Report on Quality Improvement of Flow within ACT Teams of the Champlain LHIN and the Implementation of the ATR© (Assertive Community Treatment Transition Readiness Scale) as a Resource

ATR Pilot Evaluation Project of The Royal - Community Mental Health Program[1]

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Thank you to all ACTT members and managers; they have been an essential part of sharing information, whether or not they participated in the ATR pilot, to learn about client transition practices.
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Introduction

Flow of clients on and off an ACT team is a key focus for service providers and is supported by the strategic initiatives of the Champlain LHIN's Integrated Health Plan. A focus on flow ensures that more people with mental health conditions will have access to ACTT's intensity of service. A significant impact on flow is an ACT team's ability to assess and identify transition readiness of clients to less intensive services. A standardized assessment that can be used by ACT teams to measure transition readiness may be a valuable addition to ACTT practice.

The Community Mental Health Program (CMHP) of The Royal, in collaboration with other teams in the Eastern Ontario ACT Network, has initiated a pilot project over the last three years to evaluate the use of the Assertive Community Treatment Transition Readiness Scale© (ATR) and its effectiveness to support client transition and recovery within teams across the Champlain LHIN, as well as other networks. The Champlain LHIN approached the CMHP of The Royal to summarize and discuss the findings of this pilot project and its relevance to team flow.

This report will describe the development of the ATR scale, the process of the pilot project, and an evaluation of the use of the ATR to date across the Champlain LHIN. In addition, as requested by the LHIN, a summary of current transitional barriers among teams in the Champlain LHIN will be provided with a focus on differences among teams based on geographical areas (urban vs. rural). Lastly, in consideration of all team feedback and the ATR pilot project throughout the last three years, recommendations are proposed for further implementation of the ATR scale.

Development of the ATR

The ATR is an 18-item measure designed to help clinicians identify ACTT clients who might be ready to transition to less intensive services (Appendix 1). The need for a specific tool to address transition from ACTT was due to the historical view of ACTT as a lifetime service; however, this "act-for-life" orientation is changing because of fiscal pressures in the health system as well as the emergence of the recovery model, and the need of mental health care systems to advance community social inclusion.

In developing the items for the ATR, several sources for item content were identified: (a) qualitative interviews with experienced ACT staff; (b) research on ACTT transitions; and (c) similar standardized measures such as the Level of Care Utilization System for Psychiatric and Addiction Services (LOCUS). The examination of outcomes for transitioned consumers was also incorporated into the design. In a preliminary study, higher ATR scores were associated with a

lower probability of post-transition: (a) homelessness; (b) hospitalization; (c) incarceration; (d) medication and treatment noncompliance; and (e) return to ACTT.

The ATR contributes to other regular assessment activities of ACT teams such as recovery/treatment plans and the Ontario Common Assessment of Need (OCAN) Action Items. It is a tool developed to be utilized to support, and never replace, clinician judgment.

The ATR Pilot Evaluation Project of The Royal

In 2012, the ATR was initially piloted to individual teams of the Eastern Ontario ACT Network (EOAN – Champlain/South East LHIN). The ATR pilot project was supported with Cuddeback's ATR manual (Appendix 6), translated to French, and the development of a pilot guidebook and a virtual Community of Practice[2] (CoP) by the CMHP of The Royal. On a yearly basis, participating teams were asked to complete an ATR on each client, as well as indicate client demographics at the time of ATR completion (Client Tracking Sheet, Appendix 2), and share these data with the evaluation team. Data were managed and analysed in order to provide ACT teams with a profile of client characteristics, ATR scores, and if there was a significant relationship between ATR scores and number of years with ACTT. The team profile was presented in comparison to the profile for all participating ACT Teams of that year (Appendix 3).

ACT teams were encouraged to explore the meaning of their ATR team profile data from their own practice and system context. Teams generated a list of clinical and structural transition barriers and commented on their experience with the use of the ATR. Alignment of the ATR with individual client scores/domains within other team assessment and treatment planning practices was posited as important to support implementation.

The EOAN ATR pilot framed the ATR as a resource for transition as "a work in progress" and sought to further validate the scale, as well as engage both frontline clinicians and managers to be contributors in the further understanding of transition practices within ACTT. Through workshops via the Ontario ACT Association Conferences in 2012 and 2014, and an OTN presentation to the Central East LHIN network of ACT teams in 2013, the following teams in Ontario were engaged on the scale's use:

- 7 teams in the Champlain LHIN (6 ACT teams and Step Down from ACTT) and one team in Oakville, ON, are currently participating in annual ATR completion and data sharing

[2] To see the ATR pilot process in full detail as well as Cuddeback's ATR Manual and the pilot guidebook developed by the CMHP, please create a login at the following link: http://www.eenetconnect.ca/forum/act-transition-readiness-scale-community-of-practice

with the pilot evaluation team (see Table 1 for participating Champlain LHIN teams across the last three years in the ATR pilot project)

- 8 teams of the Central East LHIN are using the ATR as part of their system reform and some teams may share their aggregate data in the pilot; a number of other teams in Ontario are utilizing the ATR
- Several South East LHIN teams within the EOAN are considering entering the pilot project

Table 1. Participating Champlain ACT Teams in the ATR Pilot Project

Champlain LHIN ACT Teams	2012	2013	2014
Urban:			
▪ **ACTT Catherine** (The Royal)	✓	✓	✓
▪ **ACTT Bank** (The Royal)	✓	✓	✓
▪ **ACTT Pinecrest-Queensway**	✓	✓	✓
▪ **ECTI Montfort**	✓	**x**	**x**
▪ **ACTT Carlington***	**x**	**x**	**x**
Rural:			
▪ **ACTT Prescott-Russell**	✓	✓	✓
▪ **ACTT Renfrew**	**x**	✓	✓
▪ **ACTT Stormont, Dundas & Glengarry (SDG)**	**x**	✓	✓

✓ - Team completed an ATR assessment on all clients for the ATR Pilot Project
x - Team did **not** complete ATR assessments for the ATR Pilot Project
***** - Team not participating in pilot project but using ATR for client Central Intake referral to Step Down From ACTT

Categorizing ATR Scores

A cut-off score of 50 indicates readiness to transition to less intensive services. However, the ATR manual, as well as the pilot evaluation team, emphasised that these scores are guidelines and are not meant to replace clinical judgement. It is possible that a client with a high ATR score may continue to require ACTT services and may not be a good candidate for transition.

Client scores throughout the duration of the ATR pilot project were categorized into four groups in order to more easily focus team planning and practices. The de-emphasis on an exact ATR score to categories or levels of transition readiness helps teams to consider the next steps for a client moving towards greater independence and following his or her personal vision. The four categorical groups can be bridged with the other assessment tools the teams use, including the OCAN.

ATR Pilot Score Categories

Group A	ATR Score < 43 • Client needs high support from team
Group B	ATR Score = 43-50 • Client is moving towards recovery
Group C	ATR Score = 51-58 • Has client obtained wellness? Transition potential?
Group D	ATR > 58 • What keeps client on team?

ATR scores were compiled according to the number of clients in each group (A, B, C or D) across the last three years (Table 2). Each year includes ATR scores of all participating ACT teams in the Champlain LHIN. ATR scores for Step Down from ACTT (The Royal) are not included in these results. A comparison of ATR scores between Step Down from ACTT and ACT teams can be found in Appendix 4.

In addition to ATR score frequencies, the pilot evaluation team investigated if there was an association between the number of years with ACTT and the ATR score. For each year, the analysis revealed a significant positive relationship. A positive relationship indicates that higher numbers of years with ACTT are associated with higher ATR scores. In other words, as the number of years with ACTT increases, the ATR scores also increase. This significant positive relationship may indicate that clients are moving towards recovery over time on ACTT, and that the ATR is able to detect this improvement, further suggesting that the ATR score may be a useful indicator of transition readiness.

Table 2. ATR Score Frequencies of Participating Champlain ACT Teams

	Group A	Group B	Group C	Group D	Relationship between ATR score & # of years with ACTT
2012 (n = 333)	**24.3 %** (n = 81)	**38.4 %** (n = 128)	**26.1 %** (n = 87)	**11.1 %** (n = 37)	r = 0.22**
2013 (n = 363)	**34.2 %** (n = 124)	**37.2 %** (n = 135)	**20.9 %** (n = 76)	**7.7 %** (n = 28)	r = 0.14**
2014 (n = 396)	**29.0 %** (n = 115)	**38.6 %** (n = 153)	**24.7 %** (n = 98)	**7.6 %** (n = 30)	r = 0.12*

Note: * $\rho < 0.05$, ** $\rho < 0.01$, for significance values (r)

The Champlain LHIN was also interested in the flow of clients on and off ACT teams across the same time period as the implementation of the ATR pilot project. Teams were asked to indicate the number of admissions and discharges during the last three fiscal years (Table 3). In addition to indicating the number of clients discharged from ACTT, teams were asked to describe the outcome of each client upon discharge. This information allowed the ATR pilot evaluation team to assess specifically the number of clients who were *transitioned* to another service, as opposed to clients who were discharged due to a move or a death. This *transition number* is illustrated in bold in Table 3. The percent of clients transitioned relative to team size is indicated in brackets.

