

Fidelity monitoring: challenges and opportunities

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Today

1. What is fidelity and why should we measure it?
2. Examples of fidelity monitoring in practice and research
3. Challenges and opportunities

What is Fidelity?

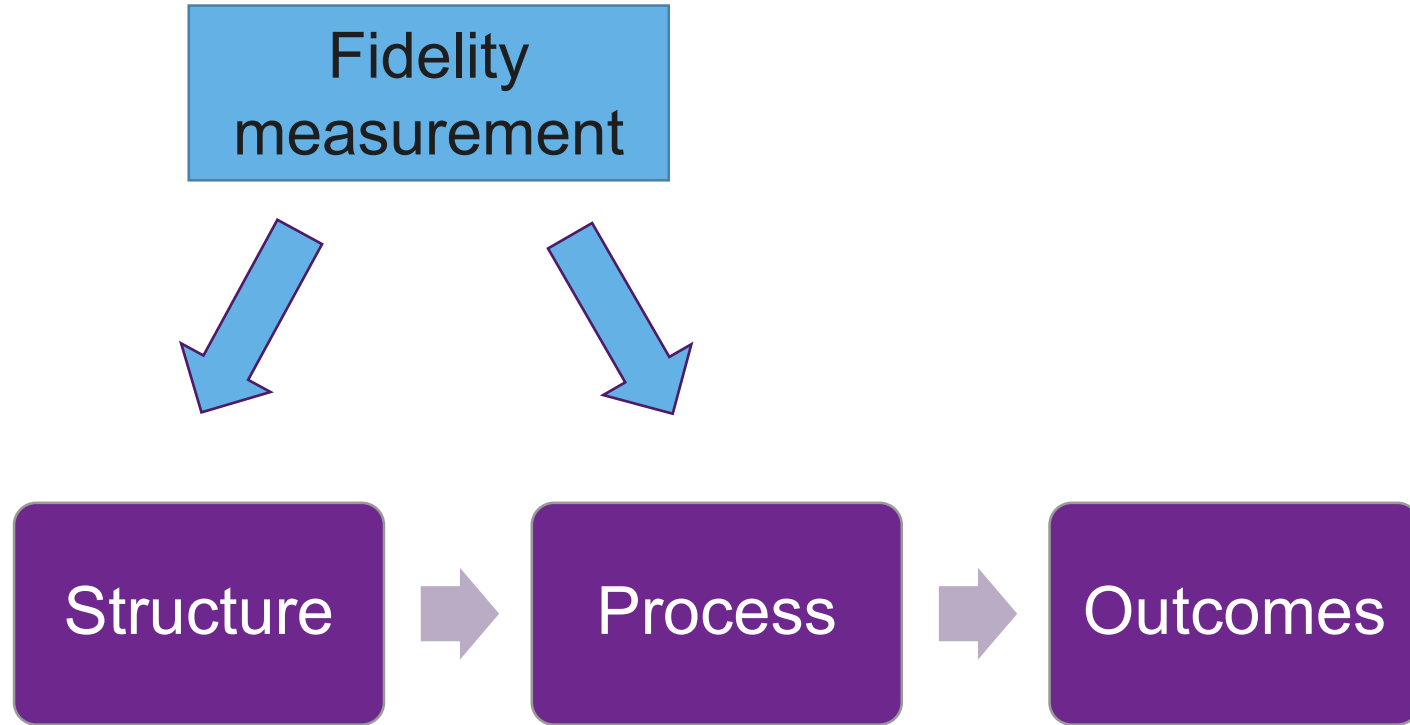
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What is Fidelity?

