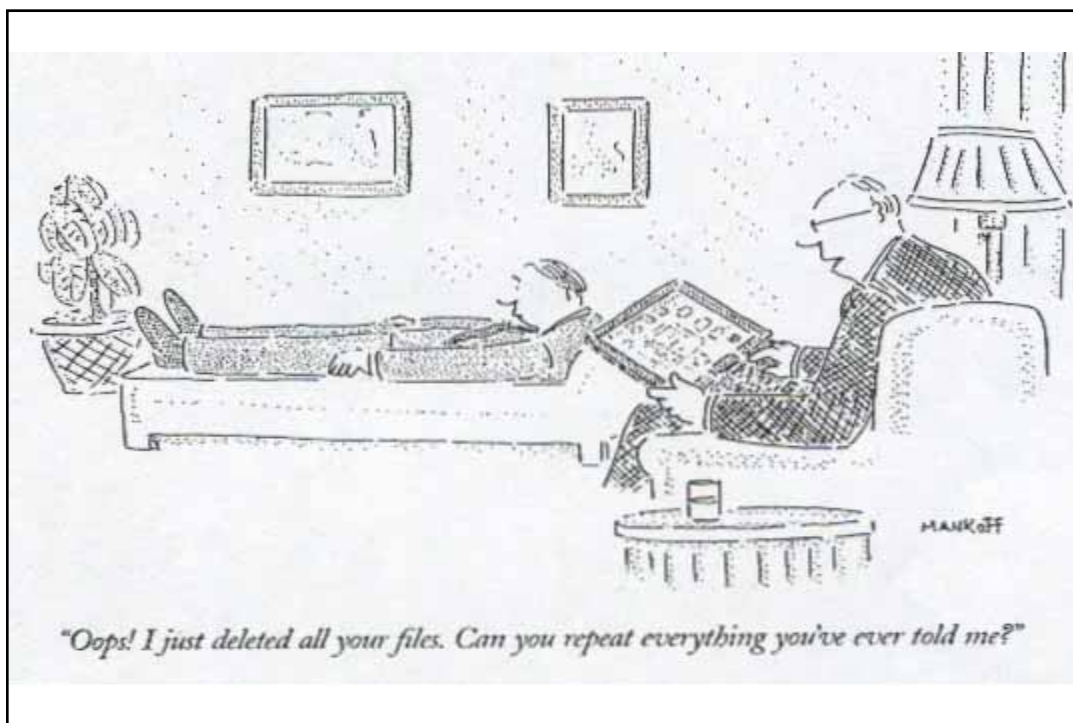


**CCM for mental health
services in primary care :
Literature Review and key
lessons learnt**

Nick Kates

**Hamilton HSO Mental Health
and Nutrition Program**

Calgary September 28th. 2005



Plan

- The Ontario context
- Hamilton HSO Mental Health and Nutrition Program
- Traditional planning priorities
- Evidence from the literature
- Evidence from Breakthrough Series
- Summary of the evidence
- Application to the Hamilton Program

The Ontario Context

Ontario

- No Regional authorities – Local Health Integration Networks (LHINs)
- Very few CDM programs
- Some promoted by PHCTF – Ends March 31st
- Bottom-up and top down

- Family Health Teams
- Comprehensive primary care
- Emphasis on
 - Prevention and health promotion
 - Self-Management
 - Client-centred care
 - Management of chronic diseases

Hamilton HSO Mental Health & Nutrition Program

Nick Kates
Anne Marie Crustolo
Michele Mach
Lindsey George
Judy Corras
Jennifer Boyko

Cathy Shorer
Shelley Brown
Wanda Kelly
Aimee Collings
Sari Ackerman
Elka Persin

HSO Mental Health and Nutrition Program

- 38 practices
- 51 sites
- 80 family physicians
- 170,000 patients (38%)

- Counsellors 1:8000 24 FTE 41
- Psychiatrists 2.0 FTE 12
- Registered Dietitians 6.0 FTE 8

- Co-ordinated through a central administrative body

Referrals 2004 : Counsellors

◆ Total	4004	
◆ Counsellors	3460	(87%)

