

Evaluating Mental Health System Enhancements


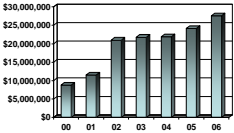


Investigators: Heather Stuart, PhD and Terry Krupa, PhD, Queen's University
 Research Associate: Michelle Koller, PhD Student, Queen's University




Funding Enhancements by Year

Southeastern Ontario (Population ~ 500,000), 2000-2006





Total Year End Funding
 Source: MOHLTC, SEO Regional Office



Study Approach


- Objective: Assess changes in:
 - Appropriateness of community mental health care (Service Match: the extent to clients receive a intensity/level of care that matches their level of need)
 - Hospital utilization (emergency room contacts, discharges, days of care) in 3 Queen's University affiliated general & psychiatric hospitals
- Followed two cohorts of community care patients:
 - Cohort 1: assembled in 2001 (before funding enhancements)
 - Cohort 2: assembled in 2006 (following funding enhancements)



| 2001 Cohort | 2006 Cohort |
|--|--|
| <ul style="list-style-type: none"> All 13 eligible agencies participated <ul style="list-style-type: none"> Provided a log of all clients who received care in a three month period A unique anonymized identifier created to identify unique clients Age group stratified random sample from amalgamated agency list of 3163 unique individuals 525 assessments completed by primary care workers from 620 (85% response) Follow-up through hospital administrative databases Weighted analysis | <ul style="list-style-type: none"> 10 of 11 eligible agencies participated <ul style="list-style-type: none"> Provided a log of all clients who received care in a three month period A unique anonymized identifier created to identify unique clients Age group stratified random sample from amalgamated agency list of 3447 unique clients 610 assessments completed by primary care workers from 715 (85% response) Follow-up through hospital administrative databases Weighted analysis |
| Combined Sample = 1,135 | |


Level of Care Definitions

- Level 1: Self-management: monthly/as needed
- Level 2: Community support: weekly
- Level 3: Intensive community support: up to daily
- Level 4: Residential treatment (community beds)
- Level 5: Inpatient (hospital beds)



Recommended Level of Care: Colorado Client Assessment Record (CCAR)

- Structured tool to assess functioning
- CCAP version rates client across 26 functional and symptom domains, including strengths and resources
- Detailed training manual
- Demonstrated reliability and validity
- Ratings are made by staff who know the client well (no client interview required)
- Takes 30-45 minutes to complete



Level of Care Received: Support and services Inventory

- Detailed listing of services and supports currently used by the client
- Type of contact (by professional; program, etc.)
- Frequency of contact (daily, weekly, monthly, yearly)

seei

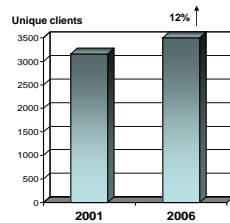
Main Measure: Service Match

- Comparing recommended level of care (from the Colorado Client Assessment Record) to the actual level of care received (from the Support and Service Inventory).
- Three outcomes:
 - Actual level of care is less than the recommended level of care (under-served)
 - Actual level of care matches the recommended level of care (matched)
 - Actual level of care is higher than the recommended level of care (over-served)

| Recommended Level | | Actual Level | |
|-----------------------------------|------------------------------------|-------------------------------|------------------------------------|
| Colorado Client Assessment Record | | Support and Service Inventory | |
| Level 1: | Self-management: monthly/as needed | Level 1: | Self-management: monthly/as needed |
| Level 2: | Community support: weekly | Level 2: | Community support: weekly |
| Level 3: | Intensive community support: daily | Level 3: | Intensive community support: daily |
| Level 4: | Residential treatment | Level 4: | Residential treatment |
| Level 5: | Inpatient hospitalization | Level 5: | Inpatient hospitalization |

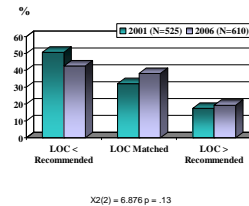
Findings: Did Access to Care Improve?

