

# Quantitative assessment of partnership in youth mental health collaborative care: Results of a Montreal Study

Presenter: Lucie Nadeau

Research team: Cécile Rousseau (PI) Marie-Claire Laurendeau (PI) A Battaglini, J Broadhurst, A-M Gagné, K Germain, J Houle, G Matteij, T Measham, L Nadeau, P Pluye, J Rhéaume, Y Séguin, G Vrakas, S Walsh  
Research assistants: S Deshaies, A Jaimes, A Laurin-Lamothe, G Papazian-Zohrabian.

**12th Canadian Collaborative Mental Health Conference**  
**Halifax, June 23rd 2011**



Centre de santé et de services sociaux  
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de Bordeaux-Cartierville-Saint-Laurent

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# disclosure

- The presenters have no involvement with industry, thus nothing to disclose i.e. cannot identify any potential conflict of interest.

# Research team:

- Principal investigators:
  - Cécile Rousseau , Marie-Claire Laurendeau
- Co-investigators and collaborators:
  - Joanna Broadhurst, Anne-Marie Gagné, Kateri Germain, Janie Houle, Jean-François Labadie (replaced by Alex Battaglini), Gemma Matteij, Toby Measham, Lucie Nadeau, Pierre Pluye, Jacques Rhéaume, Yves Séguin, Georgia Vrakas, Suzanne Walsh
- Coordinators:
  - Alex Battaglini, Lucie Nadeau
- Research assistants:
  - Suzanne Deshaies, Annie Jaimes, Garine Papazian-Zohrabian, Audrey Laurin-Lamothe
- In partnership with:
  - CSSS Bordeaux-Cartierville-St-Laurent
  - CSSS Cavendish
  - CSSS de la Montagne

# Introduction

- The quality of partnership is a key determinant of the success of collaborative care
- To unravel the reasons why the implementation of partnership is challenging, we need to refine what we mean by partnership, to pinpoint the facilitating factors or barriers to it.
- We also need to appraise the eventual specificities of this collaboration within youth mental health.
- Few studies have looked at quantitative measures which could be helpful to appraise partnership or collaboration.

# Learning objectives

- 1) Acquire knowledge about two instruments appraising the quality of collaboration:
  - 1) The Perception of Interprofessional Collaboration Model Questionnaire (PINCOM-Q)
  - 2) The Decisional Conflict Scale (ECD-M)
  
- 2) Review the study's results from data collected through these instruments, including:
  - 1) Description of the psychometric properties of the instruments
  - 2) Exploration of the validity of the instruments
  
- 3) Envisage the potential usefulness of these instruments in the context of youth mental health collaborative care.

# The context

- The results presented today are a part of the results obtained from a wider CIHR (2008-2011) study.
  - Title: *‘Évaluation du processus d’implantation d’un modèle de soins partagés en santé mental jeunesse en milieu multiethnique’*.
  - Objective: Comparative study to identify facilitators and barriers of collaboration and partnership in youth mental health within the local service networks<sup>1</sup> of 3 primary care centers<sup>2</sup> offering collaborative care in youth mental health in multiethnic neighbourhoods.
  - Methods: Mixed-methods participatory research
    - to capture through **qualitative methods** a broad discourse around these themes
    - and to operationalize collaboration and partnership through **quantitative methods**.

1. ‘Réseaux locaux de services’ or *RLS*

2. ‘Centres de services sociaux et de santé’ or *CSSS*

# The lime survey: transversal quantitative data

A survey to measure collaboration quantitatively including :

- Socio-demographic questions
- Questions on facilitating factors and obstacles targeting aspects specific to the context of the institutions where the study took place.
- **Two scales:**
  - the Perception of Interprofessional Collaboration (PINCOM.Q) (Ødegård, 2006)
  - an adaptation of the Provider Decision Process Assessment Instrument (Dolan, 1999) as inspired by its modified version (the ECD-M) by Légaré and colleagues (2003).

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Ødegård, A. (2006). Exploring perceptions of interprofessional collaboration in child mental health care. *International Journal of Integrated Care* 6. <http://www.ijic.org>

Dolan, J.G. (1999). A method for evaluating health care providers' decision making: the Provider Decision Process Assessment Instrument. *Med Decis Making*, 19:38-41.

Légaré, F., Graham, I. D., O'Connor, A. M., Dolan, J. G., & Bélanger-Ducharme, F. (2003). Prise de décision partagée : Traduction et validation d'une échelle de confort décisionnel du médecin. *Pédagogie Médicale*, 4, 216-222.