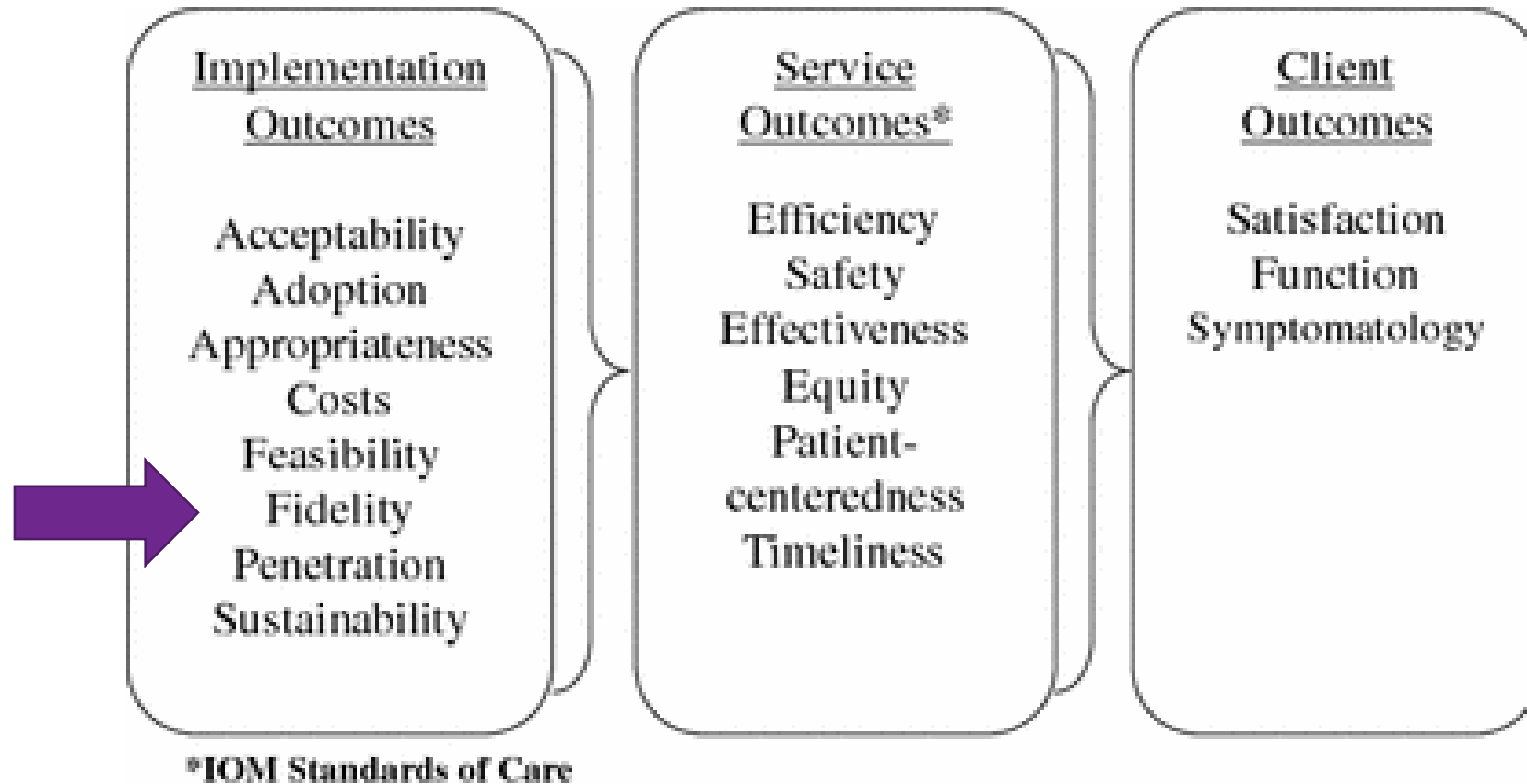
- Fidelity= The extent to which a program is delivering services in alignment with the guidelines or standards that define it
- A fidelity assessment/fidelity measure = a systematic way to measure program fidelity



