Formative Evaluation of Practice Changes for Managing Depression in Primary Care in Manitoba

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Collaborators

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- **Ms. Jeanette Edwards**, Special Advisor to the Deputy Minister on Primary Care, Manitoba Health
- **Ms. Renata Neufeld**, Manitoba Health, PIN Analyst (Mr. Angus Steele, formerly PIN Analyst)
- **Dr. Ingrid Botting**, Director, Health Services Integration, Family Medicine – Primary Care Program, WRHA
- **Ms. Deb Taillefer**, Regional Manager - Mental Health, South Eastman Health
- **Ms. Marcelle Falk**, Mental Health, South Eastman Health
Acknowledgements

- Primary care sites
- Assistance with qualitative interviews: Robin Westmacott & Terri-Lynn Mackay
- Assistance with qualitative analysis: Pam Wener & Alana Hosegood
- Funding: Manitoba Health
Presentation Objectives

- To share findings from phase 2 of the evaluation related to depression management in primary care

- To suggest implications for implementing practice changes in collaborative care settings related to depression management
### Screening for Depression: Rationale

- Depression often goes undetected and untreated

- Primary care is where most cases are identified and managed

- Screening for depression is recommended when:
  - It is targeted, such as on high risk groups
  - When practice also includes accurate diagnosis and access to collaborative care program
Physician Integrated Network (PIN): Background

- 2006: Manitoba Health launched PIN, a new primary care renewal initiative

- An overarching objective of PIN is to demonstrate high-quality primary care, focusing on chronic disease management, with the support of a quality-based incentive funding model

- As part of PIN, 2 mental health indicators specific to screening and managing follow-up for depression were developed and implemented
  - **Indicator 1**: PHQ2
  - **Indicator 2**: If patients respond yes to one of PHQ2 questions, a follow-up assessment is to be conducted within 4 weeks of initial screening to confirm diagnosis and treatment option

- Initiative targets patients between 18 and 69 years of age who have:
  - Diabetes;
  - Congestive heart failure;
  - Coronary artery disease; and/or,
  - Women who have given birth within the past 12 months
Formative Evaluation: Sites

- Objective is to investigate the implementation and initial impact of the PIN mental health indicators in 3 PIN Shared Mental Health Care settings:
  - 1 rural
  - 2 urban (1 of these sites different)
Evaluation Questions

1. What are providers’ attitudes, skills, behaviours, and satisfaction related to recognizing and treating depression?

2. Since implementing the PIN mental health indicators, what is each clinic’s process related to the management of depression with the target high risk groups?

3. What are the barriers and facilitators to the implementation of the PIN mental health indicators?

4. What is the initial impact of the PIN mental health indicators on the provider, patients, and collaborative practice?
Evaluation Methods

- Document Review
  - EMR data
  - Shared Care data

- Provider Survey
  - Questions on implementation of PIN mental health indicators, in addition to provider perception of their attitudes, skills, and behaviours related to recognizing and treating depression
  - Response rate (for both Phase 1 & 2)
    - 3/3 counsellors
    - 28/36 physicians (i.e., 78%)
      - 6/7 physicians at site 1
      - 16/16 physicians at site 2*
      - 6/13 at site 3
  
*6 physicians did not have access to Shared Care

- Interview
  - ~30 minute open-ended qualitative interview
  - 5 providers per site
# Evaluation Plan

<table>
<thead>
<tr>
<th>Phase</th>
<th>Timeline</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: Initial Snapshot</td>
<td>Spring 2011</td>
<td>1. Document review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Survey</td>
</tr>
<tr>
<td>Phase 2: Follow-up Snapshot 1</td>
<td>January – April 2012</td>
<td>1. Document review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Interview</td>
</tr>
<tr>
<td>Phase 3: Follow-up Snapshot 2</td>
<td>1 year post Follow-up Snapshot 1</td>
<td>1. Document review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Interview</td>
</tr>
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</table>
Providers’ Attitudes, Skills, Behaviours, and Satisfaction Related to Recognizing and Treating Depression
Providers’ **Attitudes** Related to Recognizing and Treating Depression

