Mental Health: What Cost Data Are Important?

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Main Points

- Different perspectives require different costs
- Some cost data are not available, unless through primary data collection
- Primary data collection can provide important insights

Total costs, definition

Two key cost data questions when you do a project:

- What perspective?
- What items should be included based on that perspective?

Total costs, math

- Common perspectives include: societal, gov't, patient and caregiver…

- Societal Total Cost ($TC^{societal}$) is
- $TC^{societal} = TC^{gov't} + TC^{patient} + TC^{caregiver}$

- $TC^{gov't} = TC^{MOH} + TC^{non\text{-}MOH}$

Most of the time…

- $TC^{societal} = TC^{gov't} + TC^{patient} + TC^{caregiver}$

Becomes

- $TC = TC^{MOH} + TC^{non\text{-}MOH} + TC^{patient} + TC^{caregiver}$

- $TC^{MOH} = p_1q_1 + p_2q_2 + \dots + p_mq_m + p_{m+1}q_{m+1} + \dots + p_Mq_M$

- $TC^{MOH} = \Sigma p_iq_i + 0$

(e.g., community programs)

Main points

- Different perspectives require different costs
- Some cost data require primary data collection
- Primary data collection can reveal insights

Not easily available data

There are some cost data that are hard to find

- Community service use
- “Non-health” health items (e.g., healthcare at a shelter)
- New programs

Cost Study

- Typically, when comparing costs between a NEW and OLD way of doing things, we test
- Is $TC^{NEW} = TC^{OLD}$?

  OR
- Is $\Delta TC = 0$?
- What if one takes a societal perspective, but uses only easily accessible data?

Cost study (missing data)

- $\Delta TC = \Delta TC^{MOH} + \Delta TC^{non\text{-}MOH} + \Delta TC^{patient} + \Delta TC^{caregiver}$

Assuming $\Delta TC = \Delta TC^{MOH}$ is like assuming

- $\Delta TC^{non\text{-}MOH} = \Delta TC^{patient} = \Delta TC^{caregiver} = 0$

Plus, there may still be parts of TC^{MOH} that are not accessible in administrative data sets

Key issue

- Is it a bad thing to assume:

  $\Delta TC^{\text{non-MOH}} = \Delta TC^{\text{patient}} = \Delta TC^{\text{caregiver}} = 0$?

- In mental health economics, it is important to check because mental health care is not exclusively hospital or physician based

Main points

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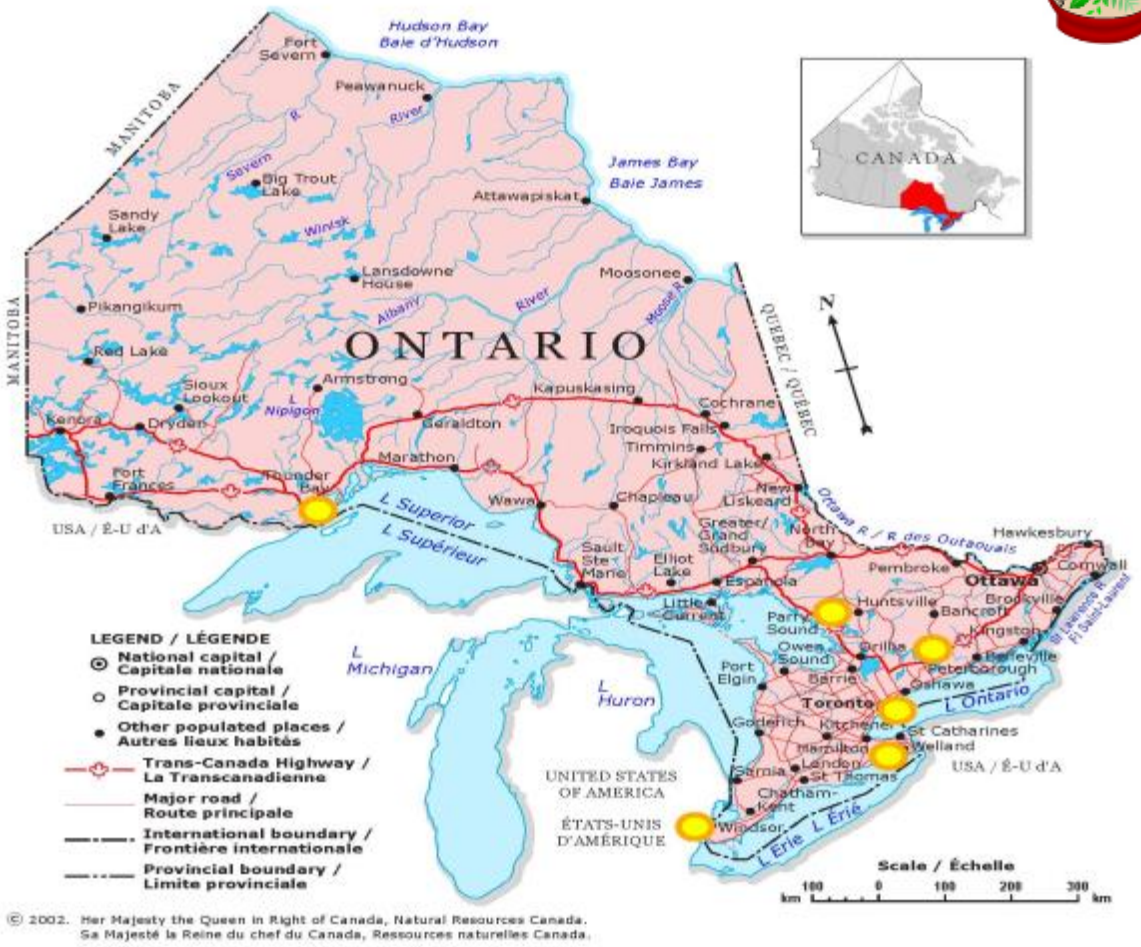
Consider a Case: The Matryoshka Project

