D09

Collaborative Care Initiative for Mental Health Risk Factors in Dementia: Anxiety, Depression, and Mild Cognitive Impairment

Nick Kates, MB.BS FRCPC Chair Dept. of Psychiatry & Behavioural Neurosciences, McMaster University

Pallavi Dham MBBS FANZCP Dept. of Psychiatry Queensland Health

CFHA and SharedCare Annual Conference
October 19 – 23 , 2021

FACULTY DISCLOSURE

The presenters of this session have NOT had any relevant financial relationships during the past 12 months.

CFHA COLLABORATIVE FAMILY HEALTHCARE ASSOCIATION

CONFERENCE RESOURCES

Slides and handouts shared by our conference presenters are available on https://www.integratedcareconference.com/ and on the conference mobile app.

All sessions will be recorded and posted to https://integratedcarelearning.talentlms.com/ shortly following the conference.

CFHA COLLABORATIVE FAMILY HEALTHCARE ASSOCIATION

Plan for today

- Reasons for the project
- What we did
  - Goals
  - Methodology
- Findings
- Implications of our findings for
  - Implementing the pathway in other practices
  - Future research and standardisation of the ICP
  - Seniors mental health and wellness and the role primary care could play
- Questions and discussion

Why did we conduct this study

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Reasons for the Study

- **Anxiety, Depression and Mild Cognitive Impairment (MCI)** are highly burdensome in late life and increase risk of Alzheimer's dementia (AD).
- Detecting these conditions early and treating them better could modify the risk for AD.
- These conditions are more likely to present themselves in primary care than specialty care settings.
- **Collaborative mental health care** between primary care providers and mental health clinicians has been demonstrated to be effective at the patient and system levels.
- Evidence-based **Integrated Care Pathways (ICPs)** are promising approaches to care that standardize assessment and care for better detection and treatment.
- **Thus, the overall goal of this project is to assess impact and feasibility of implementing Collaborative Care ICP to diagnose and manage anxiety, depression and MCI in primary care, and how it could be introduced more broadly into primary care.**

Specific Objectives

- **Objective 1:** Assess the impact of the ICP on patient-related outcomes

- **Objective 2:** Examine the implementation of the ICP in a primary care practice

- **Objective 3:** Assess the impact of ICP on identification of Anxiety, Depression, and MCI within the primary care setting

What we did

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Components of the study

- Identified an Intervention (ICP) group and a comparison (Treatment as Usual) group, each drawn from a dates of birth cohorts in each practice
- Screened for MCI, Depression and Anxiety in both populations
- Introduction of Integrated Care Pathways (ICPs)
- Preparation of handouts and educational materials
- Measurement of outcomes at regular intervals
- Tracking of process changes made by the practices during the study
- Focus groups with participating practices

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Patient Participants

150 participants (75 + 75) meeting the following criteria

Inclusion criteria

- Anxiety, Depression, or MCI
- Born in 1951, 53, 55: ICP
- Born in 1950, 52, 56: Treatment-As-Usual (TAU)
- Able to provide consent

Exclusion criteria

- Dementia diagnosis
- Substance use currently meeting level of disorder
- Unstable medical condition
- Palliative

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

The Main Assessment Tools

- PHQ-9: to assess depression
- GAD-7: to assess anxiety
- MoCA: to assess cognition
- QOL: to assess quality of life

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Follow-Up & Monitoring

- Every 6 months for 24 months for all participants
- Moderate to severe symptoms: If medications initiated, every 2 weeks until remission
- If patient has moderate to severe symptoms and refuses medications, follow-up every 4 weeks by PCP and every 3 months by the research staff

What did participants receive in the ICPs?