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression is overemphasized as a problem</td>
<td>4 (1)</td>
<td>21 (2)</td>
<td>2</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Depression is a frequent problem</td>
<td>2</td>
<td></td>
<td>17 (1)</td>
<td>10 (2)</td>
<td>1</td>
</tr>
<tr>
<td>Treating depression is time consuming</td>
<td>1</td>
<td>4 (2)</td>
<td>18 (1)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Patients are better off treated by mental health specialists</td>
<td>3</td>
<td>18</td>
<td>3 (3)</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

Note. Total physician sample = 32 (Total counsellor sample = 3)
### Providers’ Attitudes Related to Recognizing and Treating Depression continued…

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug treatment is very effective</td>
<td>1</td>
<td>24 (2)</td>
<td>1 (1)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Counselling/therapy is very effective</td>
<td>1</td>
<td>19 (2)</td>
<td>6 (1)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Self-help approaches for depression are very effective</td>
<td>7</td>
<td>18 (2)</td>
<td>1 (1)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>I am more comfortable treating physical disease than emotional disorders such as depression</td>
<td>2 (2)</td>
<td>15 (1)</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>The benefits of screening for depression outweigh the costs</td>
<td>1</td>
<td>2</td>
<td>21 (1)</td>
<td>1 (2)</td>
<td>7</td>
</tr>
</tbody>
</table>

**Note.** Total physician sample = 32 (Total counsellor sample = 3)
## Providers’ Skills Related to Recognizing and Treating Depression?

<table>
<thead>
<tr>
<th>Skill</th>
<th>Very Certain</th>
<th>Uncertain</th>
<th>Certain</th>
<th>Very Certain</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can recognize depression</td>
<td></td>
<td>1</td>
<td>21 (1)</td>
<td>5 (2)</td>
<td>5</td>
</tr>
<tr>
<td>Can recognize suicidal patient</td>
<td></td>
<td>2</td>
<td>23 (1)</td>
<td>1 (2)</td>
<td>6</td>
</tr>
<tr>
<td>Effectively treat with medications</td>
<td></td>
<td>23</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Effectively treat by counselling</td>
<td></td>
<td>13</td>
<td>13 (3)</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Effectively treat by encouraging self-management</td>
<td>1</td>
<td>10 (1)</td>
<td>13 (2)</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Get timely advice in a crisis/emergency related to a depressed patient</td>
<td>1</td>
<td>5</td>
<td>20 (3)</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Understand the mental health treatment system</td>
<td></td>
<td>7</td>
<td>19 (2)</td>
<td>1 (1)</td>
<td>5</td>
</tr>
<tr>
<td>Have access to timely treatment from a mental health specialist</td>
<td>2</td>
<td>8</td>
<td>15</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

Note. Total physician sample = 32 (Total counsellor sample = 3)
Providers’ **Behaviours** Related to Recognizing and Treating Depression?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Likely</th>
<th>Very Likely</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start on antidepressant medications</td>
<td>1</td>
<td>19</td>
<td>7</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Give supportive counselling yourself</td>
<td>24</td>
<td>3 (3)</td>
<td>5</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Conduct a differential diagnosis</td>
<td>22</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Write diagnosis of depression in chart</td>
<td>18</td>
<td>9</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Tell patient to contact mental health agency/insurance company for referral</td>
<td>2 (1)</td>
<td>12</td>
<td>11 (2)</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Refer directly to a mental health specialist</td>
<td>1 (1)</td>
<td>4 (2)</td>
<td>17</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Call a consulting psychiatrist, psychologist, or counsellor</td>
<td>1</td>
<td>12 (1)</td>
<td>10 (2)</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Provide educational materials</td>
<td>3</td>
<td>13</td>
<td>7 (1)</td>
<td>3 (2)</td>
<td>6</td>
</tr>
</tbody>
</table>