In addition to illustrating the number of clients who were *transitioned* from ACTT, the ATR evaluation team felt it would be useful to indicate if the ACT team completed the ATR assessment in that year. Dark shaded years indicate that the team did *not* complete an ATR on clients for the pilot project during this time period.

Table 3. Flow within ACTT across the last three fiscal years

Champlain LHIN ACT Teams	Apr 2012 – Mar 2013				Apr 2013 – Mar 2014				Apr 2014 – Mar 2015			
	n	+	D	**Transitions (%)**	n	+	D	**Transitions (%)**	n	+	D	**Transitions (%)**
Urban:												
Catherine (The Royal)	88	8	8	**5 (5.7 %)**	90	11	5	**3 (3.3 %)**	95	10	8	**5 (5.3 %)**
Bank (The Royal)	81	9	8	**6 (7.4 %)**	85	13	8	**4 (4.7 %)**	86	9	13	**11 (12.7 %)**
Pinecrest-Queensway	70	14	7	**4 (5.7%)**	78	15	3	**1 (1.3%)**	82	7	7	**5 (6.1%)**
ECTI Montfort	86	20	9	**5 (5.8%)**	94	10	11	**9 (9.5%)**	87	11	8	**3 (3.4%)**
Carlington	85	12	7	**4 (4.7%)**	84	9	7	**3 (3.6 %)**	85	4	6	**2 (2.4 %)**
Rural:												
Prescott-Russell	64	10	6	**3 (4.7%)**	64	4	8	**7 (10.9%)**	65	8	6	**6 (9.2 %)**
Renfrew	77	11	7	**6 (9.1%)**	73	5	7	**5 (6.8%)**	80	13	9	**7 (8.8%)**
SDG	64	8	7	**0 (0%)**	62	9	9	**2 (3.2%)**	63	13	5	**1 (1.5%)**

n – Total number of clients served in that fiscal year
+ - Admissions
D - Discharges (includes all clients discharged – transitions, moves, deaths, decline of service)
Transitions - Number of clients discharged from ACTT to a less intense form of service
Dark Shaded Years – Team did not complete the ATR for the pilot project in this year

Transition from ACTT across the Champlain LHIN

In order to further assess flow within ACT Teams, the Champlain LHIN asked that this report describe the transition process among teams and identify challenges experienced when transitioning clients. One interest of the LHIN was to recognize differences among ACT Teams based on geographical area; therefore barriers to transition will be organized as urban vs. rural. Some of these clinical and structural barriers to transition were discussed with teams in the first year of the ATR pilot project in 2012. This discussion was repeated in 2015 with not only the participating ACT teams in the ATR pilot, but also with teams in the Champlain LHIN who have chosen to not complete the ATR for the pilot project.

The research assistant of the ATR pilot evaluation team communicated with each ACT team either in person, via OTN, or over the phone. A discussion was held with the manager and/or director, the team leader or multiple ACT team members. As requested by the LHIN, the following key questions were asked:

1. **Where are clients being referred when they leave ACTT?**

Four out of five ACT Teams in Ottawa refer appropriate clients to the transition service program, Step Down from ACTT. Clients are also discharged to continue follow-up with a family physician, a community psychiatrist or as an outpatient of The Royal. In some cases, clients were discharged to a long-term care facility or to case management (Figure 1).

Teams outside of Ottawa, serving Renfrew County, SDG (Stormont, Dundas & Glengarry) and Prescott-Russell regions, report transitioning most clients to case management within CMHA East or Renfrew County Mental Health Services (Figure 2). These rural teams describe regular meetings among ACTT workers and case managers in order to facilitate the transition process. Clients in these areas have also been discharged to family physicians, community or private psychiatrists, or long-term care facilities. Unique to one area, SDG, is the transition of clients to a nurse practitioner-led clinic for medication follow-up for both injections and clozapine.

One notifiable difference among rural teams is the lack of a Step Down from ACTT program. One team described a Step Down program within the ACT team itself occurring on an informal basis, where visits are decreased with the client. Rural teams describe a shorter wait-list for case management services than urban teams. However, some rural teams indicate acceptance to case management within CMHA-East as a short-term service that discharges clients after a period of about two years, as opposed to urban teams who indicate admission to CMHA-Ottawa as a long-term service once accepted.

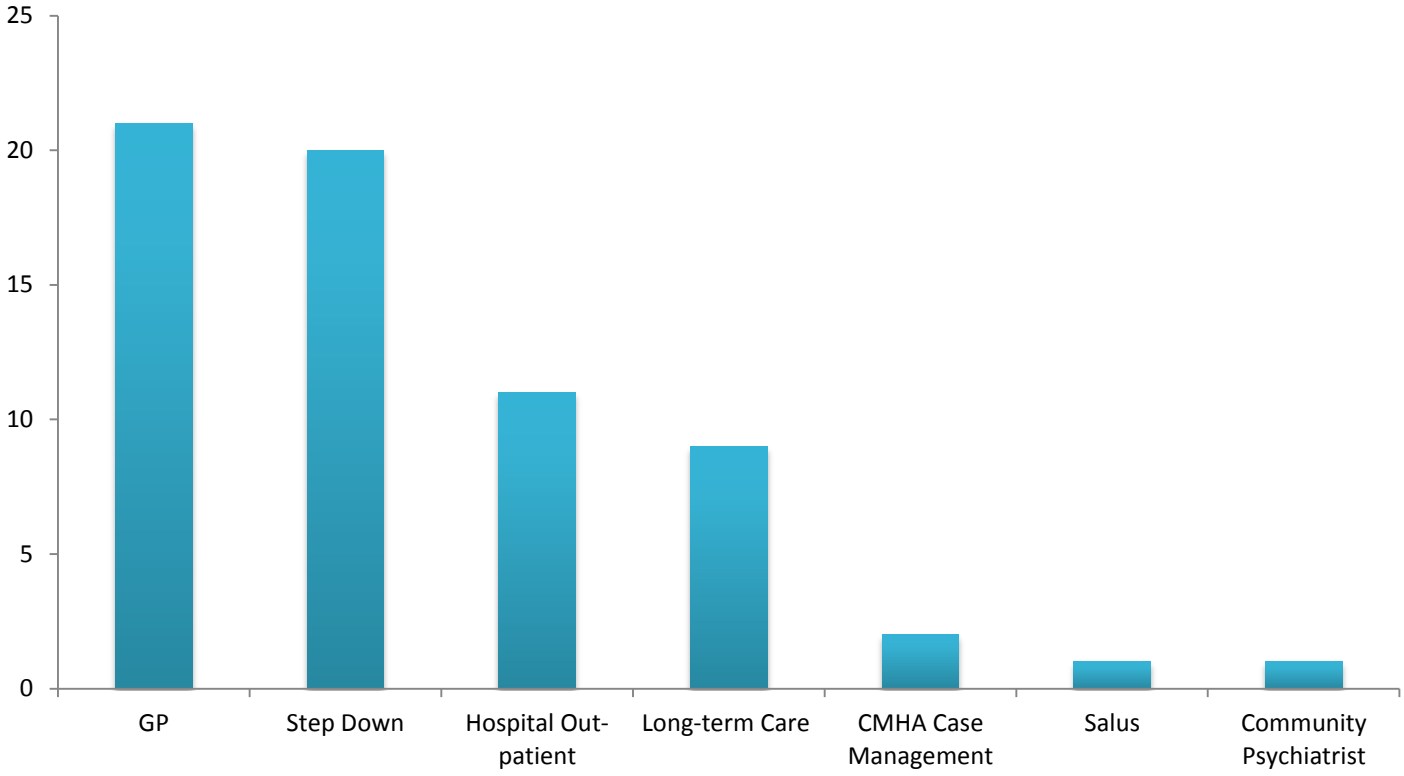

Figure 1. Client Transitions among Urban ACT Teams. This figure illustrates the number of clients among the urban ACT Teams discharged to less intense forms of services from April 1st 2012 to March 31st, 2015.

