Development and Application of the Quality Indicator for Rehabilitative Care (QuIRC)

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Background

- Across Europe, many people with severe mental health problems continue to reside in institutions (WHO, 2005)
- Less economically developed countries - large institutions, concerns about quality of care (Muijen, 2008)
- Countries with better developed community mental health services - reinstitutionalisation of people with longer term and complex mental health problems (Priebe et al, 2005)
  - Psychosis, treatment refractory, severe negative symptoms, co-morbidities, challenging behaviours, poor function
  - In UK, this group represent 10-15% of the secondary care mental health population but absorb 25-50% of total mental health budget
- Concerns about quality of care and lack of rehabilitative ethos (Killaspy and Meier, 2010)
- Service quality is a complex, multidimensional construct difficult to operationalise and measure, particularly across different socioeconomic and political contexts
Development of a European Measure of Best Practice in Institutional Care for People with Long Term Mental Health Problems (DEMoBinc)

**Consortium**

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- Funded by EC, 2007-2010
- Ten countries at different stages of deinstitutionalisation
- International, standardised, reliable quality assessment tool for longer term mental health units
- Completed by unit managers
- International expert reference group
DEMoBinc Project

**Phase 1: Agreeing content (domains of care)**
- Systematic review (Taylor et al., *BMC Psych*, 2009, 9: 55)
  - service users; carers; mental health staff; advocates.
  - “In your view what most helps recovery for people with long term mental health problems in institutional care?”
- Review of national care standards

**Phase 2: Testing** (Killaspy et al., *BMC Psych*, 2011, 11: 35 )
- Piloting
- Inter-rater reliability testing (> 200 units)
- Factor analysis
- Feedback

**Phase 3: Refining**

**Phase 4: Validation** (Killaspy et al., *PLoS ONE*, 2012, 10.1371/journal.pone.0038070)
- Association between unit managers’ toolkit ratings and service users’ ratings of care
Quality Indicator for Rehabilitative Care (QuIRC)

**Seven domains:**
- Living environment
- Therapeutic environment
- Treatments and interventions
- Self-management and autonomy
- Social interface
- Human rights
- Recovery based practice

- Staffing, staff training and supervision
- Built environment
- Interventions
- Activities within and outside unit
- Care planning
- Service user involvement
- Autonomy, promotion of independence
- Physical health promotion
- Response to challenging behaviour (use of restraint)
- Access to and involvement in community
- Family support and involvement
- Complaints, confidentiality, access to advocacy/lawyer
QuIRC Home

Welcome to the QuIRC website. The QuIRC (Quality Indicator for Rehabilitative Care) is the first internationally agreed tool to assess quality of care for people with longer term mental health problems in psychiatric and social care facilities. Following completion, a facility's QuIRC ratings are provided across seven areas of care (built environment; therapeutic environment; treatments and interventions; self-management and autonomy; social interface; human rights; Recovery-orientated practice) which are then compared to ratings of similar facilities within your country.

The QuIRC was developed through a three-year pan-European study funded by the European Commission. More information about the study can be found here.

If you are a manager or senior member of staff of a psychiatric or social care facility for individuals with longer term mental health problems and would like an assessment of the quality of care provided in your facility, register here. You will first be asked to complete a number of questions about your facility to check that the QuIRC is the right tool for you. If so, you will receive log-in details to proceed to the assessment.
QUALITY INDICATOR FOR REHABILITATIVE CARE
Measuring Best Practice in Facilities Addressing Complex Mental Health Issues

1. How many beds/places are there in your unit?  

2. How many are currently occupied?  

3. Number of male patients/residents:  

4. Number of female patients/residents:  

5. How many patients/residents in your unit are involuntary?  

6. How many staff, including visiting staff, work in your unit?  

page 2 of 30
28. Do non-detained patients/residents have a key or entry code to the front door of the facility? Yes/No

29. Do patients/residents have keys to their own bedrooms? Yes/No

30. Are meals for patients/residents cooked in a central kitchen? Yes/No

31. How would you rate the quality of these meals?

<table>
<thead>
<tr>
<th>Poor</th>
<th>Not very good</th>
<th>Satisfactory</th>
<th>Quite good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

32. Do patients/residents have any choice of meals?

<table>
<thead>
<tr>
<th>None</th>
<th>Some</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
39. Which organisation(s) employ(s) your staff? You may tick more than one organisation.

