

# Thinking Upstream: Questions That Need Answering in the Child and Youth Mental Health Programme (CYMHP)

A Collaboration Between  
Colleagues at the Offord Centre  
for Child Studies and CYMHP

# Our Shared Goal: *Making the Race Fair*

- To effect meaningful positive outcomes in the lives of children, youth and families affected by mental illness and developmental disability



# Objectives

- To present **FOUR** clinical research questions developed in partnership between clinicians and researchers
- To discuss these and other clinical research questions
- To plan *concrete steps* towards a more stimulating and productive academic environment in child and youth mental health at McMaster and HHS

# Let's Get Started



# Orientation to CYMHP

Community Education Service (CES)



Physician Referrals for Consult

Consultation/ Collaboration within Hospital

Outpatient Mental Health

Contact Hamilton referral for follow-up

Walk-in

Emergency Mental Health (CHYMES)

Inpatient Care (3G), Bridging, Day Treatment

Regional physician referrals



**Funding: MOHTLC and MCYS**

# Youth Social Phobia in a Shifting Social Environment

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**Carole Kaufhold, 0-6 team/IPP therapist**

**Andrea Gozalez, Offord Centre Researcher**

**Michael Boyle, Offord Centre Director**

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# Background

- **Youth social phobia is common (~4 %)**
- **Strong burden of suffering**
  - School avoidance, Interpersonal difficulties**
  - Missed social opportunities, Comorbid depression**
- **Recent systematic review: increased prevalence of internalizing symptoms in girls across generations (Bor, Dean, Najman and Hayatbakhsh)**

# Our Clinical Experience in CYMHP

- **Social phobia seems to be more common now**
  - More complicated, harder to treat
- **Youth seem to be more socially *vulnerable***
  - Larger schools;
  - Social media
  - Online friendships, less face-to-face time
  - Easier to stay at home
  - Changes in parental availability/responsiveness