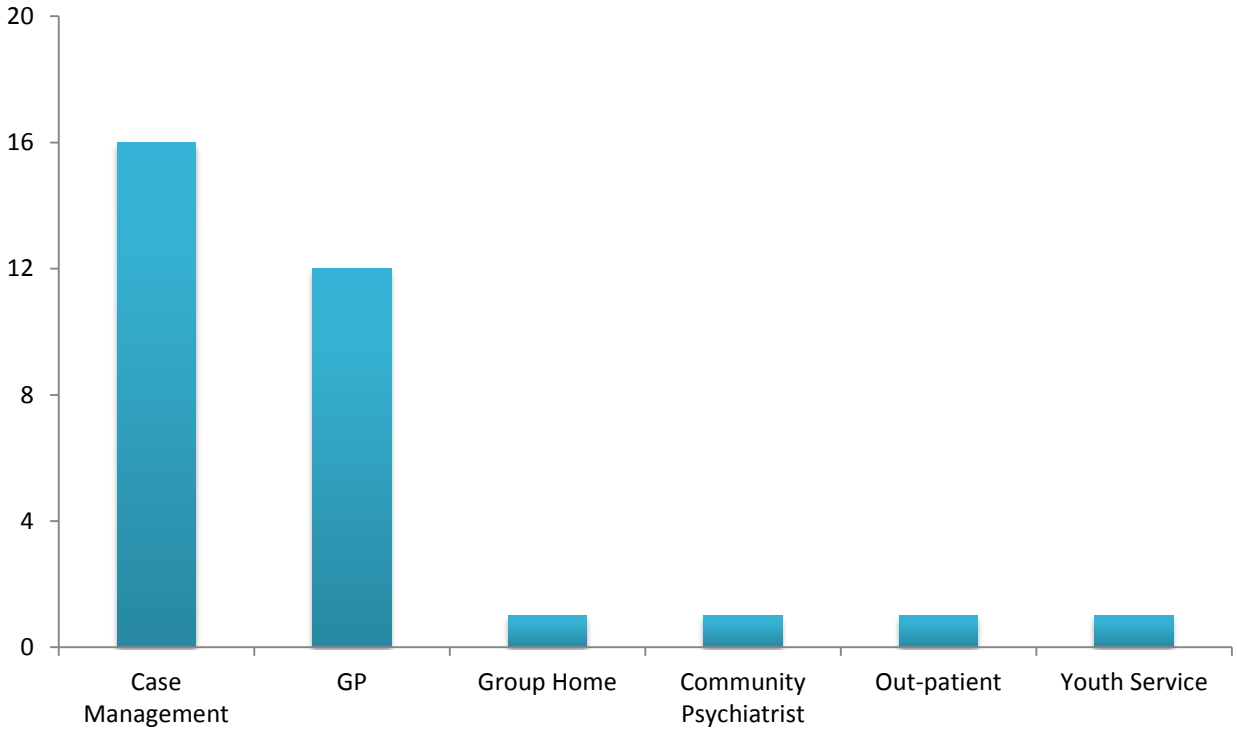

Figure 2. Client Transitions among Rural ACT Teams. This figure illustrates the number of clients among the rural ACT Teams discharged to less intense forms of services from April 1st, 2012 to March 31st, 2015.

2. **Who is doing the follow-up?**

Most teams state that no additional follow-up is completed after a client has made the transition to another service. However, all teams describe a long transition process over-lapping in services to ensure all connections are made for the client and all necessary plans are in place in terms of goal planning and crisis situations. Teams also describe a period within two years of discharge where the client can be readmitted to ACTT if the services are needed.

One team, ACTT Renfrew, states that follow-up with clients who remain in the county is very easy, because the services are under one administration and often in the same facility. Even for clients who have left the county, the team makes efforts to do follow-up with the client until he/she is fully connected with services in the new area (linked with a doctor and receiving medications).

3. **What are some of the barriers teams face when transitioning clients to other services? What strategies have teams developed to break down the barriers?**

Some feedback from teams may require review or clarification. In certain sections, additional points to consider are outlined in a text box.

<u>Barriers for Urban Regions (Ottawa)</u>

System Barriers

- **Lack of Transition Knowledge:** Intake processes for other services can be unclear; there is a lack of relationships and partnerships between ACTT and other mental health services.
    - Could there be a centralized intake for transition?
    - Would the team benefit from education about transition services and how these services would work with ACTT clients?
- **Lack of Follow-up:** Team does not have access to updates or information regarding the state of clients after transition; no feedback is received.
    - Would more follow-up and communication after transition result in the team having more confidence in transitioning clients?
- **Use of Injection Medication (IM):** Several clients are choosing IM as it improves functioning and the ability to focus on many other goals; however, Step Down will not provide injections and it is a challenge to find a GP who will manage IMs.
    - One team has arranged for injections at a Community Health Centre.

- **Clients on CTO**: Step Down can manage a CTO (since the GP cannot), but the team would have to communicate with the GP office to inquire if the injection was received; this systemic issue prevents smooth transition.
- **Language**: There are significantly fewer agencies that offer French services; Step Down from ACTT has no French psychiatrist.
- **Clients in Vars:** Clients living outside the city in a group home may not need the intensive services of ACTT, but in order to continue psychiatric follow-up, a home visit from a psychiatrist is required. There is a lack of resources/psychiatrists for visits in this area.
    - Some Vars clients are appropriate for the Step Down program if they meet the requirements of having rehab goals and are engaged in treatment.

Step Down from ACTT works with various family or residence physicians to manage IMs.

Admission to Step Down from ACTT is not contingent on client recovery goals; depending on client context, considerations for admission are as follows:

- Number of hospitalizations in the last two years, hospitalization history, number of Emergency Room appearances/assessments
- Previous use of on-call support
- History of criminal involvement, safety concerns - current or historical
- Substance abuse
- Clinical need to work with one professional
- Stable housing
- Medication adherence (by self or supported by client's resources (domiciliary hostel/family)

Service Barriers

- **Step Down:**
    - Requires that the client does not use the on-call service with ACTT; a client may be ready in all other areas, but continues to use the on-call service.
    - Step Down requires clients to be medication independent which can be a large step for some clients even if they are doing well.
- **Family Physicians:** Several GP's will not continue follow-up with clients on clozapine.
    - A possible strategy may be for the team to become more adept at locating GP's in the community who are comfortable working with these clients, and to provide increased consultation and training for GP's (or incorporate shared care models).

- **Psychiatric follow-up:** Finding psychiatric follow-up in services outside of Step Down can be very difficult.
- **Community Mental Health Supports:** It is challenging to link clients to mental health supports in the community, including case management, housing supports, and meaningful day time activities.

Workload

- **Paperwork**: Discharge of a client may be delayed due to the significant amount of required paperwork and lack of time for the clinician.
    - Full days may be planned for the clinician to complete discharge paperwork, but this time is a challenge to find due to workload and employee absences.
- **Clients on Probation**: If ACTT is named in the probation, it may be difficult to discharge a client until the probation period is over.
- **Maintaining Balance**: If the team has several clients who require a high intensity of service (group A and B), the team may keep some clients with a higher ATR score (group C and D) in order to balance caseload and prevent worker burnout.

Step Down from ACTT has had no difficulties with probation on transition as long as the client is being followed by a psychiatric service and the client's mental health status is stable.

Among urban teams, some perceptions and views of other services may require clarification. Additional education about transition services for ACT Teams may be a key factor in promoting an increased number of successful transitions.

<u>Barriers for Rural Regions (Prescott-Russell, SDG, Renfrew)</u>

Service/System Barriers

ACTT Prescott-Russell:

- This region has a lack of intensive case management as well as a Step Down program, resulting in difficulty transitioning ACTT clients as well as ACTT receiving referrals that should be meant for ICM
    - Some clients will relocate in order to receive stronger resources once discharged.
    - A regional Step Down program and resources for ICM would be very helpful.

ACTT Renfrew:

- Wait-lists for services can delay transition; for example, case management within Mental Health Services of Renfrew County has a three month wait-list.
    - Team has an informal Step Down program within ACTT until the client is accepted to another service, where frequency of visits is decreased.
- If there is a GP to provide injections, the client will be integrated with that service as soon as possible and long before discharge from ACTT in order to advocate independence and community integration for the client. However, there is a lack of nursing services in other community programs, such as case management. If a client meets all criteria for discharge, but has no GP or other service to manage the IM, ACTT will discharge the client, but continue to provide the injection.
- Many services are under the same administration, allowing for regular meetings among ACTT workers and case managers to facilitate transition; however, the lack of nursing services on case management also requires ACTT to provide some injections for clients who have never been on ACTT. Providing this service to ACTT clients, as well as discharged ACTT clients and clients on the case management program, has become very taxing on the ACT team.
    - Having nursing services added to community mental health programs other than ACTT would greatly benefit the system by facilitating transition from ACTT, supporting the case management program, take some pressure of the ER's providing injections for some clients, and facilitate medication compliance.
- Changing psychiatrists when transitioning from ACTT to case management can be stressful for the client.
    - ACTT provides as much history and information as possible to the receiving psychiatrist to prevent the client from having to recount all details of his or her past experiences.
    - ACTT accompanies the client on the visit to new psychiatrist.
    - Both psychiatrists work closely together (ACTT and case management).