# The setting

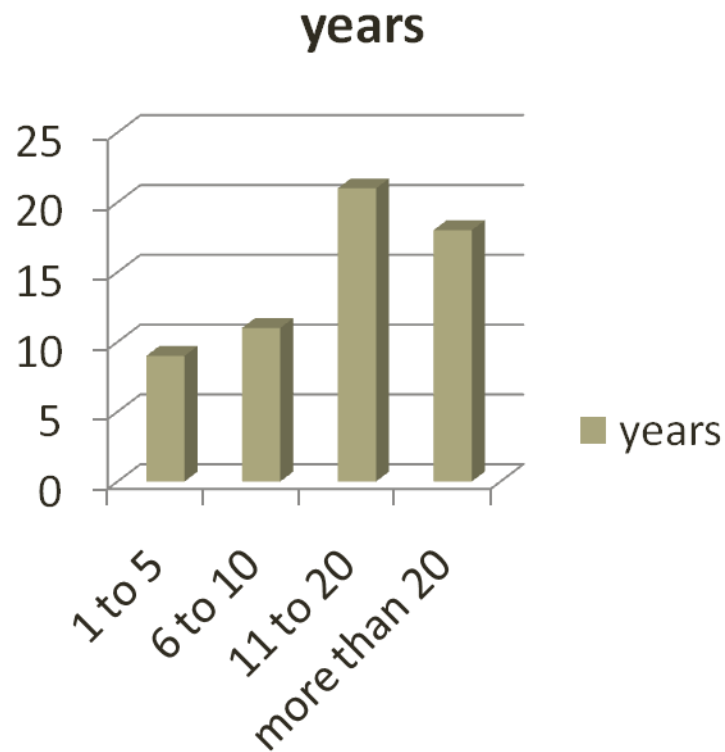
- Clinicians of child and youth teams in three primary care settings serving multiethnic neighbourhoods' in Montreal (Quebec, Canada) were invited to participate in an on-line survey, using the *Lime survey* format, about their experience of work in partnership.
- The targeted participants:
  - child mental health team professionals
  - general child psychosocial care team professionals
  - health professionals belonging to teams dedicated to school collaboration
- Of the 165 professionals invited to take part in the survey, 103 (62.42%) visited the survey site, and 96 (58.18%) filled the questionnaire although they did not always completed it, which resulted in some missing data.

# Participants

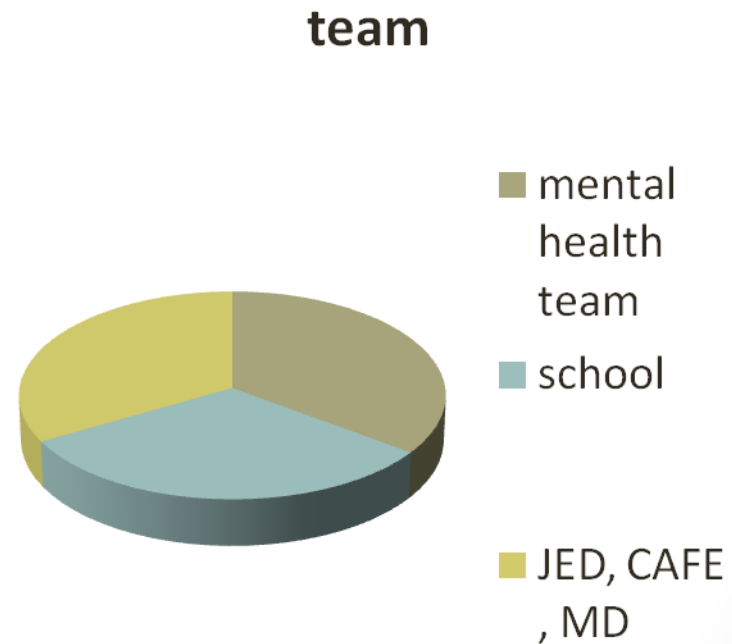
- Social workers (50%), nurses (17%) , psychoeducators (15%), psychologists, creative art therapists, educators, child psychiatrists.
- Mostly women (91,8%)

# Participants

Number of years worked in this area



To which team do you belong?



# The two instruments:

## PINCOM.Q AND ECD-M MODIFIED

- Main methodological obstacle in evaluating the collaborative care models: the *operationalization* of collaboration.
- An aim of the study was to determine the potential usefulness of two scales to evaluate the quality of partnership in child mental health collaborative care
  - the Perception of Interprofessional Collaboration (PINCOM.Q) (Ødegård, 2006)
  - an adaptation of the Provider Decision Process Assessment Instrument (Dolan, 1999) as inspired by its modified version (the ECD-M) by Légaré and colleagues (2003).

# The instruments

- The PINCOM.Q addresses the general perceptions of clinicians about collaborations while the ECD-M (modified) focuses on the appraisal of a specific clinical interaction, documenting perceptions about collaboration around a real clinical event.