Donabedian model

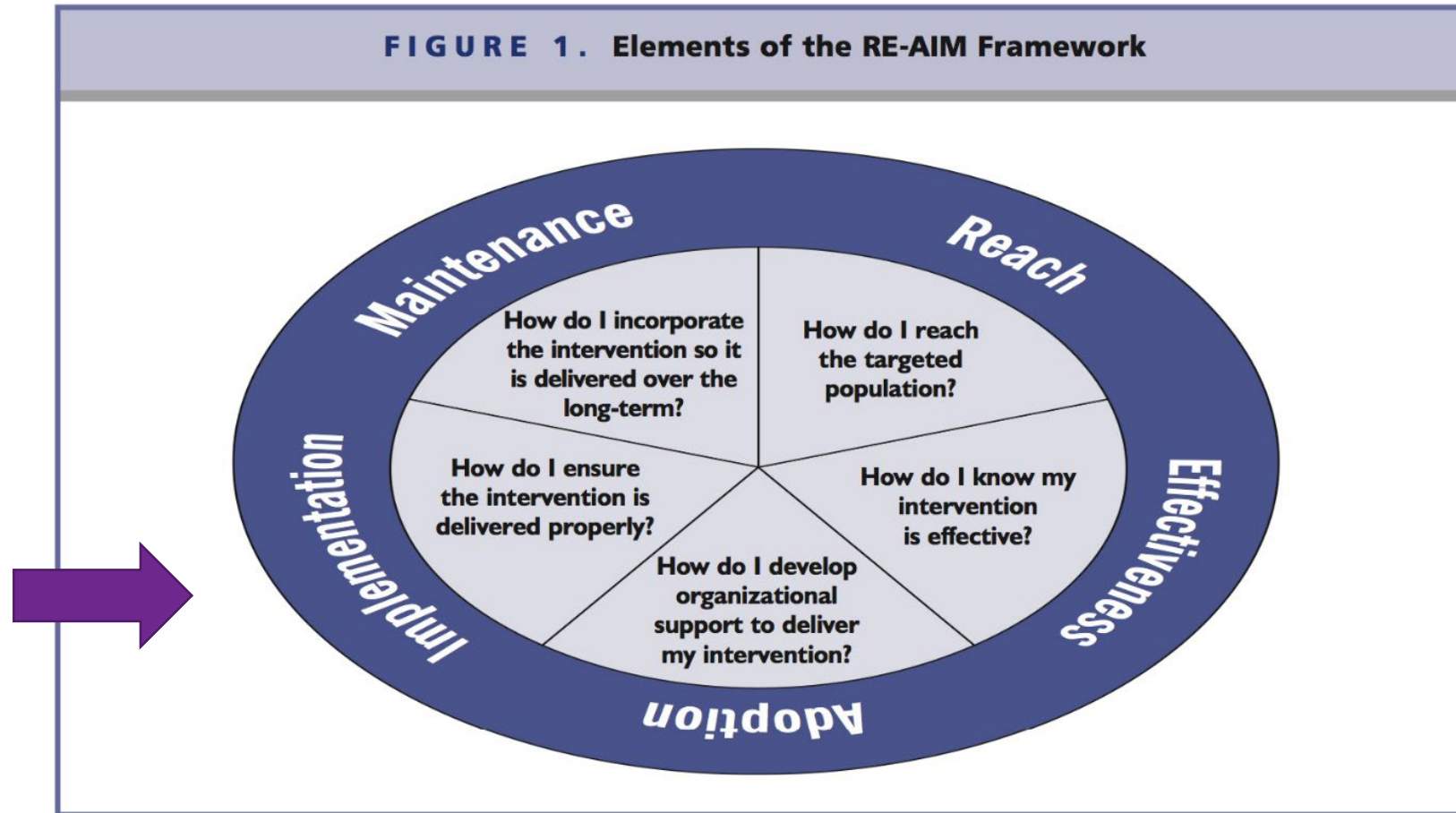


Proctor Implementation Outcomes



Proctor E, et al. Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Adm Policy Ment Heal.* 2011;38:65–76.

RE-AIM Framework



Belza B, Toobert DJ, Glasgow RE. RE-AIM for Program Planning: Overview and Applications. 2013

Why measure fidelity?

In research

- Ensure internal validity in effectiveness/ efficacy studies
- Assess implementation success/ feasibility

In practice

- Guide new practice implementation
- Reduce model drift/ support sustainability
- Assess accountability for funders
- Identify opportunities for improvement
- Support consistency across a system

Mowbray et al. Fidelity Criteria: Development, Measurement, and Validation. *Am J Eval.* 2003;24(3)

Schoenwald et al. Toward the effective and efficient measurement of implementation fidelity. *Adm Policy Ment Heal Ment Heal Serv Res.* 2011;38(1)

Conducting fidelity assessments

Gold standard:

- Direct observation
- Patient health record audit
- Administrative data
- Interviews with staff
- Interviews with patients and families

Alternatives

- Remote assessment
- Self assessment (staff/ patient survey)

Breitenstein et al. Implementation fidelity in community-based interventions. *Res Nurs Health*. 2010;33(2):164–73.

Rollins et al. Comparing the costs and acceptability of three fidelity assessment methods for assertive community treatment. *Adm Policy Ment Heal Ment Heal Serv Res*. 2017;44(5):810–6



"Just measuring your job performance..."

