ASSERTIVE COMMUNITY TREATMENT: OVERVIEW AND SPECIAL FOCUS ON NURSING ROLES AND FUNCTIONS
OAA NURSES CONFERENCE
OTTAWA
JANUARY 30, 2013

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DIVISION HEAD/SERVICE CHIEF TERTIARY SERVICES
MENTAL HEALTH AND ADDICTIONS SERVICES
VANCOUVER ISLAND HEALTH AUTHORITY
PRESENTATION OUTLINE

- ACT definition/target populations, history, national context,
- Ontario provincial infrastructure, outcome measurements
- Nurses on ACT Teams: staffing, roles and functions
- Questions, Discussion
ASSERTIVE COMMUNITY TREATMENT: INTRODUCTION

- Definition, structure/functions
- Target populations
- Canadian historical context, rollout
- Expected delivered clinical results
- Cost effectiveness, analysis
- Ontario provincial infrastructure
- System linkages, integration
ACT STRUCTURE AND FUNCTION

Multidisciplinary team
7 days per week, day/evening shifts
Intensive (1:10 ratio max)
Shared and Collaborative care
Community based, home delivered services
Treatment, rehabilitation and support
“Housing First”
Crisis interventions
Close ties/integration with the courts, income assistance, primary health care
ACT

1980’s Madison Wisconsin: Stein and Test
1990’s … Ontario ACT rollout….various phases…

- Long stay deinstitutionalization from the 10 provincial psychiatric hospitals and “revolving door syndrome” acute care general hospital patients
- Infrastructure of a joint Ministry/clinical field advisory panel specific for ACT
- Provincial standards, funding, site visits, accreditation and technical training, evaluation outcome measurements, annual publication
ACT TEAMS IN CANADA

~ 80 teams in Ontario
~ 25 teams in Quebec

Several teams in the Maritimes
- Moncton, Charlottetown, St. John’s

Several teams in the Prairies
- Winnipeg (2), Calgary (2)

10, soon to be 12 teams in British Columbia
ACT TARGET POPULATIONS

Tripartite Target populations

1. Long stay/institutionalized mentally ill
2. “revolving door syndrome” (“heavy users” of ER, and hospital….50 + beddays in previous year literature benchmark)
3. “high profile” Homeless, high criminal justice system users
   - Primarily psychotic disordered patients, brain injury, etc.
   - Often with high addiction and physical health care needs

Progressive shift over time towards more general hospital and community based referrals as the longterm care hospital populations have diminished

Collectively, these patients are amongst the most ill and cost the state the most amount of money without much positive outcome to show for it…
ACT EXPECTED OUTCOMES

Expected and “proven” RCT results across many jurisdictions (Cochrane reviews)

- Much reduced hospital and ER use (both long stays and acute care recidivism…70% range bedday reduction on average, when targeting high end users of the hospital system)
- Much better housing status and greater housing stability and independence
- (“housing first” rent subsidies approach allows for maximizing the private market housing sector)
- Homelessness to housed
- Platform for recovery, psychosocial interventions, especially historical emphasis on vocational IPS approach
- Platform for better mental health status/care, and physical health care status/care
ONTARIO: COMPARISON OF AVERAGE HOSPITAL BED DAY REDUCTION RESULTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-ACT</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tbody>
<tr>
<td>2001-02</td>
<td>70</td>
<td>27</td>
<td>17</td>
<td>16</td>
<td>14</td>
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<tr>
<td>2002-03</td>
<td>86</td>
<td>28</td>
<td>20</td>
<td>16</td>
<td>15</td>
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<tr>
<td>2003-04</td>
<td>77</td>
<td>26</td>
<td>23</td>
<td>16</td>
<td>16</td>
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<tr>
<td>2004-05</td>
<td>76</td>
<td>25</td>
<td>20</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>2005-06</td>
<td>71</td>
<td>27</td>
<td>22</td>
<td>19</td>
<td>17</td>
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</table>
ONTARIO: COMPARING THE VALUE OF AN INDIVIDUAL ACT CLIENT’S REDUCED HOSPITAL BED UTILIZATION