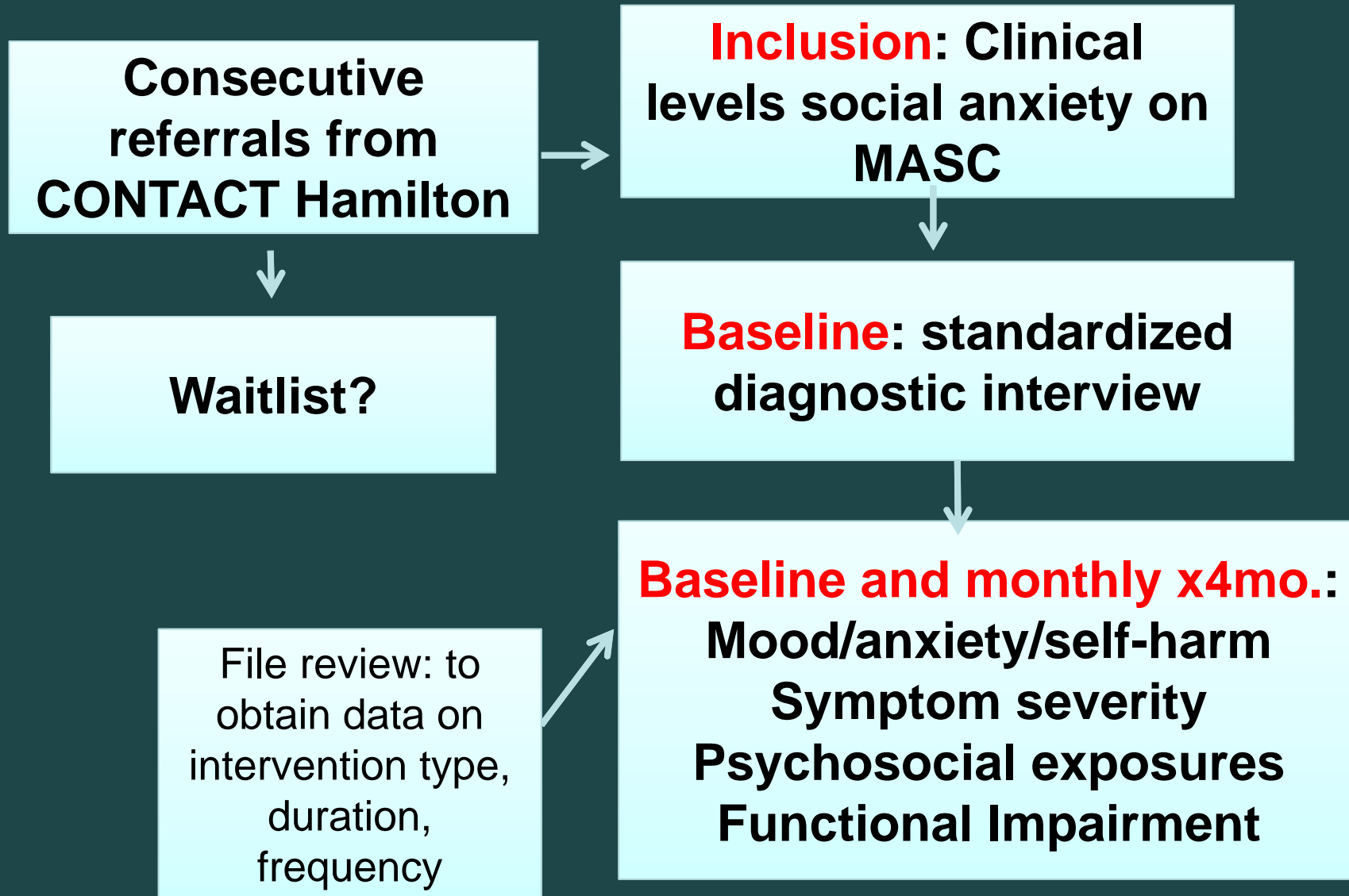
# We Want to Know

- Are these generational shifts in youth's social environments related to social phobia?
  - Societal level – increased prevalence
  - *Individual level – severity of symptoms, more protracted course of illness*
- Important social problem AND
- May inform care for our patients

# CYMHP Research Question

**In our population of youth with social anxiety, are factors that reflect shifts in youth-specific social environments related to more severe and protracted course of social phobia?**

# Research Design



# Study Design

**Assess demographic and psychosocial exposures:**

**Sex, age, SES**

**Hours spent online, type of activity online**

**Experience of bullying and cyber-bullying**

**Size of school, school climate**

**Experience of friendships**

**Rating of parental responsiveness**

# Study Design

- **Analyse how these factors are associated with severity of symptoms at baseline and endpoint**
- **Analyse how these factors relate to change (e.g., improvement) in symptoms over time**
- **Control for age, sex, service type/dosage**

# Things to Consider

- **How can we make sure we get a representative sample of our clients – i.e. make sure everyone has chance to participate?**
- **How would we share our results with our patients and colleagues?**
- **How can we incorporate this into better models of care?**

# Exploring the Role of Family-Centered Care: Improving Outcomes for High Service Users

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# Background

- **‘High Service Using’ (HSU) clients require significant resources across inpatient and outpatient programs**
  - One bed on 3G costs \$1,800+ per day with an average admission 4-10 days
- **Revolving door phenomenon**
- **Require a longer length/more intensive treatment**
- **Hospitalization may be iatrogenic and is associated with risks**
  - Increased self harm;
  - Power struggles with staff
  - Increased dependency on mental health services
  - Reduction of taking responsibility for own behaviour



# What We Know

- **Engaging families is being increasingly recognized as a best practice in providing quality services in child and youth mental health**
- **Family involvement positively influences the outcome of treatment and empowers parents to continue to nurture their child's development (Chovil, 2009)**
- **What is family-centered care? There is no widely accepted definition, particularly one specific to pediatric mental health.**