ACTT SDG (Stormont, Dundas & Glengarry):

No service or system barriers were communicated.

- No difficulties were expressed in transitioning clients to CMHA-East.
- There is no psychiatrist on this ACT team. Clients must have a community or private psychiatrist in order to be accepted at ACTT intake; therefore, the client does not have to change psychiatrist when transitioning from ACTT.
- Injections and clozapine can be managed by a nurse practitioner-led clinic.

Barriers Common to All Regions (Urban and Rural)

Client Reluctance

- Clients develop a good rapport with the team and do not want to engage in another service when they feel all their needs are being met by ACTT.
- Trust in the psychiatrist is a crucial factor, especially when clients have been hospitalized on several occasions and may not have had a positive experience; the bond built with the team becomes very important.
- It can be stressful for clients to move on from ACTT.
- Clients may create behaviours to require ACTT services.
- Several strategies to reduce client reluctance have been utilized by teams:
    - Educate clients from intake that ACTT is not forever
    - Frame transition as positive – moving on to become more independent
    - Review strengths and history of stability with client
    - Decrease visits, have medications delivered, slowly decrease dependency on ACTT
    - Ease into transition and have overlap of services - meet with Step Down worker/case manager while client is still on ACTT team
    - Reassure client that discharge is not a quick process - ACTT will remain connected with client until linked and comfortable with other services
    - Ensure coping and crisis plans move forward with the client when transitioned, especially since transition itself can be a stressor
    - Reassure client that if they need ACTT, they can come back to the team – flexible on this time period
    - If client is transitioned to another service, ACTT has remained available for consultation for that service

Worker Reluctance

- ACTT workers may be hesitant to let clients go, and might score lower than they should on the ATR.
- Psychiatrists may think ACTT is needed to maintain well-being of the client and do not want the client to leave ACTT.
    - Reassurance to all ACTT workers and psychiatrists that the client will not be alone, and will be connected to many other services.

ACTT meeting all needs of the client

- If ACTT is the sole provider of services, especially for clients with paranoia, it is very difficult for the client to leave ACTT
    - Clients are linked with services in the community as soon as they enter ACTT (ex. have client use other services to travel to appointments).
    - ACTT will advocate for clients' needs of services in the community (ex. CCAC), instead of ACTT providing the service.
    - Workers encourage clients to call only when in crisis instead of daily visits from the team.
    - In discussions with the client, ACTT does not frame linking with services in terms of discharge, but describes services as beneficial resources to take advantage of in the community.

Evaluation of the ATR

The ATR is currently being completed on a 6-month or yearly basis by ACT teams participating in the pilot project. Some teams are incorporating the scale into a formalized discharge process, and a copy of the ATR score is provided to the transitioned service (i.e. Step Down from ACTT). In addition to identifying transition readiness, other useful practices of the ATR have been implemented. Teams were asked to provide feedback on their experience with the ATR:

Advantages

- The scale is quick, efficient and user friendly.
- ACTT can become very task-orientated; the ATR score is a useful prompt to encourage more discussion of transition.
- The ATR is accurate at identifying the clients for which a transition discussion should be held.
- The ATR score has helped clinicians realize that the client may be more independent than previously thought and may not require the intensive services of ACTT; one team expressed that thinking has significantly evolved on the topic of transition.
- The ATR has assisted the team in becoming more comfortable with the idea of transitioning clients.
- It is a useful assessment, as the OCAN is used more for future goals and not as much for transition.
- The team is always thinking about discharge and is continuously working to link clients with other services in the community; the ATR, however, provides a framework to talk about discharge more formerly and regularly.

- The scale is beneficial in evaluating the consistency of client scores (another measure of client progress or decline over time), and provides a quick indication of the client's current status and needs.
- The ATR would be useful for a manager/director who is not directly involved in client care, if supervising multiple ACT Teams.
    - Manager/director could have discussions with teams about high-scoring clients – is it an anomaly or is the client ready for transition?
- One team has expressed that uses for the ATR are endless – it could be matched and completed in relationship to the OCAN and spark valuable team discussions.

Good Practices of the ATR to date

- The ATR is a valuable tool for caseload balance, as group A scoring clients typically have a higher intensity of needs (although group D clients may be working towards significant goals as well).
    - ACTT Pinecrest-Queensway has implemented ATR scores in managing worker caseload balance (Appendix 5).
- The ATR score is a useful reference for clinicians who are not the prime worker of the client, but need to provide service for a client that day (i.e., if the prime worker is off).
- An average ATR score is assigned to each worker based on their prime clients. This score assists in determining which worker should receive the next referral.
    - Teams have found this practice to be an objective method in assigning new clients, and some teams are considering formalizing this process.
- When a new client is accepted, some teams have assigned an ATR score of 18 (lowest possible score). The score is reassessed after six months and the ATR score average for the ACTT worker is adjusted.
- The ATR is a great tool to complete as a team which will prompt conversation at the table – some workers will agree and some will disagree on certain items. The team can then discuss opinions and views for each item.
    - The completion of the ATR as a team has helped prevent a subjective ATR score from one clinician.
- The ATR can also be filled out with the client to ensure it is a client-centered assessment.

Limitations

- Step Down has accepted some low-scoring clients, and some clients with a high ATR score may not be good candidates for transition.
- Some workers have been uncertain of how to respond to some items.

- The ATR is very "at the current moment in time"; it does not take into account what could happen in the future.
- If a clinician is not accurately completing the ATR (for example, due to hesitation to transition the client), it makes it hard for the scale to show transition readiness.

The following points address the limitations expressed by teams in the above section:

- The ATR should not be a definite indicator of transition, but rather a prompt for clinicians to discuss the possibility of a client's transition readiness. Cuddeback notes the scale is meant to enhance clinical judgement: "The ATR© should not be used as the sole method with which transition decisions are made. The ATR© should be used in concert with clinical judgment and other assessment methods to identify consumers who might be ready to transition from ACT to less intensive services."(Cuddeback, ATR Manual, Pg 6, Appendix 6)

- Additional guidance/training may be necessary on how to appropriately complete each item of the ATR assessment.

- The ATR is a measure of the client's current status; however, in the development of the scale, it was shown to be a valid predictor of client outcomes post-transition. Furthermore, it would not be appropriate to keep clients on ACTT solely for the possibility that a negative event may happen in the future. Teams develop crisis plans and make strong links with other services in order to ensure the client will have supports post-ACTT. If a client does require ACTT after transition, he or she can easily re-enter ACTT within a significant and flexible time period described by teams.

- Continued and further reassurance, education on services, and post-transition client updates for ACTT workers who have transition reluctance may be required in order to ensure the accurate completion of ATR assessments. [3]

Why have some teams chosen not to implement the ATR?

Two teams in the Champlain LHIN have chosen not to adopt the ATR as part of their practice. The reasons for this decision are as follows:

[3] **New York state's team experience with transition from ACT echo's ATR pilot team's issues and strategies to promote the recovery model and transition**
Community Ment Health J. 2015 Jan;51(1):85-95. doi: 10.1007/s10597-014-9706-y. Epub 2014 Feb 14.
Clinicians' perceptions of challenges and strategies of transition from assertive community treatment to less intensive services.
Finnerty MT[1], Manuel JI, Tochterman AZ, Stellato C, Fraser LH, Reber CA, Reddy HB, Miracle AD.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4289526/

- The ATR items do not measure the psychological dependence of the client on ACTT; therefore, it does not take into account how the client will cope without ACTT.
- Meetings are already conducted twice a year to discuss clients that could be discharged.
- The team believes that the OCAN is a better tool to use with the client to discuss how transition could be possible.
- The team feels that it is extra workload and paperwork; there is already not enough clinician time with the clients.
- Transition is a regular talk amongst the team; the team feels that the ATR does not provide more insight than simply discussing the case.
- The team found the tool to be very subjective; clinicians had different opinions.
- The ATR would not be needed in assisting caseload balance; team members are continuously helping other members with their caseload.

The following points address the reasons why teams have not incorporated the ATR as part of their practice:

- The ATR tool is designed to assess how the client would manage on each item *without* the services of ACTT. Therefore, the psychological dependence of the client on ACTT should be taken into account when responding to item 10, "He/She is independent", as well as item 13, "He/She has adequate resources" and item 1, "He/She no longer needs intensive services".