Measuring fidelity for different types of interventions

- Simple interventions (e.g., handwashing)
- Single complicated interventions (e.g., cognitive behaviour therapy)
- Multi-component programs – (e.g., Early Psychosis Intervention)

Our focus today: complex interventions in mental health

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Examples

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2 Examples...

1) System application – supporting high quality delivery of Ontario Early Psychosis Intervention (EPI) Programs

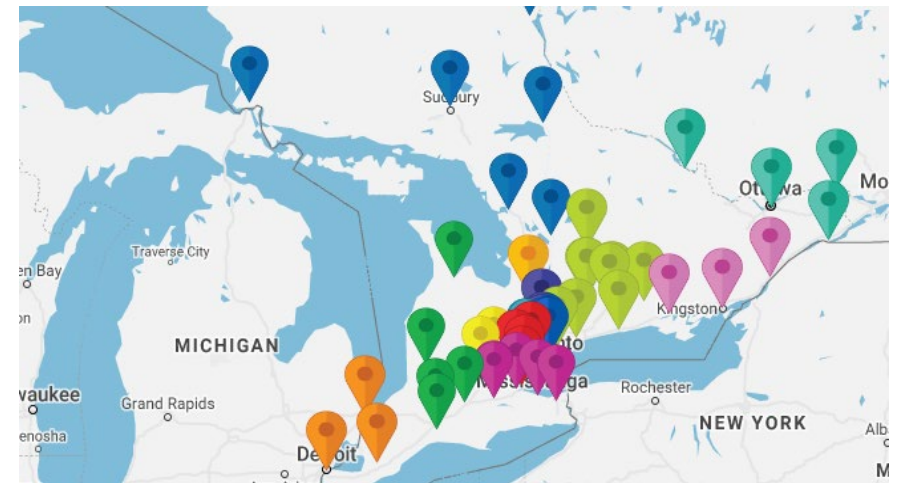


2) Research application – assessing implementation of strengths based case management



Delivery of Early Psychosis Intervention (EPI) Programs in Ontario

- EPI is evidence-based, interdisciplinary model of care for youth experiencing first episode of psychosis (age 14- 35)
- Team based, complex intervention - medication, psychoeducation, family support, physical health monitoring , CBT, employment/ education support)
- Widely implemented in Ontario
- Standards released in 2011
- EPI fidelity scale released in 2016 (Addington, 2016)



Addington et al. Development and testing of the First-Episode Psychosis Services Fidelity Scale. *Psychiatr Serv.* 2016;67(9):1023–5.

What we did

Process

- Partnership between PSSP at CAMH and Early Psychosis Intervention Network of Ontario (EPION)
- Funding – modest, annual
- Programs invited for voluntary assessment (3 rounds between 2017-2021)