Examined the effects of enhanced funding in Ontario for specialized community mental health programs on continuity of care

The study focused on the continuity of care of clients in two types of specialized programs:

(1) court support programs (CSP) and

(2) early intervention programs for psychosis (EIP)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LEGEND / LÉGENDE
National capital / Capitale nationale
Provincial capital / Capitale provinciale
Other populated places / Autres lieux habités
Trans-Canada Highway / La Transcanadienne
Major road / Route principale
International boundary / Frontière internationale
Provincial boundary / Limite provinciale
Scale / Échelle
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EIP Programs

- All developed using the guidelines and standards of the *International Early Psychosis Association*
- All meet the Ontario Ministry of Health and Long-Term Care's EIP Program Standards
- Members of EPION, the network of the 56 EIP programs serving Ontario

The Matryoshka Project

For this case, we will examine the service use of two groups of clients enrolled in early intervention programs (EIP):

Group 1 (Long Timers) = Enrolled in an EIP for > 12 m (n = 45)

Group 2 (Short Timers) = Enrolled in an EIP for ≤ 12 m (n = 122)

Question: Is there a difference in the use of services and supports based on length of involvement in EIP?

Rationale for the Two Groups

- 12-month time frame is a time frame for a typical fiscal year --- salient for decision maker budget cycle
- Time frame informative for a decision maker who must decide how to distribute scarce public resources among multiple sectors for a budget year.
- Comparison of enrollment time offers insight into potential changes in resources used by client groups by enrollment period – suggests impact of costing time horizon.

The Matryoshka Project

Data sources: self-report, case manager, program records

Data collection instruments:

- Hospital and Emergency Department Use Questions
- Medication Log
- Matryoshka Service Needs Profile
  - Physician visits (Primary care and psychiatry)
  - Community support services (i.e., vocational, social/ recreational, counselling)
- Housing Questionnaire
- Legal Contacts Questionnaire

Annual Mean Costs
Total by Perspective

	> 12 m	≤ 12 m	ΔC
MOH (without Community)	$12,364	$10,786	$1,578
MOH + Community	$13,445	$12,045	$1,401
MOH + Community + Non-MOH	$14,132	$13,569	$563
MOH + Community + Non-MOH + Patient + Ins	$15,679	$15,875	($197)

Caregiver Contributions

	Annual Mean Caregiver Contributions
Transportation	$103
Clothing	$7
Medication	$461
Mental health care	$200
Rent	$73
Utilities	$317
Phone	$32
Damage to property	$65
Other	$797
TOTAL	**$2,055**

Discussion

- Will not know if a cost item will show an important difference without collecting and testing.
- These items were useful in the case study
  - Medication and Insurance
  - Community Mental Health Services
  - Caregiver contributions

Conclusion

- If we don’t advocate for collection of data, there won’t be resources for it.
- If we don’t collect the data that allow for cost estimation, we won’t know what we are missing.
- Including a range of costing perspectives acknowledges the breadth of the effects of mental health on both a health and a social level.

References

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