASIS-32. *J Behav Health Serv Res* **26**(1): 5–17
- Gifford D, Schmook A, Woody C, Vollendorf C, Germain M (1995) *Recovery Assessment Scale*. Illinois Department of Mental Health, Chicago, IL
- Killaspy H, White S, Taylor TL, King M (2012) Psychometric properties of the Mental Health Recovery Star. *Br J Psychiatry* **201**(1): 65–70
- McNaught M, Caputi P, Oades LG, Deane FP (2007) Testing the validity of the Recovery Assessment Scale using an Australian sample. *Aust N Z J Psychiatry* **41**(5): 450–7
- Mental Health Network (2011) *Developing an Outcomes-based Approach in Mental Health*. NHS Confederation, London
- Monger B, Hardie S, Ion R, Cumming J, Henderson N (in press) The Individual Recovery Outcomes Counter: Preliminary validation of a personal recovery measure. *The Psychiatrist*
- Monger B, Ion RM, Henderson N, Cumming J, Hardie SM (2012) Outcome measurement in a Scottish mental health charity. *Mental Health Today* March/April: 24–27
- Nursing and Midwifery Council (2010) *Standards for Pre-registration Nursing Education*. NMC, London
- Stickley T, Wright N (2011a) The British research evidence for recovery, papers published between 2006 and 2009 (inclusive). Part two: a review of the grey literature including book chapters and policy documents. *J Psychiatr Ment Health Nurs* **18**(4): 297–307
- Tilley S, Cowan S (2011) Recovery in mental health policy: good strategy or bad rhetoric? *Critical Public Health* **21**(1): 95–104
- Trauer T, ed (2010) *Outcome Measurement in Mental Health: Theory and Practice*. Cambridge University Press, Cambridge
- Trauer T, Callaly T and Herrman H (2009) Attitudes of mental health staff to routine outcome measurement. *J Ment Health* **18**(4): 288–98
- Welsh Government (2012) *Together for Mental Health: A Strategy for Mental Health and Wellbeing in Wales*. Welsh Government, Cardiff