# Our Clinical Experience in CYMHP

- **Parents have expressed feeling ill equipped to address the needs of HSU and admit to struggling to manage their own distress**
- **HSU whose CYMHP treatment has engaged family members qualitatively appear to respond better to treatment**
  - **Shorter length of treatment; Fewer admissions**
  - **Greater reductions in self harm**
- **HSU often are involved in multiple services**
- **Across CYMHP programs, staff have expressed a desire to better involve and respond to caregivers' role in treatment for HSU**

# What We Want to Know

- **What are the individual, parental, familial, and systemic needs of families of HSU?**
- **What are the experiences of families of HSU in CYMHP? What has been helpful? Which needs have been met/unmet?**
- **What would family-centered care look like in CYMHP? (operational definition)**
- **Can family-centered care help to prevent high service use?**

# CYMHP Research Question

**What are the individual, family, and clinical factors associated with high (in-patient) service use?**

# Study Design

- **Mixed-methods**

## **Part I**

- **Conduct focus groups with caregivers of currently known HSU**
- **Conduct focus groups with currently known HSU**

## **Purpose**

- **Understand stakeholders' needs related to family-centered care**
  - **Attitudes towards mental health**
  - **Self-perceived family needs**
  - **Family's understanding of strengths and problems**
  - **Barriers to treatment**
- **This will inform Part II**

# Study Design

## Part II

- **Prospective cohort study (*dependent on study numbers*)**
- **Questionnaires will assess individual and family factors (informed by Part I)**

## Purpose

- **Further understand HSU experiences within CYMHP that may facilitate or hinder client outcomes**
- **Inform targeted family-centered care to those youth at risk for HSU**

# Things to Consider

- **Recruitment process**
  - How best to recruit participants and their families?
  - Ensure representative sample with minimal attrition
- **Role of treatment providers be in the study**
  - How do we incorporate their perspective?
- **Knowledge translation**
  - How would we share our results with our patients and colleagues?
- **Implications for practice**
  - How to incorporate findings into practice?
  - Future intervention studies targeting modifiable factors within family-centered care model

# Family and Social Support: Active Ingredients in Mental Health Inpatient Care?

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# Background

- **Biosocial theory of emotion dysregulation = Biological vulnerability + invalidating social environments (Koerner, 2013; Linehan, 1993)**
- **Parental behaviour predicts symptoms of depression and anxiety in adolescents (Schwartz et al., 2012)**
- **Low perceived social support from family is related to suicidal behaviour in adolescents with a history of suicidality (Lewinsohn et al, 1994)**
- **Low perceived social support is a significant risk factor for attempted suicide in adolescents with depression longitudinally into young adulthood (Tuisku et al. 2014)**

# Background

- **Gender differences in suicide attempts in young adulthood Family support for women; Friendship support for men (Lewinsohn et al., 2001)**
- **Empirical research on the relationship between perceived support and therapeutic outcomes within a Canadian pediatric mental health context is limited**
- **An investigation of perceived family and social support on depressive and anxious symptomatology is crucial in determining key targets for treatment planning**

# Research Question

Do self-reported symptoms of internalizing symptoms (e.g. mood and anxiety) and suicidality improve as a result of perceived family and social support in a sample of adolescents on a pediatric mental health inpatient unit?

# Study Design

- Participants: Adolescents (male and female) admitted to 3G for assessment and stabilization for any disorder
- Measures:
  - CDI and MASC at intake and at discharge
  - Suicide risk scale (TBD)
  - Family support questionnaire (TBD) completed by youth and parent(s)
- Chart or other tool review for
  - Number of visits to unit by family and others
  - Number of LOAs; Success of LOAs
  - Parental attendance at Caregiver Connections

# Approach to Statistical Analysis

- Predictors: 1) baseline self report of family support (parent and youth) and 2) objective demonstration of supportive behaviours during the admission specifically # of visits by family, # and timing of LOAs, # times attended family support group.
- Outcome: Primary is change in internalizing symptoms (e.g. depression and anxiety) and suicide risk scores at discharge. Secondary is success at achieving outpatient service contact by family.
- Covariates: youth diagnosis, current outpatient treatment attendance, duration of admission, age, socio-economic status

# How Can We Get There?

- Inpatient staff engagement to inform the question, and method(s) of data collection to reduce stigma and increase participant compliance.
- Staff training for documentation of family visits.
- Participants will need to consent. Will this bias the data collection?