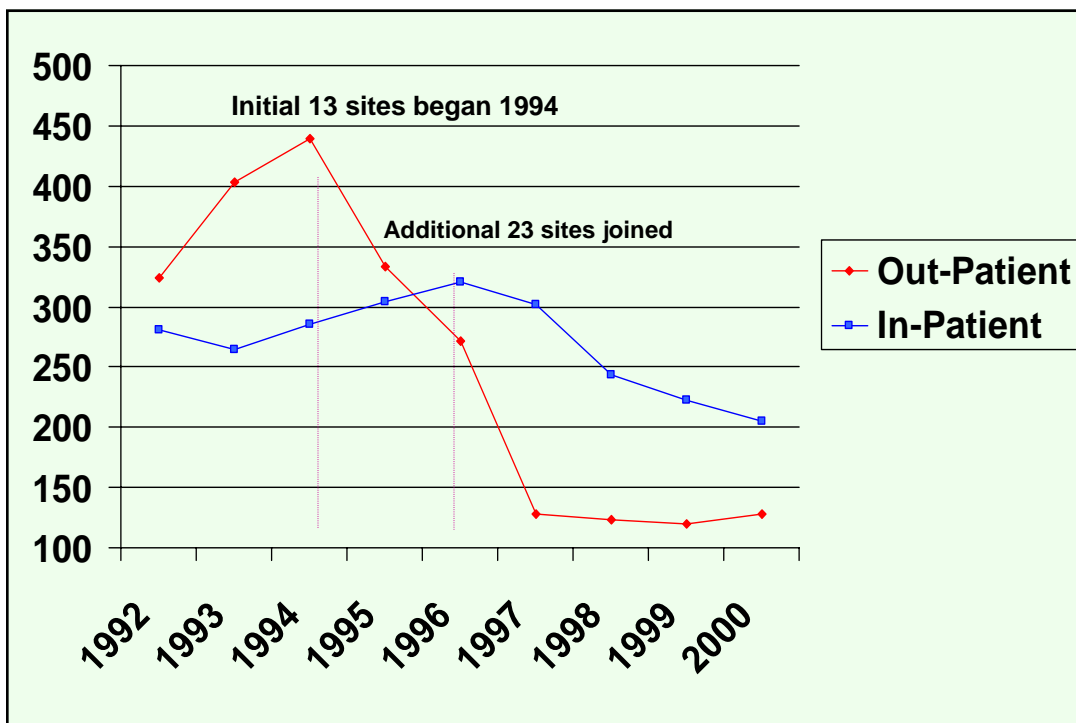
161 per Full Time Equivalent

◆ Psychiatrists	1270	(31%)
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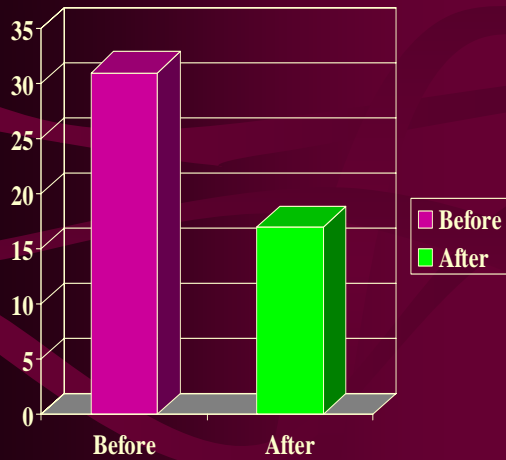
594 per Full Time Equivalent

Benefits of the program

- Increases capacity of mental health system
- Increases capacity of primary care to handle mental health problems
- Improves access to mental health care
- Improves access for underserved populations
- Changes patterns of utilisation of mental health services



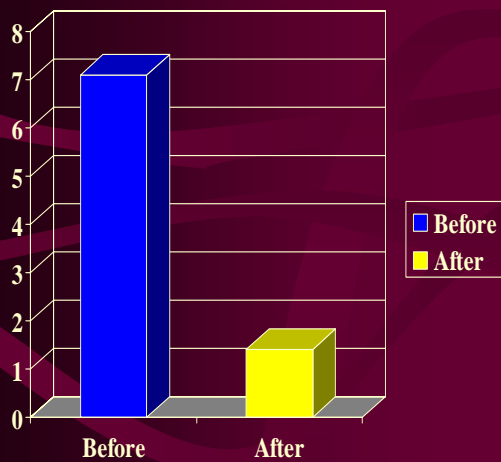
Outcome measures CES-D



- Mean change 14
- Improved > 1 SD 58%
- Score reduced > 50% 74%

All changes significant $p < .05$

Outcome measures 12 Item GHQ



- Mean change 5.7
- Improved > 1 SD 84%
- Score reduced > 50% 81%

All changes significant $p < .05$

Benefits of the program

- **Improves quality of care**
- **Improves co-ordination of care**
- **Improves continuity of care**
- **Improves communication**