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

General Intervention (for all ICP participants)

- Education
- Exercise
- Stress Management
- Encouraging Social Engagement
- Encouraging Cognitive Activation
- Management of Comorbid Medical Conditions: diabetes, hypertension, hypercholesterolemia, smoking

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Psychological Interventions

- Structured brief psychological intervention
- Provided by a trained clinician: general practitioner, psychologist, psychiatrist or other health professional

Medication Trial

TRIAL 1

Sertraline

- Initiation dose: 25 mg/day
- Increase after one week to 50mg/day (minimal effective dose)
- Review and titrate every 2 weeks. Max dose is 200 mg/day

TRIAL 2

Venlafaxine XR

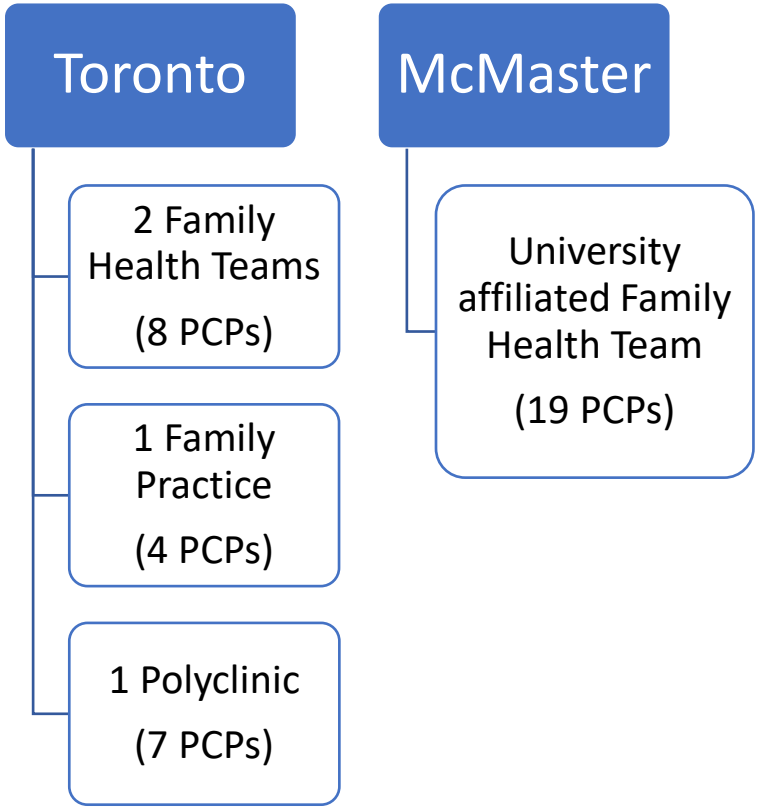
- Initiation dose: 37.5 mg/day
- Increase to 75 mg after one week (minimal effective dose)
- Review and titrate every 2 weeks. Max dose is 300 mg/day

