Centre for Addiction and Mental Health
Centre de toxicomanie et de santé mentale

CANADIAN MENTAL HEALTH ASSOCIATION
L'ASSOCIATION CANADIENNE POUR LE SANTÉ MENTALE

Report on the Survey of Hospitals' Use of Community Treatment Orders and Case Management Services

By

The Centre for Addiction and Mental Health and the Canadian Mental Health Association

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Introduction

Purpose of the Study

In the fall of 2003, the Centre for Addiction and Mental Health (CAMH) conducted a survey of all hospitals in Toronto that have access to Community Treatment Order (CTO) coordination and case management services. The purpose of the survey was to obtain feedback from mental health professionals regarding:

1. Their experiences working with CAMH and the Canadian Mental Health Association (CMHA) on this CTO initiative
2. Experiences utilizing CTOs
3. Reasons CTOs are not used
4. Ongoing perceptions/beliefs about CTOs

Although surveys were completed anonymously, the data collected reflected the organizations that individuals were from, their position, and their level of experience with CTOs.

The purpose of this report is to examine the perceptions that clinicians who are served by the CTO project in Toronto, Ontario, Canada, have of CTOs and the services provided by CAMH and CMHA. Ultimately, findings from this survey will serve to evaluate the service, identify gaps and direct future planning for the CTO project.

Background

CTOs and similar interventions are currently being used in Canada, the United States, Australia, New Zealand and Israel, and are being considered for use in England and Wales. Aside from Ontario, the only other province in Canada currently using CTOs is Saskatchewan. CTOs were introduced into the mental health landscape of Ontario via Bill 68 in December 2000. CAMH provides CTO Coordination services via five Community Mental Health Services Coordinators (CMHSCs) who consult to hospitals with a psychiatric unit in Toronto. CMHA provides case management services to clients on CTOs.

Literature Review

There is some evidence to support that CTOs, Mandatory Outpatient Treatment (MOT) and similar intervention tools are effective to reduce length of stay (LOS) and hospital re-admission rates under specific circumstances (Swartz & Swanson, 2004; O'Brien & Farrell, 2004; Swartz, Swanson, Wagner, Burns, Hiday & Borum, 1999). However, other studies suggest that CTOs alone do not reduce hospital admissions or use of health services (Preston, Kisely, & Xiao, 2002; Kisely, Xiao & Preston, 2004). Despite efforts to determine the efficacy of CTOs, the evidence is still inconclusive.

In addition, most research has been conducted in jurisdictions outside of Canada such as the United States, Australia, New Zealand, and Israel. Although an extensive literature review was conducted, no studies examined coordination services such as those offered by the CTO project.

Methodology

A mixed method approach utilizing both qualitative and quantitative research methods was used to examine the experiences of mental health professionals regarding CTOs in Schedule 1 psychiatric facilities that have access to CTO coordination and case management services in Toronto. Hospitals identified for the study included: The Centre for Addiction and Mental Health (CAMH), The University Health Network (UHN), St. Michael's Hospital (SMH), Mount Sinai Hospital (MSH), North York General Hospital (NYGH), Sunnybrook and Women's College Health Sciences Centre - Sunnybrook Campus (SWHSC), Toronto East General Hospital (TEGH), Rouge Valley Health System - Centenary Site (RVHS), St. Joseph's Health Centre (SJHC), Humber River Regional Hospital - Keele Street Site (HRRH), William Osler Health Centre - Etobicoke Campus (WOHC) and the Scarborough Hospital (TSH).

A range of service providers such as psychiatrists, nurses, occupational therapists, social workers and administrators were contacted for the study, regardless of their level of CTO experience. Literature on CTOs and related subjects was gathered from the CAMH library (through Medline and Psych info) and from literature acquired by the CMHSC Team within the past few years. The survey was developed in consultation with the CTO Advisory Committee. It was framed in a clear and concise fashion in order to ensure that all the key issues were captured.

Surveys were predominantly distributed in person and via mail by CTO coordinators. At CAMH, they were distributed in person, internally via mail and through CAMH's internal email. The surveys were distributed in self-addressed, stamped envelopes. Overall, more than one hundred surveys were sent to service providers in all CTO affiliated hospitals in Toronto. In total, 70 responses were received from the targeted hospitals.

Responses/results were reviewed by Aurora Chui (CMHA), Tania Saccoccio (CAMH) and a subset of the CTO Advisory Committee including: Nora Mcauliffe (THC), Aseefa Sarang (Across Boundaries) and Theresa Claxton (Empowerment Council, NYGH). A summary of data was presented to the Advisory Committee; based on their feedback, CTO coordinators analyzed the responses. Each coordinator was responsible for compiling data collected from hospitals outside their jurisdiction. This allowed for fair and effective reporting of the results. In addition to compiling and analyzing data from a quadrant perspective, coordinators also compared: high and low user hospitals, service providers with and without CTO experience ("users" and "non-users"), and the involvement of physicians and other professionals.

Results

There were a total of 70 responses received for this survey. All geographic quadrants of Toronto were represented in responses. Survey results were reviewed and analyzed according to high and low user hospitals, those with or without CTO experience ("users" and "non- users"), the involvement of physicians and other professionals. Geographic groupings were also used. They are: central (UHN, SMH, MSH), CAMH (all sites), North (NYGH, SWCHSC), East (TEGH, RVHS, TSH) and West (SJHC, HRRH, WOHC). Below, a breakdown of respondents is provided, including an analysis of respondents by quadrant. Results for each survey question are presented. The complete survey, including the list of survey questions, is presented in Appendix A.

Respondents by High or Low User Hospital

Respondents' affiliated hospitals were divided into high user hospitals and low user hospitals. High user hospitals are those where more than 50 CTOs have been issued since the beginning of the CTO project. These hospitals include NYGH, SJHC, HRRH, RVHC and CAMH. Low user hospitals refers to hospitals with 50 or less CTOs issued; they are: UHN, MSH, SMH, TSH and WOHC.

