The use of the Health of the Nation Outcome Scales (HoNOS) to inform discharge and transfer decisions in community mental health services

Liz Prowse and Tim Coombs

Abstract
Discharge from public community mental health services has proven difficult for mental health workers and managers. Mental illness can often be long term, with ongoing disability, requiring a need for corresponding long-term care. Community mental health services are now becoming recovery focused and are recognising the need for alternative management arrangements for individuals with long-term care needs. There are, however, few tools to assist in the decision making about discharge or transfer of care between community mental health teams. This article describes a quality improvement project to develop a flag for mental health workers to prompt decisions regarding discharge and transfer using the Health of the Nation Outcome Scales (HoNOS). Relevant literature and HoNOS data collected as part of routine clinical practice were reviewed to develop the flag. The implementation process is described along with plans for future developments.

The Community Mental Health service in outer southern Adelaide supports about 300 people with long-term mental illness. Two teams work with individuals with high levels of psychiatric disability as a result of severe and enduring mental illness. The Mobile Assertive Care (MAC) Team provides an intensive case management service based on the Assertive Community Treatment Model. Caseloads are limited to about 10 to 12 consumers, and the team works with consumers with complex needs who are difficult to engage. Alternatively, the Shared Care Team provides a low-intensity clinical service to people requiring long-term support and who are relatively stable. In addition to clinical mental health support, clients of this team are likely to be receiving disability support from the non-government sector and be managed in conjunction with a general practitioner.

From a service manager’s perspective, discharge from both teams, as well as transfer between teams, has been problematic. The Shared Care Team are most likely to discharge to the care of general practice, with or without the support of private psychiatry, while the MAC Team are less likely to refer solely to GPs, given the complexity of the consumers’ presentation and the need for assertive intervention. Rather than discharge consumers, MAC are more likely to transfer care within the community mental health service to shared care. Determining appropriate discharge has often been an ad hoc and difficult process for mental health workers, particularly with consumers who have received services for lengthy periods of time. Similarly, transfer within the service between shared care and MAC has been a fraught process, with significant variability in practice between staff, and a tendency for some staff in each team to continue to see consumers longer than is clinically required.

As part of the National Mental Health Plan (2003–2008), community mental health services in Australia are required to collect outcomes and...
casemix measures under the National Outcomes and Casemix Collection. One measure introduced in this collection is the Health of the Nation Outcomes Scales (HoNOS). The HoNOS were developed in the United Kingdom to measure severity of symptoms for people with mental illness. The HoNOS comprise 12 items covering a range of common problems often experienced by people with a mental illness. Each item is rated on a five-point scale (0 = no problem; 1 = minor problem; 2 = mild problem; 3 = moderately severe problem; 4 = very severe problem). A total score can be calculated, with higher scores indicating higher problem severity; and four subscale scores relate to behaviour, impairment, symptoms, and social problems.

The use of the HoNOS within services is in its infancy. Staff often question the utility of the measure, citing the time burden of collection, suspicion of management motives, and competence and confidence in use of the information. These concerns do not only impact on the willingness of staff to collect information but on the quality of that information collected as part of routine clinical practice. Indications, however, from Callaly et al are that as measures such as the HoNOS are increasingly used within clinical practice, participation and understanding of potential value and benefit increases.

This article describes how managers can use active data to assist in managing services through a quality improvement process to develop the use of the HoNOS as a flag to support the practice of discharge and transfer between teams in a community mental health service. It will describe how the HoNOS were piloted as a flag to prompt decisions regarding discharge and team transfer and how this was introduced into the local practice of the MAC and Shared Care teams.

### Results of file audit

<table>
<thead>
<tr>
<th>Origin of transfer</th>
<th>Transfer destination</th>
<th>Mean HoNOS score (SD)</th>
<th>HoNOS range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared care (n = 19)</td>
<td>General practitioner</td>
<td>7 (3.3)</td>
<td>1–12</td>
</tr>
<tr>
<td>MAC (n = 9)</td>
<td>General practitioner</td>
<td>5.4 (3.2)</td>
<td>4–10</td>
</tr>
<tr>
<td>Shared care (n = 4)</td>
<td>MAC</td>
<td>21.3</td>
<td>16–30</td>
</tr>
<tr>
<td>MAC (n = 6)</td>
<td>Shared care</td>
<td>12</td>
<td>4–18</td>
</tr>
</tbody>
</table>

HoNOS = Health of the Nation Outcome Scales. MAC = mobile assertive care.

### Identification of a flag

A two-stage process was used to develop the use of the HoNOS as a flag. The first stage involved a retrospective audit of service discharge HoNOS scores to establish a baseline of existing practice. The second involved a review of the literature to identify reference points to support the construction of the flag. This process does not aim to construct a psychometrically robust screening tool with demonstrable statistical rigour, but to use information collected and reviewed during routine clinical practice to support quality improvement in service provision.