Satisfaction with the program

- **High level of satisfaction – consumers (VSQ) > 90%**
- **High level of satisfaction – providers > 90%**

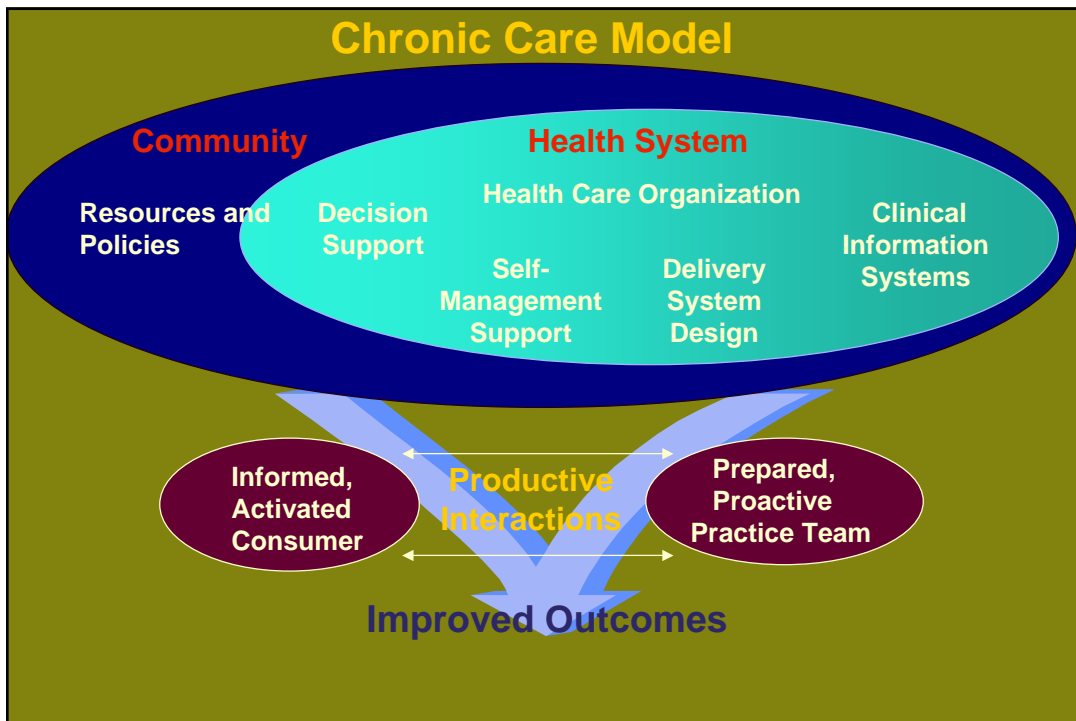
Evaluation of the Hamilton HSO MHNP

- **Received 1999 Significant Achievement Award from the American Psychiatric Association**
- **By Ontario Ministry of Health and Long-Term Care**
 - **Completed May 2005**
 - **Very positive**
 - **Seen as a provincial model**
- **Set up the Ontario Centre for Collaborative Primary health Care to consult to other programs**