Participant Recruitment

camh

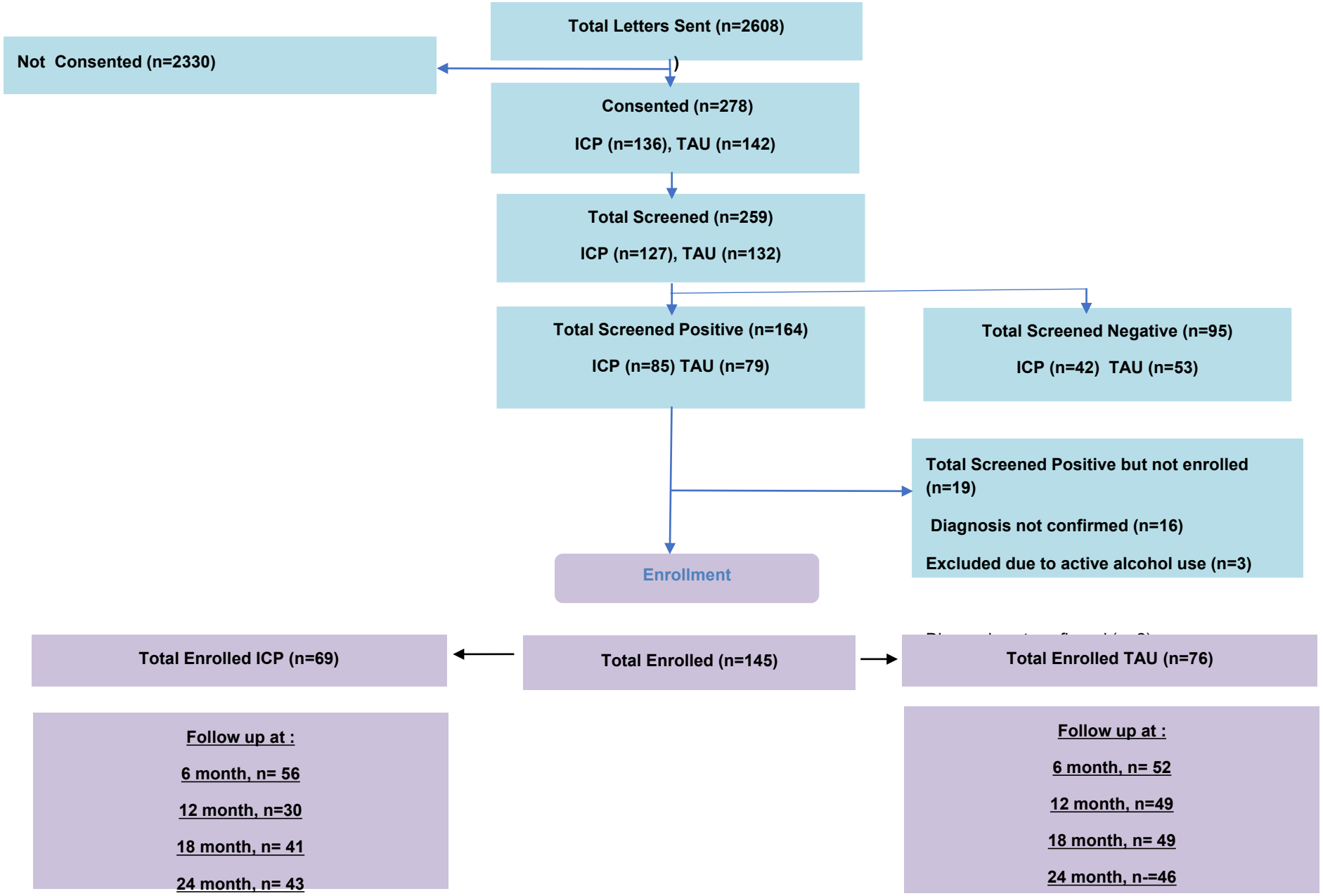
McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Participation Settings



camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES


Total Letters Sent (n=2608)
Not Consented (n=2330)
Consented (n=278)
ICP (n=136), TAU (n=142)
Total Screened (n=259)
ICP (n=127), TAU (n=132)
Total Screened Positive (n=164)
ICP (n=85) TAU (n=79)
Total Screened Negative (n=95)
ICP (n=42) TAU (n=53)
Total Screened Positive but not enrolled (n=19)
Diagnosis not confirmed (n=16)
Excluded due to active alcohol use (n=3)
Enrollment
Total Enrolled ICP (n=69)
Total Enrolled (n=145)
Total Enrolled TAU (n=76)
Follow up at :
6 month, n= 56
12 month, n=30
18 month, n= 41
24 month, n= 43
Follow up at :
6 month, n= 52
12 month, n=49
18 month, n= 49
24 month, n-=46