<table>
<thead>
<tr>
<th>Year</th>
<th>1Yr Pre</th>
<th>1 Yr Post</th>
<th>2Yr Post</th>
<th>3Yr Post</th>
<th>4Yr Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03</td>
<td>$54,352</td>
<td>$17,696</td>
<td>$12,640</td>
<td>$10,112</td>
<td>$9,480</td>
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<tr>
<td>2003-04</td>
<td>$48,664</td>
<td>$16,432</td>
<td>$14,536</td>
<td>$10,112</td>
<td>$10,112</td>
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<tr>
<td>2004-05</td>
<td>$48,032</td>
<td>$15,800</td>
<td>$12,640</td>
<td>$11,376</td>
<td>$10,112</td>
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<td>2005-06</td>
<td>$44,872</td>
<td>$17,064</td>
<td>$13,904</td>
<td>$12,008</td>
<td>$10,744</td>
</tr>
</tbody>
</table>

Avg. Bed Day Cost = $632†

† Source for Average Bed Day Cost: http://www.chsrf.ca/final_research/ogc/forchuk_e.php
Forchuk, Cheryl, RN, PhD., “Therapeutic Relationships: From Hospital to Community” (June 2002)
ONTARIO: VALUE OF REDUCED ACT HOSPITAL BED DAY UTILIZATION PROJECTED TO 4048 CLIENTS

4048 clients: Pre-ACT averages 71 Bed Days; declines to 27 Avg. Bed Days after 1 year in ACT

N.B. - #’s rounded off to the nearest thousand

Using Average Bed Cost of $632†

† Source for Average Bed Day Cost: http://www.chsrf.ca/final_research/ogc/forchuk_e.php

Forchuk, Cheryl, RN, PhD., “Therapeutic Relationships: From Hospital to Community” (June 2002)

Number of days

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2</td>
<td>194</td>
</tr>
<tr>
<td>Year 1</td>
<td>303</td>
</tr>
</tbody>
</table>

Post-admission to ACT services

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>19</td>
</tr>
<tr>
<td>Year 2</td>
<td>22</td>
</tr>
<tr>
<td>Year 3</td>
<td>19</td>
</tr>
</tbody>
</table>

n=35
SEVEN OAKS ACT TEAM (VICTORIA, BC):
PRE AND POST HOSPITAL COSTS & COST AVOIDANCES

Costs estimated using per diem of $325
n=35

<table>
<thead>
<tr>
<th></th>
<th>Year 2</th>
<th>Year 1</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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</thead>
<tbody>
<tr>
<td>Pre-admission to ACT</td>
<td>$2,206,750</td>
<td>$3,446,625</td>
<td>$2,610,563</td>
<td>$2,576,438</td>
<td>$2,610,563</td>
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<tr>
<td>services</td>
<td></td>
<td></td>
<td>$216,125</td>
<td>$250,250</td>
<td>$216,125</td>
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<tr>
<td>Post-admission to ACT</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Estimated cost avoidance
Estimated cost
VICTORIA BC ACT TEAMS ACUTE CARE BED DAYS
1 YEAR PRE AND 1 YEAR POST ACT ADMISSION

Units included: EM3A, EM3B, EM4A, EM4B, PIC, KEN2, WAT2, 4STH-CD, 2SER, 2SWR, 1NWR, 1SFR, 2NER, 2NWR, PICJ, PIPJ, PSY-N, PIC

N=128
Teams serve = 248
82.8% reduction
PSYCHIATRIC ACUTE CARE BED DAYS BY TEAM
1 YEAR PRE AND 2 YEARS POST ACT ADMISSION

Reduction % is from 1 yr Pre ACT

Downtown ACT
N=16 (team N = 70)

Pandora ACT
N=28 (team N = 87)

VICOT
N=22 (team N = 64)

Seven Oaks ACT
N=9 (team N = 14)
PSYCHIATRIC ACUTE CARE BED DAYS BY TEAM
1 YEAR PRE AND 1 YEAR POST ACT ADMISSION

**DACT**
- N=28
- Team N = 70
- Pre Bed Days Yr 1: 861
- Post Bed Days Yr 1: 50
- Reduction: 94.2%

**PACT**
- N=48
- Team N = 58
- Pre Bed Days Yr 1: 2,000
- Post Bed Days Yr 1: 400
- Reduction: 75.5%

**MICOT**
- N=37
- Team N = 52
- Pre Bed Days Yr 1: 358
- Post Bed Days Yr 1: 105
- Reduction: 71.8%

**SevenOaks**
- N=15
- Team N = 14
- Pre Bed Days Yr 1: 56
- Post Bed Days Yr 1: 15
- Reduction: 95.2%
VICTORIA ACT TEAMS: HOUSING TYPE SNAPSHOT - ADMISSION AND CURRENT (NOV. 2011)