Program Priorities 2004 – Pre CDM

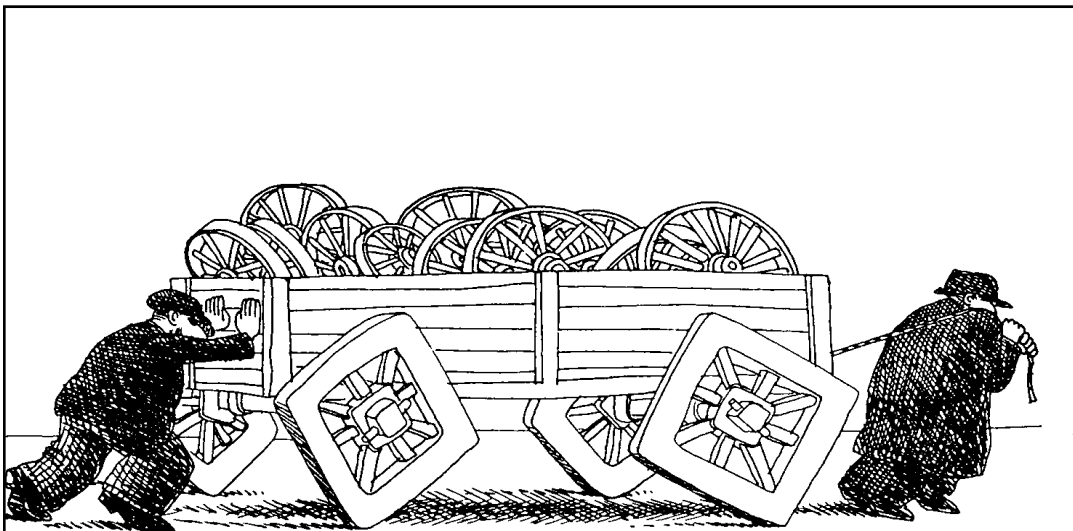
- **Develop a Pain Component**
- **Develop Peer Support**
- **Review Services Delivered for Individuals with Serious Mental Illness**
- **Develop Standardized Models of Care**
- **Develop an Addictions Pilot**
- **Expand Child Psychiatry**

Changes over the last 12 months



Use of the Chronic Care Model

- Care of specific problems
- Analyse the program
- Analyse our system of care
- A way of understanding why things do and don't work
- Promote a population focus



An opportunity to look at new solutions to existing problems

Expansion of Hamilton HSO MHNP

- **Part of Hamilton Family Health Team - 109 Family physicians**
- **Doubling size of mental health and nutrition program**
- **Taking on responsibility for programs for other chronic diseases**
- **Expansion of role of central co-ordinating body**
- **Building from the bottom-up**

CDM for Depression - What works

1. Evidence from Programs

Collaborative Management to Achieve Treatment Guidelines

- Patient education
- On-Site consultation by psychiatrists
- Active collaboration with family physicians
- Increased frequency of primary care visits
 - Major depression: 74.4% improved compared to 43.8%
 - Minor depression 60% improved compared to 67.6%

Katon JAMA 1995

Nurse Telehealth : Adjunctive Care

- ◆ Randomised trial for 302 depressed patients on antidepressants from FP
- ◆ Intervention
 - ◆ usual care
 - ◆ telephone calls 10 x 6 mins. over 4 months
 - ◆ telephone plus peer support
- ◆ Symptoms / satisfaction at 6 & 26 weeks
- ◆ Significant improvement in both with call

Hunkeler E. Arch Fam Med 2000

Impact on depressed high utilisers

- RCT aimed at depressed high utilisers (DMP)
 - Patient education materials
 - Physician education programs
 - Telephone-based treatment co-ordination
 - Antidepressant medication
 - Compared with usual care

Katzelnick Arch. Fam. Med. 2000

Impact on depressed high utilisers

- DMP group
 - More likely to fill three or more prescriptions
 - Had significantly greater improvement on HAM-D at 1 yr.
 - Improvement began at 6 weeks
 - Improved on mental health, social functioning, and general health self-reports
 - Mean visits increased by 1.6 compared to decrease of 2.0 for controls

Impact of Quality Improvement Programs for Depression (Wells et al)

- ◆ Aimed to improve treatment of depressed patients in primary care
- ◆ 46 Primary Care Clinics in 6 HMOs
- ◆ Usual care or quality improvement program
 - ◆ Commitment
 - ◆ Education
 - ◆ Identification
 - ◆ Referral

Impact of Quality Improvement Programs for Depressions

- ◆ Improved quality of care
- ◆ Improved symptoms
- ◆ Decreased prescriptions
- ◆ Improved retention of improvement

- ◆ No change in medical visits

Wells et al JAMA Jan 2000

RESPECT : Quality improvement

- RCT
- 180 clinicians in 60 practices
- Building on what's already in place

- Care Manager
- Telephone treatment
- Technology for Tracking
- Visits from a psychiatrist
- QI measures in place