A retrospective audit of discharges and transfers from the shared care and MAC services during 2005 and the first half of 2006 was undertaken. The purpose of this audit was to identify trends and patterns in HoNOS data from current practice. One-hundred and thirteen discharges and transfers between the two teams were reviewed for discharge destination and HoNOS discharge score (Box 1). The audit demonstrated that the major recorded discharge option was to general practice, with or without the support of a private psychiatrist. In addition, an audit of HoNOS review scores for existing caseloads for MAC and shared care was also undertaken.

Results of the file audit indicated that 28 individuals were discharged to GPs, with discharge total HoNOS scores of between 1 and 12. HoNOS scores for transfers between teams ranged between 4 and 30, with very low numbers available, so to examine this further, a review of the mean HoNOS of caseloads was undertaken. The mean HoNOS score for a shared care caseload was 10, while the mean MAC HoNOS score was 16.7. Information missing in the case audit which meant that the cases could not be included for the purposes of
this exercise includes those where no discharge 
HoNOS score is recorded \( (n=49) \), where a con-
sumer is deceased \( (n=5) \), or where the discharge 
destination is to the care of another health region 
or is unclear \( (n=31) \).

These total HoNOS scores are in comparison to 
the Australian national mean for community 
mental health clients of 9.9.\(^7\) The national aggre-
gate data give a mean discharge score from ambu-
latory services as 8.2, with a discharge to “no 
 further care” (no further care by specialist mental 
health services, but shared care with GPs is still 
applicable) mean HoNOS score of 6.3.\(^7\)

A literature review uncovered only two articles 
that provided published scores on the HoNOS for 
community mental health care and general prac-
tice. Bruce et al\(^8\) used the HoNOS in a study 
looking at the management of people in general 
practice with a mental illness with a similar 
presentation to MAC and shared care clients. 
They reported median total HoNOS scores of 5 
for the study group with no dedicated mental 
health nurse, and 6 for the group who received 
service from a dedicated nurse working within 
the general practice. Horner and Asher\(^9\) described 
a model of sharing care between mental health 
services and general practitioners in Australia. 
Mean initial HoNOS scores were 6.1, falling to 
5.2. These reported HoNOS scores of between 
5.2 and 6.1 give an indication of the level of 
acuity that general practitioners are managing in 
people with mental illness.

The final step in the development of the flag 
was to match the relevant HoNOS literature with 
the information gleaned from the retrospective 
file and caseload audit. There was enough inform-
ton to develop an initial set of flags using the 
HoNOS, which were then piloted in the mental 
health service (Box 2). This initial pilot set 
includes a flag to identify potential discharge to 
general practitioners, another to support transfer 
between shared care and MAC.

The literature and the results from current local 
practice context suggest a flag to support consid-
eration of discharge when there is a total HoNOS 
score of less than 8. That is to say, a current 
shared care or MAC client with a score of less 
than 8 should be considered for discharge to their 
general practitioner and/or private psychiatrist. 
The flag was set at a total HoNOS score of 8 
because the intent of the pilot was to create a flag 
which would prompt consideration of potential 
for discharge and transfer, not to compel practice. 
There are legitimate reasons for some consumers 
remaining in care, regardless of HoNOS score.

Given the small numbers of transfers between 
the teams with HoNOS scores, the flags for transfer 
between the two teams (Box 3) are based on the 
mean HoNOS score in respective caseloads. A total 
HoNOS score of less than 12 in MAC should be 
considered for possible transfer to shared care, and 
a shared care client with a score of over 14 should 
be considered for transfer to MAC.

### Implementation process

The experience of implementing routine outcome 
measurement using measures such as the HoNOS

<table>
<thead>
<tr>
<th>Source</th>
<th>Total HoNOS score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruce et al (1999) (Study group, ( n=22 ); comparison group ( n=18 ))</td>
<td>5–6 (median) (range 0–19)</td>
</tr>
<tr>
<td>Horner and Asher (2005) (( n=19 ))</td>
<td>5.2–6.1 (mean)</td>
</tr>
<tr>
<td>File audit discharge review (MACS and shared care) (( n=28 ))</td>
<td>6.5 (mean) (SD, 3.3)</td>
</tr>
<tr>
<td>AMHOCN discharge</td>
<td>8.2 (SD, 6.7)</td>
</tr>
<tr>
<td>AMHOCN discharge “no further care”</td>
<td>6.3 (SD, 5.5)</td>
</tr>
<tr>
<td>Flag</td>
<td>&lt;8</td>
</tr>
</tbody>
</table>

HoNOS = Health of the Nation Outcome Scales. AMHOCN = Australian Mental Health Outcomes and Classification Network.
into services has been identified in the literature. Views described in a paper by Callaly et al\(^6\) include concerns about professionalism being threatened, fear of management interference, and issues about the time that it takes to complete the measures. These experiences and issues were also encountered during the implementation phase of this pilot. In a planning session, staff identified that use of the flags could potentially diminish clinical “expertise”, be used as an exclusion mechanism for clients rather than supporting inclusion, and that flags would be used as a “must do” rather than a prompt.