Hospital	Number	%
High User	50	71.4%
Low User	20	28.6%
Total (N)	70	100%

Note that 27% of respondents were from CAMH (a high user hospital)

Respondents by discipline

Respondents	Number	%
Social Worker	22	31.4%
Physician	21	30%
Nurses	8	11%
Other	6	9%
Adm. Director	2	3%
Clinical Director	2	3%
Manager	2	3%
OT	2	3%
APN	2	3%
Discharge Planner	1	1%
Addictions Clinician	1	1%
Research	1	1%
Total (N)	70	100%

Nearly the same number of physicians (N=21) and social workers (N=22) responded (N=43 or 61.4%).

Comparison of Physicians and "Other" Mental Health Professionals (MHP)

Professional	Number	%
Physician	21	30%
Other MHP	49	70%
Total	70	100%

Majority of respondents were other mental health professionals.

Respondents' CTO involvement

Respondents	Number	%
With CTO Experience	45	64.3%
Without CTO Experience	25	35.7%
Total	70	100%

Nearly twice as many respondents had experience using CTOs.

Respondents by quadrant

Quadrant	Number	%
CAMH	27	39%
Central	17	24%
North	12	17%
West	9	13%
East	6	9%
Total	70	100%

1. Top three factors that prompt the use of CTOs

1.1 Comparison of Physicians and Other Mental Health Professionals (MHP)

Factors Prompting Use	Physicians	Other MHP
Safety	**9 (16.1%)**	**28 (21.4%)**
Access to Case Management	3 (5%)	9 (7%)
History of Treatment Non-compliance	**16 (28.6%)**	**37 (28.2%)**
Family request	5 (9%)	3 (2%)
History of frequent hospitalizations	**10 (17.9%)**	**26 (19.8%)**
Previous positive experience using CTO	1 (2%)	2 (2%)
Legal history	2 (4%)	9 (7%)
Client meets CTO criteria	5 (9%)	7 (5%)
Service of case managers	1 (2%)	6 (5%)
Service of CTO coordinators	2 (4%)	0 (0%)
Other	2 (4%)	4 (3%)
Total	56	131

Top 3 Factors prompting use of CTOs among Physicians and Other MHPs:

a) History of treatment non-compliance
b) History of frequent hospitalizations
c) Patient safety in the community

1.2 Comparison of High User Hospitals and Low User Hospitals

Factors Prompting Use	High User Hospitals	Low User Hospitals
Safety	**27 (20%)**	**10 (20%)**
Access to Case Management	10 (7%)	2 (4%)
History of Treatment Non-compliance	**38 (28%)**	**15 (29.4%)**
Family request	6 (4%)	1 (2%)
History of frequent hospitalizations	**27 (20%)**	**9 (17.6%)**
Previous positive experience using CTO	3 (2%)	0 (0%)
Legal history	7 (5%)	4 (8%)
Client meets CTO criteria	8 (6%)	4 (8%)
Service of case managers	5 (4%)	2 (4%)
Service of CTO coordinators	1 (1%)	1 (2%)
Other	3 (2%)	3 (6%)
Total	135	51

Top 3 Factors prompting use of CTOs in High and Low User Hospitals:

a) History of treatment non-compliance
b) History of frequent hospitalizations
c) Patient safety in the community

1.3 Comparison of Respondents with CTO Experience and Respondents without CTO Experience

Factors Prompting Use	Respondents with CTO Experience	Respondents without CTO Experience
Safety	**21 (17.4%)**	**16 (24.6%)**
Access to Case Management	10 (8%)	2 (3%)
History of Treatment Non-compliance	**32 (26.4%)**	**21 (32.3%)**
Family request	7 (6%)	0 (0%)
History of frequent hospitalizations	**28 (23.1%)**	**8 (12.3%)**
Previous positive experience using CTO	3 (2%)	0 (0%)
Legal history	3 (2%)	**8 (12.3%)**
Client meets CTO criteria	7 (6%)	5 (8%)
Service of case managers	5 (4%)	2 (3%)
Service of CTO coordinators	2 (2%)	0 (0%)
Other	3 (2%)	3 (5%)
Total	121	65

Top 3 Factors Prompting Use among those with CTO Experience “Users”:
a) History of treatment non-compliance
b) History of frequent hospitalizations
c) Safety of clients

Top 3 Factors Prompting Use among those without CTO Experience “Non-users”:
a) History of non-compliance
b) Safety of clients
c) History of legal involvement and history of frequent hospitalizations

2. Top three factors that deter the use of CTOs

2.1 Comparison of High and Low User Hospitals

Factors Deterring Use	High User Hospitals	Low User Hospitals
Lack of knowledge/exp	**14 (12.8%)**	4 (7.3%)
Liability	4 (3.7%)	0 (0%)
Infringe client’s rights	**16 (14.7%)**	**7 (12.8%)**
Impact on rapport	9 (8.3%)	**7 (12.8%)**
Services of case mgmt	1 (1%)	0 (0%)
Efficacy	10 (9%)	**14 (25.5%)**
Services of CTO Coord.	0 (0%)	0 (0%)
Previous –ve experience	1 (1%)	6 (10.9%)
Rights Advice	3 (2.6%)	0 (0%)
Time req’d to issue CTO	**14 (12.8%)**	6 (10.9%)
Financial reimbursement	3 (2.8%)	0 (0%)
Workload-CTO process	4 (3.7%)	5 (9%)
Workload-CCBs	7 (6.4%)	1 (1.8%)
Lack of comm. resources	8 (7.3%)	2 (3.6%)
Other	**15 (13.8%)**	3 (5.4%)
Total	109	55