- Symptom improvement
- Increased satisfaction

Dietrich et al Ann Fam Med 2004

Impact on Functioning and Cost

RCT

200 patients in 12 practices

- Care Manager
- Activation Program
- 24 months

- Increased depression-free days
- Reduced other health care costs
- Decreased number of work days lost
- Improved quality of life

Rost et al Medical Care 2004

IMPACT : Depression in Seniors

- RCT
- 18 practices, 8 HSOs, 5 States
- 1801 depressed patients
- **Intervention**
 - Depression care manager
 - Supervised by a psychiatrist
 - Support from primary care specialist
 - education
 - care management
 - support of medication management
 - brief psychotherapy

Unutzer et al JAMA 2002

IMPACT

- At 12 months 45% improved v. 19%
- More satisfied
- Less symptom severity
- Less functional impairment
- Greater quality of life
- Reduced arthritis pain
- Improved diabetes management

CDM for Depression - What works

2. Evidence from Review articles

Reviews

Gilbody – Review of depression interventions in primary care

Ofman – 102 CDM Programs – Review of outcomes

Weingarten - Same programs – Outcomes of specific problems

Bamdagarav - 24 CDM Depression Programs

Neumeyer-Grumen - Meta-analysis of CDM Programs

Gilbody: Education and Organizational Interventions - Depression

36 studies (29 RCTs); inception to 2003

21 with positive results

***systematic review utilizing a narrative synthesis to evaluate the effectiveness of organizational and educational interventions**

Most likely to be effective if

- More Complex
- Incorporated Client Education
- Enhanced Nursing Role
- Integrated Primary and Secondary Care

Gilbody et al, JAMA 2003

The Care Model

- **There is substantial potential to improve the management of depression in primary care. Commonly used guidelines and education strategies alone are likely to be ineffective.**

Gilbody et al. 2003

Ofman : Outcomes of CDM

118 programs (102 studies 1997-2001)

11 conditions

- Satisfaction increased 71%
- Adherence 47%
- Disease Control 45%
- Cost reduction 15%

Ofman et al, Am. J. Med. 2004

Weingarten: Comparison of Effects

Same 102 DM studies (118 programs) as Ofman

- Patient Education 92
- Provider Education 47
- Provider Feedback 32
- Patient Reminders 28
- Provider Reminders 19
- Patient Financial Incentives 6

1 = 48

2 = 41

3 = 22

4 = 7

Weingarten et al. BMJ 2002

Weingarten : Significant Improvement by Disease

Components of Interventions	Total	Depression
• Patient Education	24 / 55	10 / 18 *
• Provider Education	12 / 32	6 / 15 *
• Provider Feedback	9 / 23	8 / 11 *
• Patient Reminders	6 / 16	2 / 3 *
• Provider Reminders	6 / 10	5 / 8 *
• Patient Financial Incentives	3 / 4	1 / 1 *

* = greatest demonstrated improvement of all diseases (%)

Badamgarav : Sytematic Review of the Effectiveness of CDM Programs

- 24 studies
- Pooled results indicated statistically significant improvements in
 - Symptoms
 - Physical functioning
 - Health status
 - Satisfaction with treatment
 - Adherence to treatment regimens
 - Detection rates
 - Adequacy of treatment with antidepressants

Badamgarav et al. Am J. Psych 2003

Neumeyer-Gromen:DM Depression Programs- systematic review and meta-analysis of RCT's

10 studies included in meta-analysis (until 2002)

- Significant effect of disease management programs (DMPs) on symptom severity
- Patient satisfaction and adherence to tx. regimen improved significantly (**only in heterogeneous models**)
- Costs per quality adjusted life range: \$9,051-\$49,500 (increased cost vs. usual care)

Neumeyer-Gromen et al, Medical Care 2004

General Observations

- Very few long-term studies
- Not in “real life” practices
- Difficult to sort out components of successful interventions
- Few addressed self-management – just patient education
- Need to be applied flexibly
- Can be integrated with the care of other chronic diseases
- Increase costs of care – offset by other savings
- Need components in place for effective
 - **Provider Education**
 - **Patient Education**
 - **Feedback**
 - **Utilisation of guidelines**
 - **Screening**