To date

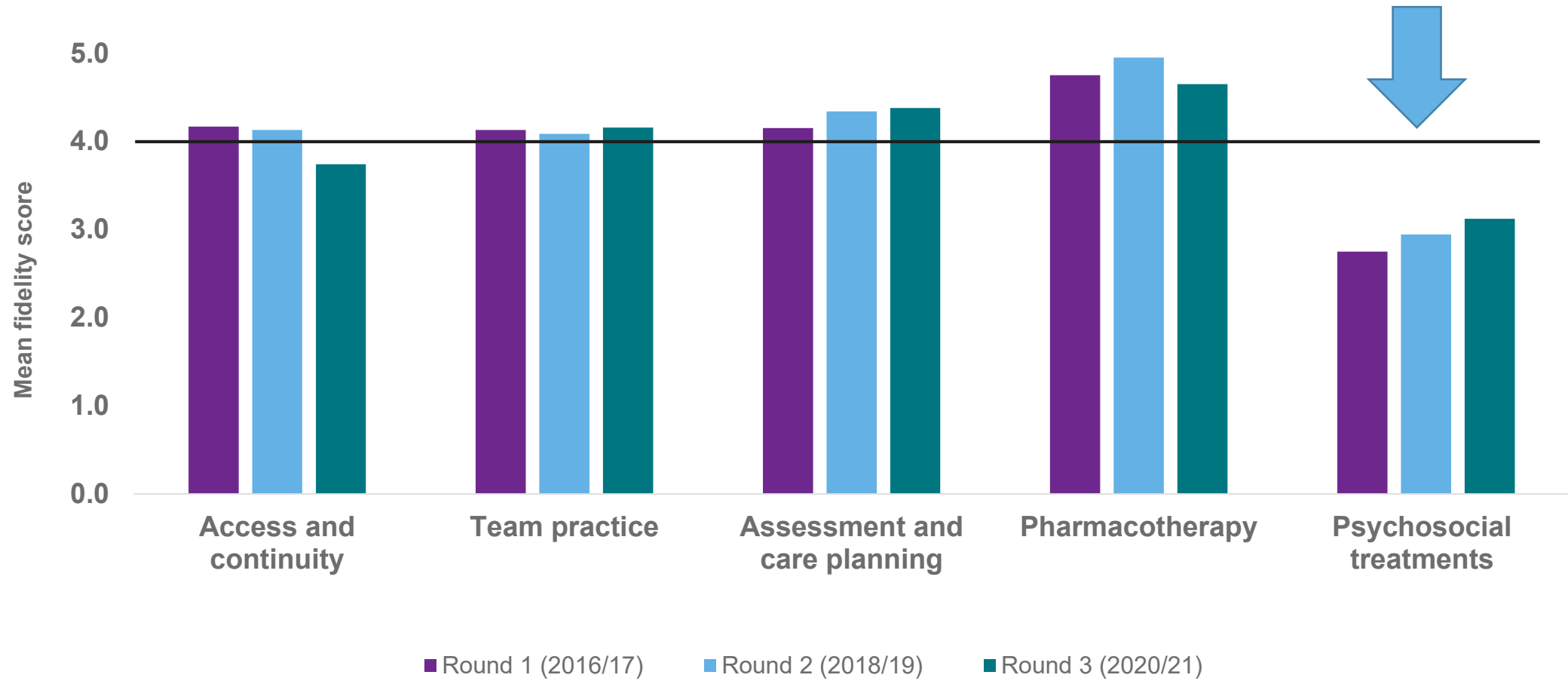
- Assessments completed for 21 programs (~53%)
 - Variation in location, staffing, host organization