Results

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Objective 1: Outcomes

camh

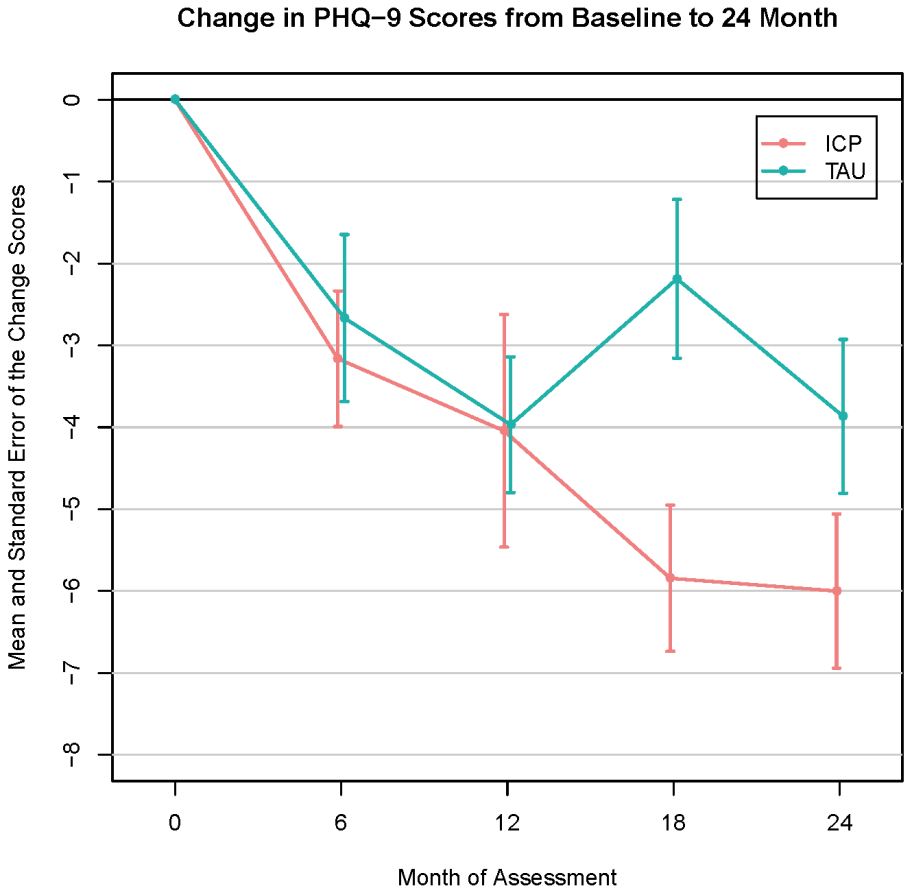
McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