Top 3 Factors deterring use of CTOs among High User Hospitals:

a) Infringement on client’s rights
b) “Other” factors that deter use
c) Lack of knowledge/experience with CTOs; time required to issue a CTO

Top 3 Factors deterring use of CTOs among Low User Hospitals

a) Lack of demonstrated efficacy
b) Infringement on clients’ rights (12.8%)
c) Potential negative impact on therapeutic rapport (12.8%)

2.2 Comparison of Respondents with and without CTO Experience

Factors Deterring Use	Respondents with CTO Experience	Respondents without CTO Experience
Lack of knowledge/exp	8 (6.5%)	**10 (18.5%)**
Liability	3 (2.5%)	1 (1.9%)
Infringe client's rights	**14 (11.6%)**	**9 (16.7%)**
Impact on rapport	11 (9%)	5 (9.2%)
Services of case mgmt	1 (1%)	0 (0%)
Efficacy	**17 (14%)**	6 (11.1%)
Services of CTO Coord.	0 (0%)	0 (0%)
Previous –ve experience	5 (4.1%)	2 (3.7%)
Rights Advice	2 (1.7%)	1 (1.9%)
Time req'd to issue CTO	**16 (13.2%)**	4 (7.4%)
Financial reimbursement	3 (2.5%)	0 (0%)
Workload-CTO process	6 (5%)	3 (5.6%)
Workload-CCBs	6 (5%)	2 (3.7%)
Lack of comm. resources	6 (5%)	4 (7.4%)
Other	8 (6.6%)	**7 (13%)**
Total	121	54

Top 3 Factors deterring use of CTOs among Users:

a) Lack of demonstrated efficacy
b) Time required to issue CTO
c) Infringement of client's rights

Top 3 Factors deterring use of CTOs among Non-users:

a) Lack of knowledge/experience
b) Infringement on clients' rights
c) "Other" reasons

2.3 Comparison of Physicians and Other Mental Health Professionals (MHP)

Factors Deterring Use	Physicians	Other MHP
Lack of knowledge/exp	2 (4.4%)	**16 (14%)**
Liability	1 (2.2%)	3 (2.6%)
Infringe client's rights	3 (6.7%)	**20 (17.5%)**
Impact on rapport	**6 (13.3%)**	10 (8.8%)
Services of case mgmt	0 (0%)	1 (1%)
Efficacy	**7 (15.6%)**	**17 (14.9%)**
Services of CTO Coord.	0 (0%)	0 (0%)
Previous –ve experience	3 (6.7%)	4 (3.5%)
Rights Advice	1 (2.2%)	2 (1.8%)
Time req'd to issue CTO	5 (4.4%)	13 (11.4%)
Financial reimbursement	3 (2.6%)	0 (0%)
Workload-CTO process	3 (2.6%)	6 (5.3%)
Workload-CCBs	**6 (13.3%)**	2 (1.8%)
Lack of comm. resources	3 (2.6%)	7 (6.1%)
Other	5 (11.1%)	13 (11.4%)
Total	45	114

Top 3 Factors deterring use of CTOs Among Physicians:

a) Lack of demonstrated efficacy
b) Workload associated with the CCB (13.3%) and potential impact on therapeutic rapport (13.3%)
c) Time required to issue CTO

Top 3 Factors deterring use of CTOs Among Other MHPs:

a) Infringement on client rights
b) Lack of demonstrated efficacy
c) Lack of knowledge and/or experience

3. Experience with CTO Coordination Services

3.1 Use of CTO Coordination services

- 89 % of respondents from the East, West and North quadrants had utilized CTO coordination services (24 of 27); 11% had not (3 of 27).
- 37.5% of respondents from the Central quadrant had utilized CTO coordination services; 62.5% had not. The majority of the latter were never involved in a CTO and a few were unaware of the service.
- 37% of respondents at CAMH had utilized CTO coordination services; 63% had not. The majority of the latter had not been involved in a CTO.
- Of those respondents whom had used the services, the majority had had contact through CTO consultations, followed by in-services and then program consultations.

3.2 Number of occasions CTO Coordination Services used

- Overall, 57% of respondents had used CTO coordination services and 43% had not used the services.
- The usage was shown as follows:

1-5 times	62.5%
6-10 times	20%
11-15 times	7.5%
More than 15 times	7.5%

3.3 Ratings of CTO Coordination Services

	Excellent	Very Good	Good	Fair	Poor	Don't know
Timeliness of team's response	57.5%	22.5%	7.5%	7.5%	0%	5%
Coordinator's level of knowledge	65%	30%	5%	0%	0%	0%
Coordinator's level of approachability	72.5%	22.5%	5%	0%	0%	0%
Impact of the service on discharge planning	42.5%	30%	5%	5%	5%	12.5%
Overall usefulness of the service	55%	27.5%	7.5%	5%	2.5%	2.5%

4. Experience with CTO Case Management Services

4.1 Use of CTO Case Management

- Overall, 45% of respondents had used case management (CM) services. Of those whom had not used CM services 54% had never been involved in a CTO. 22% did not need the services and 22% were unaware.
- 18.7% of respondents in Central quadrant had used the CM services; 81% have not.
- 15% of respondents from CAMH had used the CM services; 85% had not.
- 67% of respondents from the East had used CM services; 33% had not.
- 100% of respondents from the West had used CM services.
- 75% of respondents from the North had used CM services; 25% had not.