- Even if teams are having regular transition discussions, the ATR may be considered as tangible evidence that a client is ready to transition. The ATR score may provide a more objective indicator to back-up clinician decisions on transition, as well as a valuable guideline for new clinicians entering ACTT. The scale also offers a consistent framework of thinking in terms of transition across teams, as each clinician reviews the same variables when completing the assessment.

- One of the most significant barriers to transition is client reluctance. An ATR assessment could be completed with the client to help the client visualize how well he or she is doing, including progress made towards goals, independence, and recovery. This concrete positive feedback could be provided to the client in minutes, as the ATR is quick and simple to fill out.

- The ATR pilot project found client scoring is not overly biased by worker preference, especially if the process of usual team-wide discussion of treatment plans is in place, and if the OCAN incorporates the client's ATR score.

Recommendations for future directions with the ATR

Throughout the discussions held with each ACT Team in the Champlain LHIN, valuable feedback was received on the ATR. Based on this feedback, as well as the experience of the ATR pilot evaluation team across the past three years, some important recommendations are suggested for future use of the scale.

Bi-annual use of the ATR alongside the OCAN

Throughout the three years of the ATR pilot evaluation project, actions to further develop client recovery and the potential for transition were encouraged in discussions with teams by linking ATR domains with the OCAN action items. The 18 items of the ATR focus on the client's current environment, as well as the client's abilities to manage on his or her own or with formal and informal community supports, but *without* the services of ACTT. These items are presented in connection with the OCAN domains in Table 5. This table outlines how the ATR themes can be bridged with OCAN domains in team treatment and recovery planning for individual clients.

In the recent discussions, some teams articulated the desire to begin completing an ATR assessment alongside the OCAN. Members felt it could provide another measure of client progress or decline over time, and could initiate a valuable discussion about treatment planning if the ATR is different from the OCAN.

Table 5. Linking ATR Themes and Domains with OCAN Action Items

ATR Themes	ATR Items	OCAN Domains
Stability (symptoms, behaviors, housing, etc.)	Stability	OCAN- Psychological Distress, Psychotic symptoms, harm-self/other
	Criminal Justice contacts	OCAN- CDS (common data set)
	Housing Stability	OCAN- Accommodation
	Hospitalization	OCAN – CDS
Daily structure	Time	OCAN- Daytime activities
	Structure	OCAN -Daytime activities
	Employment	OCAN – Activity during the day
Complex needs (substance abuse, Axis II, etc.)	Substance use	OCAN- Addictions (3 kinds)
	Complexity	OCAN – Health + life domain need
	Intensity	OCAN – level of need assessment
Engagement and compliance	Engaged w /ACTT	OCAN- Info. on condition and treatment
	Treatment Goals	OCAN- Action items
	Medication	OCAN- use of meds., info on symptoms and treatment
Independence	Independence	OCAN – food, ADLs, self-care
	Dependence	OCAN – psychological distress, company, personal vision
	Benefits	OCAN – Benefits
Social support	Social Support	OCAN – Company, daytime activities
	Resources	OCAN- broader - needs and family involvement
Insight	Insight	OCAN – information on condition

Further Education on ATR Completion

Feedback on the scale conveyed confusion on how clinicians should be completing some questions of the ATR. Further guidance and education may be necessary in order to ensure that all teams are adopting the same framework when responding to each item. For teams that have chosen not to use the ATR, more explanation and increased understanding of this tool would be beneficial.

Access to an Electronic ATR

Several teams have expressed the value, usefulness, and practicality that would be provided by an electronic ATR. For most teams, the ATR is currently hand-scored by clinicians in

order to determine the total score. Teams have communicated this time requirement as a limitation in moving forward with further ATR implementation. An electronic ATR would also prevent human errors when totalling the ATR score.

To date, the ATR pilot evaluation team has been managing all ATR data and providing annual feedback reports for each participating ACT team. An electronic ATR database would significantly assist the data management of this tool and the critical task of providing feedback to programs, particularly as the number of teams using the ATR is increasing each year. Access to an online version of the scale, one that is integrated with the Common Data Set reporting process, would allow the clinician to quickly and easily complete an ATR assessment, as well as look up the history of an individual client's ATR scores and the associated demographic changes with each score. This access to ATR scores over time would be useful for frontline clinicians interested in the history of one particular client, as well as for managers or directors seeking an overall summary of the number of clients in each group (A, B, C, or D). Since different teams across the Champlain LHIN and other LHINs in Ontario use different software systems for recording clinical information, universal online access to the ATR for all teams would be of substantial value.

Sharing Practices on Client Transition and Recovery among Teams

Use of the ATR as well as the implementation process of the pilot project has been invaluable to support team focus on client transition from ACTT. The ATR is not the sole impetus for transitioning clients as transitions occur on teams not using this scale; however, the ATR brings a systemic basis of understanding needs and working towards transition. The ATR scale, data and clinician insights from the pilot project helped to further advance transition practices as well as team understanding of an individual client's recovery pathway beyond ACTT within the broader mental and physical health systems, strengthening client wellbeing and inclusion in community. Continued and further sharing of team practices would be of significant value in the following possible ways:

- Support teams to share practices in venues such as the online ATR Community of Practice (CoP) for Transition and Recovery (see Page 4 footnote for link).
    - Maintain focus on systems and clinical components that support client transition and recovery.
- Create a yearly half-day workshop where all teams come together to share practices, with an emphasis on recovery benchmarks and transition.
- Continue to exchange with ACTT teams via the Ontario ACT Association to advance recovery and transition practices.

Conclusion

Flow within ACTT is critical, and the participating pilot teams have sought to encourage transition of clients to less intense forms of service through the use of the Assertive Community Treatment Transition Readiness Scale (ATR) and to address the practice issues involved at both the clinical and system levels. During the last three years, the ATR pilot evaluation project coordinated implementation of the scale to several teams in the Champlain LHIN, as well as other teams throughout Ontario. In addition to identifying clients who might be ready to transition, team experience with the ATR has revealed other possible uses, such as managing caseload balance and alignment with the OCAN. Overall, teams conveyed positive views, describing the tool as efficient and a valuable asset, and plan to continue its regular use. Further implementation of the tool will require a more practical method of data management, which could be achieved by developing an electronic ATR. Universal electronic access to the scale would facilitate ATR completion, as well as worker accessibility (both frontline clinicians and managers/directors) to ATR scores over time in association with client demographics. In summary, the experience of ACT teams in the Champlain LHIN with the ATR has illustrated several benefits of incorporating the tool into ACTT practice, suggesting the ATR may play a significant role in facilitating transition.

Appendix 1. ATR Scale

This is the **Assertive Community Treatment Transition Readiness Scale© (ATR©)**. Each item is scored on a four-point scale: strongly disagree (1), disagree (2), agree (3), strongly agree (4). For example, Item 1 reads, "He/she no longer needs intensive services." If you strongly agree with this statement, a consumer would receive a score of 4 for this item. Before computing Total or Mean scores, the responses to Items 5, 7, 12, and 17 must be reverse-scored. So, if you respond strongly disagree (1) to Item 5, this response should be reverse-scored to 4 before computing Total or Mean scores. At least 14 of the 18 items must be completed before scoring the ATR©. A Total score can be computed by adding up all item responses. Total scores range from 18 to 72. Mean scores can be computed by adding up all item responses and dividing by the number of completed items. Mean scores range from 1.0 to 4.0. Higher Total and Mean scores indicate greater potential to transition from ACT to less intensive services. Questions about the ATR© should be addressed to Gary S. Cuddeback, Ph.D., University of North Carolina at Chapel Hill, 325 Pittsboro Street, CB#3550, Chapel Hill, NC, 27599, 919.962.4363, cuddeback@mail.schsr.unc.edu.