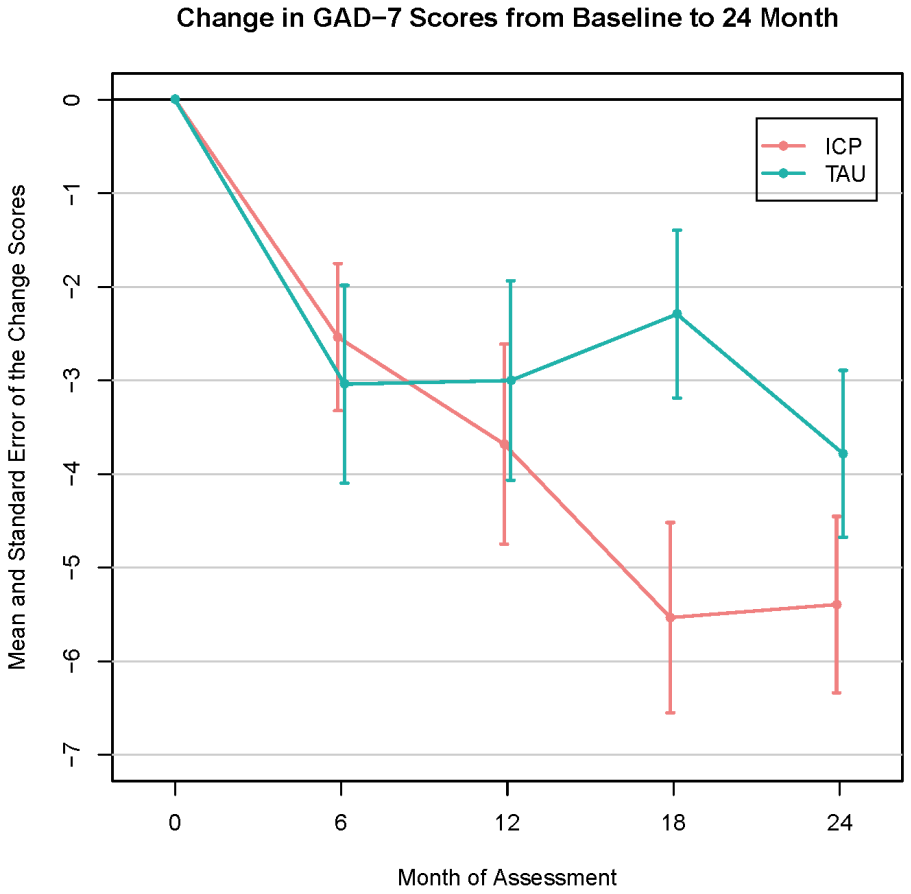
Baseline Demographic Data

	ICP	TAU	N	p
Site (N, %)	69, 47.59%	76, 52.41%	145	-
Gender				
Male (N, %)	32, 46.38%	34, 44.74%	66	0.843
Female (N, %)	37, 53.62%	42, 55.26%	79	
Marital status				
Not married (N, %)	35, 50.72%	33, 43.42%	68	0.379
Married (N, %)	34, 49.28%	43, 56.58%	77	
English as a first language				
No (N, %)	10, 14.49%	14, 18.42%	24	0.525
Yes (N, %)	59, 85.51%	62, 81.58%	121	
Employment status				
Retired (N, %)	34, 49.28%	39, 51.32%	73	0.806
Not Retired (N, %)	35, 50.72%	37, 48.70%	72	
Years of education (min-max, IQR, N)	8-20, 2	1-20, 2.5	145	0.350

Objective 1: Patient-Level Outcomes:

More reduction in anxiety and depression symptoms in ICP vs. TAU





F (1, 256)=4.1, P=0.044

F (1, 223)=4.0, P=0.047

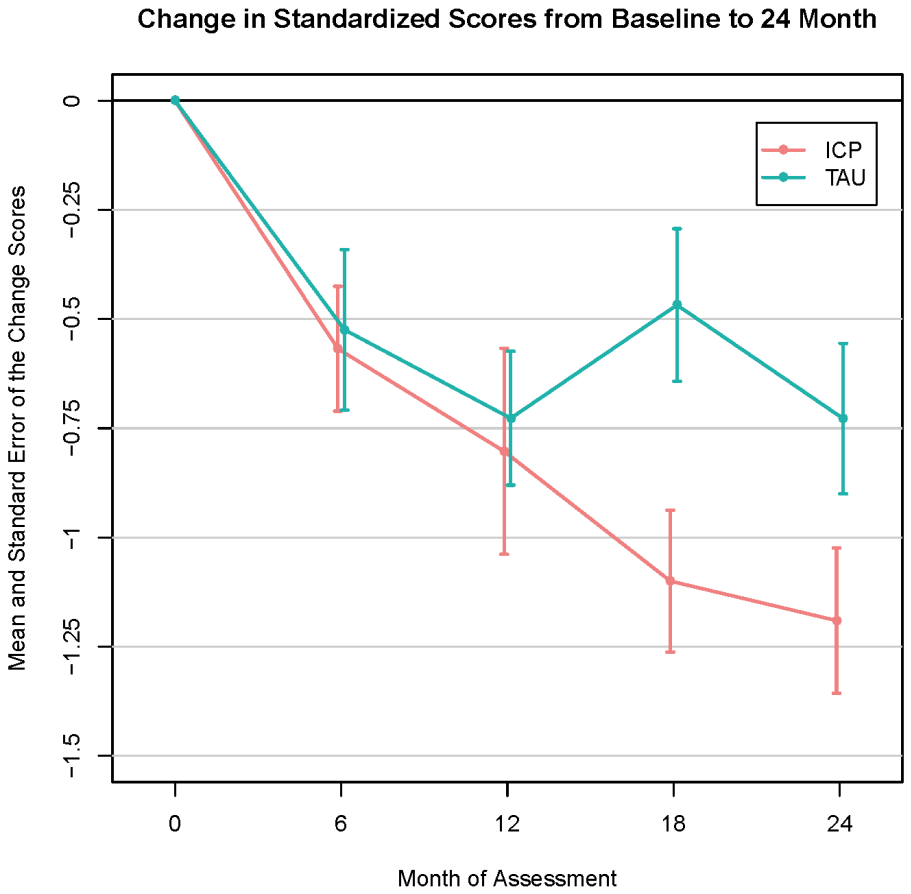
Linear Mixed Model, accounted for repeat measures , controlled for covariates (age, gender, sites, baseline scores)