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public service - health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public service - social services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent/private organisation</td>
<td></td>
<td></td>
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<tr>
<td>Voluntary organisation (e.g. NGO)</td>
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</tbody>
</table>

40. Are patients/residents or ex-service users employed within the facility?

Ex-service users do not need to have been patients/residents at the facility in which they worked or received care from any mental health service. Ex-service users working as volunteers may be coded for the question if they are accounted for on page 2.
Domain performance in your unit against average in your country

<table>
<thead>
<tr>
<th>Key</th>
<th>Domain</th>
<th>Your Unit Score (%)</th>
<th>Average Score In Similar Unit (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LE</td>
<td>Living Environment</td>
<td>78</td>
<td>64</td>
</tr>
<tr>
<td>TE</td>
<td>Therapeutic Environment</td>
<td>68</td>
<td>69</td>
</tr>
<tr>
<td>TI</td>
<td>Treatments &amp; Interventions</td>
<td>58</td>
<td>63</td>
</tr>
<tr>
<td>SMA</td>
<td>Self-management &amp; Autonomy</td>
<td>82</td>
<td>67</td>
</tr>
<tr>
<td>SI</td>
<td>Social Interface</td>
<td>48</td>
<td>56</td>
</tr>
<tr>
<td>HR</td>
<td>Human Rights</td>
<td>83</td>
<td>71</td>
</tr>
<tr>
<td>RBP</td>
<td>Recovery Based Practice</td>
<td>79</td>
<td>69</td>
</tr>
</tbody>
</table>
Rehabilitation and Effectiveness for Activities for Life (REAL) Study

Helen Killaspy – Professor and honorary consultant in rehabilitation psychiatry, UCL and Camden & Islington NHS Foundation Trust (CIFT)
Michael King - Professor and honorary consultant psychiatrist, UCL and CIFT
Frank Holloway - Consultant psychiatrist, South London and Maudsley NHS Trust (SLaM)
Tom Craig - Professor and honorary consultant psychiatrist, Inst of Psychiatry and SLaM
Sarah Cook - Sen. Lecturer in occupational therapy, Sheffield Hallam University (SHU)
Cathy Hill/Tim Mundy - Sen. Lecturers, organisational and professional development, SHU
Paul McCrone/Leo Koeser - Health economists, Institute of Psychiatry
Rumana Omar, Louise Marston - Statisticians, PRIMENT
Maurice Arbuthnott - North London Service User Research Forum
Gerry Leavey - Professor of social science, Northern Ireland Association of Mental Health
Wendy Wallace - Chief Executive, Camden and Islington NHS FT
Clinical collaborators - Gemma Dorer, Louise Reynolds (CIFT), Marieke Wrigley (SLaM)
Researchers: Nick Green, Isobel Harrison
Project manager: Melanie Lean
Local PIs: in every MH Trust in England

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REAL study aims

**WP1:** To survey current provision and quality of mental health rehabilitation services in England

**WP2:** To develop simple training intervention for front-line staff of rehabilitation units to facilitate service users’ activities of daily living, ward and community based activities

**WP3:** To investigate clinical and cost-effectiveness of the staff training intervention through cluster randomised controlled trial

**WP4:** To investigate outcomes for rehabilitation service users and identify service and service user characteristics that predict better outcomes through a naturalistic cohort study
Outputs from REAL using QuIRC

WP1:
- National quality benchmarking data for NHS inpatient mental health rehabilitation units across England (133 units, 87% response rate)
- Patient factors have little influence on quality of care
- Positive association between quality of care and patient autonomy and experience

Service quality and clinical outcomes: an example from mental health rehabilitation services in England

Helen Killaspy, Louise Marston, Rumana Z. Omar, Nicholas Green, Isobel Harrison, Melanie Lean, Frank Holloway, Tom Craig, Gerard Leavey and Michael King

Background
Current health policy assumes better quality services lead to better outcomes.