NAME_____ **DATE** _____ **TOTAL or MEAN SCORE** _____

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. He/she no longer needs intensive services.	○	○	○	○
2. He/she has structure in his/her daily life.	○	○	○	○
3. His/her symptoms have been stable over the last six months.	○	○	○	○
4. He/she has had stable housing over the last several months.	○	○	○	○
5. He/she has been in the psychiatric hospital within the last six months.	○	○	○	○
6. He/she has insight into his/her mental illness.	○	○	○	○
7. He/she has been incarcerated within the last six months.	○	○	○	○
8. He/she has benefits in place.	○	○	○	○
9. He/she is engaged in treatment.	○	○	○	○
10. He/she is independent.	○	○	○	○
11. He/she is compliant with his/her medication.	○	○	○	○
12. He/she has complex needs (i.e., personality disorders, health problems, substance use).	○	○	○	○
13. He/she has adequate resources.	○	○	○	○
14. He/she has social support.	○	○	○	○
15. He/she is gainfully employed.	○	○	○	○
16. He/she keeps appointments without help.	○	○	○	○
17. His/her behaviors have not been stable over the last six months.	○	○	○	○
18. He/she has met his/her treatment goals.	○	○	○	○

Appendix 2. ATR Tracking Sheet

ATR TRACKING SHEET
Please ensure initials and date are on both sheets

Client initials:

Case file number / Identification Number used by Team:

Date of entry to ACTT:

Date of entry to a transitioned service, i.e.: Stepdown or ICM:

Date of completion of the ATR:

Age on ATR completion:

Please circle or write below Based on Common Data Set/OCAN categories

Gender: Male Female Transgendered

Source of income: ODSP OW Pension Plan Other_____

Culture/ethnic group background:

□ Canadian □ American □ Central American

□ South American □ Asian □ Aboriginal

□ European □ East Indian □ Middle Eastern

□ African American □ Other _____

Current Housing:

□ Approved Homes and Homes for Special Care □ Domiciliary Hostel

□ Correctional/probational facility □ Homeless

□ Hospital (indicate only if permanent residence) □ Long Term Care/Nursing Home

□ Private House/Apartment □ Retirement Home/Seniors Residence
□ Rooming/boarding house □ Supportive Housing – Congregate Living

□ Supporting Housing – Assisted Living (developmentally delayed or physically disabled

Primary diagnosis:

□ Anxiety Disorder □ Bipolar Disorder □ Developmental Disability

□ Dissociative Disorder □ Mood Disorder (including depression & dysthymia)

□ Personality Disorder □ PTSD □ Schizophrenia & psychosis
□ Other _____

Secondary Diagnosis:

□ Anxiety Disorder □ Bipolar Disorder □ Developmental Disability

□ Dissociative Disorder □ Mood Disorder (including depression & dysthymia)

□ Personality Disorder □ PTSD □ Schizophrenia & psychosis
□ Other _____

Concurrent Disorder: Current In Remission None

Employed: YES…….. FT PT Volunteer

NO

Appendix 3. Example of ATR Team profile for one year

Assertive Community Treatment Transition Readiness Scale (ATR©) Team Profile – 2013

Team Name:

Total Sample: ACTT Catherine, ACTT Bank, Step Down from ACTT, ACTT Pinecrest-Queensway, ACTT Prescott-Russell, ACTT Stormont Dundas & Glengarry; ACTT Renfrew; (n=460)

The Assertive Community Treatment Transition Readiness Scale (ATR; G. Cuddeback)© is a recently developed measure to help ACT teams identify consumers who might be ready to transition from ACTT . It can be used as one of the methods to help teams formalize the transition decision-making process and help gauge client and team-level progress. The ATR is meant to support, not replace, clinician and client transition decision making.

The ATR team profile was developed by this project to support discussion with teams that participated and to identify its relevance to our daily practice with consumers.

	Team Result (n=72)	**Total Sample Result** (n=460)	**Total Sample Result Excluding Step-down** (n= 363)
Client Characteristics			
Gender			
Male:	52.2 %	58.5 %	60.8 %
Female:	47.8 %	41.2 %	38.9 %
Age			
Mean:	48 yrs	47 yrs	46 yrs
Range:	20-75 yrs	19-80 yrs	19-76 yrs
≤ 25 yrs:	5.6 %	5.6 %	6.5 %
26-35 yrs:	12.7 %	18.7 %	20.0 %
36-45 yrs:	19.7 %	20.7 %	21.4 %
46-55 yrs:	33.8 %	27.8 %	25.6 %
56-65 yrs:	18.3 %	19.6 %	19.2 %
65+ yrs:	9.9 %	7.8 %	7.3 %

Employed	1.5 %	13.2 %	9.8 %
Type:			
Full Time:	0 %	2.4 %	1.9 %
Part Time:	0 %	6.5 %	3.6 %
Volunteer:	1.5 %	4.8 %	4.1 %
Mental Health and ACTT Service Involvement			
Primary Diagnosis			
Schizophrenia & Psychosis:	85.9 %	82.5 %	83.5 %
Mood Disorder:	7.0 %	8.4 %	7.8 %
Anxiety Disorder:	2.8 %	3.5 %	1.7 %
Personality Disorder:	2.8 %	2.2 %	1.4 %
Bipolar:	1.4 %	1.6 %	4.2 %
Dissociative Disorder:	0 %	0.4 %	0 %
PTSD:	0 %	0.7 %	0.8 %
Developmental Disability:	0 %	0.2 %	0 %
Presence of Concurrent Disorder	Yes: 49.3 In Remission: 4.2 %	Yes: 34.7 % In Remission: 7.6 %	Yes: 38.8 % In Remission: 8.9 %
Length of Time with ACTT			
Mean:	6 yrs	6 yrs	6 yrs
Range:	1-12 yrs	1-21 yrs	1-21 yrs
1-3 yrs:	36.6 %	34.6 %	36.4 %
4-6 yrs:	23.9 %	24.4 %	21.7 %
7-9 yrs:	9.9 %	18.8 %	17.0 %
> 9 yrs:	29.6 %	22.2 %	24.9 %
Relationship between ATR Score and # of years with ACTT:	Relationship is not significant	r = 0.14** Relationship is significant	r = 0.16** Relationship is significant

ATR Result			
ATR Score Mean: Range:	 48 31-67	 48 22-70	 46 22-70
Group A Score < 43: Still quite ill / symptomatic	16.7 %	27.6 %	33.6 %
Group B Score 43-50: Moving towards discharge / wellness	45.8 %	34.6 %	37.7 %
Group C Score 51-58: Theoretically obtained wellness, but wonder what holds back from discharge	29.2 %	25.9 %	20.9 %
Group D Score < 58: Question is what keeps with team	5.6 %	12.0 %	7.7 %

Note: * $\rho < 0.05$, ** $\rho < 0.01$

Appendix 4. Comparison of Step Down from ACTT vs. ACTT ATR scores

	Group A (Score <43)	**Group B** (Score 43-50)	**Group C** (Score 51-58)	**Group D** (Score >59)
2012 ACTT (n = 333)	**24.3 %** (n = 81)	**38.4 %** (n = 128)	**26.1 %** (n = 87)	**11.1 %** (n = 37)
Step Down (n=90)	1.1 % (n=1)	30.0 % (n=27)	51.1 % (n=46)	17.8 % (n=16)
2013 ACTT (n = 363)	**34.2 %** (n = 124)	**37.2 %** (n = 135)	**20.9 %** (n = 76)	**7.7 %** (n = 28)
Step Down (n=97)	**5.2 %** **(n=5)**	**22.7 %** **(n=22)**	**44.3 %** **(n=43)**	**27.8 %** **(n=43)**
2014 ACTT (n = 396)	**29.0 %** (n = 115)	**38.6 %** (n = 153)	**24.7 %** (n = 98)	**7.6 %** (n = 30)
Step Down (n=93)	**8.6 %** (n=8)	**20.4 %** (n=19)	**48.4 %** (n=45)	**22.6 %** (n=21)

Appendix 5. ACTT PQ's graphic of ATR implementation in worker caseload balance

ACTT Worker Caseloads According to Client ATR Scores (July 2014)

	Brendan	*Carl*	*Jen*	*Kelly*	*KJ*	*Matt*	*Megan R*	*Mike*	*Sarah*	*Tracy*
1	Michael A	Donnie A	Amber A	Ethan A	Isabel B	Kirk A	Chewy A	Larry A	Oscar A	Sue A
2	Janet B	Marie A	Briana A	Emma A	James B	Spock A	Anakin C	Bob A	Oda B	Ted A
3	Reebie B	Merrill B	Charlotte A	Frank A	Jessie C	Scottie A	Leia C	Lynn B	Patricia B	Teri A
4	Marlon B	Jimmy C	Aiden B	Fern A	Kahn C	Pavel A	Luke D	Milo B	Phil B	Vic B
5	Tito C	Alan C	Bailey B	Grace B	Kathy C	Uhura B	Han D	Mona B	Quincy C	Van B
6	Jermaine C	Jay D	Caleb C	Gary B		Sulu B	Obiwan D	Nancy C	Quinn C	Walter C
7	Randy C	Wayne D	Denise D	Harry C		Bones C	Padma D	Noah C	Robin C	Winnie C
8	Paris D	George D		Henny C					Red C	
9	Prince D	Olive D		Isaac D					Stan C	
	A-1	A-2	A-3	A-4	A-0	A-4	A-1	A-2	A-1	A-3
	B-3	B-1	B-2	B-2	B-2	B-2	B-0	B-3	B-3	B-2
	C-3	C-2	C-1	C-2	C-3	C-1	C-2	C-2	C-5	C-2
	D-2	D-4	D-1	D-1	D-0	D-0	D-4	D-0	D-0	D-0
	A-11%	A-22%	**A-43%**	**A-44%**	A-0%	**A-57%**	A-14%	A-29%	A-11%	**A-43%**
	B-33%	B-11%	B-29%	B-22%	B-40%	B-29%	B-0%	B-43%	B-33%	B-29%
	C-33%	C-22%	C-14%	C-22%	**C-60%**	C-14%	C-29%	C-29%	**C-56%**	C-29%
	D-22%	**D-44%**	D-14%	D-11%	D-0%	**D-0%**	**D-57%**	D-0%	D-0%	D-0%

Appendix 6 – Cuddeback's ATR Manual

The Assertive Community Treatment Transition Readiness Scale©

User's Manual[4]

Gary S. Cuddeback, Ph.D.