# PINCOM.Q (Ødegård, 2006)

- designed to address the interdisciplinary and the interinstitutional context which characterizes child mental health collaborative care.
- documents the perceptions and behaviours of clinicians around collaboration.
- three dimensions, assessing:
  - Individual collaboration
  - Group collaboration
  - Organisational collaboration
- These dimensions are further divided in 48 items
- Rated on a 7 degree likert scale.

# PINCOM.Q (Ødegård, 2006)

## Conceptual framework (Ødegård and Strype, 2009)

- Individual collaboration:
  - motivation,
  - role expectations,
  - personality style,
  - professional power,
- Group collaboration
  - group leadership
  - coping
  - communication
  - social support
- Organizational collaboration
  - organizational culture
  - organizational goal/aims,
  - organizational domain
  - organizational environment

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Ødegård & Strype, (2009). Perceptions of interprofessional collaboration within child mental health care in Norway, *Journal of Interprofessional Care*, 23(3): 286–296.

## PINCOM.Q (Ødegård, 2006) :examples of questions

### individual collaboration

- Motivation: *“I find working in interprofessional groups valuable”*
- role expectations : *‘My experience is that our role is always clearly defined’*

### group collaboration

- group leadership: *“I often experience that effective interprofessional groups have a clear and defined leader.”*
- social support: *‘I experience that I can get help and social support from the other professionals in the interprofessional groups I participate in.’*

### organizational collaboration

- organizational culture: *“Interprofessional groups are composed of professionals that are strongly influenced by the organizational culture they belong to.”*
- organizational environment: *‘The needs of the clients are very important for how we work in interprofessional groups.’*

## The Provider Decision Process Scale (Dolan, 1999) And the ECD – M (Légaré et al, 2003)

- The Provider Decision Process Assessment Instrument (Dolan, 1999) is inspired by the “Decisional Conflict Scale” (DCS) (O’Connor, 1995) and the ‘Satisfaction with Decision Scale’ (Holmes-Rovner et als, 1996).
- It measures the level of comfort of the care provider with a clinical orientation decision in a primary care setting.
- It has been validated in French – then called the ECD – M (F. Légaré et al., 2003). Légaré et colleagues added complementary construct validity questions.
- composed of 16 items
- rated on 5 level likert scale
- has good psychometric properties.

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O’Connor, A.M. (1995). Validation of a Decisional Conflict Scale. *Medical Decision Making*, 15:25

Holmes-Rovner M, Kroll J, Schmitt N, et al. (1996) Patient satisfaction with health care decisions: the satisfaction with decision scale. *Med Decis Making*. 16:58-64.

# The ECD – M

(Légaré et al, 2003)

Examples of questions:

*‘This decision was difficult to make’*

*‘It was easy to identify all of the factors influencing this decision.’*

*‘The best option for the patient was made clear.’*

*‘I am satisfied with the decision that was made.’*

## The ECD-M modified

- To reflect child and adolescent care, we changed the formulation 'the patient' for 'the family'.
- Also, based on previous qualitative research in collaborative care (Nadeau & Séguin, 2008) we modified the construct validity questions to also target the impact of interinstitutional relations on the clinical orientation decision process.
- The modified version has 17 items.

# Analysis

- (1) to establish the psychometric characteristics of these instruments in this specific setting
- (2) to study the association between the two scales
- (3) to compare the score of the two instruments rated by teams involved in collaborative care in child mental health and in general psychosocial primary care for children.
- (4) to describe main patterns in scale

# Analysis

- The following tests were done:
  - 1) descriptive analysis of the professionals sociodemographic profiles (mean, standard deviation and range);
  - 2) descriptive analysis of the items and patterns of the scales (mean, standard deviation);
  - 3) Cronbach's alpha for the two scales ;
  - 4) bivariate and multivariate analysis (T-test and ANOVA) of the two scales scores for the different teams (mental health team (n=19), school team (n=17) and general psychosocial teams (n=18)).

# Results

- Internal consistency estimates of reliability computed for the SDM and the PINCOM-Q scales, gave values for the Alpha de Cronbach of:
  - .90 for the original scale of ECD-M
  - .93 for the adapted ECD-M scale.
  - .94 for the PINCOM.Q scale
- For the overall sample, the pearson correlation between
  - the ECD-M and the PINCOM.Q global scores was  $R = 0.356$  ( $P = 0.003$ ).
  - the adapted ECD-M and the PINCOM.Q was  $R = 0.411$  ( $P < 0.0001$ ).