Learning from the above experiences as part of the change management process, a significant amount of time was allocated to implementation of the indicators. Fourteen staff across both teams were asked to identify and discuss from their clinical experience potential blocks to discharge. These included risk of client aggression and self-harm upon discharge, duty of care obligations, and an understanding of the capacity of individuals and agencies that provide support for clients on discharge. Further exploration of issues included formalising transfer of care arrangements with GPs and discussion about the rights of people with mental illness to make decisions about their own care. Relapse of illness was discussed as a potential barrier to discharge, but it was felt that this could be overcome with sound discharge planning and availability of mental health staff post-discharge if needed.

The last of the issues relating to implementing the indicators is that many of the individuals identified for potential discharge have been clients of mental health services for a long period of time. They have at times been receiving a model of case management which is based on the staff belief that clients require life-long support. This model has the potential to develop dependency with the view by staff that clients don’t seek discharge, and in fact some actively reject it. It is important to note that this is staff perception, and that this view has not been validated with consumers as a group. Mental health services in South Australia are moving to a recovery orientated model of service delivery\(^10\) and the use of the HoNOS to support and encourage discussion around discharge planning has been a benefit in the transition to recovery-orientated services.

### Next steps

Staff felt that the indicator for transfer between teams could be strengthened by some frequency of contact or intensity of service information. The issue of transfer between teams does not simply relate to problem severity, which the HoNOS demonstrate: it relates to the capacity of each team to work intensively with an individual. Shared care can work with an individual who requires a higher intensity of contact for a short period of time, however the team cannot sustain this intensity of service provision. Their usual practice is to see a client once a week or less. If an individual requires increased intensity of input to more than once a week, it is manageable for a few weeks, then after that, a referral is made to MACS.

Development of these flags has been a relatively small localised quality improvement project, using data available at service level. The work has potential for further use and development with more detailed and rigorous analysis of a larger dataset to strengthen validity. From a service perspective, piloting of the flags from June 2006

<table>
<thead>
<tr>
<th>Source</th>
<th>Total mean HoNOS score (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>File audit transfer shared care to MACS (n = 4)</td>
<td>21.4</td>
</tr>
<tr>
<td>File audit transfer MACS to shared care (n = 6)</td>
<td>12</td>
</tr>
<tr>
<td>Caseload review shared care</td>
<td>10 (6.6)</td>
</tr>
<tr>
<td>Caseload review MAC</td>
<td>16.7 (7.8)</td>
</tr>
<tr>
<td>National AMHOCN data (ambulatory review)</td>
<td>9.5 (6.2)</td>
</tr>
<tr>
<td>Flag: shared care to MAC</td>
<td>&gt; 14</td>
</tr>
<tr>
<td>Flag: MAC to shared care</td>
<td>&lt; 12</td>
</tr>
</tbody>
</table>

HoNOS = Health of the Nation Outcome Scales. AMHOCN = Australian Mental Health Outcomes and Classification Network.
will be followed up by further audits of discharges and transfers. As this is an ongoing quality improvement project, continued evaluation will include a review of discharge HoNOS scores and discharge destination, interviews with staff about usefulness of the flag, and discussion about the “success” of discharges. It is anticipated that the resulting information will add to the development and refinement of the flags, including the potential use of the HoNOS subscales. In continuing review of the use of the flag, the service will need to be mindful of the risk of HoNOS scores being used as “absolutes” rather than as supports for clinical decision making. This has the potential to impact on the accuracy of information and usefulness of the flag for quality improvement around discharge and transfer.

This pilot has uncovered a number of issues around discharge from community mental health, and further quality improvement processes will be put in place to begin to address these. For example, a frequently encountered view from staff is that the service expects everyone to be discharged. One of the required pieces of work is identifying who may need a longer term service from community mental health. In addition, the flags will be written into service models and implemented across the southern region of Adelaide.

Initial feedback from staff at the time of writing has been positive, with the flag for transfer between teams having had a particular impact, being described as increasing respect between teams, and a providing a “objective” starting point and greater ease around communication.

**Conclusion**

Mental health staff are involved in the collection of significant amounts of information that they often see as superfluous to clinical practice, which can impact on the completeness and quality of the information collected. This article has described a pilot that has used the HoNOS as part of a quality improvement project in regard to discharge and transfer practice in a community mental health service. Current relevant literature and analysis of the HoNOS scores on discharge from two community mental health teams have been used to create a set of flags. These flags thus far have been to prompt practice around discharge from public community mental health services to general practitioners, and to transfer between different community mental health teams. The flags have been implemented into routine practice within the teams and have been reported by staff as a valuable addition to decision making. From a service manager’s perspective this project has not only helped to focus staff on issues around discharge and transfer between teams but also helped make the collection of information a real part of practice. While further review and audit are required to both strengthen the existing flags and to determine whether discharge practice has changed as a result of their implementation, service managers who are responsible for ensuring information collection should consider this pilot as one approach to supporting information collection and use.

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**Competing interests**

The authors declare that they have no competing interests.

**References**

Models of Care