4.2 Number of occasions CTO Case Management Services used

1-5 times	46%
6-10 times	12%
11-15 times	7%
More than 15 times	5%

4.3 Ratings of CTO Case Management Services

	Excellent	Very Good	Good	Fair	Poor	Don't know
Timeliness of team's response	17%	38%	31%	7%	3.5%	3.5%
Frequency of case managers' contact with clients	27%	17%	17%	10%	6%	23%
Case managers' level of knowledge	17%	31%	24%	11%	0%	17%
Communication with case managers	24%	24%	11%	24%	3%	14%
Impact of the service on discharge planning	14%	24%	31%	11%	3%	17%
Impact of the service on the clients	21%	45%	13%	0%	7%	14%

5. Personal beliefs regarding CTOs

5.1 Comparison of High and Low User hospitals

	High User Hospitals			Low User Hospitals		
	Agree	Disagree	Don't Know	Agree	Disagree	Don't Know
Effective Tool	**88%**	5%	7%	**39%**	33%	28%
Improve Treatment	**71%**	3%	26%	33%	**45%**	22%
Access CM	**77%**	10%	13%	**59%**	12%	29%
Decrease Hospitalization	**72%**	7%	21%	24%	35%	**41%**
Increase communication	**71%**	7%	22%	**67%**	11%	22%
Infringe rights	18%	**55%**	27%	39%	**44%**	17%
Appeal to CCB	0%	36%	**64%**	0%	25%	**75%**
-ve on rapport	10%	**55%**	35%	28%	33%	**39%**
Increase Hosp. Stay	16%	**43%**	41%	0%	**67%**	33%
Not worth work	8%	**57%**	35%	33%	**44%**	22%
Inc. liability	18%	**44%**	38%	23%	17%	**60%**

- More than 70% responses of the high user hospitals viewed CTO as an effective treatment tool in improving treatment compliance, accessing case management services, decreasing hospital readmissions and increasing communication among service providers. The respondents from low user hospitals had a diverse view of CTOs with respect to them being an effective treatment tool in these areas, except in accessing case management services (59%) and increasing communication among service providers (67%).
- Besides the appeal to Consent and Capacity Board, the high user hospitals mostly disagreed with all other negative aspect of CTOs.

5.2 Comparison of Respondents with and without CTO Experience

	With CTO experience			Without CTO experience		
	Agree	Disagree	Don't Know	Agree	Disagree	Don't Know
Effective Tool	**70%**	16%	14%	**79%**	7%	14%
Improve Treatment	**60%**	18%	22%	**75%**	8%	17%
Access CM	**71%**	12%	17%	**71%**	8%	21%
Decrease Hospitalization	**53%**	19%	28%	**69%**	8%	23%
Increase communication	**65%**	9%	26%	**81%**	6%	13%
Infringe rights	22%	**56%**	22%	26%	**48%**	26%
Appeal to CCB	0%	47%	**53%**	0%	5%	**95%**
-ve on rapport	17%	**53%**	30%	12%	42%	**46%**
Increase Hosp. Stay	16%	**57%**	27%	4%	35%	**61%**
Not worth work	20.5%	**59%**	20.5%	5%	43%	**52%**
Inc. liability	21%	**42%**	37%	17%	26%	**57%**

- Both the respondents with and without CTO experience had positive personal beliefs about the CTO. More than 50% of them saw CTOs as effective tool in improving treatment compliance, accessing case management services, decreasing hospital readmissions and increasing communication among service providers. Interestingly, those without CTO experience had a higher percentage in all these areas.
- Other than the appeal to CCB, respondents with CTO experience mostly disagreed with the negative aspect of CTO while those without the experience rated most with "don't know" with the exception of infringement of client's rights.

5.3 Comparison of Physicians and Other Mental Health Professionals (MHP)

	Physicians			MHP		
	Agree	Disagree	Don't Know	Agree	Disagree	Don't Know
Effective Tool	**56%**	28%	16%	**80%**	8%	12%
Improve Treatment	**56%**	22%	22%	**67%**	13%	20%
Access CM	**56%**	19%	25%	**78%**	8%	14%
Decrease Hospitalization	**39%**	28%	33%	**66%**	11%	23%
Increase communication	**65%**	17.5%	17.5%	**71%**	5%	24%
Infringe rights	28%	**56%**	16%	22%	**51%**	27%
Appeal to CCB	0%	**72%**	28%	0%	19%	**81%**
-ve on rapport	11%	**50%**	39%	16%	**49%**	35%
Increase Hosp. Stay	11%	**61%**	28%	12%	**45%**	43%
Not worth work	32%	**42%**	26%	9%	**58%**	33%
Inc. liability	22%	33%	**44%**	8%	38%	**44%**

- Both groups perceived CTO positively as an effective tool in all the listed areas.
- Physicians and other mental health professionals had the same most frequent rating regarding the negative connotation of CTO other than the appeal to CCB. Physicians mostly disagreed that majority of CTOs are appealed to the Consent and Capacity Board, while the other mental health professionals rated most with "don't know".

6. Most useful aspect of CTOs – Qualitative responses

Respondents from hospitals with high rates of CTO usage, respondents who have used CTOs, and respondents who are physicians or other mental health professionals, felt that issues relating to ***treatment*** (e.g. "improve compliance with medication and treatment", "appears to support community-based treatment") were the most useful aspect of a CTO. Treatment issues occurred second most frequently in responses from low user hospitals and CTO nonusers.

Community support, such as access to case management, was most often cited as the most useful aspect of a CTO for CTO nonusers, and second most frequently for high user hospitals, CTO users, physicians and other professionals. This issue was fourth most frequently occurring for low usage hospitals.

Among respondents from low usage hospitals, issues relating to the ***CTO as a formal plan or contract*** were the most frequently occurring response. This theme occurred third most frequently for CTO users and nonusers, and other professionals. Responses included, "brings clinicians from various areas together to formulate structured plan with everyone's roles delineated" and "contractual relationship between patient, service providers, hospital, family members".

Client outcome appeared third most frequently in responses from high usage hospitals, and fourth most frequently from CTO nonusers and other professionals.

