WATERLOO INSTITUTE FOR HEALTH INFORMATICS RESEARCH

Waterloo Smarter Health Seminar Series:
eHealth Strategies: Local to Global

Informatics in Mental Health and Addictions

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Informatics in Mental Health and Addictions

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Today's Discussion

- Mental Health and Addictions Environment
- The Centre for Addiction and Mental Health
- IT Challenges and Differences
- Discussion

The Addictions and Mental Health Sector in Ontario

Addictions and Mental Health Clients and Patients

- Mental illness costs about $5.5B (estimate) annually
- Addictions costs $7B annually (equivalent to 2.5% of budget)
- Mentally ill patients use 9 Million bed days
- 1 in 4 people will experience a mental health or addiction problem in their lifetime - concurrence of both is over 50%
- Due patients/client's needs and societal response – they interact with other "non-health" sectors, i.e. – Attorney General, volunteer self help
- Many A&MH patients/clients need support for life

Key Sector Facts – A&MH Organizations

- More than 2,000 specialty mental health (and addiction) beds in 7 hospitals
- 588 forensic beds in 9 designated hospitals
- Almost 3,000 mental health beds in 55 general hospitals
- Sector serves more than 2,000,000 (estimate) outpatient/ambulatory encounters annually
- Over 550 organizations spend more than $1B (estimate) annually

Provincial Environment History

- Divestment of Provincial Psychiatric Hospitals – still ongoing
- Lack of system change and best practice – the asylum approach
- The Mental Health Act – emphasize the differences and "continue the cycle"
- A starving community system with an attitude of "learned helplessness"
- Little innovation, little research and little technology
- Minimal focus on human resource development
  - For example, high agency use, high ratio of RPNs

Benefits of E-health

- ***Better and faster access*** and matching of patients/clients to service, program, resource or practitioner
- ***Accountability*** through less duplication
- ***Better decisions*** based on better data
- ***Better care*** and continuity of care for A&MH patients/clients through integration with all healthcare sector
- ***Enhanced understanding*** through health promotion, using e-health, e-learning
- Secure systems; IT into 21st century

A&MH Sector Successes

- A strong ***integrated*** community based system of 500+ agencies
- Investment in improving services ***reduces healthcare system costs*** by reducing client's dependence on other healthcare and social services
- Strong ***consumer and family involvement*** in care and advocacy ensures vigilance in continuous improvement and leverages resources
- A&MH community has a system ***plan*** developed through numerous provincial reviews and local task forces using the best research

A&MH Sector e-health Successes

- The system has taken ***E-health leadership by designing provincial*** electronic systems to:
  - 1) collect assessments information (DATIS and PSR)
  - 2) create demographic and encounter databases (DATIS)
  - 3) adopting standards
  - 4) providing 24x7 access to services information and wait times (DART and MHSIO)
- Sector has taken ***leadership in transformation*** by clearly stating it's role in LHIN evolution
- Adoption of telemedicine for tele-psychiatry to remote /rural areas
- Initiatives in privacy, toolkits, standards, policy

The Centre for Addiction and Mental Health (CAMH)

What is CAMH?

- U of T Teaching Hospital
  - 550 IP beds; 420,000 OP visits; 4800 ER visits
  - 200 Active Physicians; 400 Total Physicians
  - 2800 Staff, 400 Nurses
  - Annual Budget $290M
- 11 Major Clinical Programs in 4 areas:
  - General Psychiatry (80 beds)
  - Law and Mental Health (154 beds)
  - Long Term, mostly Schizophrenia (260 beds)
  - Addictions (60 beds)

What is CAMH?

- Policy, Education, and Health Promotion
  - Advocacy, information access and client empowerment
  - Knowledge transformation and capacity building
- Research
  - Neuroscience and PET
  - Clinical Research
  - Social Prevention and Health Policy Research

Today's environment

- Focus on best practice and redesigning the system
- Integration and treatment in "urban setting"
- Struggling to achieve better work force
- Mental Health Act changes and PHIPA
- Need for redesign of community recognized
- "Access" to services defined as major challenge
- E-health recognized as a needed investment

Today's environment – a look inside CAMH

- In the following slides imagine how would you feel if you had to…

Encounter this as you enter your unit?

Store all your worldly possessions here?