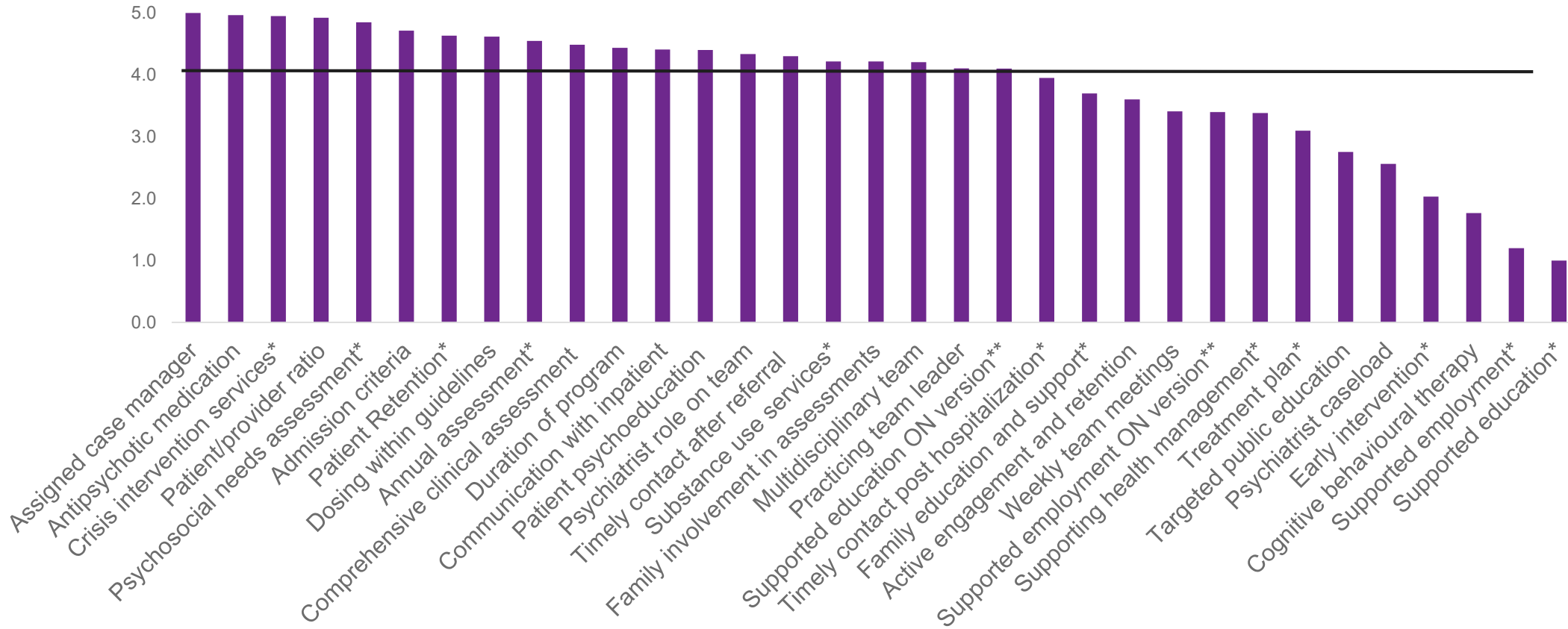
Ontario EPI fidelity assessment model

- **Scale:**
 - First Episode Psychosis Services Fidelity Scale (FEPS-FS) (Addington 2020;2016)
 - 33 items, rating 1-5 (4 = good fidelity)
 - Item, domain (5), total scores
- **Independent assessor team**
 - Interviews with staff, clients and families (in-person, virtual)
 - Client health record sample
 - Administrative data
 - Consensus rating
- **Structured report to programs:**
 - Ratings, narrative explanation and QI recommendations

Mean scores across all assessments – 5 domains



Mean item scores across all programs



Durbin, J., Selick, A., Langill, G. et al (2019). Using fidelity measurement to assess quality of early psychosis intervention services in Ontario. *Psychiatric Services*, 70(9), 840-844.

Observations

- Important opportunity to identify delivery challenges at program & system level
- Benefit not fully realized → lacked resources to support program or system QI
- Implementation challenges
 - Voluntary participation/no incentives = challenges recruiting late adopters
 - Year to year funding –
 - maintaining high quality assessors, longitudinal monitoring
- Adapt fidelity scale to Ontario context & standards
- Feasibility concerns

Selick et al. Feasibility and acceptability of a volunteer peer fidelity assessment model in early psychosis intervention programmes in Ontario: Results from a pilot study. *Early Interv Psychiatry*. 2021;15(3):480–5

Implementation Evaluation – Strengths Model Case Management (SMCM)

- Recovery-oriented approach to delivering mental health case management
 - emphasizes client strengths, use of community resources, client agency
 - developed as a response to deficit-oriented approaches to care
- Delivery based on set of structured practice tools
 - strengths assessment
 - personal recovery plan
 - group supervision method
 - field mentoring
- CIHR funded study – 7 teams, 3 provinces – to implement model and evaluate