Issues around ***patient understanding*** were the third most frequently occurring response from low usage hospitals and physicians, and the fourth most frequently occurring from CTO users.

7. Least useful aspect of CTOs – Qualitative responses

Difficulty of enforcing a CTO was cited most often by low usage hospitals, CTO nonusers and other professionals as the least useful aspect, and by high usage hospitals, CTO users and physicians as the second most frequently occurring issue. Respondents noted that CTOs have "no teeth" and are "difficult to enforce unless client has SDM".

CTO process (e.g. length of time to implement, paperwork, CCB hearings) was most frequently identified by high usage hospitals, CTO users and physicians as the least useful aspect of a CTO.

Community support appeared third most frequently for high usage hospitals and CTO users, and fourth most frequently for other professionals. Comments centred on lack of case management; one respondent noted a lack of case management for geriatric patients.

The issue of ***patient understanding*** was the second most frequently occurring response from low usage hospitals and the fourth most frequently occurring from CTO users. Respondents noted that CTOs have been used "on non-insightful patients" and are "not helpful with patients with no insight".

Client rights appeared second most frequently for CTO nonusers and fourth most frequently for high usage hospitals. Comments focused on CTOs as an infringement on client rights.

Confusion regarding the use of a CTO and lack of knowledge was cited third most frequently by CTO nonusers and other professionals.

8. Recommending CTOs as a treatment option

For all high and low usage hospitals, CTO users and nonusers, and physicians and other professionals, the majority of respondents said that they would recommend the CTO option to a colleague. Many respondents would recommend the CTO option only for certain patients or depending on the patient's circumstance. For example, one respondent stated that they would recommend the CTO option to a colleague "depending on patient's level of insight, motivation and history of non-compliance and/or history of aggression, etc."

Negative responses to this question were concerned with wasting time and resources with little impact on the patient's outcome, ruining rapport with clients, and a lack of knowledge and experience with CTOs.

9. General comments about CTOs

For all high and low usage hospitals, CTO users and non-users, and physicians and other professionals, general comments about CTOs most frequently focused on the ***usefulness of a CTO***, including both positive aspects and CTO limitations. Comments ranged from "excellent program" to "useless – legislation needs to be modified…." One respondent stated that we "need to do outcome studies".

Issues relating to ***community support*** appeared second most frequently in responses from high usage hospitals, CTO users and other professionals, while appearing third most frequently from physicians. Generally, respondents noted the need for more case management; one respondent noted difficulty in accessing case management for adolescents.

Comments around ***CTO process*** appeared second most frequently for physicians, third for high usage hospitals, and fourth for CTO users. One respondent stated that "billing for psychiatric care for CTO clients through OHIP is complicated and not worth the effort…", and stated that it has been suggested that sessional funding be used to pay for physician's time. Others noted a problem with the length of the CTO process.

Client rights appeared second most frequently for low-user hospitals, and third for CTO users and other professionals. One respondent stated that CTOs should be used as a last resort as they infringe on clients' rights.

Issues around ***CTO Coordination services*** were noted second most frequently by CTO non-users and fourth by high-user hospitals and other professionals, indicating that CTO Coordinators are a useful and integral part of the system.

10. Comments on CAMH CTO Coordination Services

10.1 The comments generated under Part 2 of the survey are:

Really depends on the individual involved. Some are excellent and knowledgeable - some less so.
Wonderful service; excellent coordinator
CTO Coordinator helped to get case managers to agree to accept younger clients
Level not answered. My limited experience makes it difficult to answer this question. The assistance I have requested in the past has been timely and useful.
Excellent, approachable, knowledgeable
CTOs have not been used in withdrawal management
This would be an extremely difficult process without the help of the CTO Coordinator
We are very fortunate to have an excellent CTO Coordinator.
Perhaps more education to doc's and visible presence to promote benefits of program to patients' wellness may produce more referrals
Very accessible coordinator
Don't know (re: level of service)

10.2 Additional comments provided under Part 5 of the survey:

There were numerous positive comments regarding CTO coordination services across the city. Coordinators are described as organized, professional, responsive, taking on hours of work, comprehensive, hard working, and meeting with clients regularly. Other feedback included:

- Some are excellent and communicate well, others less so
- Process a little slow for crisis services
- Difficult to access in a timely fashion
- Process detains clients in hospital longer
- Coordinator presence on site helps keep CTOs in mind

Respondents suggested that adding access to ACTT services would be helpful, and suggested marketing services more.

11. Comments on CMHA CTO Case Management Services

There were varied comments about CTO case management services based on the individual respondent's experience with the service. It ranged from "excellent", "terrific" to "need more". They are listed below:

11.1 Comments generated under Part 3 of the survey

Limited experience makes it difficult to answer. The CTO Coordinator in our hospital had to go 'up the ladder' with respect to getting our client accepted by the CTO case management team. Our contact with the client ended after d/c from our program so I cannot respond to all questions being asked.
Not much of impact on the client, not b/c of poor quality of service but b/c of severity of patient's illness and extreme level of non-compliance
Unable to rate
I understand that there is a wait list in place for case management support for CTO

11.2 Additional comments provided under Part 5 of the survey (organized by quadrant):

Central

- Excellent; knowledgeable; efficient
- Success dependent on clients themselves
- Many respondents didn't know much about the CTO CM services (mainly from CAMH)

East

- Could improve more face to face contact rather than telephone
- Good
- Want to know more about them

North

- Help clients
- Terrific
- Need more
- Need increased contact and frequency of visits
- Model of east team more effective than west
- Need their involvement for geriatric clients

West

- Very good/good
- Some don't communicate well
- Sometimes ACTT would be more appropriate, but waiting list is a barrier
- Need daily med drops, but not available

Discussion

1. Characteristics of respondents and response rates

Sixty-one point four percent (61.4%) of respondents were either physicians (n=21) or MSWs (n=22). This may be due to the fact that CTO Coordinators work very closely with these 2 disciplines. Seventy percent of respondents were not physicians; however, all respondents worked in the mental health system. This may be explained by the fact that CTO coordinators receive referrals from a variety of sources including registered nurses (RNs), MSWs, occupational therapists (OTs) and other mental health practitioners that sometimes refer on behalf of the physician.

