Implementation of routine outcome measurement in child and adolescent mental health services in the United Kingdom: a critical perspective

C. L. Hall · M. Moldavsky · J. Taylor · K. Sayal · M. Marriott · M. J. Batty · S. Pass · C. Hollis

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The aim of this commentary is to provide an overview of clinical outcome measures that are currently recommended for use in UK Child and Adolescent Mental Health Services (CAMHS), focusing on measures that are applicable across a wide range of conditions with established validity and reliability, or innovative in their design. We also provide an overview of the barriers and drivers to the use of Routine Outcome Measurement (ROM) in clinical practice.

For the purpose of this paper, we define ROM as the use of generic measures that assess the clinical outcomes or patient/carer satisfaction with service delivery. Outcome measures are usually completed at first contact (baseline) and after a fixed interval, often 6 months after the initial measure [1]. Symptomatic measures or measures of broader functioning that are completed only at one time point (e.g. at the end of intervention) do not provide a measure of within-individual change which is an essential feature of symptomatic or functional outcome measurement. The exception to this rule is measures of patient or caregiver satisfaction with the service which are typically obtained once at the end of treatment or discharge [2, 3].

The purpose and use of outcome measures may differ depending upon the end user of the data. ROM should enable clinicians to assess change over the course of treatment and help them draw comparisons between the perspectives of the clinician, child, their parent/carer and other informants such as teachers [4, 5]. Outcome measures provide service users with a way of seeing change in their condition and functioning over time and an opportunity to express their level of satisfaction with the care received [2]. At a service level, outcome data can help identify areas for development, evaluate whether services are meeting targets and influence the allocation of funding [5]. Anonymised outcome data collected at a service level may satisfy commissioners’ demand for greater service accountability through service user feedback and objective measurement of clinical effectiveness [2]. Regular, consistent outcome measurement should lead to improvements in practice and patient outcome, provided that results are carefully interpreted in the clinical and organisational context [6].

Fitzpatrick and colleagues [7] outline several criteria that outcome measures should meet. ROM should be based on measures with good psychometric properties, including established reliability, validity and sensitivity to change. Measures should be simple and quick to complete, cost-effective and easy to interpret. Furthermore, if outcome
measures are to be used for benchmarking, they should be
generic, relevant to the most frequent clinical diagnoses
and applicable across a broad range of theoretical frame-
works. Generic outcome measures do not cover factors
specific to all disorders, but enable comparisons across
disorders and services. Outcome measures data should be
interpreted in the context of case mix and case complexity
for each particular service.

The NHS National Service Framework for Children,
Young People and Maternity Services [8] in England
proposed that work conducted within CAMHS should be
evaluated from the perspective of both clinicians and ser-
vice users. In response to this, the CAMHS Outcome
Research Consortium (CORC, [9]) was created to develop
a common suite of measures and to provide leadership on
CAMHS ROM and support to services with the collection
and analysis of anonymised outcome data. CORC recom-
mand a range of core outcome measures [10], including:
the Strengths and Difficulties Questionnaire (SDQ) [11];
the Health of the Nation Outcome Scales for Children and
Adolescents (HoNOSCA) [12] and the Children’s Global
Assessment Scale (C-GAS) [13]. These measures were
chosen for their established validity, reliability and appli-
cability across a range of psychiatric problems in children
and young people [10, 14] and open source access free of
charge. CORC also recommend the use of two more
recently developed measures whose psychometric prop-
erties are less well known: the Commission for Health
Improvement-Experience of Service Questionnaire (CHI-
ESQ) [14] as a measure of service user satisfaction, and the
Goals Based Outcome (GBO) [15]. However, CORC do
not advocate that ROM should be limited only to their
selected measures [10].

Since 2011, CORC have been commissioned by the
Department of Health to support the analysis of outcome
measurements collated through the Children and Young
People’s Improving Access to Psychological Therapies
(CYP-IAPT; www.IAPT.nhs.uk). The CYP-IAPT aspires
to improve services for service users by routinely assessing
their opinion on the quality and experience of services.
Alongside the SDQ, GBO and CHI-ESQ, CYP-IAPT rec-
ommend the use of brief scales such as the ORS (Outcome
Rating Scale) [16] to measure functioning and the SRS
(Session Rating Scale) [17] to assess client satisfaction on a
session-by-session basis (http://www.iapt.nhs.uk/silo/files/
cyp-iapt-outcomes-summary.pdf). Although there has been
some research on the psychometric properties of the adult
versions of these scales [18, 19], there is no research
investigating the psychometric properties of these child
versions.