Downtown ACT
N=73

Pandora ACT
N=61

VICOT
N=64

Seven Oaks
N=43
DOWNTOWN ACT TEAM: GENDER DISTRIBUTION REPRESENTED AS A PERCENTAGE

- Female: 39%
- Male: 61%

n=75
DOWNTOWN ACT TEAM:
AGE DISTRIBUTION REPRESENTED AS A PERCENTAGE

Percentage of ACT clients

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>16-24</td>
<td>8%</td>
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<tr>
<td>25-34</td>
<td>28%</td>
</tr>
<tr>
<td>35-44</td>
<td>21%</td>
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<td>45-54</td>
<td>25%</td>
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<tr>
<td>55-64</td>
<td>13%</td>
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<tr>
<td>65-74</td>
<td>3%</td>
</tr>
<tr>
<td>75+</td>
<td>0%</td>
</tr>
</tbody>
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n=75
D/ACT TEAM:
HOUSING SNAPSHOT (AT ADMISSION AND CURRENT)

Number of clients

n=75

Homeless | Hotel/SRO | Supported MH | Low Barrier | Market Rent | Family Home | Other
---|---|---|---|---|---|---
40 | 10 | 30 | 15 | 10 | 5 | 2
CHANGE IN HOUSING DISPOSITION FOR CLIENTS HOMELESS AT TIME OF ADMISSION

D/ACT TEAM

Number of clients

18
18
2
13
11
9

Homeless - Rough
Homeless - Shelter
Hotel/SRO
Supported MH
Low Barrier
Market Rent

n=36
(48% of clients)

At admission
Current
VICTORIA ACT INTEGRATION WITH MINISTRY RESPONSIBLE FOR INCOME ASSISTANCE

**Strong partnership with income assistance**

- Income assistance officer on site
- Direct day to day money management if required to maintain housing and dignity…platform for skills teaching and autonomy
- treatment for addictions (ie budget for housing and food and essentials, not street drugs and dealers)
- Often endorsed through Mental Health Act or the Courts (as a condition of freedom)
- Occasional use of public guardianship/trusteeships
VICTORIA ACT INTEGRATION WITH CRIMINAL JUSTICE SYSTEM

Strong partnership with Criminal Justice System

- Dedicated court (“Victoria Integrated Court”) system specific for ACT clientele developed over last few years with judiciary, corrections, mental health (ACT) and law enforcement
- Enhanced efficiencies, very little delay/holdovers
- Consensus building (crown, defence, probation, law enforcement, care givers) on conditional community based ACT mediated sentencing and work services
- Community Sentence Orders and probation orders as a “court diversion” from incarceration with specific court mandated attachment to specific ACT services
VICTORIA ACT INTEGRATION WITH PRIMARY HEALTH CARE

Full time nurse practitioner serving our four teams
Integrated/on site services and at “Cool Aid”
General practitioner also with our teams on site one half day per week
Nursing staff working closely with NP/GP and clinics wrt tough medical situations, chronic disease management (eg IDDM, HIV, Hep C)
ACT NURSING STAFFING

Staffing standards: ACT model in most jurisdictions

urban 3 fte
rural 2 fte

other considerations:
is the team leader a nurse?
are there other ACT teams in the same setting where some interteam sharing can occur?
are there other nonACT nursing staff integral /available to the service setting?
is there nurse practitioner staffing on/available to the ACT team?
ACT NURSING STAFFING ROLES AND FUNCTIONS

Mental health care
Physical health care
Generic ACT activities and responsibilities
Relationship to NP’s, GP’s, specialists,…

Staff education
Academic / Teaching contributions to nursing students
Health Care Outcomes
ACT NURSING ROLES: MENTAL HEALTH CARE

Psychiatric medications
- separate and secure storage, “stock medications on site”
- storage (special considerations for narcotics, benzodiazepines)
- dispensing /administering (non-nursing staff roles)
- pharmacy relationships: witnessed medications, windows of observation
- accounting, setup, organization of the meds room/practices

Oral and Depot Antipsychotics

Monitoring requirements/recommendations
- clozapine, routine/regularized lab work, infrastructure

Assessments of effectiveness, side effects, (symptom rating scales, EPS, TD)
ACT NURSING ROLES: PHYSICAL HEALTH CARE