Also, high user hospitals had a response rate more than 2.5 times higher than that of low user hospitals. This seems reasonable, as high user hospitals have more experience using CTO coordination services, and CTOs in general, and may have felt more inclined to respond to this survey. It is also noteworthy that 38.7% of respondents were from CAMH, a high user hospital. This number may be so high due to the distribution method of surveys at CAMH: in addition to all staff receiving the survey via the internal broadcast email system, they were also circulated by inter-office mail, and distributed in person to some staff by CTO coordinators. At all other Schedule 1 facilities in Toronto, the surveys were mailed out and CTO coordinators personally distributed surveys using convenience sampling (i.e., those who were available). Another possible reason for a high response rate from CAMH is that there are 2 CTO coordinators at this facility: one at the Queen Street site and the other at the College Street site (no other Schedule 1 facility has 2 coordinators on-site).

2. Factors prompting the use of CTOs

Data collected from the survey was compiled and analyzed in a manner that allowed for comparison between low user and high user hospitals, CTO user vs. nonuser, and physicians vs. other mental health professionals. However, data analysis shows that regardless of how they are ranked or compared, respondents identified the same top three factors prompting consideration of CTOs. They are: history of treatment non-compliance, history of frequent hospitalizations, and patient's safety in the community. This is consistent with some literature that supports the assertion that the use of CTOs can be effective in reducing hospital use, and improving treatment compliance when clients are placed on CTOs for longer durations with adequate supports in place (O'Brien & Farrel, 2004; Swartz et al., 1999; Swartz & Swanson, 2004).

The selection of these 3 factors also seems to indicate that there is an accurate understanding of the purpose and intention of CTOs among respondents as history of treatment non-compliance, history of frequent hospitalizations, and safety to self are directly identified in the Mental Health Act (MHA), and its forms (i.e. 1, 49) as criteria for CTO consideration. The high frequency of these responses may also demonstrate that CTOs are being used as a treatment option by clinicians who are seeking to address these common clinical issues as they arise in the treatment of severely mentally ill patients. Finally, the prominence of these responses may indicate that CTO Coordinators are providing consistent and accurate information and education to physicians and treatment teams in the hospitals that have access to their services.

This being said, an analysis of CTO users vs. non-users indicates that *non-users* identified a forth factor prompting consideration of a CTO: history of legal involvement. This option yielded the same response rate as 'safety of clients' as a third top factor prompting consideration of a CTO. While the survey does not clarify what is entailed in "history of legal involvement" (i.e. forensic history and/or apprehensions under the MHA), there are a few interpretations that can be drawn. First, while CTO coordination statistics show that the number of CTO clients who have a forensic history is actually quite low (14%), there may be a perception among the general public and clinicians with no CTO experience that CTOs are intended for patients with a forensic history. This may be due to the circumstances that brought about Bill 68, and the use of "Brian's Law" as a reference to the context for the changes to the MHA.

Secondly, the identification of this factor among CTO nonusers may indicate that CTOs may be seen as a viable treatment option to address the issues of legal history in treating severely mentally ill patients. In addition, in jurisdictions outside of Canada, namely the Australian states, it has been identified that history of legal involvement is a significant factor that increases one's chances of being placed on an outpatient commitment order (Xiao, Preston & Kisely, 2004). It is also common to use CTOs for individuals with either a history of legal involvement or violence in both Australia and the United States (Kisely et al., 2004; Swartz, Swanson, Wagner, Burns & Hiday, 2001). This is an area that CTO Coordinators may wish to explore and understand as a future direction for the project.

3. Factors deterring use of CTOs

There are a number of factors that respondents felt deterred them from utilizing CTOs.

The majority of respondents indicated that the lack of demonstrated efficacy of CTOs was a factor that deterred them from using CTOs as an alternative treatment modality. This is not entirely surprising as research studies examining the effectiveness of CTOs are inconclusive or are from jurisdictions that use a different approach to mandatory outpatient treatment than what is used in Ontario. Interestingly, respondents from high CTO usage hospitals did not feel that this deterred them from using CTOs. This may be because high usage hospitals, over time, have directly observed what client factors contribute to CTO success and failures more than low usage hospitals.

All respondents noted that utilizing CTOs could potentially infringe their clients' rights and/or have an impact on the therapeutic relationship. Consequently, one or both of these factors deterred all respondents from using CTOs. This has also been identified in the literature as a concern for clinicians (Heffern & Austin, 1999).

While there are safeguards in place to protect the rights of clients throughout the CTO process, many still regard CTOs as a coercive treatment modality that may affect rapport with clients. That being said, only 6.7% of physicians, compared to 17.6% of "other" mental health professionals, felt that CTOs infringe clients' rights. This is an interesting finding when considering the argument in some CTO literature that the potential benefits of CTOs outweigh their coercive nature (Dawson & Romans, 2001).

Physicians, high and low usage hospitals, and respondents with direct CTO experience identified issues related with the CTO process itself as deterrents of its use. The time it takes to issue a CTO and the workload associated with it deterred respondents from using CTOs. Even with the services of CTO coordinators, respondents still indicated that CTOs are labour intensive and time-consuming.

Those without CTO experience, as well as some mental health professionals from both high and low usage hospitals noted that a lack of knowledge and/or experience with CTOs deterred them from considering and/or using this treatment approach.