camh

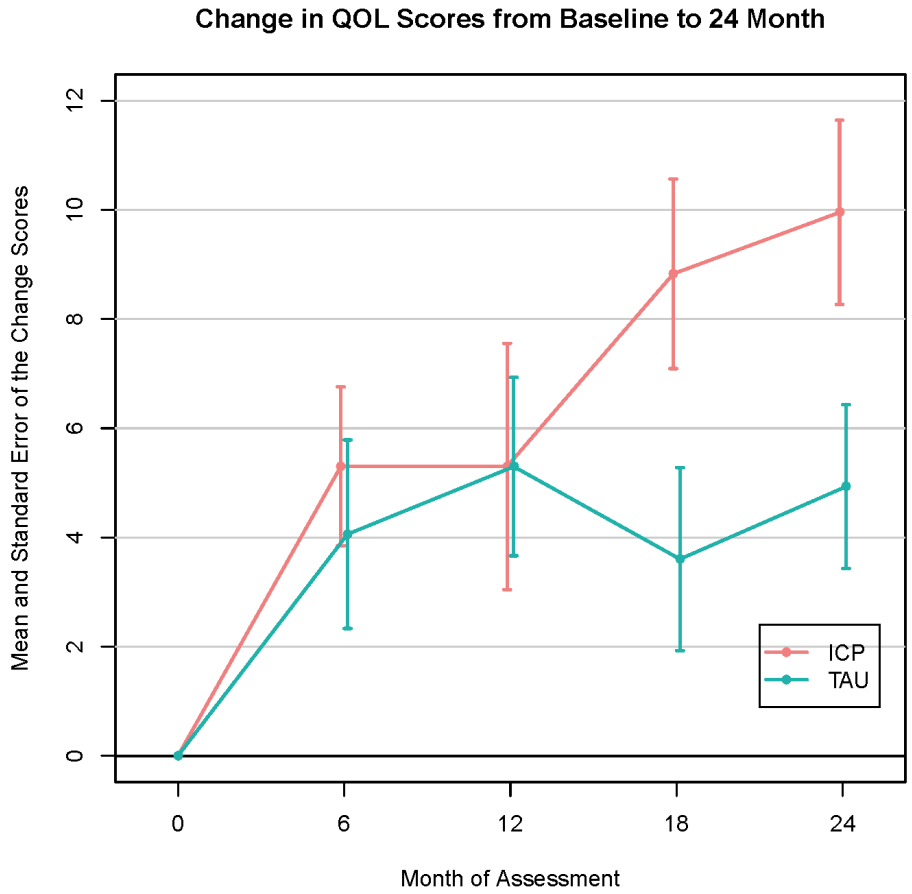
McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Objective 1: Patient-Level Outcomes

More reduction in anxiety and depression symptoms combined and more improvement in quality-of-life in ICP vs. TAU