# Are we making a difference? Assessment and examination of effectiveness within CYMHP

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# Background

- In the past 30 years, child and adolescent therapy research has made significant advancements with a multitude of treatments indicating therapeutic change (Kazdin & Weisz, 2003; Nathan & Gorman, 2007)
- Although randomized controlled trials (RCTs) are the recognized gold standard in evaluating treatment efficacy, there is a gap between what research projects show *can happen* under ideal conditions, and what *actually happens* under ‘real world’ circumstances (efficacy vs. effectiveness) (Kazdin & Nock, 2003)
- Examination of whether the effects seen in RCTs can be obtained in clinical practice has not been well studied



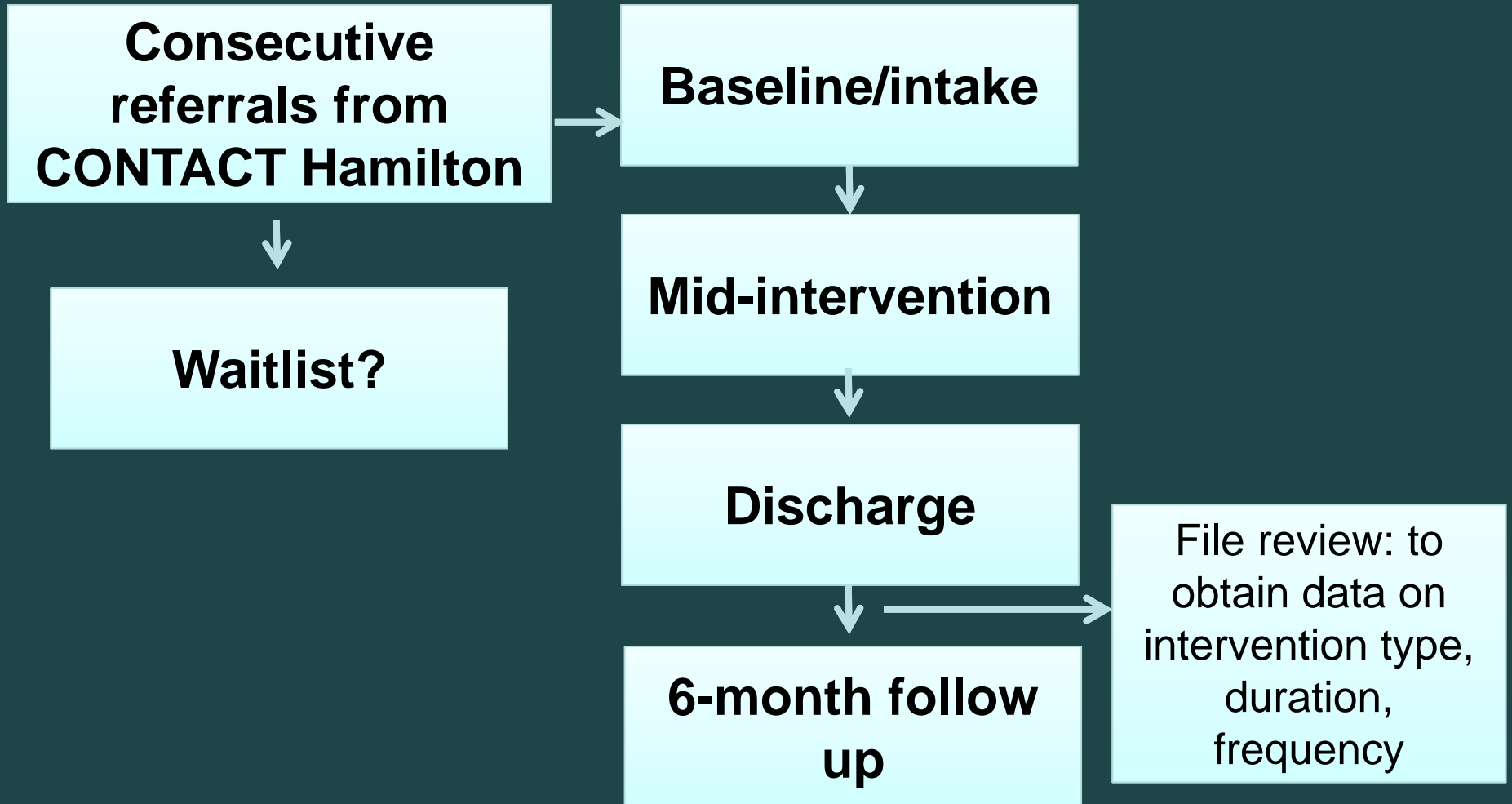
# Background

- **Furthermore, the impact of treatment on children and families within clinical settings is not clear (Kazdin & Nock, 2003).**
- **Statistically significant changes in treatment outcomes do not necessarily convey how a child actually functions in everyday life.**
- **An examination of treatment effects within clinical practice is critically important to demonstrating the effectiveness of various interventions across multiple domains and the robustness of therapeutic change within the CYHMP**

# Research Questions

- **What are the short-term and long-term outcomes of participating in the CYMHP among children aged 6-17 years in the outpatient clinic?**
- **Do family factors, (parental mental health, parental stress, family functioning) moderate this association?**
- **To what extent is the association between treatment and outcomes moderated by intervention factors, including frequency (# sessions attended/cancelled), intervention type and duration of intervention?**

# Research Design



# Research Design

## Parent Measures

- Parental mental health