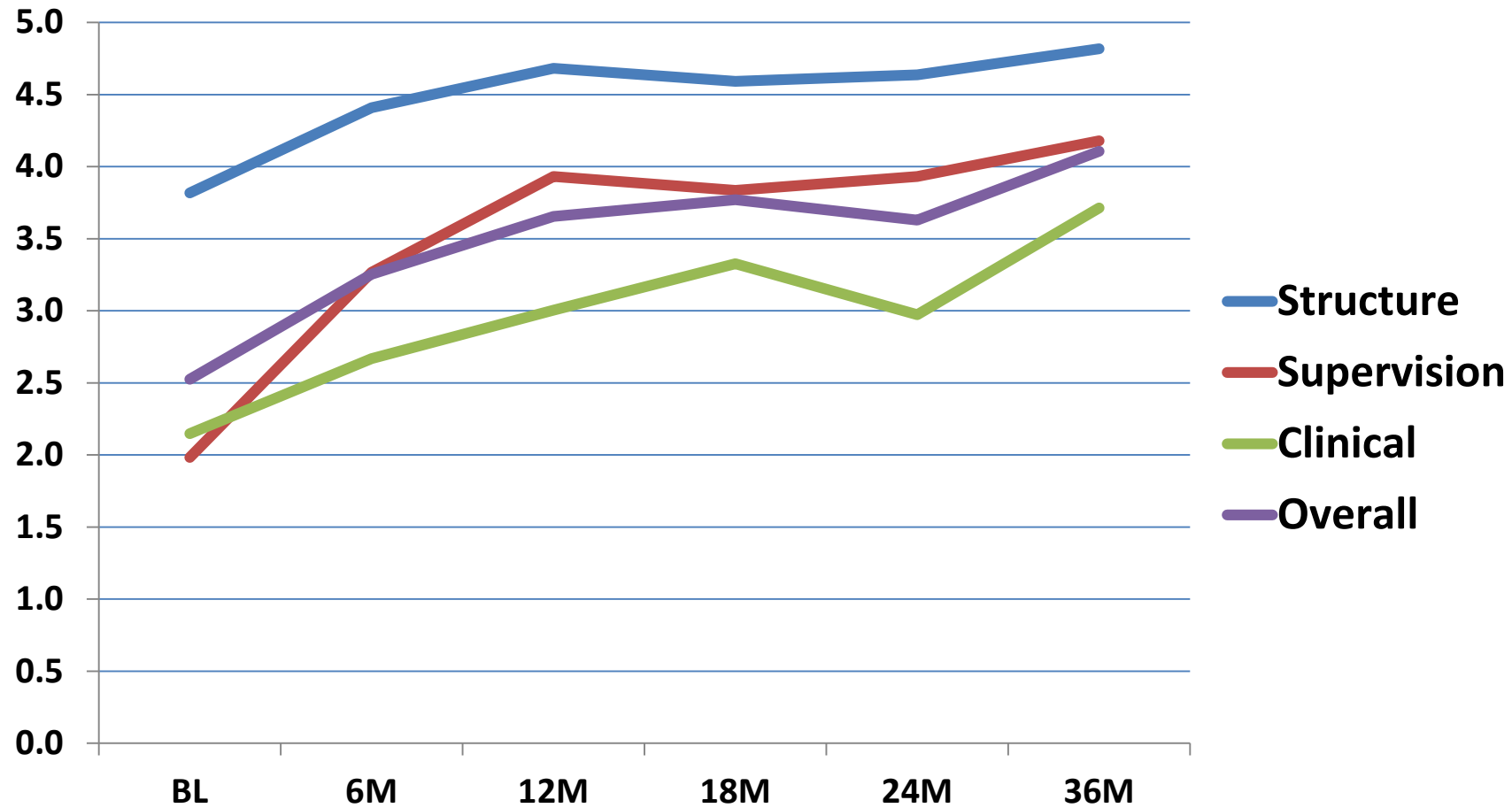
Rapp, C. & Goscha, R. (2012). *The strengths model: A recovery oriented approach to mental health services* (3rd ed.). Oxford University Press.
Latimer et al (2022). Association between fidelity to the strengths model of case management and client outcomes: A quasi-experimental study, *Psychiatric Rehabilitation Journal*. 2022 Sep;45(3):280-290.