Nearly 14% of respondents from high usage hospitals, 13% of those without CTO experience, and about 11% of mental health professionals (excluding physicians) indicated that "other" factors deterred them from using CTOs. Unfortunately, none of these respondents elaborated on what these factors were.

4. CAMH CTO Coordination Services

More than half of respondents (57%) had used CTO coordination services: the percentage being higher (89%) for the east, west and north quadrant. A lower percentage in the Toronto central core (37.5%) and CAMH (37%) may be attributed to a shorter history of having a designated coordinator, unlike the other quadrants that have had a designated coordinator for a longer period of time. The central core and CAMH were covered informally by coordinators for almost 2 years before having designated coordinators and hence, the service may not have been as well known and frequently used. This may also be related to the higher response rate from the central quadrant and CAMH.

The feedback of the CTO coordination services was very good. One hundred percent of the respondents rated the coordinators good/very good/excellent in the level of knowledge and approachability. The comment, "this would be an extremely difficult process without the help of the CTO coordinator", demonstrates the usefulness of having the coordinator involved in the CTO process. Ninety percent of the respondents rated the usefulness of the services as good/very good/excellent. Suggestions for improving the services included marketing the service more, and increasing coordinator visibility on units.

5. CMHA CTO Case Management Services

There was higher use of case management services among the West, North and East quadrants, with CAMH using the service least. This may be due to the resources available within CAMH, and clients' needs for more intensive services such as the Assertive Community Treatment Team (ACTT). The respondents found the case management services very timely in response (86% rated the service good or above) and 79% rated the impact of the service good/very good/excellent. However, the comments were varied as some respondents have more experience with the case management services than others. The impact of the service was also considered to depend on the severity of clients' mental illness and level of non-compliance. There was feedback regarding the need for more case management services and more frequent contact, and the limitations of not having daily medication drops. This reflects the reality that some clients are in need of higher levels of support such as ACTT, but waiting lists are a barrier.

6. Personal Beliefs

The general positive beliefs about CTOs among high user hospitals might explain why CTOs were used more frequently among respondents than not. Interestingly, respondents without CTO experience and other mental health professionals had a higher percentage in rating the positive aspects of CTO. Those with no CTO experience mostly rated the "Don't know" category regarding the negative assumptions of CTO. In this case, the "social desirability" factor usually found in surveys might have more impact on the ratings by respondents without CTO experience. It also appeared that those with CTO experience had more realistic expectations of CTOs, and were more able to formulate opinions related to the negative assumptions of CTOs.

7. Most useful aspect of CTO

It is interesting to note that the overall main concern of respondents is that clients receive treatment, which is consistent with the purpose of CTO legislation. Respondents generally appear to believe that case management services for clients are an essential part of the CTO.

Both physicians and other professionals recognize treatment and support as important issues. However, other professionals, including social workers, see the formal plan as an important aspect of the CTO. Perhaps it is conducive with their role to organize services and may assist them with their work.

Client outcomes, such as reduction in hospitalizations, were noted as the most useful aspect of a CTO for high user hospitals. Hospitals that have high CTO usage rates may believe, through first-hand experience, that CTOs prevent and decrease client hospitalization.

Clients' understanding emerged as a theme among physicians, who are closer to the process than other professionals, and may recognize that the CTO does not work if patients do not have some level of understanding regarding the CTO.

8. Least useful aspect of CTO

Both high and low user hospitals identified that CTOs were difficult to enforce. This may suggest that respondents would prefer changes to the legislation that would make CTOs more assertive.

High user hospitals, CTO users, and physicians frequently identified CTO process as the least useful aspect of CTOs. These groups, or arguably those who witness the CTO process repeatedly, are more sensitive to the amount of work involved in the process. Additionally, concerns regarding length of time to implement a CTO may be related to an increased length of stay in hospital.

9. Recommendation of CTO option to a colleague

Most respondents would recommend the CTO option to a colleague. However, some qualified their responses by suggesting that CTOs be limited to certain patients who are most suitable for this treatment. This suggests that research or information regarding the ideal candidate for a CTO would be useful for physicians and other professionals (i.e. what type of client has the most potential for success on a CTO).

10. General comments about CTO

Considering the diverse views of respondents, further research on the efficacy of CTOs is necessary.

The comments on community support services indicate a need for systemic changes around more case management services, particularly for youth and seniors.

Limitations of the Study

While this report uncovered some interesting findings, it is not without limitations. The sampling method and means of distributing the survey encouraged a higher response rate from CAMH where surveys were distributed via the email system, in person and by inter-office mail. At all other hospitals, the surveys were mailed out or distributed to mental health clinicians and psychiatrists by the coordinators. Furthermore, the sample size was not large enough for organizing responses into further subgroups for more information.

We must also interpret the findings with caution due to selection and/or response bias (e.g., social desirability). That is, those who do not use CTOs may have responded more favourably to the survey. Additionally, the possibility of bias exists if those who responded to the survey were more supportive of CTOs than those who chose not to complete the survey.

Conclusion

Based on feedback from mental health professionals regarding their experiences working with CAMH and CMHA on the CTO project, their experiences utilizing CTOs, reasons CTOs are not used, and ongoing perceptions/beliefs about CTOs, some key conclusions can be made.

CTO coordination and case management services were regarded very positively, and respondents generally possess affirmative beliefs regarding CTOs, particularly hospitals with high use of CTOs. The useful aspects of CTOs included improving compliance, supporting community based treatment, and bringing clinicians together in a treatment plan.

Nevertheless, this study has highlighted considerations for future directions of the CTO project, and areas where more research is needed. Responses indicate that there is need for more outreach and visibility of CTO coordinators in the Toronto central quadrant, and that there is room for more education with mental health professionals (non-physicians) and non-users regarding the CTO process. More research is required in order to demonstrate efficacy of CTOs, potential effect on rapport with clinicians, and characteristics of suitable candidates for this form of treatment.