Psychiatric Patient illness and premature death
   lack of access to care, follow through, stigma, inherently higher risk groups
Cardiovascular Disease Prevention, Diagnosis, Treatment
   lifestyle, nutrition, wellness clinics, smoking cessation treatment,
Age and Gender appropriate screening (per clinical guidelines)
   well woman/man examintions and checkups, cancer risk monitoring,
Diabetes Mellitus
   diagnosis, management
Infectious Disease diagnoses , prevention and treatment
   hepatitis C, HIV
   immunizations ("childhood "illnesses, flu vaccines)
Accidents, Wound Care
GENERIC ACT WORK AND NURSING ROLES

ACT philosophical orientation towards
    “whatever it takes”, “can do attitude”, priority patient task assignments

Nursing staff will often do non-nursing functions and activities
Generic work lends credibility to ACT team member colleagues,
Generic work broadens the patient relationship
Nursing generic work also includes being a “primary case manager” to a select group of patients, perhaps in part based on nursing specific roles
ACT NURSES’ RELATIONSHIP TO EXTERNAL NURSING AND MEDICAL STAFF

“Orphan “patients of any responsible primary care

Doctor shopping/walk in clinic,””poly pharmacy”/poly doctoring scenarios

Advocacy for access, problem solving, adaptations to regular care to ensure ACT clients gain access, avoid second rate care, and benefit maximally

Examples:

hepatitis C support group therapy, treatment

important specialist appointments, information sharing/support/followup

difficult/onerous procedures, hospital based care difficulties

extraordinary diabetic management scenarios
EDUCATION AND ACADEMIC VENUES

Internal staff educational topics
Promoting inservices:
  new medications, topics of physical health care relevant to nursing staff, all staff
Creating academic opportunities for education and training of nursing students
  college and university linkages, rotation descriptions, mentoring
Graduate level research studies
Illness education and Self Management promotions
UNDERTAKING OF NURSES/NURSING DRIVEN OUTCOME MEASUREMENT STUDIES

Exploiting and nurturing interests in any topic germane to the work of nursing staff!

Examples:

- Tabulating prevalence and management of various common physical illnesses, or conditions over against gender, age, specific guidelines of care

- Promotions of nicotine replacement therapy, measuring outcomes

- Promotions of reductions of other cardiovascular risk factors and measuring changes

- Walking/activity groups, cooking/nutrition classes
BC ACT PROVINCIAL INFRASTRUCTURES

BC ACT Provincial Advisory Committee: ACT stakeholders and other relevant parties

BC ACT standards: reflective of the scientific literature and other jurisdictions, presented to and endorsed by the provincial council

BC ACT evaluation framework: development of provincial template of common outcome measurements and deliverables, heightened emphasis on performance management

BC ACT peer review and site visitation “accreditation” process…potential model for other standardized services

BC “Advanced Practice” partnership between Ministry and VIHA being developed
ONTARIO ACT PROVINCIAL INFRASTRUCTURES

Ministry of Health and Longterm Care, LHIN’s

Direct Local Sponsorship of individual teams:

- Longterm Hospital, Acute Care/General Hospital, Community Agencies (CMHA, Health Clinics, etc)

Local networking (regional ACT networking groups, LHIN driven networking)….including nursing specific

Provincial ACT “Technical Advisory Panel”

- Ministry, (plus other Ministries, agencies at provincial level), interface with the “field”, the ACT teams themselves across all levels: direct internal (eg model fidelity), external (relations to all other stakeholders)

  1 Standards,

  2 Accreditation/Training/Consultation,

  3 Evaluation/Outcome Measurements

Ontario ACT Association

- conferences,
- consultations,
- training,
- networking
Assertive Community Treatment teams, especially when comprehensively and ideally integrated/partnered with relevant interministerial services (primary health, income assistance, justice), demonstrate compelling evidence for effectively addressing the successful community tenure of the vast majority of those patients otherwise requiring longstay hospitalization or otherwise resulting in acute care revolving door syndrome and/or homelessness outcomes.

ACT teams have an integral and significant definition of nursing staff endowment, encompassing a wide variety of functions and structures, that address and serve the mental health and physical health care needs and entitlements of ACT patients.

ACT nursing staff have huge scope in shaping and improving upon the services of teams to their clientele!
QUESTIONS, COMMENTS, DISCUSSION...

...thank you!

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