[4] This project was supported by funding from the Ohio Department of Mental Health and The Health Foundation of Greater Cincinnati. Correspondence regarding this manual should be addressed to Gary S. Cuddeback, Ph.D., University of North Carolina at Chapel Hill, 325 Pittsboro Street, CB#3550, Chapel Hill, NC, 27599, 919.962.4363, cuddeback@mail.schsr.unc.edu.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

Chapter Overview

This is the user's manual for the Assertive Community Treatment Transition Readiness Scale©, or ATR©, for short. **It is highly recommended that you read this manual carefully and thoroughly before using the ATR©.** The ATR© is an 18-item paper-and-pencil measure that was developed to help assertive community treatment (ACT) teams identify ACT consumers who might be ready to transition from ACT to less intensive services. In this Chapter, I will provide a brief overview of the published research literature about transitions from ACT. Next, I will discuss the importance of and need for standardized measures to help ACT teams identify consumers who might be ready to transition to less intensive services. Then, I will briefly describe the development of the ATR©. Next, I will discuss some of the advantages of using the ATR©. I will conclude Chapter 1 with a discussion of how the ATR© should not be used. First, I will begin by introducing key terms that will be used throughout this manual.

Definition of Terms

A number of key terms will be used throughout this manual. These are defined below.

Assertive Community Treatment – ACT is an evidence-based practice for persons with severe and persistent mental illness.

ACT staff – ACT staff members can include but are not limited to case managers, social workers, therapists, nurses, psychiatrists, substance abuse specialists, housing specialists, benefit specialists, and peer support specialists.

ACT consumer – ACT consumer refers to persons with severe and persistent mental illness who are receiving ACT services.

Transition – Transition refers to a planned transition from ACT to less intensive services.

Transition readiness – Transition readiness refers to the potential for an ACT consumer to transition from ACT to less intensive services without experiencing deterioration in functioning or undesirable outcomes, such as hospitalization or incarceration.

Less intensive services – The term less intensive services is used throughout this manual to describe services that are less intense and/or frequent than ACT. These services may be called usual care, traditional case management, or community support in your community.

Literature Review

Assertive community treatment (ACT) is an evidence-based practice for persons with severe and persistent mental illness and is characterized as a multi-disciplinary, team-based approach with a small (1:10) staff-consumer ratio, 24/7 hour availability, aggressive outreach and

engagement, which delivers a wide array of psychosocial interventions.[5] ACT targets the most profoundly ill among persons with severe mental illness and it was originally conceptualized that those who needed ACT would need ACT for life.[6] However, this ACT-for-life perspective is contrary to what we know today about recovery from mental illness and presents a considerable challenge because once a team reaches capacity it is no longer a resource to the community.[7,8] This is a significant problem because in most communities ACT capacity does not meet demand and many persons who could benefit from ACT are denied access.[9] Many teams solve this capacity-demand problem by transitioning consumers to less intensive services.

Only a handful of studies have examined the transitions of persons with severe mental illness from ACT to less intensive services. Several experimental studies suggest consumers should not be transitioned from ACT. For example, in Stein and Test's original study of ACT, within 14 months of transition to usual care former ACT consumers who were randomly assigned to transition to less intensive services had reverted to their pre-ACT functioning and hospitalization patterns.[10] Another study found a 67% increase in hospital days among consumers who were randomly assigned to be transitioned to standard case management. A third study found an increase in hospitalizations and loss in clinical gains among consumers who were randomly selected to have intensive home-based, ACT-like care withdrawn.[11,12]

Other studies, albeit with weaker designs, suggest ACT consumers can be transitioned to less intensive services. For example, in a retrospective record review, transitioned ACT consumers had better outcomes compared to consumers who were not transitioned; however, those who were transitioned were higher functioning prior to transition than those who remained on ACT.[13] Further, two quasi-experimental studies compared housing outcomes among consumers who received time-limited intensive case management and consumers who received

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[9] Cuddeback, G. S., Morrissey, J. P., & Meyer, P. S. (2006). How many ACT teams do we need? Results from a large, urban community. *Psychiatric Services, 57*(12), 1803-1806.

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[12] McRae, J., Higgins, M., Lycan, C., & Sherman, M. D. (1990). What happens to patients after five years of intensive case management stops? Hospital and Community Psychiatry, 41(2), 175-179.

[13] Salyers, M. P., Masterston, T. W., Fekete, D. M., Picone, J. J., & Bond, G. R. (1998). Transferring clients from intensive case management: Impact on client functioning. *American Journal of Orthopsychiatry, 68*(2), 233-245.

usual care and found that time-limited intensive case management had sustained effects on housing; however, effects on hospitalizations and other indicators were omitted.[14,15]

The Need for Standardized Measures to Assess Transition Readiness

The evidence about transitions from ACT to less intensive services is mixed and a number of gaps in our knowledge remain, including a clear understanding of who can transition to less intensive services, to what level of less intensive services and with what outcomes. Moreover, there are no standardized measures designed specifically to help ACT teams identify consumers who might be ready to transition from ACT to less intensive services. This is particularly problematic given the focus on increased access to evidence-based practices in the public mental health system.[16] The lack of standardized measures designed specifically to help ACT teams identify consumers who might be ready to transition to less intensive services is a critical barrier to progress in mental health practice, policy, and research. Here, to address this critical gap in mental health practice, policy and research, the Assertive Community Treatment Transition Readiness Scale© (ATR©) has been developed.

Development of the ATR©

The ATR© is an 18-item, paper-and-pencil measure designed to help ACT staff identify ACT consumers who might be ready to transition to less intensive services. In developing the items for the ATR©, several sources for item content were identified: (a) qualitative interviews with experienced ACT staff, (b) research on ACT transitions, and (c) similar standardized measures such as the Level of Care Utilization System for Psychiatric and Addiction Services (LOCUS).[17]

Consumer Characteristics Assessed by the ATR©

Care was given to constructing items on the ATR© using principles of good item construction and to writing clear instructions for completion.[18] Items were written to cover the following areas: (a) psychiatric and behavioral stability; (b) hospitalization and incarceration; (c) housing stability; (d) treatment engagement; (e) medication compliance; (g) independence; (g) complexity of health and behavioral issues, including substance abuse; (h) intensity of service need; (i) benefits; (j) social support; (k) resources; (l) insight; (m) daily structure; and (n) employment.

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[14] Jones, K., Colson, P. W., Holter, M. C., Lin, S., Valencia, E., Susser, E., & Wyatt, R. J. (2003). Cost-effectiveness of critical time intervention to reduce homelessness among persons with mental illness. *Psychiatric Services, 54*(6), 884-890.

[15] Susser, E., Valenica, E., Conover, S., Felix, A., Wei-Yann, T., & Wyatt, R. J. (1997). Preventing recurrent homelessness among mentally ill men: A "critical time" intervention after discharge from a shelter. *American Journal of Public Health, 87*(2), 356-262.

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[18] Nunnally, J. C., & Bernstein, I. H. (2001). Psychometric theory (4th ed.). New York: McGraw-Hill.

Advantages of Using the ATR©

There are a number of advantages to using standardized measures like the ATR© along with clinical judgment and other decision-making methods. Clinical wisdom and professional judgment should and always will be an important part of identifying consumers who are ready to transition from ACT to less intensive services. However, clinical wisdom and professional judgment can be used along with high quality standardized measures to improve assessments of a consumer's readiness to transition. ***The intent here is not to replace clinical judgment but to improve clinical judgment with the addition of the ATR©.***

The ATR© has the potential to formalize and codify the transition decision-making process by providing guidance to ACT teams concerning relevant information to consider about transitions to less intensive services, and this could be particularly important for new and/or inexperienced ACT teams and staff members. Further, a standardized measure such as the ATR© has the potential to reduce subjectivity and bias inherent in clinical judgment and practice wisdom. Also, the ATR© can facilitate communication and accountability among staff within teams and between teams and their agencies through quantitative information that can be incorporated into assessments and reports. The ATR© could be used as a clinical tool for consumer progress and case planning purposes and as an administrative and/or supervisory tool to focus treatment goals and monitor ACT team performance. Also, scores on the ATR© can be used by agencies and by local and state mental health authorities to develop standards about transitioning consumers from ACT. Finally, standardized measures like the ATR©, save money and time, relative to subjective evaluations, especially when they require little training or effort to use.[19]

What the ATR© Should Not Be Used for

The ATR© should not be used as the sole method with which transition decisions are made. The ATR© should be used in concert with clinical judgment and other assessment methods to identify consumers who might be ready to transition from ACT to less intensive services. Most importantly, the ATR© should not be used for purposes for which it was not intended. For example, the ATR© should not be used to determine if a consumer needs to be hospitalized.