F (1, 358)=6.58, P=0.011



F (1, 299)=4.71, P=0.031

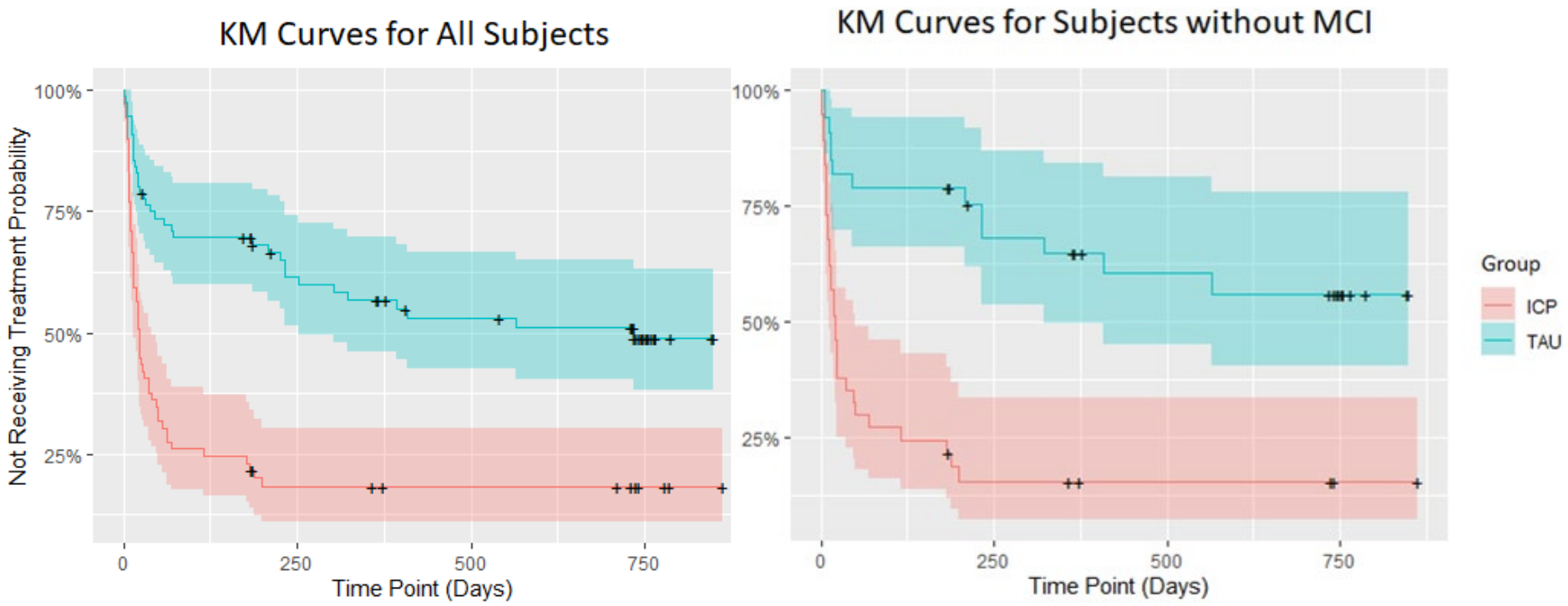
camh

Linear Mixed Model, accounted for repeat measures , controlled for covariates (age, gender, sites, baseline scores)

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Objective 1: Time-To-Treatment

Much shorter time to treatment initiation in ICP vs. TAU for all conditions combined and for anxiety and depression combined without MCI



Chi-square (df = 1) =25.28, P<0.001

Chi-square (df = 1) =17.01, P<0.001

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Objective 3 : Impact on Identification

Objective 3: Impact on Identification

Study screening improves detection rates

	Before the ICP (N=848)	*During the ICP (N=259)*	*P value*
Dep Dx. (N, Rate)	63, 7.43%	98, 37.84%	*<0.001*
Anxiety Dx. (N, Rate)	55, 6.49%	87, 33.59%	*<0.001*
MCI Dx. (N, Rate)	2, 0.24%	75, 28.96%	*<0.001*
Dep/Anx/MCI Dx. (N, Rate)	91, 10.73%	145, 55.98%	*<0.001*

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Objective 3: Impact on Identification

But the detection rates went back to pre-study rates when active screening by research staff stopped and study was withdrawing from the sites