What we did

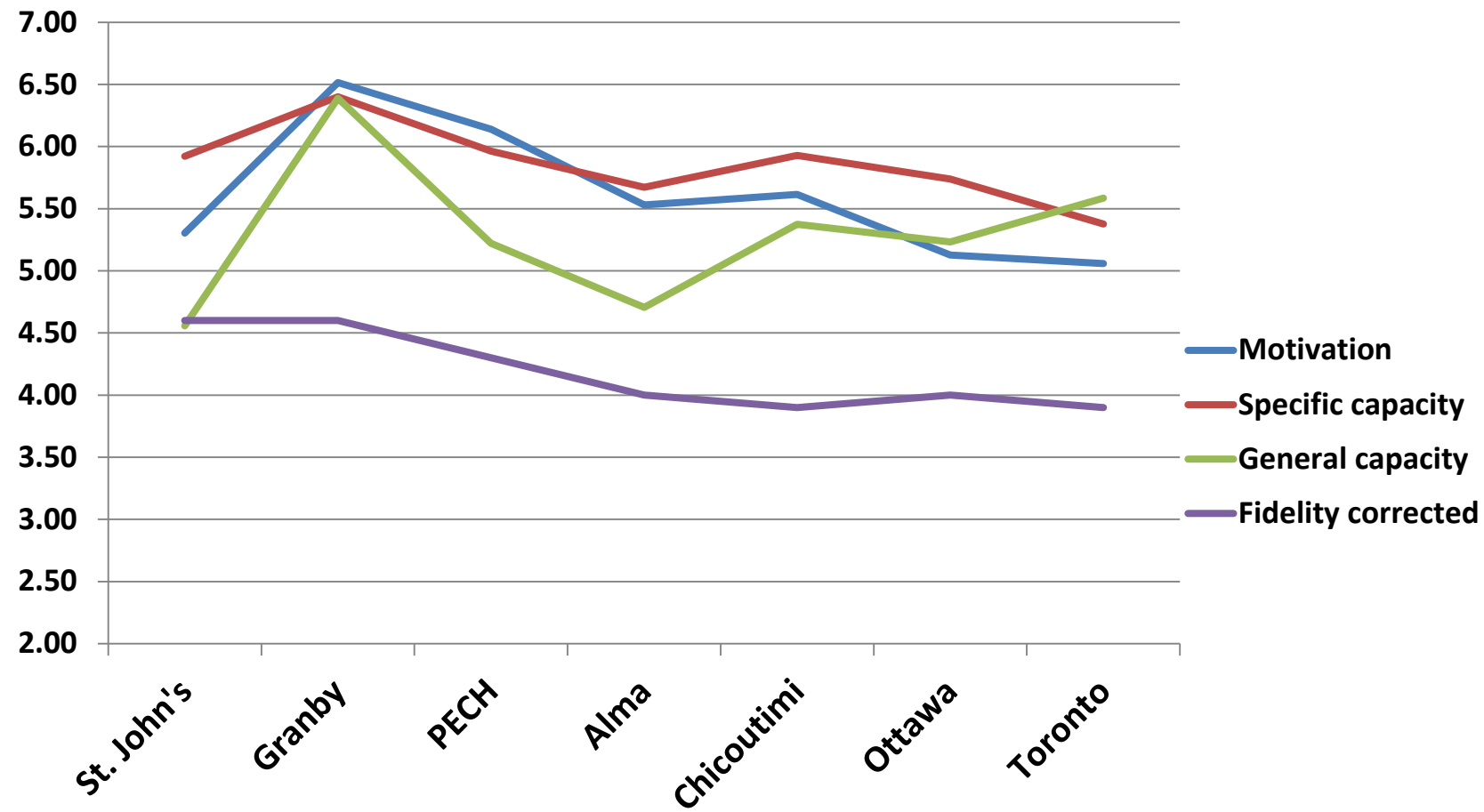
- SMCM fidelity tool released 2012 (Rapp & Goscha, 2012)
- Repeat fidelity assessments from BL → 36 months (every 6 months)
- Independent raters, site visits, review of data from multiple sources, reports shared back with teams
- Fidelity scale
 - 31 items, 3 domains (structure, supervision, service delivery) , 8 subdomains
 - Ratings from 1 – 5, 4 = good practice
- Study concluded in 2019

Durbin, J., Aubry, T., Barrett, B. et al. Implementing the Strengths Model of Case Management; Assessing Practice Three Years after Initial Implementation. Community Mental Health Journal. 2022

Fidelity over time - all teams



Fidelity and staff reported capacity to deliver model at 36 months (per team)



Observations

- Programs appreciated continuing feedback – opportunity to improve over time
- Sharing of results across teams
- Implementation support guided by results

But

- End of study → end of fidelity reviews → some de-implementation of model
- Resource limits - lacked consistent assessor team
- Scale – item clarification, inter-rater consistency, adapt to Ontario

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Opportunities and Challenges

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Opportunities

At the program level

- Support programs to identify gaps in service delivery, improve quality of care, monitor changes over time
- Perceived value from programs
- Just being measured can lead to change

At the system level (with common tool and system implementation)

- Can identify common challenges that require system or sector level intervention
- Can identify high performers or innovative practices that other programs can learn from
- Together with outcome monitoring, refine and improve models of care
- Can support consistent services across systems

Challenges

- Resource intensive, how to balance validity vs feasibility
 - Though improved documentation and routine data collection can make assessments more feasible
- Risk= “What gets measured gets done”
- Concerns about use for accountability/ funding decisions
- Balance fidelity and adaptation
- Lack of support for programs to use fidelity to inform improvement
- Important to adapt fidelity scales to Ontario context

Thank You

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