This study has also surfaced legislative and structural issues including the difficulty of enforcing this treatment, the need for increased access to case management services, and access to services for populations that require specialized case management (i.e. seniors, youth, and those who require more intensive case management such as ACTT).

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Appendix A: Survey

Part 1

1.1 Please indicate the organization with which you are affiliated:

☐ CAMH
☐ HRRH
☐ MSH
☐ NYGH
☐ SMH
☐ SJHC
☐ SWCHSC
☐ TEGH
☐ TSH
☐ RVHS
☐ UHN
☐ WOHC
☐ Private practice
☐ Other hospital ______________________________
☐ Community organization ______________________________
☐ Other ______________________________

1.2 Please indicate your position:

☐ Physician in Chief/Chief of Psychiatry
☐ Administrative Director
☐ Psychiatrist – inpatients
☐ Manager – inpatient unit
☐ Social worker
☐ Clinical Director
☐ Psychiatrist – outpatients
☐ Manager – outpatient program
☐ Discharge planner
☐ Other ______________________________

1.3 With how many Community Treatment Orders (CTOs) have you had personal, direct involvement?

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 15+

1.4 What are the <u>top 3</u> factors that prompt you to consider a CTO for one of your patients?

☐ Patient safety in the community
☐ Patient's history of treatment non-compliance
☐ Patient's history of frequent hospitalizations
☐ Patient's legal history
☐ Services provided by CMHA Case Managers
☐ Access to CMHA case management
☐ Family request for CTO
☐ Your prior positive experiences
☐ Patient meets legislated criteria
☐ Services provided by CTO Coordinators
☐ Other ______________________________

1.5 What are the <u>top 3</u> factors that deter you from considering a CTO?

☐ Lack of CTO knowledge and/or experience
☐ Concerns regarding infringement of patient rights
☐ Services provided by CMHA Case Managers
☐ Services provided by CTO Coordinators
☐ Legislated requirement of rights advice provision
☐ Difficulty obtaining financial reimbursement
☐ Workload concerns regarding the CTO process
☐ Workload concerns regarding attending CCB hearings
☐ Lack of community resources available for clients on CTOs
☐ Concerns regarding liability
☐ Potential negative impact on rapport
☐ Lack of demonstrated efficacy
☐ Your prior negative experiences
☐ Time required to issue a CTO
☐ Other ______________________________

Part 2

This section considers your experience with the **CTO Coordination** services offered through the Centre for Addiction & Mental Health (CAMH).

2.1 Have you ever used the services of a CAMH CTO Coordinator (including educational services)?

☐ YES

In what capacity?

☐ CTO consultation for a particular patient
☐ Program consultation
☐ Inservice, rounds or other educational session
☐ Other ______________________________

☐ NO

Why not?

☐ Have never been involved with a CTO
☐ Have been involved with a CTO, but did not need coordination services
☐ Was unaware of the service
☐ Other ______________________________

Please skip to Part 3

2.2 On how many occasions have you used these services?

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 15+

2.3 Please rate the CTO Coordination service on the following factors (✓) :

	Excel-lent	Very Good	Good	Fair	Poor	Don't Know
Timeliness of team's response						
Coordinator's level of knowledge						
Coordinator's level of approachability						
Impact of service on discharge planning						
Overall usefulness of service						

2.4 Please rate the level of service provided to your organization (✓):

☐ More than we require ☐ Just right ☐ Less than we require

2.5 Other comments? ______________________________

Part 3
This section considers your experience with the **CTO Case Management** services offered through the Canadian Mental Health Association (CMHA).

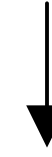
3.1 Have you ever used the services of a CMHA CTO case manager (including educational services)?

☐ YES

In what capacity?

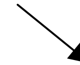
☐ CTO case management services for a particular patient
☐ Inservice, rounds or other educational session
☐ Other ______________________________
____
____

☐ NO



Why not?

☐ Have never been involved with a CTO
☐ Have been involved with a CTO, but did not need case management
☐ Was unaware of this service
☐ Other ______________________________
____



Please skip to Part 4

3.2 On how many occasions have you used these services?

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 15+

3.3 Please rate the CMHA case management service on the following factors (✓) :

	Excel-lent	Very Good	Good	Fair	Poor	Don't Know
Timeliness of team's response						
Frequency of Case Managers' contact with clients						
Case Managers' level of knowledge						
Communication with Case Managers						
Impact of the service on discharge planning						
Impact of the service on the client						

3.4 Please rate the level of service provided to your organization (✓):

☐ More than we require ☐ Just right ☐ Less than we require

3.5 Other comments? ______________________________
____
____
____

Part 4
This section considers the general impact of CTOs on services and patients.

4.1 Please indicate your personal beliefs regarding the following statements (✓):

	Agree	**Disagree**	Don't Know
CTOs are an effective treatment tool			
CTOs improve treatment compliance			
CTOs are useful for accessing case management services			
CTOs decrease hospital readmissions			
CTOs increase communication among service providers			
CTOs infringe on patients' human rights			
The majority of CTOs are appealed to the Consent and Capacity Board			
CTOs negatively impact on rapport with patients			
CTOs increase hospital length of stay			
CTOs are not worth the required workload			
CTOs increase service providers' liability			

4.2 In your opinion, what is the most useful aspect of a CTO?

4.3 In your opinion, what is the least useful aspect of a CTO?

4.4 Based on your experience with CTOs and the Toronto CTO Project, would you recommend this treatment option to a colleague?

Part 5
Additional Comments

5.1 General Comments about CTOs

5.2 Comments about CTO COORDINATION services

5.3 Comments about CTO CASE MANAGEMENT services

We appreciate your feedback.

THANK YOU FOR PARTICIPATING IN THIS SURVEY