- In 2001 there were 3163 unique clients served by community mental health agencies meeting our study criteria in a three month period. This represented all 13 agencies providing care to adults with serious mental illnesses.
- In 2006, we estimated that this had increased to 3537 unique clients (12%).
- Programs and services excluded from study were forensic, dual diagnosis, acquired brain injury, addictions, geriatric, crisis, fee-for-service psychiatry, and child & adolescent.



seei

Did Service Match Improve ?

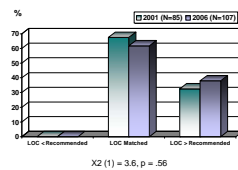


- The community mental health treatment system is somewhat better able to match level of care received (LOC) to client needs, however changes have been small & not significant
- Under-servicing of clients remains a problem.
 - In 2006, 42.5% of clients received a level of care that was less than recommended
- Under-servicing was a particular problem for clients requiring intensive (daily) community supports

seei

Changes in Service Match in Clients Recommended for Level 1- Self-Managed Care

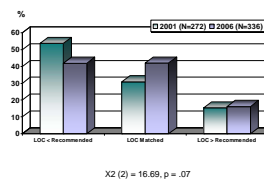
- The majority of clients at this level received a level of care that matched their needs
- However, clients who were recommended to receive Level 1 Care were more likely to be over-served than any other group (38% in 2006)



seei

Changes in Service Match in Clients Recommended for Level 2 - Community Care

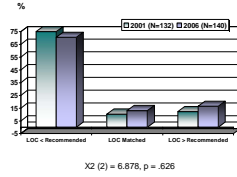
- The largest improvements in service match were noted at this level:
 - 12% reduction in the proportion of clients who received a level of care (LOC) that was less than recommended
 - 11% improvement in the proportion of clients who received a level of care (LOC) that was matched to the level of care recommended
 - Negligible change in the proportion of clients who received a level of care that exceeded that recommended



seei

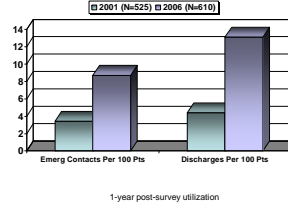
Changes in Service Match Among Level 3 - Intensive Community Care

- Little change occurred at this level
- Under-servicing remains a major problem for clients who require intensive community based supports and services (Level 3)
- 71% received a level of care that was less than recommended
- Social/vocational and dental are the largest areas of unmet need



seei

Did Hospital Utilization Decrease?

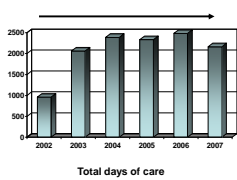


- Hospital utilization in the year following the surveys increased
 - Emergency contacts per 100 patients increase by a factor of 2.25
 - Discharges per 100 patients tripled
 - Days of care per person doubled
- Though small, the proportion of people having a discharge in the year following the survey doubled
 - 3.0% in 2002 (for the 2001 cohort)
 - 6.4% in 2007 (for the 2006 cohort)
 - 11% overall with any hospital use

seei

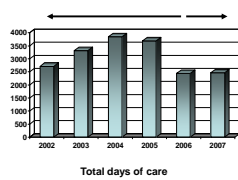
Changes in Days of Care

2001 Cohort (N=525) Looking Forward



- Hospitalization increased over time within the 2001 cohort—more than doubling between 2002 and 2003; then remained steady

2006 Cohort (N=610) Looking Backward



- Hospitalization increased between 2002 and 2004/2005, then dropped

Main Findings

Funding enhancements improved system coverage, but did not translate into positive changes in service match.

Under servicing remains a problem overall, but is particularly prevalent among Level 3 Intensive Community Care clients.

Most clients in community services are not heavy users of hospital services but hospitalization utilization increased

seei

Implications

- Targeted change (including direct incentives) may be required to change the way in which community care is delivered
- Changes in services as a result of funding enhancements may not have been in full effect during the study time period

seei