Spend up to 8,237 days (22.5 years) of your life here?

Be ill and admitted to a hospital through this entry?

Need I say more?

Where is CAMH going?

- Improving access to services - CATS
- Recovery model of care
  - Still much argument on medical model versus not
- Reducing stigma, embracing diversity
- Being fiscally and clinically accountable
- Being a provincial leader in research and education

Where is CAMH going?

- Developing an urban village on Queen Street, with a revitalized functional plan
- Developing a role with the LHINs, trying to understand our role with LHIN 7?
- Leading provincial system development for mental health and addictions
  - DATIS
  - E-health Councils
  - Developing standards

Redevelopment will result in….

- Redevelopment of 27 Acres on Queen St – Toronto
  - Open space - 4.5 Acres
  - Streets – 7.8 Acres
  - Buildings - 14.2 Acres
    - CAMH - 1.4M Sq Ft 7 buildings
    - Non- CAMH - 1.3M Sq Ft
- Complete change in function plans and program design – including IT

We do have challenges…

- Technology
- Money
- Learning and Competency
- Staffing, and the union environment
- Province wide infrastructure
- TIME

IT Challenges and Differences

The history

- In 1999 we inherited the Queen Street Mental Health Centre;
  - 40 PCs, no voice mail, no email, government systems, no clinical interaction with computers and no money and about 20 other “no”s
- And btw - the other organizations weren’t much better
- And it was 1999 – this is one for Ripley’s
- Huge challenge…

How have we progressed?

- First strategy (1999-2002):
  - Survive amalgamation
  - Basic systems for financials and reporting
- Second strategy(2002-2005):
  - Begin clinical systems
  - Basic accountability
- The next strategy (2006-2011)
  - Paperless and wireless
  - Clinical focus

How have we progressed?

- Basic financial systems
  - Counting our payroll and people
  - Reporting on time financials and statistics
  - Great audits, hospital in surplus every year
- Basic administrative systems
  - Admitting, recording visits and abstracting
  - Chart management and statistical reporting
  - Balanced Scorecard approach
  - Workload and staff scheduling

How have we progressed?

- Basic Clinical Systems (23% of chart)
  - RAI-MH Assessments and TREAT
  - Physician order entry results
  - Pharmacy, Lab, Dietary systems
  - Dictation and Physician ESA for Transcription
  - Clinical Repository

Challenges…

- Insufficient clinical systems available on market
- Data accuracy and user compliance an issue
- Major people issues are:
  - Not my job, too much additional effort
  - Culture of subjective case based approaches rather than objective evidence base
  - Challenge to practice – implementing care plans
- Computer literacy a real problem

Challenges….

- Differences from Acute Care
  - Assessments are questionnaire based, individual practice based
  - Length of stay long – minimum chart is 100 pages
  - Many handwritten text based notes
  - Diagnosis is often debated
  - Privacy and competency issues significant
  - Who (what organization) does best practice?
  - Interface with non-health important to recovery - examples are housing, income and work needs

In the IM Strategy 2006-11 there are 5 key goals

1. Establish a near paperless environment for the Mood and Anxiety and Addictions Programs by December 2007.
2. All core administrative processes will be paperless by December 2008.
3. Establish a near paperless environment for all CAMH clinical programs by December 2011.
4. Provide integrated information systems to support effective decision-making for all CAMH managers by 2010.
5. Become the “go-to” Web source for evidence-based addiction and mental health information, knowledge exchange and education by 2008.

In the IM Strategy 2006-11 there are 2 overarching goals…

1. Build a work environment where all employees have the competencies to work electronically in their jobs.
2. Establish a systematic, corporate-wide educational model for the adoption of information systems.

In the new strategy then….

- Priority applications needs are significant (est. $40M)
  - Increased CPOE – $2-4M (11% of chart)
  - Progress Notes / Group Notes - $2.5M (38% of chart)
  - Care plans (IPCC Version 2) - $2.2M (12% of chart)
  - Document Management - $4.5M
  - E-services for all human resource issues - $2M
- Financial support has been promised
  - $5M/Year additional
  - Operational increases 12% - $1M/year

Discussion:

- Change management and adoption are a big issue …. $700K / year in additional resources for programs to assist
- Based on presentation – what are the challenges?
- Potential solutions and approaches?