Note. Total physician sample = 32 (Total counsellor sample = 3)
<table>
<thead>
<tr>
<th>Provider Satisfaction Related to Recognizing and Treating Depression?</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Missing or NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with depressed patients is heavy going</td>
<td>10 (2)</td>
<td>11 (1)</td>
<td>5</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>I find great satisfaction in treating depression</td>
<td>7 (1)</td>
<td>18</td>
<td>2 (2)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>I am fairly compensated for treatment of depressed patients</td>
<td>8</td>
<td>17 (1)</td>
<td>(2)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>It is not economically viable for me to treat depression</td>
<td>(2)</td>
<td>22 (1)</td>
<td>3</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>I am too pressed for time to routinely screen for depression</td>
<td>1 (2)</td>
<td>11 (1)</td>
<td>14</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Note. Total physician sample = 32 (Total counsellor sample = 3)
## Providers’ Satisfaction Related to PIN and Shared Care?

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Missing or NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The PIN mental health indicators have helped me screen for depression</td>
<td>9</td>
<td>11</td>
<td>2</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>With or without the PHQ2, I would probably identify the same patients as depressed</td>
<td>5</td>
<td>19</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>I will continue to screen for depression beyond the trial period</td>
<td>2</td>
<td>22</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Shared Care is useful in assisting in the management and care of depressed patients</td>
<td>5</td>
<td>20</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>It would be feasible for me to continue to screen and treat depressed patients without access to Shared Care</td>
<td>2</td>
<td>9</td>
<td>12</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Training and educational materials provided by Shared Care were useful in managing depressed patients</td>
<td>1</td>
<td>10</td>
<td>8</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

Note. Total physician sample = 32 (Total counsellor sample = 3)
Differences Between Sites

- All sites tend to disagree with the statement that “Patients are better off treated by mental health specialists”; site 3 significantly more likely to disagree with this statement, as compared to Site 2 \[F(2,23) = 5.73, p = .01\]

- Site 3 significantly more likely to disagree with the statement that “I will continue to screen beyond trial”, as compared to Sites 1 and 2 \[F(2,24) = 5.94, p = .008\]

- Site 3 significantly more likely to disagree with the statement that “Benefits of screening for depression outweigh the costs”, as compared to Sites 1 and 2 \[F(2,23) = 7.60, p = .003\]

(ANOVA interpreted with an alpha of .025)
Changes from Phase 1 to Phase 2…

- No significant changes for counselors

- For physicians (N=28):
  - a trend toward seeing treating depression as less time consuming
PIN Mental Health
Indicators: Implementation
Implementation: Overall

Range of implementation

- some unaware of indicators and not implemented
- some aware of indicators and do not use
- physician dependent; not working for everyone
- of those that have implemented, many described indicators as simple, reasonable
Are Physicians Screening for Depression with the PHQ2?

- Overall, practice is mixed and varies significantly across sites
  - some occasionally use PHQ2, such as when client appears distressed
  - some use PHQ2 loosely in practice

- More report to using PHQ2, as compared to Phase 1 survey
  - 20/27 Physicians report to be screening with the PHQ2
  - Site 3 significantly less likely to screen [$F(2,24) = 16.72, p = .000$]
Those physicians using the PHQ2, tend to be using it with <50% of target group patients.
Frequency of Physician Use of PHQ2 Outside of Target Groups

- Physicians tend not to use the PHQ2 outside of the target groups
  - However, significant increase reported in such use from Phase 1 to Phase 2 \[t(23) = -2.70, p = 0.013\]
Clinics’ Process Related to the Management of Depression with the Target High Risk Groups
Depression Screening

- Appropriateness of PHQ2 as a screening tool: varied opinion

  "As a screening tool its both quick and relatively effective so I think you know it’s hard to improve on something that’s as simple as asking two questions" (Interview 2)

  "I don’t tend to use tools like checklists, I just find them very impersonal and these are people that I’ve known for years" (Interview 11)

- While counsellors screen most patients on depression symptoms, screening practice is variable and tends to be informal for physicians

  "I can usually tell if something’s not quite right, then I will ask about it." (Interview 12)