Aims
To investigate the relationship between quality of mental health rehabilitation services in England, local deprivation, service user characteristics and clinical outcomes.

Method
Standardised tools were used to assess the quality of mental health rehabilitation units and service users’ autonomy, quality of life, experiences of care and ratings of the therapeutic milieu. Multiple level modelling investigated relationships between service quality, service user characteristics and outcomes.

Results
A total of 52/60 (87%) National Health Service trusts participated, comprising 133 units and 739 service users. All aspects of service quality were positively associated with service users’ autonomy, experiences of care and therapeutic milieu, but there was no association with quality of life.

Conclusions
Quality of care is linked to better clinical outcomes in people with complex and longer-term mental health problems. Thus, investing in quality is likely to show real clinical gains.

Declaration of interest
None.
<table>
<thead>
<tr>
<th>QuIRC domain scores: DEMoBinc and REAL data</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Mean (SD) %</td>
</tr>
<tr>
<td>England: REAL study N=133</td>
</tr>
<tr>
<td>Mean (SD) %</td>
</tr>
<tr>
<td>England: DEMoBinc N= 20</td>
</tr>
<tr>
<td>Mean (SD) %</td>
</tr>
<tr>
<td>Europe: DEMoBinc N=220</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Living Environment</td>
</tr>
<tr>
<td>Therapeutic Environment</td>
</tr>
<tr>
<td>Treatments and Interventions</td>
</tr>
<tr>
<td>Self Management and Autonomy</td>
</tr>
<tr>
<td>Recovery Based Practice</td>
</tr>
<tr>
<td>Social Interface</td>
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<tr>
<td>Human Rights</td>
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</tbody>
</table>
Outputs from REAL using QuIRC (cont)

WP3: No difference in outcomes (including QuIRC ratings) between intervention and comparison units

WP4: QuIRC Recovery Based Practice domain score, level of patient activity and level of patient social skills at baseline were predictors of successful community discharge at 12 months follow-up:

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length current admission (months)</td>
<td>0.99</td>
<td>(0.99, 1.00)</td>
</tr>
<tr>
<td>% receiving CBT in 12 months before recruitment</td>
<td>0.99</td>
<td>(0.98, 1.00)</td>
</tr>
<tr>
<td>Time Use Diary (activity) score</td>
<td>1.03</td>
<td>(1.01, 1.05)</td>
</tr>
<tr>
<td>QuIRC Recovery Based Practice domain score (%)</td>
<td>1.04</td>
<td>(1.00, 1.08)</td>
</tr>
<tr>
<td>LSP communication sub-scale score (social skills)</td>
<td>1.13</td>
<td>(1.04, 1.24)</td>
</tr>
</tbody>
</table>
Other applications of QuIRC

- Benchmarking quality of longer term mental health care units in other countries: Germany; Czech Republic; Netherlands; Bulgaria; Ireland....
- Audit quality of care (local, regional, national, international)
- Quality accreditation programmes e.g. RCPsych’s AIMS-rehab
- Other research
  - Relationship between national spend on mental health and quality of care (Taylor et al)
  - Portugal - national research programme on longer term mental health care (PromQual) which includes replication of REAL trial

➢ Tools to review and drive up quality of care and guide investment for specific interventions for marginalised group
Czech Republic:
QuIRC assessments 2010 and 2012

Community based units (n=5)
Inpatient units (n=15)
Use of QuIRC by country 2009-2014

UK
Portugal
Germany
Czech
Netherlands
Spain
Italy
Ireland
Bulgaria
Greece
Brazil
Australia
Canada
Japan
New Zealand

Frequency
Future research and development

- Qualitative analysis and “realistic evaluation” of the staff training intervention used in REAL
- Portuguese trial will report very soon
- Refine and re-evaluate the intervention in further trial, across Europe, using QuIRC assessment as part of the intervention and QuIRC domain scores as outcomes
- Interest from colleagues in South America and Africa for use of QuIRC as quality benchmarking and research tool
- Adapting QuIRC in UK for supported accommodation (QuEST project)
Many thanks for your attention