[19] Nunnally, J. C., & Bernstein, I. H. (2001). Psychometric theory (4th ed.). New York: McGraw-Hill.

CHAPTER 2: ATR© SCORING AND INTERPRETATION

Chapter Overview

Chapter 2 focuses on scoring and interpreting the ATR©. In this Chapter, I will provide instructions about how to score the ATR©. Next, I will provide guidelines about missing data and reverse-scoring items on the ATR©. Then, I will discuss ATR© total and Mean scores. I will conclude this section with a discussion of cutoff scores for the ATR©.

Scoring the ATR©

The ATR© is an 18-item measure designed to assess the readiness of ACT consumers to transition from ACT to less intensive services. The 18 items cover the following areas:

- psychiatric and behavioral stability;
- hospitalization and incarceration;
- housing stability;
- treatment engagement;
- medication compliance;
- independence;
- complexity of health and behavioral issues;
- intensity of service need;
- benefits;
- social support;
- resources;
- insight;
- daily structure; and
- employment.

Each item is scored on a four-point response scale: strongly disagree (1), disagree (2), agree (3), strongly agree (4). For example, Item 1 reads, “He/she no longer needs intensive services.” If you strongly agree with this statement about the ACT consumer you are assessing, the consumer would receive a score of 4. If you strongly disagree with the statement, indicating the consumer still needs intensive services, the consumer would receive a score of 1 for this item. You will be provided instructions for computing Total and Mean scores later.

Reverse-scored items

Before computing Total or Mean scores, for each ACT consumer’s score the responses to four items must be reverse-scored, so that for each item a higher score indicates greater potential to transition from ACT to less intensive services. As stated above, when you complete the ATR© on a consumer, you will be asked to rate each consumer on a series of questions using a 4-point response scale: strongly disagree (1), disagree (2), agree (3), strongly agree (4). The items that need to be reverse-scored are as follows:

- Item 5 – He/she has been in the psychiatric hospital within the last six months.
- Item 7 – He/she has been incarcerated within the last six months.
- Item 12 – He/she has complex needs (i.e., personality disorders, health problems, substance use).
- Item 17 – His/her behaviors have not been stable over the last six months.

For example, if you respond strongly disagree (1) on item 5 for a particular consumer, this response should be reverse scored to 4 before computing a consumer's total score or Mean. If you respond strongly agree (4) to Item 12, "He/she has complex needs (i.e., personality disorders, health problems, substance use," you would reverse score the item to a 1 before computing a consumer's total score or Mean.

Missing Item Responses

A Total or Mean score on the ATR© should not be computed if fewer than 80% of the items are completed. That is, at least 14 of the 18 items must be completed before scoring the ATR©.

ATR© Scores

Higher scores on the ATR© indicate greater potential to transition from ACT to less intensive services. Total scores or Mean scores for the ATR© can be computed. Total scores are the sum of all item responses on a measure and Mean scores are the average of all item responses. ***Be sure to reverse-score items 5, 7, 12, and 17 before computing Total or Mean scores!***

Total Scores: A Total score on the ATR© can be computed by adding up all of the item responses. Total scores on the ATR© can range from 18 to 72, with higher scores indicating greater potential to transition from ACT to less intensive services. ***Be sure to reverse-score items 5, 7, 12, and 17 first!*** An example of a simple EXCEL spreadsheet has been provided below. Please contact me if you would like a copy of this program or if you would like help in designing your own scoring and data collection program.

Mean Scores: The Mean score on the ATR© can be computed by adding up item responses and dividing by the number of completed items. The Mean score can range from 1.0 to 4.0. A simple scoring sheet can be created in EXCEL.

If this were a working spreadsheet I would simply enter scores under each item for Items Q1 – Q18. The spreadsheet can be programmed to alert you when you enter a score outside the allowable response range (i.e., 1, 2, 3, or 4). Note that item 4 is beyond the allowable range and the cell is highlighted in red. ***Be sure to reverse-score items 5, 7, 12, and 17 first!*** The spreadsheet can be programmed to automatically calculate Total and Mean scores.

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18
1234567	2	1	3	6	3	4	1	2	1	2	4	4	3	3	2	1	1	4
Total Score	47																	
Average Score	2.61																	

Cutoff Scores: In an effort to help ACT teams use the ATR© to help make decisions about ACT consumers who might be ready to transition to less intensive services, cutoff scores were developed. More information about how this was done will be covered in a Technical Manual which will be forthcoming soon. Cutoff scores should only be used as rough guides rather than definitive, set-in-stone rules for making transition decisions.

In this context, consumers with **Total** scores on the ATR© **equal to or greater than 50** could be considered candidates for transition from ACT to less intensive services. Similarly, consumers with **Mean** scores of **equal to or greater than 2.8** could be considered for transition from ACT to less intensive services.

Measures such as the ATR© never do a perfect job of predicting whatever they are intended to predict. So, as with any measure, there is some amount of inherent measurement error and with any cutoff score there are occasions where misclassification will occur. Ideally, a measure should maximize true positives (i.e., correctly identify consumers who have the potential to transition when they truly) while minimizing false positives (i.e., incorrectly identify consumers as having the potential to transition when they do not).

Using the cutoff scores listed above will correctly identify about 75% of your consumers as having the potential to transition when they do but will misidentify about 22% of your consumers as having the potential when they do not. That is why it is important to remember that the ATR© is to be used along with clinical judgment, practice wisdom and other resources to make decisions about transitioning consumers.

As stated earlier, these cutoffs are only to be used as rough guidelines. For example, if a consumer has a total score of 25 of 72 on the ATR, he or she might not be a good candidate for transition. If a consumer has a score of a 68 of 72 on the ATR©, he or she might be a good candidate for transition. The further a consumer's score is from these cutoffs the easier it might be to assess readiness for transition; however, the closer a consumer's score is to the cutoffs the more challenging it might be to make a transition decision. Again, these cutoffs are rough guidelines and the ATR© should not be the only method used to help make transition decisions.

CHAPTER 3: ADMINISTRATION AND USE

Chapter Overview

Chapter 3 focuses on the administration and use of the ATR©. In this Chapter, I discuss guidelines for when to complete the ATR©. Then, I will discuss how to complete the ATR©. I will conclude with a discussion of how to use the ATR©.

When to Complete the ATR©

The ATR© was intended to be used as a tool to help identify consumers who might be ready to transition from ACT to less intensive services. This implies that the ATR© can be used with a consumer who has been receiving ACT services for some time, who is stable, and who could handle transition to less intensive services, which was the original intent. However, there may be other uses for the ATR©. For example, the ATR© could be used as a clinical tool to assess and monitor consumer progress. Thus, the ATR© could be used during the ACT intake process and re-administered periodically (i.e., every six months).

How to Complete the ATR©

Currently, only a staff version of the ATR© exists. That it, the ATR© is a measure completed by an ACT staff member on an ACT consumer. There are 18 items on the ATR©. Each item should be read carefully before answering. The ATR© can be completed by an individual ACT staff member or as a team. The original intent for the ATR© was that it was to be completed without the presence of the consumer; however, you or your agency might choose to do this differently. Currently, only a paper-and-pencil version of the ATR© exists (see below).

Using the ATR©

The ATR© is a work in progress. So far, the ATR© appears to have excellent reliability and good concurrent and predictive validity. However, the ATR© has only been tested retrospectively. More testing of the ATR© is needed!

The ATR© is free to use and you can use it as much and as often as you like. I would be interested in hearing from you if you or your agency decides to use the ATR©. In particular, if your team or agency decides to adopt the ATR© as a part of your routine assessment strategy, I would like to talk to you about how you might collect your data and how your data could be useful to further testing the ATR©. And, I would be very interested in hearing your feedback about the ATR©, particularly your likes and dislikes and suggestions for improvement. Also, if you have further questions about the ATR© or if you're interested in the Technical Manual, please feel free to contact me.