- Many use other screening methods used such as:
  - open-ended questions or conversation
  - SIGECAPS acronym
  - judgment, intuition, and knowing the patient (e.g., screen based on perceived need)
  - rely on information coming from patients
Depression Screening

- Target populations screened: some felt appropriate, some felt too broad
  - most but not all consistently screen post-partum
  - other target populations likely relevant for screening: seniors, teens, recent significant event
  - most felt screening within chronic condition population better determined by severity, duration of condition, impairment; some consistently screen
  - some felt systematic screening (using any method) unnecessary, not sufficiently worthwhile, and/or not feasible

- Process of screening: incorporated into existing appointments
  - some suggested screening in other settings beyond primary care (e.g., CancerCare)
Treatment Follow-Up: Options

- Treatment option and timelines based on patient preferences and need; physicians more directive with greater patient impairment

- Medication:
  - all confident in managing medication; some see limitations

- Counselling:
  - viewed by physicians as effective but not a viable option for all: cognitive factors, motivation
  - referral often to SC
  - physician counseling: some past training but perceived limited knowledge; provide some limited supportive present-focused counselling,
  - Counsellors: solution-focused counselling, multi-orientation, and involves patient education

- Self-management
  - Counsellors commonly promote; limited use by physicians

- Purpose of follow-up:
  - to monitor symptoms/side effects of medications, provide support, and assess improvement
When physicians provided follow-up care to depressed patients, on average:

- 31.8% cases treated with medication only
- 28.1% cases treated with counselling only
- 14.2% cases treated with self-help/self-management approach only
- 43.3% cases treated with combined approach

*Note. Percentages do not add up to 100
Treatment Collaboration

- **Collaboration with other providers**
  - SC facilitates treatment, physician practice, and reduces physician burden
  - SC serves as a bridge
  - appreciation for SC and confidence in counselor; had to do it all before SC

- **Improvement in access to mental health services with SC**
  - limited access to Mental health Services outside of Shared Care
  - preference is to refer to SC rather than Community Mental Health
  - some concern re: SC 6-session limit

  “one of the reasons why the Shared Care Counsellor is so important is because very many people don't have ‘…’ coverage ‘…’ for counselling and, and can't afford private counselling. And so therefore most people went without. So therefore it was left on our shoulders to ‘…’ provide most of the counselling, and of course we weren't trained for that…” (Interview 4)

- **Collaboration with patients**
  - treatment options discussed
  - importance of physician-patient relationship and knowing your patients
  - counsellors treatment focused on patient goals
PIN Mental Health Indicators
Implementation: Barriers & Facilitators
Barriers & Facilitators

- Physician’s comfort varies
  - e.g., apprehension, fear of identifying depression

  “When you’re talking about their diabetes and sugars and their cholesterol and blood pressure then sometimes it doesn’t flow nicely just to all of a sudden ask them if they’re depressed.” (Interview 8)

- Demands vs. time
  - e.g., workload, remuneration

  “…not because we don’t want to, just there’s a lot coming at us that we’re trying to sort through in a fifteen minute visit.” (Interview 1)

  “And that’s problematic because Manitoba Health says, well yeah okay so yeah we’ll pay you to look at his toe, but you did what, you treated him for his depression, we’re not paying for that in addition.” (Interview 10)

- Resources
  - e.g., access to Shared Care, accessibility of effective treatment options, information on PIN
Barriers & Facilitators

- Perceived Need for Screening
  - Mixed. Most convinced but not all. Some resentment of PIN

  “I’ve used it but I was um slightly resentful thinking this is you know this is like kindergarten, put on your, put on your shoes before you go outside.” (Interview 7)

  “A question to put out there, like we know that if we lower haemoglobin A1C in a diabetic we’re reducing mortality. We know that ‘…’ if we reduced our LDL we’re reducing mortality, but if we screen for depression are we changing anything in the long-run…” (Interview 11)

- Methods
  - Workflow, technology literacy, EMR reminders and method of administering screening (e.g., use of patient-administered questionnaire)
Initial Impact of the PIN Mental Health Indicators
Initial Impact of the PIN Mental Health Indicators