Conclusions

- Conclusive evidence that CDM programs for depression
 - Improve symptom severity
 - Increase treatment adherence
 - Improve quality of life / functioning
 - Increase job tenure
 - Increase detection rates
 - Improve appropriateness of care
 - Increase consumer and patient satisfaction

CDM for Depression - What works

3. Evidence from Clinical Experiences

BreakThrough Series reviews: What doesn't work

- Education not effective on its own
- Guidelines not effective on their own
- Screening not effective unless more severe
- Feedback no benefit on its own

BreakThrough Series reviews: What does work – from successful CC Projects

- Patient registry
- Care co-ordination
- Proactive follow-up
- Diagnostic assessment

IHI Report 2003

Key ingredients of CDM Programs

- **Delivery design**
 - Diagnostic assessments
 - Integration of specialists in primary care
 - Telephone treatment
 - Care co-ordination
 - System navigation
 - Telephone Treatment
 - Tracking after care / pro-active follow-up
- **Self-Management**
 - Goal Setting
 - New approaches to patient education

Key ingredients of CDM Programs

- **Decision support**
 - Guidelines - if integrated with processes of care
 - Education – if integrated with processes of care
 - Integration of specialists in primary care
- **Information systems**
 - Registries of Individuals at Risk
 - Capacity to monitor care over time
 - Reminders – if integrated with processes of care
- **Organisational support**
 - Organisational leadership
- **Community linkages**

Implementing these findings in Hamilton

2004 Program Priorities

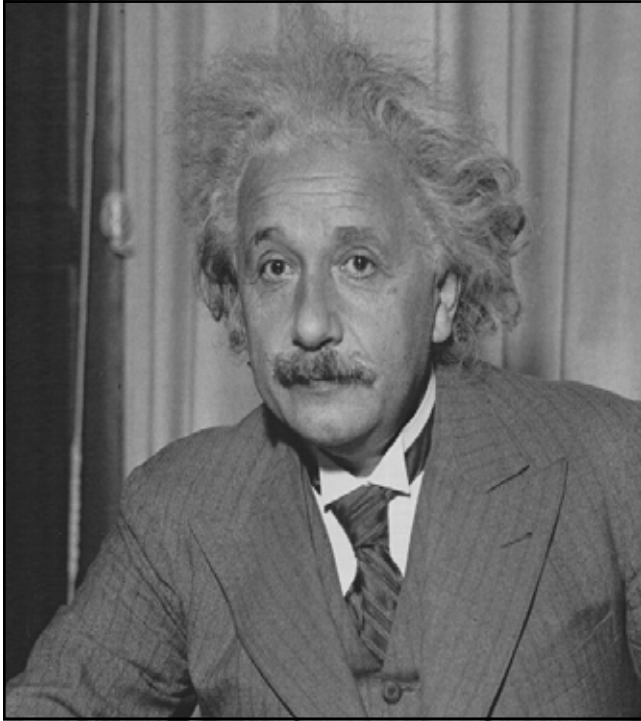
- Develop a Pain Component
- Develop Peer Support
- Review Services Delivered for Individuals with Serious Mental Illness
- Develop Standardized Models of Care
- Develop an Addictions Pilot
- Expand Child Psychiatry

New program Priorities – Using CCM

- **Delivery design**
 - Telephone Treatment
 - Tracking after care
- **Self-Management**
 - Goal Setting
 - Peer Support
 - New approaches to patient education
- **Decision support**
 - Standardized Care
 - Integrate guidelines with processes of care

Program Priorities – Using CCM

- **Information systems**
 - Registries of Individuals at Risk
 - Capacity to monitor care over time
- **Organisational support**
 - Strength of program
- **Community linkages**
 - Program Wide Agency Links ie with CCACs



“Insanity is doing things the way we’ve always done them, and expecting different results”

How do we get there

- **Clarity on goals amongst program leaders**
- **Use existing management framework for bottom-up approach**
- **Buy-in to goals from primary care staff**
- **Determine priorities**
 - **Registries**
 - **Follow-up after care**
 - **Goal setting**
- **Work with specialists to implement**
- **Feedback to PCPs on a regular basis**

Summary

- Conclusive evidence it is effective
- How to integrate in non-research (“real life”) settings
- Enabled us to look at program and system functioning
- Prepared us for an expanded role with other chronic illnesses