Drawing on the work of Clark et al. [20] and Weiz et al.
[21] CYP-IAPT specifically advocates the use of idio-
graphic and standardised measures. In their commentary,
Wolpert et al. [22] specifically make reference to the
compromise of choosing measures which are sufficiently
tailored to individual patient needs to be able to inform
clinical practice whilst being broad enough to draw com-
parisons across cases and services. They also comment that
the CYP-IAPT measures have been chosen with recogni-
tion of the need to reduce time burden for both the clinical
staff and service users whilst balancing reliability and
generalisability.

Barriers to the implementation of ROM into clinical
practice

The literature reveals common themes that are recognised
barriers and facilitators to the implementation of ROM in
mental health services internationally.

Studies have shown that treatment outcomes are mea-
sured in only 16–30 % of clinical cases [2, 3] in the UK,
and only 37 % of psychologists in the US [23] reported
measuring outcomes routinely; these findings suggest the
presence of barriers to ROM in practice. Several studies
have identified multiple barriers, including the increased
time demands on clinicians and administrative staff [2, 3,
17, 22, 24]; a lack of clinician training on how to integrate
ROM into clinical practice [3]; whether ROM is considered
to produce clinically useful information [19, 23, 25, 26];
and a poor return rate of questionnaires completed by
service users outside the clinic [27–29]. The frequent lack
of timely feedback from outcome measures decreases their
clinical usefulness and has a negative impact on clinicians’
and patients’ motivation to use them [2].

Additional barriers are related to limitations of the
available outcome measures, for example, the fact that
generic outcome measures do not typically assess self-
harm behaviour and suicidal risk [30], or are not sensitive
to symptom change in some clinical presentations [31].

Clinicians have expressed concerns about the time
required to complete the questionnaires during the session
[2, 32] and about outcome measures not being necessary
[33] or relevant to their practice [23, 34]. Differences in
psychologists’ willingness to use outcome measures
according to their therapeutic approach (i.e. cognitive
behavioural or insight-oriented) have been reported [23],
and some clinicians may be reluctant to use a quantitative,
systematic approach for data collection [35]. Johnston and
Gowers [3] found that clinicians who did not regularly use
quantitative clinical measurements were more likely to be
sceptical about the value of the quantitative ‘medical’
approach. Additional concerns relate to ‘labelling’ patients
[30], confidentiality [23], and the risk of data being used by
managers and commissioners to unfairly compare services
that deal with different levels of case complexity [23, 24,
32]. Despite these reservations, most studies [2, 24, 36] report a range of clinicians’ views, with a substantial number of clinicians showing a positive attitude towards the implementation of ROM. Clinicians’ attitudes towards ROM have been shown to become more positive following attendance at a workshop and training focusing on their clinical value [37].

Studies have reported [34] that parents feel that ROM can add to the burden of form-filling already required of service users, even when language is not a barrier [38]; however, positive views about the opportunity to express their opinion have also been reported [2].

In summary, research shows that clinicians and service users have a range of views about ROM and identifies the need for further clinician training on the use of outcome measures, as well as a system to improve the provision of timely feedback from those measures to clinicians and patients/carers to support real-time clinical decision-making.

Future directions for development include the validation of session-by-session outcome measures [22] and the use of technology (for example, computer-based measures) to aid ROM implementation and reduce administrative burden. Research into the barriers to the integration of ROM in CAMHS in different countries will be of international interest and may provide insights into methods that support wider uptake of ROM and further evidence for their contribution to improved clinical effectiveness of child and adolescent mental healthcare.

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Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

Ethical Standards The paper is not a human or animal study so ethical approval was not required. However, all work was undertaken under the auspices of the CATO (Consensus Assessment and Treatment Outcome Measures) study, which has ethical approval.

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