**Screening**
- Increase use of PHQ2 and preventive screening
- Increase detection of depression and mild mental health problems
- Cues to assess depression; makes it a habit
- Increase awareness of depression for high risk groups
- Change in attitude re: screening

“I can think of people in my mind where I was surprised they answered positively, I was, if I would answer ahead of time for each patient beforehand and, and make my own prediction, I’d say oh I think this guy’s, this guy’s okay and, and then they’re not. So, so impact is that I think I’ve picked up depression that I would not have otherwise.” (Interview 5)

**PIN follow-up indicator**
- Some feel more useful than screening indicator as assists/forces planning

“It makes me commit to a plan of action. So I’m going to have to put down something, either this person’s not really depressed or this person is depressed but I can manage it myself or I’m going to refer on.” (Interview 7)
Initial Impact of the PIN Mental Health Indicators

- **Benefits to patient-physician relationship**
  - Patients reaction: positive, surprise
  - Benefits to patient-physician relationship; showing care and concern beyond chronic disease
  - Generated discussion: screening provides a segue to discussing mental health

  “…not that we medicated her or not that she needs a counselor but, but it was appropriate just to come touch on it and I know she appreciated it cause it’s kind of like wow you never really asked me that before or for three years, so it’s kind of almost a little embarrassing on my part to go wow, I should have asked that.” (Interview 1)

- **Impact on referrals and workload**
  - No change to referrals
  - No impact on SC
  - Workload: Increase/no change

- **Too soon to tell impact**

  “Not too much, I mean I found that a lot of the times the, the people who had a lot of signs of it had already been diagnosed and um I don’t know that its caught too many new cases of depression, but that being said it’s still early so maybe they just haven’t popped up yet.” (Interview 2)
Limitations

- Self-report nature of data; physician/counsellor perspective
- EMR and program data still needs to be considered
- Findings do not speak to impact of screening in terms of objective patient outcomes
Conclusions

- Depression is viewed as an important problem that is time consuming to treat
- Many find satisfaction in treating depression (all counsellors) but many find such work heavy going
- Counsellors reported to be fairly compensated but physicians were mixed
- Most providers do not perceive a need for additional tools or training related to depression management
- Shared Care was unanimously seen as useful in assisting in the management and care of depressed patients
Conclusions continued…

- Medication, counselling, and self-help approaches are seen as effective; yet, self-management is infrequently used alone.
- Perceived as skilled in recognizing depression, suicidal patients, and for physicians, in effectively treating with medication.
- Physician perceptions are mixed about effectiveness in treating by counselling and self-management; counsellors are more certain about their skills in these areas.
- Yet, most physicians disagreed with the statement that depressed patients are better off treated by mental health specialists: Site 3 significantly more so.
Conclusions continued…

- Implementation of PIN mental health indicators is variable across sites and physicians: increase in use since Phase 1
- Most physicians feel that benefits of screening outweigh the costs: Site 3 significantly less so
- Most physicians reported that they would continue to screen beyond the trial: Site 3 significantly less so
- Some initial impacts suggested in terms of an increase in screening and detection, change in attitude toward screening, and benefits to patient-physician relationship. Too early to speak more broadly about impact.
Implications

- Convincing evidence on the benefits of screening for depression is needed; currently, insufficient evidence to support benefits to patient outcomes.
- Physicians suggested that this screening initiative detected primarily cases of mild depression. What are the costs of this initiative relative to the suggested impacts?
- Implementation of this initiative in sites without Shared Care does not seem feasible or desirable.
- Although many report that they will continue to screen for depression beyond the trial period, not necessarily according to PIN protocol.
- Addressing some of the barriers to depression screening would likely lead to increased participation in this initiative.
- What is needed to foster clinical practice that is more consistent with treatment guidelines on the effective treatment and management of depression?
- More patients may be appropriate for counseling and self-management treatment approaches than currently perceived by physicians (e.g., patients with low IQ).
- Self-management is an effective and low intensity/cost treatment approach that remains underutilized.
- Physician interviews may have served as an intervention.
Questions?

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