# ANOVA results for ECD-M, ECD-M (modified) and PINCOM.Q by team of work.

A lower mean indicates a better partnership

Teams	Mental health		School		Psychosocial		Anova (F)	P
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation		
PINCOM.Q - total	136.21	33.64	159.29	32.55	147.89	27.93	2.41	0.1
PINCOM.Q - individual	49.11	14.15	60.06	13.21	57.61	11.06	3.64	0.03
PINCOM.Q - group	40.32	13.96	50	15.24	43.33	10.47	2.44	0.1
PINCOM.Q - organization	46.79	10.31	49.24	8.65	46.94	12.26	0.3	0.76
ECD-M	26.53	10.78	30.29	6.79	27.61	9.65	0.77	0.47
ECD-M (modified)	37.21	15.03	43.12	8.51	39.72	14.6	0.91	0.41

- Comparison of the different teams PINCOM.Q score and subscores and ECD-M scores indicated that:
  - child mental health team professionals reported better interprofessional collaboration and more comfort in shared decision making than the professionals of the other teams although in most cases the differences were not statistically significant.
  - The PINCOM.Q sub scale measuring individual perceptions and behaviours around interprofessional collaborations was significantly better for the child mental health professionals.
- *Motivation* has the highest score within the PINCOM.Q for the overall sample, followed by *social support, organizational culture* and *group leadership*.

# discussion

- The PINCOM.Q and modified ECD-M have good internal consistency when used in a collaborative care setting.
- As theoretically expected, the fact that they are moderately positively correlated indicates that the level of comfort with a decision about clinical orientation in a partnership setting is associated with the perception of interprofessional relations.
- This moderate correlation also underlines that the two scales are measuring different dimensions of partnership and that they may well be used in a complementary way when assessing the quality of collaborations.

- A recent theoretical model (Légaré et al., 2011) emphasized the interest of merging perceptions of interprofessional relations and comfort in decision making to appraise partnership, but there has been no operationalization of this model in child mental health.
- The fact that the child mental health professionals have better perceptions of collaboration and more comfort with clinical orientation decisions in the collaborative care context than the other youth teams, even if this reaches significance only in the case of individual collaborations, suggest that the PINCOM.Q and the ECD-M modified may be quite sensitive to variation in the quality of collaboration. As such, they may constitute interesting indicators of the quality of the partnership in collaborative care settings.
- The small sample size and the relatively low response rate are however important limitations of this pilot study.

A note on the survey section: facilitators and barriers to collaboration in youth mental health, according to the primary care professionals

- The first most important facilitating factor :  
Clinical / case discussions
- The first most important barrier :  
Differences between administrative and clinical cultures.

# conclusion

- Measuring the quality of interprofessional and interinstitutional collaboration is a challenge in the evaluation of collaborative care settings.
- Although the results of the present study are very preliminary, they suggest that the PINCOM.Q and the ECD-M modified may be promising scales to measure different dimensions of the quality of collaboration in those settings.
- Youth mental health teams within the 3 primary care centers (CSSS) reported better interprofessional collaborations and more comfort with clinical decisions with partners compared to other CSSS teams working with youth.
- Results of the survey point also towards important facilitators and barriers in the process of collaborative care in youth mental health, including *clinical discussions* as facilitator, and *different administrative and clinical cultures* as a barrier.

# A world-wide challenge

- Some of the WPA guidance (Thornicroft et als, 2010):
  - Lack of multi-sectorial collaboration
  - professional resistance e.g. to community-oriented care and service user involvement
  - need for shared decision making
- The PINCOM.Q (Ødegård, 2006) was developed in Norway, in view of :
  - the ‘many potential difficulties in achieving effective working relationships’ throughout the western world, including ‘management styles’ and ‘elements of competition’.
- In 2009, a study by Ødegård and Strype suggested that *‘most prominent constructs of collaboration perceived by the professionals were: motivation, group leadership, social support and organizational culture’*

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Thornicroft, G, Alem, A, Dos Santos, R.A., Barley, E., Drake, R.E. et als (2010). WPA guidance on steps, obstacles and mistakes to avoid in the implementation of community mental health care. *World Psychiatry*.9(2):67-77.

Ødegård, A and Strype, J (2009). Perceptions of interprofessional collaboration within child mental health care in Norway, *Journal of Interprofessional Care*, 23(3): 286–296.

- Our results can be put in perspective with the above-mentioned literature:
  - Motivation, social support, organizational culture and group leadership are the same key aspects in the study by Ødegård and Strype (2009) and our study.
  - Possible association between the concepts of interdisciplinary and interinstitutional clinical discussions and the ones of motivation and social support could be looked into.
  - Differences between administrative and clinical cultures are also to be looked into in addition to different organizational cultures.

# The future

- Continued work on more precisely defining facilitators and barriers to collaboration in youth mental health will help clarify the successful strategies to implement for this collaboration to take place.
- The PINCOM.Q and modified ECD-M appear as important instruments to address these issues.
- Other institutional (schools, Centres jeunesse, hospitals) or community partners also need to be surveyed to understand how to best include them as collaborators and provide true integrated service networks in youth mental health.
- Further studies need to establish if the quality of collaboration is in fact associated with improved outcome in the children.