- Parental stress
- Family functioning

## Intervention Measures

- Type
- Frequency
- Duration

## Child measures

- School attendance
- Friendships
- Extracurricular participation
- Family relations
- Symptoms

## Other factors

- Sociodemographic
- Child sex and age

# Potential Analyses

- **Descriptive analyses of various measures at intake (to obtain profile of children and youth referred to CYMHP)**
- **Pre-post analyses across various outcome measures**
- **Use hierarchical linear modelling to examine symptom trajectory and predictors of treatment response**

# Considerations

- **Should we try to recruit and assess children on the waitlist?**
- **Selection of measures based on psychometric properties and feasibility (time constraints and burden)**
- **How do we ensure rigorous assessments at all time points?**
- **Heterogeneity of sample: age/developmental stage; diagnoses; interventions – how to incorporate and accommodate?**

# Moving Forward

- **CYMHP Strategic Directions Committees – Clinical Research**  
**([mcisaacca@hhsc.ca](mailto:mcisaacca@hhsc.ca)) and**  
**KTE/Collaboration**  
**([bennett@hhsc.ca](mailto:bennett@hhsc.ca) )**
- **Ideas?**

1. Objective  
Epidemiological  
Study of Mental  
Health Need in  
4-17 years olds  
from 180  
communities

2. Methods  
Complex  
Design,  
13,500 hhlds



3. Questions  
Prevalence  
SES  
Inequalities  
Contextual  
effects  
Impact  
System  
response





# Questions linked to Health System Response

1. How do families receiving MH services rate their satisfaction with care?
2. Has the targeting of child MH services increased from 1983 to 2014?
3. What is the association between child MH need and geographic resource allocation?
4. Do geographic expenditures on children's MH mute the association between family SES and child disorders?

# THANK YOU!