	Pre-study arm (N=848)	**Post-study arm (N=740)**	***P value***
Dep Dx. (N, Rate)	63, 7.43%	61, 8.24%	*0.546*
Anxiety Dx. (N, Rate)	55, 6.49%	48, 6.49%	*1.000*
MCI Dx. (N, Rate)	2, 0.24%	3, 0.41%	*0.547*
Dep/Anx/MCI Dx.(N,Rate)	91, 10.73%	93, 12.57%	*0.254*

Objective 2 : Implementation

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Objective 2: Factors affecting Implementation (1)

Acceptability – acceptable, willingness to use the ICP

Factors that positively impacted acceptance:

- Seen positively by many family physicians and worth including if feasible

Factors that negatively impacted acceptance:

- Medication component not always realistic for primary care

Feasibility – how realistic it is to use in primary care

Factors affecting feasibility of the ICP:

- Workload - Mixed responses but the major concern
- Needs a dedicated person, who understands the clinical context

- Need for larger system changes, especially to improve access to mental health supports

Objective 2: Factors affecting Implementation (2)

Utility – perceived usefulness of the ICP

Benefits for primary care providers:

- Increased Knowledge, Comfort, and Skills

Not always aligned with how primary care works – cultural differences between mental health and primary care approaches

Benefits for patients:

- Could track their own results / progress (support for self-management)

Barriers & Facilitators to implementing the ICP

Barriers

- Culture – Provider, patient and practice

Facilitators

- Having one clinician on the primary care team who was well-versed in the ICP

Lessons Learnt : The IPC

- **The algorithm was effective in improving outcomes and detection rates but…** detection rates went down again to pre-study levels in the last 6 months of the study when staff presence was lower and active screening was not happening

- **Outcomes may be positively affected by**
  - Shorter time to treatment
  - Physician buy-in and engagement

- **Family Physicians**
  - Responses were mixed but were generally positive in their overall acceptance of the ICP (time and workload being the main concerns)

- **Changing physician practice is hard**
  - Require wider changes in the practice
  - The algorithm may need to be adapted for individual physicians

Lessons Learnt : The System of Care

- Engaging the team and practice was very important
- The tiered interventions need to be culturally congruent
- Many challenges – especially time and workload demands
- Importance of overall awareness of seniors mental health

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Implications: Future Research and Standardization

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Next steps : Research and standardisation of care

While many of the lessons learned from this project and others can be implemented in practices, three research questions emerge directly from our study:

1. What changes are needed to sustain the benefits of the ICPs in primary care?

2. What ingredients within the ICPs had the strongest impact and for what patients?

3. What are the long-term effects of standardizing care for these dementia risk conditions on rates of cognitive decline and dementia?

Broader implications for seniors mental health and wellbeing

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Improving the mental health and wellbeing of seniors in primary care

- **Importance of early recognition and intervention**
- **Need to integrate mental health care with all other care**
- **Opportunities that virtual care presents ie education / pro-active care**
- **Lifestyle changes need to be part of every visit**
- **Innovative approaches to education**
  - Needs to include health literacy
- **Pro-active care**
  - Early identification
    - Develop lists of seniors in a particular cohort
      - All
      - At risk groups
    - Use of the phone
  - Monitoring
  - Use of phone / zoom
- **Embed measurement (patient and system levels) into care**

Summary of the Results

- **Collaborative-care based standardization of anxiety, depression and MCI care:**
  - Is feasible
  - Results in a reduction in symptoms and an improvement in quality of life
  - Results in more than 50% improvement in access to recommended treatments
  - Increases detection of anxiety, depression and MCI by more than 5-fold
  - Without support from the study, benefits in detection rates were not sustained

- **Its spread to other practices will require:**
  - Integration with existing practice processes as much as possible
  - Better links with mental health services
  - An identified lead or point person
  - Flexibility with the medication component

SESSION EVALUATION

Use the CFHA mobile app to complete the evaluation for this session.

CFHA COLLABORATIVE FAMILY HEALTHCARE ASSOCIATION

Thank you
And Questions

camh

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES