Motivational Interviewing Implementation Project: North Central Health Care Coaching Report, 2018-2019

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Project Background
The Motivational Interviewing Implementation Project, a project of the Wisconsin Department of Health Services Division of Care and Treatment Services, assists provider organizations with the process of implementing motivational interviewing as an evidence-based practice. Implementation means that provider staff integrate motivational interviewing into routine practice with fidelity. It is only through integration and fidelity that consumers can experience the intended benefits of motivational interviewing.\cite{1, 2} Implementation is a challenging and ambitious endeavor for organizations because it requires staff to engage new ways of working. The challenge is underscored by a recent study that estimated only 1% to 3% of publicly-funded human service programs achieve successful evidence-based practice implementation.\cite{3}

The purpose of this report is to describe the coaching component of the Motivational Interviewing Implementation Project at North Central Health Care’s Department of Community Treatment. In a collaboration between the motivational interviewing consultant at the Wisconsin Department of Health Services and the North Central Health Care Department of Community Treatment’s Motivational Interviewing Implementation Committee, the motivational interviewing coaching program was launched in September 2017. As shown in the logic model (see Table 1), time and resources were invested to develop the motivational interviewing coaching program to support staff with new ways of working (that is, integration of motivational interviewing into routine practice with fidelity). The key question is, did coaching positively influence staff’s learning outcomes? To address the question, an evaluation was conducted using data from the North Central Health Care Department of Community Treatment’s motivational interviewing data system—a system created specifically for this project. The evaluation covered a two-year period (2018-2019). This report begins with the rationale for coaching, followed by a description of the North Central Health Care Department of Community Treatment’s motivational interviewing coaching program, coaching sessions, and staff experiences with coaching. Next, staff learning outcomes are described, then results are discussed and sustainability recommendations are made.
Coaching Rationale

A large body of research in human services shows that training in evidence-based practice can promote initial gains in staff skills, but those skills rapidly deteriorate without continued learning.¹, ², ⁴, ⁵ This finding has been replicated in the motivational interviewing training research.⁶, ⁷ Because motivational interviewing represents a complex skill-set that is not easy to learn,⁸ it is unrealistic for staff to attend a training then “just do it” regarding motivational interviewing implementation.⁹ In a meta-analysis of 21 motivational interviewing learning studies, staff who received only training were not able to demonstrate skillful practice six months post-training. However, when training was followed by monthly coaching staff were able to maintain skills at six months;¹⁰ when monthly coaching periodically included direct observation of practice, performance assessment, and feedback staff demonstrated significant skill gains at six months compared to those who received only coaching.¹⁰, ¹¹ On-the-job coaching is effective because it supports staff through the initial awkwardness of new ways of working, it creates opportunities for continued skill building following training, and it helps staff to integrate newly learned skills into routine practice.¹ ²

Motivational Interviewing Coaching Program

The North Central Health Care Department of Community Treatment’s Motivational Interviewing Implementation Committee created the structure, procedures, and expectations of the coaching program using a planning template.¹² Coaches (N = 14) were self-selected within the organization based on prior positive experiences with learning motivational and represented Department of Community Treatment managers, clinical supervisors, and staff champions. Provider staff (N = 44) self-selected to participate in the implementation project and represented a cross-section of Department of Community Treatment programs. (See Appendix A for a list of project participants.)
### Table 1. A logical model for the MI coaching program.

<table>
<thead>
<tr>
<th><strong>INPUTS ➔</strong></th>
<th><strong>OUTPUTS ➔</strong></th>
<th><strong>EXPECTED OUTCOMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investments of time and resources</strong></td>
<td><strong>New ways of working</strong></td>
<td><strong>Consumer benefits</strong></td>
</tr>
<tr>
<td>• Wisconsin Department of Health Services consultation</td>
<td>• Staff acquisition of motivational interviewing skills and knowledge to reach basic fidelity</td>
<td>• Increased engagement</td>
</tr>
<tr>
<td>• North Central Health Care Motivational Interviewing Implementation Committee development of coaching service delivery plan, data system, and quality improvement process</td>
<td>• Staff integration of motivational interviewing into routine practice</td>
<td>• Increased satisfaction</td>
</tr>
<tr>
<td>• Coach training and competency development</td>
<td>• Increased staff capacity to address a range of clinical concerns</td>
<td>• Improved recovery outcomes</td>
</tr>
<tr>
<td>• Coach facilitation of monthly sessions</td>
<td>• Staff satisfaction for meaningful professional development</td>
<td></td>
</tr>
<tr>
<td>• Coach review and feedback to staff based on quarterly performance assessments</td>
<td></td>
<td><strong>Organization benefits</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Alignment with values and mission</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Service delivery efficiencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increased staff satisfaction associated with lower turnover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Competitive advantage for grant funding opportunities</td>
</tr>
</tbody>
</table>

Upon completion of an initial three-day training (September 2017, May 2018, or April 2019), staff transitioned into coaching. Coaches were assigned one to three staff for a low coach-to-staff ratio. The low ratio helped to ensure coach capacity to deliver coaching because the coaching role was an additional job responsibility. Coaches were expected to meet monthly with each assigned staff for a 30-minute individual coaching session. Including preparation, estimated coaching time was 60 minutes per staff per month. Staff were expected to come prepared for sessions and complete quarterly performance assessments. Evidence-based practice implementation research suggests that monthly coaching and quarterly performance assessment are the minimum standards necessary for an effective coaching program.²

A coaching model was created by the Wisconsin Department of Health Services motivational interviewing consultant based on best practices in coaching¹³ and motivational interviewing supervision.¹⁴ The model featured the four fundamental processes of motivational interviewing (engaging, focusing, evoking, planning) adapted for the coaching context. Emphasis was placed on coach modeling of the motivational interviewing communication style, development of the coach-staff relational foundation, and use of active learning methods. A coaching toolkit provided coaches a comprehensive set of activities to facilitate during sessions.

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The motivational interviewing coaching model emphasized coach use of motivational interviewing, development of the coach-staff relational foundation, and use of active learning methods.
As presented in the Table 1 logic model, staff’s achievement of basic motivational interviewing fidelity with integration into routine practice (output) was predicated upon competent coaching (input). Because motivational interviewing coaching was a new role, coaches participated in an ongoing learning process in order to develop coaching competencies. A one-day training launched the learning with introduction to the motivational interviewing coaching model, then a coaching-the-coaches approach was used to support ongoing learning. First, to increase fluency in the requisite skills and knowledge of motivational interviewing, coaches completed performance assessments and received detailed written feedback from the Wisconsin Department of Health Services motivational interviewing consultant. As described in an earlier North Central Health Care Department of Community Treatment motivational interviewing report, coaches were able to demonstrate basic to advanced fidelity on all motivational interviewing performance assessment measures by the end of 2018. Second, coaches had periodic one-to-one coaching sessions with the consultant to review feedback, discuss use of coaching tools, and formulate a coaching development plan. And third, coaches participated in a quarterly learning collaborative co-led by the consultant and a North Central Health Care Department of Community Treatment coach who became a member of the Motivational Interviewing Network of Trainers in October 2018. During these learning sessions, coaches engaged discussions about advanced motivational interviewing theory, observed coaching demonstrations, practiced fidelity reviews, and role played use of coaching tools in experiential activities.

Coaching Sessions
Coaching sessions were structured yet flexible to meet each individual staff’s learning needs. The toolkit provided many activities from which coaches could select, including the following: getting staff ready to learn motivational interviewing; strategizing how to integrate motivational interviewing into routine practice; providing case consultation for motivational interviewing application with individual consumers; providing fidelity review and supportive feedback; reviewing motivational interviewing documentation; facilitating motivational interviewing skill practice; developing motivational interviewing knowledge; developing and reviewing motivational interviewing learning goals; and assigning readings and written exercises from a workbook. A coaching session checklist (see Appendix B) allowed coaches to document completed activities with notes. Coaches submitted checklists to the North Central Health Care motivational interviewing data lead for entry into the data system.
The following results are based on analysis of the coaching session checklists. On average, coaches facilitated 1.6 activities during sessions. As depicted in Figure 1, a wide range of activities were facilitated. The most frequent in-session activity was giving an assignment (89% of coaching sessions) followed by providing fidelity review and feedback to staff (48%). Least frequent activities during sessions were getting staff ready for motivational interviewing (9%) and providing motivational interviewing documentation review (9%). Coaches collectively facilitated 397 sessions during the two-year period. Each coach facilitated an average of 5.9 sessions with each assigned staff (range 1-17 sessions). Rate of coaching session attendance and completion of performance assessments was tracked quarterly. Rate was calculated as a function of the number that actually occurred divided by the number expected. For example, rate of coaching session attendance was calculated by dividing the number of sessions staff attended by the number of sessions expected (monthly). As shown in Table 2, rates fluctuated across time with a general improvement trend.

Figure 1. Giving assignments and providing fidelity reviews/feedback were the most frequent activities facilitated by motivational interviewing coaches.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment given</td>
<td>89%</td>
</tr>
<tr>
<td>Fidelity review/feedback</td>
<td>48%</td>
</tr>
<tr>
<td>Development motivational interviewing skill</td>
<td>27%</td>
</tr>
<tr>
<td>Integration of motivational interviewing into practice</td>
<td>25%</td>
</tr>
<tr>
<td>Goal review</td>
<td>25%</td>
</tr>
<tr>
<td>Other activity</td>
<td>17%</td>
</tr>
<tr>
<td>Case consultation</td>
<td>13%</td>
</tr>
<tr>
<td>Developed motivational interviewing knowledge</td>
<td>13%</td>
</tr>
<tr>
<td>Getting ready for motivational interviewing</td>
<td>9%</td>
</tr>
<tr>
<td>Documentation review</td>
<td>9%</td>
</tr>
</tbody>
</table>
Examination of the coaching session rate of attendance for the two-year period revealed three unique patterns of staff attendance. *Low attendance* staff (n = 8) attended, on average, about half of expected monthly coaching sessions (M = 48.7%). *Moderate attendance* staff (n = 19) attended significantly more monthly sessions (M = 80.4%) and *high attendance* staff (n = 17) attended almost all monthly sessions (M = 97.6%). Analysis of attendance status showed no statistical between-group differences for staff who experienced an interruption in coaching (examples: due to medical leave or transfer to another coach) compared to staff who did not experience an interruption. Also, results showed no difference in attendance status for the rate of fidelity review and test completion, that is, low attendance staff completed performance assessments at about the same rate as high attendance staff.

### Staff Experience of Coaching
At the conclusion of each session, coaches encouraged staff to submit an anonymous five-item survey to evaluate the coaching session. Using a 1-4 response scale (1 = not at all, 2 = sometimes, 3 = quite a bit, or 4 = extensively), staff rated their experiences in the session. During the two-year period, 286 evaluations were completed. Analysis of scale reliability showed the 5-item survey possessed a good level of reliability (alpha = .89). The overall average score was 3.76 and results for each item is presented in Table 3. Analysis of evaluations completed in 2018 (n = 102) compared to 2019 (n = 184) showed no differences in staff ratings.

### Table 2. Average rates of key coaching program implementation measures improved from year 2018 to 2019.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching session rate of attendance</td>
<td>64%</td>
<td>53%</td>
<td>73%</td>
<td>57%</td>
<td>62%</td>
<td>91%</td>
</tr>
<tr>
<td>Fidelity review rate of completion</td>
<td>7%</td>
<td>63%</td>
<td>81%</td>
<td>58%</td>
<td>52%</td>
<td>90%</td>
</tr>
<tr>
<td>Test of knowledge rate of completion</td>
<td>47%</td>
<td>81%</td>
<td>89%</td>
<td>56%</td>
<td>68%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Staff consistently rated coaching sessions with high levels of satisfaction.
Table 3. Staff’s highly favorable evaluation of coaching sessions.

<table>
<thead>
<tr>
<th>Item</th>
<th>Average Score (1-4 scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Act as a partner in your learning of motivational interviewing.</td>
<td>3.79</td>
</tr>
<tr>
<td>2. Help you get ready to integrate motivational interviewing into everyday work.</td>
<td>3.70</td>
</tr>
<tr>
<td>3. Listen to you to understand your perspectives and experiences with motivational interviewing.</td>
<td>3.80</td>
</tr>
<tr>
<td>4. Show you that she/he believes in your ability to learn motivational interviewing to fidelity.</td>
<td>3.81</td>
</tr>
<tr>
<td>5. Help you feel confident in your ability to implement motivational interviewing.</td>
<td>3.74</td>
</tr>
</tbody>
</table>

Staff Performance Assessment

Staff performance assessment was an important aspect of the coaching program because it provided insight into the extent staff were able to use motivational interviewing as intended, that is, to fidelity standards. Because there is “no reliable and valid way to measure motivational interviewing fidelity other than through the direct coding of practice samples,”17 staff audio recorded practice samples for fidelity review. Prior to recording, staff obtained written consumer consent in accordance with North Central Health Care policy. Each practice sample (approximately 15 minutes in duration) was submitted to the assigned coach for fidelity review using the Motivational Interviewing Treatment Integrity instrument.18 The Motivational Interviewing Treatment Integrity instrument was selected because it “represents a cost-effective and focused tool for evaluating competence in the use of motivational interviewing.”19 Coaches were trained to use the Motivational Interviewing Treatment Integrity instrument to assess global aspects of motivational interviewing, including relational (partnership, empathy) and technical components (cultivating change talk, softening sustain talk) as well as use of skills. To assess skills, coaches coded each staff utterance into mutually exclusive skill categories, including questions (open vs. closed), reflective listening statements (simple vs. complex), and motivational interviewing adherent behaviors (examples: affirmation, asking permission). Any “non-adherent” behaviors were also coded (behaviors that are inconsistent with the motivational interviewing method such as warning, advising, or educating without first obtaining consumer permission). As shown in Table 4, coach fidelity reviews produced seven Motivational Interviewing Treatment Integrity instrument measures. In addition to the fidelity review, a written test (fill-in-the-blank, short answer format) was administered to assess staff motivational interviewing knowledge. Coaches collectively conducted 154...
fidelity reviews of staff practice samples and administered 157 tests. Coaches documented performance assessment results for individualized staff feedback. Then, coaches submitted results to the North Central Health Care Department of Community Treatment data lead for entry into the data system.

Analysis of staff performance assessment results was conducted by the Wisconsin Department of Health Services motivational interviewing consultant. Spreadsheets from the North Central Health Care Department of Community Treatment data system were imported into statistical software for inferential statistical testing (example: analysis of variance) and descriptive statistics (example: mean [M]). A statistically significant difference between groups was determined when the probability (p) of a difference due to chance was less than 5 out of 100 (that is, p ≤ .05). Because the 44 staff entered the project in three cohorts, performance assessment results were aggregated by the order in which each was completed. For example, Time 1 results represented completion of the first performance assessment, regardless of when that occurred. Because staff were expected to complete performance assessments quarterly, each assessment time was separated by at least three months. In order to simplify some analyses, the Motivational Interviewing Treatment Integrity instrument measures were combined into a single summary score. This score captured—for each staff’s assessment results—any Motivational Interviewing Treatment Integrity instrument measure assessed at or above basic fidelity standards. In other words, the Motivational Interviewing Treatment Integrity instrument summary score reflected a scale of 0 (no measures at basic fidelity) to 7 (all measures at or above basic fidelity).

**Staff Learning Outcomes**

Regular coaching was expected to increase staff motivational interviewing skills and knowledge across time. Learning outcomes are presented in Table 4 showing staff’s average results for Motivational Interviewing Treatment Integrity instrument measures, the Motivational Interviewing Treatment Integrity instrument summary scores, and test of knowledge scores. Results are presented by assessment time during the two year period with comparison to established fidelity standards.\textsuperscript{18, 20} Time 1 results provided a baseline measure of staff motivational interviewing skills and knowledge. These performance assessments were collected on the last day of the three-day initial training. (Staff completed an audio recorded practice sample with a training partner.)
Table 4. Staff performance assessment average results across time.

<table>
<thead>
<tr>
<th>MITI Measure</th>
<th>Fidelity Standards</th>
<th>Time 1 (n = 44)</th>
<th>Time 2 (n = 36)</th>
<th>Time 3 (n = 31)</th>
<th>Time 4 (n = 19)</th>
<th>Time 5 (n = 16)</th>
<th>Time 6 (n = 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational foundation rating (1-5)</td>
<td>Basic</td>
<td>3.5</td>
<td>3.2</td>
<td>3.6</td>
<td>3.3</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>4.0</td>
<td>3.5</td>
<td>3.6</td>
<td>3.3</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Technical component rating (1-5)</td>
<td>Basic</td>
<td>3.0</td>
<td>2.9</td>
<td>3.0</td>
<td>2.8</td>
<td>3.1</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>3.5</td>
<td>3.5</td>
<td>3.6</td>
<td>3.3</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Percentage of open questions</td>
<td>Basic</td>
<td>50%</td>
<td>71%</td>
<td>62%</td>
<td>65%</td>
<td>66%</td>
<td>69%</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>70%</td>
<td>61%</td>
<td>65%</td>
<td>66%</td>
<td>69%</td>
<td>79%</td>
</tr>
<tr>
<td>Percentage of complex reflections</td>
<td>Basic</td>
<td>40%</td>
<td>37%</td>
<td>40%</td>
<td>39%</td>
<td>43%</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>50%</td>
<td>43%</td>
<td>40%</td>
<td>37%</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>Ratio of reflections to questions</td>
<td>Basic</td>
<td>1.0</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>2.0</td>
<td>0.3</td>
<td>0.4</td>
<td>0.7</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Number of motivational interviewing adherent behaviors</td>
<td>Basic</td>
<td>1.1</td>
<td>1.5</td>
<td>2.0</td>
<td>1.3</td>
<td>1.7</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>2.0</td>
<td>0.3</td>
<td>0.4</td>
<td>0.7</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Number of non-adherent behaviors</td>
<td>Basic</td>
<td>0</td>
<td>0.7</td>
<td>0.4</td>
<td>0.3</td>
<td>0.6</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>0</td>
<td>0.7</td>
<td>0.4</td>
<td>0.3</td>
<td>0.6</td>
<td>0.2</td>
</tr>
<tr>
<td>Motivational Interviewing Treatment Integrity summary score (0-7)</td>
<td>Basic</td>
<td>7.0</td>
<td>4.6</td>
<td>3.9</td>
<td>4.4</td>
<td>4.2</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Test of knowledge score (0%-100%)</td>
<td>Basic</td>
<td>75%</td>
<td>80%</td>
<td>85%</td>
<td>86%</td>
<td>92%</td>
<td>92%</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>90%</td>
<td>80%</td>
<td>85%</td>
<td>86%</td>
<td>92%</td>
<td>92%</td>
</tr>
</tbody>
</table>

Note: Motivational Interviewing Treatment Integrity (MITI) instrument version 4.2.1 was used. Bolded scores denote basic fidelity standard met.

At Time 1, staff demonstrated 4.6 of 7 (65%) Motivational Interviewing Treatment Integrity instrument measures at or above basic fidelity. In particular, staff demonstrated the motivational interviewing relational foundation (partnership and empathy global measures), complex reflective listening skill, and motivational interviewing adherent behaviors at the basic fidelity level; open questions were demonstrated at the advanced fidelity level. These motivational interviewing relational elements of practice are consistent with a person-centered service delivery approach. However, pair-wise comparisons between Time 1 and all other assessment times (e.g., Time 1 vs. Time 4) on Motivational Interviewing Treatment Integrity instrument measures showed few statistical differences. The non-significant findings suggests that, on average, staff were able to maintain skills acquired during initial training. A different pattern was observed regarding motivational interviewing knowledge test scores. At Time 1, staff scored 57% on the test (administered during initial training based on the contents of a pre-training reading assignment). The test was re-administered at each subsequent assessment time and staff demonstrated significant improvement (p < .001) in test scores from Time 1 to Time 2 (M = 80%) and from Time 2 to Time 3 (M = 85%), then maintained knowledge from Time 4 (M = 86%) to Time 5 (M = 92%) and Time 6 (M = 92%).

Examining overall staff averages can miss important nuances and patterns of learning outcome. The following analyses examined those staff (N = 36) who completed at least one fidelity review beyond Time 1. For the Motivational Interviewing Treatment Integrity instrument summary score (0-7 scale) aggregated across all assessment times, analysis
showed a robust statistically significant difference (p < .001) between three learner groups, such that *strugglers* on average (M = 2.6; n = 4) showed the lowest level of fidelity, *improvers* (M = 4.4; n = 27) showed significantly higher fidelity, and *easy learners* (M = 6.0; n = 5) showed the highest level of fidelity. As seen in Figure 2, staff within each learning group had a unique path of learning outcome. Interestingly, at Time 1 there was a non-significant difference (p = .17) between learning groups such that strugglers, on average (M = 3.5), showed a Motivational Interviewing Treatment Integrity instrument summary score comparable to improvers (M = 4.7) and easy learners (M = 5.4). Specific learning outcomes for each group are described below.

**Figure 2.** Staff learning groups showed different learning paths across time.

![Graph showing learning paths across time]

Strugglers showed a comparable average Motivational Interviewing Treatment Integrity instrument summary score to improvers and easy learners at Time 1, however, average Motivational Interviewing Treatment Integrity instrument scores declined thereafter to Time 4. On several Motivational Interviewing Treatment Integrity instrument measures, strugglers consistently showed lower results compared to improvers, such as the motivational interviewing relational foundation (M = 2.6 vs. 3.3, p < .02), percentage of complex reflection (M = 18% vs. 42%, p < .02), ratio of reflections to questions (M = 0.4 vs. 0.8, p = .056), and number of non-adherent behaviors (M = 1.2 vs. 0.5, p = .03). As presented in Table 5, non-adherent behaviors seemed to be a consistent marker of practice samples submitted by the strugglers. This group also showed lower average test scores compared to improvers at Time 1 (M = 42% vs. 54%) and Time 2 (M = 65% vs. 82%), however, strugglers improved their knowledge to have comparable test scores to improvers at Time 3 (M = 83% vs. 86%) and Time 4 (M = 89% vs. 84%). By Time 5,
strugglers caught up to improvers and easy learners in average Motivational Interviewing Treatment Integrity instrument summary scores. This point in time reflected over one year involvement in the implementation project.

**Table 5.** Strugglers consistently showed non-adherent behaviors across time compared to improvers.

![Table 5 Diagram](image.png)

Improvers comprised 75% of staff in the sample and demonstrated steady improvement in motivational interviewing skills across time. Although improvers showed significantly lower Motivational Interviewing Treatment Integrity instrument summary scores compared to easy learners at Time 2 (M = 3.8 vs. 5.8, p < .02) and Time 3 (M = 4.5 vs. 6.4, p < .001), improvers caught up by Time 5. A significant effect was found (Chi Square, p = .051) between learner group (strugglers, improvers, easy learners) and coaching attendance rate (low, moderate, high), such that improvers were disproportionally represented in moderate and high coaching attendance. Further analysis showed that improvers with low coaching attendance had significantly lower (p < .04) average Motivational Interviewing Treatment Integrity instrument summary scores (M = 3.9) compared to improvers with a moderate level of coaching attendance (M = 4.9). (There was no difference in Motivational Interviewing Treatment Integrity instrument scores between improvers who had moderate or high attendance.) Moreover, improvers showed a significant increase (p = .05) in the Motivational Interviewing Treatment Integrity instrument summary score from Time 2 (M = 3.8) to Time 3 (M = 4.5) with skill maintenance at Time 4 (M = 4.5) and Time 5 (M = 4.6).

Easy learners began the learning process with no apparent advantage compared to strugglers or improvers. Indeed, Time 1 showed no statistically significant difference in
Motivational Interviewing Treatment Integrity instrument scores between any learning group. However, starting at Time 2, easy learners showed consistently higher fidelity scores compared to improvers and this pattern continued to Time 4. At Time 5 easy learners averaged 6.5 of 7 (93%) Motivational Interviewing Treatment Integrity instrument measures at or above basic fidelity and maintained this level of skill to Time 6. Unlike the strugglers and improvers (as shown in Table 5), there was a complete absence of non-adherent behaviors by easy learners at all assessment points. Avoiding behaviors that were inconsistent with the motivational interviewing method (such as warning, advising, or educating) may have helped to accelerate learning for staff among this group.

A final set of analyses examined how in-session coaching activities may have impacted staff learning outcome. As shown in Figure 1, coaches delivered a range of coaching activities during the two year evaluation period. Because the goal of implementation was for staff to integrate motivational interviewing into routine practice with fidelity, the frequency of the two most relevant coaching activities (integration and developing motivational interviewing skills) were examined for use within the first six coaching sessions. A combined integration-skill activities variable was created. Coach frequency of using integration-skill activities during these sessions ranged from 11% to 58% (M = 26.4%), and coaches were identified who used these activities infrequently (M = 13.8%, n = 4) and frequently (M = 51.3%, n = 3). For the Time 2 assessment (corresponding to about the third or fourth coaching session), staff of coaches who infrequently used integration-skill activities showed a significantly lower (p = .03) Motivational Interviewing Treatment Integrity instrument summary score (M = 3.4) compared to staff whose coaches frequently used these activities (M = 5.1). Although staff Motivational Interviewing Treatment Integrity instrument scores remained consistently higher at subsequent assessment times for coaches who frequently used integration-skill activities, differences were not at a level of statistical significance. Results here should be interpreted with caution due to the low sample size of coaches and the possibility that unaccounted for variables produced the differential learning outcome.

Discussion and Recommendations
The Motivational Interviewing Implementation Project represents an innovative and ambitious effort to support staff in the process of integrating motivational interviewing into routine practice with fidelity. Central to that support was the motivational interviewing coaching program. Due to the outstanding work of 14 coaches, 44 staff, and the members of the North Central Health Care Department of Community Treatment Motivational Interviewing Implementation Committee, two years of carefully compiled
data provided a unique glimpse into the challenges and successes of learning motivational interviewing. The following were key findings in this evaluation.

- **Learning motivational interviewing to fidelity is not easy.** Of the 154 practice samples submitted by staff, only 16 (10.3% of total) were assessed at 7 of 7 Motivational Interviewing Treatment Integrity instrument measures for basic fidelity. Some staff struggled to demonstrate even two or three Motivational Interviewing Treatment Integrity instrument measures at basic fidelity in a given assessment time. Yet fidelity is critical because in order for consumers to experience the anticipated benefits of motivational interviewing, it must be delivered as intended.

- **Learning takes time.** While project outcomes showed general improvement trends for implementation measures (examples: rate of coaching session attendance, rate of performance assessment completion) and fidelity measures (that is, staff skill and knowledge gains), these results occurred gradually and unevenly across the two-year period.

- **Coaching is effective.** Coaching is a well-established evidence-based approach in the human services field for helping staff learn new ways of working\(^1,2\) and this evaluation documented "practice-based evidence" for North Central Health Care Department of Community Treatment motivational interviewing coaching effectiveness. Key learning outcomes were measured in terms of staff skills (Motivational Interviewing Treatment Integrity instrument scores) and knowledge of motivational interviewing (test scores). From baseline assessment (training) to subsequent assessment times, staff average Motivational Interviewing Treatment Integrity instrument scores showed no deterioration. This finding is consistent with the motivational interviewing learning research that shows monthly coaching helps staff maintain the skills acquired during initial training.\(^10,11\) Although coaching seemed to differentially benefit some staff (the improvers) in terms of learning outcomes, overall, staff showed good engagement in coaching attendance and rated sessions with consistently high levels of satisfaction. Staff clearly perceived their coach to be a helpful, supportive partner in the learning process and this is an important aspect of effective coaching.

- **An effective coaching program can be created using existing resources.** It is remarkable that no dedicated funding was allocated to this project. Although the Wisconsin Department of Health Services motivational interviewing consultant provided limited in-kind services, the biggest resources were North Central Health Care’s Department of Community Treatment’s allocation of time and attention to develop internal coaches and the coaching program. Moreover, the Motivational Interviewing Implementation Committee was instrumental in monitoring, assessing, and improving the coaching program during the two-year period. An alternative to allocating the necessary time and resources for an in-house coaching program would
be to hire external experts to provide the coaching sessions, performance assessments, and feedback to staff. But this approach is cost-prohibitive for most human services organizations. For this reason, motivational interviewing researchers Dunn and Darnell urge that, “The same creative innovation that motivational interviewing trainers and researchers have devoted to workshops is needed to determine how to implement and sustain the actual delivery of ongoing coaching and feedback in the real world.”21

The North Central Health Care Department of Community Treatment developed an effective motivational interviewing coaching program. Maximizing the efficient use of existing resources will be important to sustain it. Based on the results of this evaluation, the following recommendations are suggested:

- **Measure, assess, and guide staff integration of motivational interviewing into routine practice.** The focus of performance assessments were on staff fidelity of motivational interviewing (skills, knowledge). While fidelity is necessary for implementation, it is not sufficient unless staff actually integrates motivational interviewing into routine work. Measurement of motivational interviewing integration should be developed and administered on a quarterly basis as part of the current fidelity review process (assessment, feedback, and goal-setting). Anecdotally, the staff who showed the biggest learning gains regularly attempted motivational interviewing integration into routine work. Increased coach support for staff to experiment with integration and to engage learning-by-doing may accelerate achievement of fidelity.

- **Coaching competencies probably matter.** Although coaching competencies were not directly measured in this evaluation, an analysis of in-session activities suggested that frequently delivered integration-skill activities by coaches during the first few sessions following training may have enhanced positive staff learning outcomes. This makes sense given that staff efforts to skillfully integrate motivational interviewing into practice (learning-by-doing) is a powerful way to advance learning. It may be useful to directly assess coaching competencies and design coaching-the-coaches to focus on specific competency development such as cultivating coach fluency in facilitating integration-skill activities.

- **Structure coaching to match staff learning need.** Although the initial motivational interviewing training resulted in staff skill equivalence at baseline (Time 1 assessment), three distinct groups of learners emerged within the first few months of coaching: easy learners, improvers, and strugglers. The Motivational Interviewing Implementation Committee should consider restructuring coaching to match the unique learning needs of individual staff. For example, instead of a universal expectation of monthly coaching session attendance, staff identified as improvers
may benefit from bi-weekly sessions for the first few months following initial training in order to gain a foothold in the learning process. Additionally, strugglers may require bi-weekly sessions plus regular assignments from the workbook to support learning.\textsuperscript{15}

- **Target non-adherent behaviors.** The presence of non-adherent behaviors in practice samples was a sign that staff were struggling to learn motivational interviewing. Initial coaching sessions should focus on helping staff to eliminate these types of behaviors with consumers. As noted by Miller and colleagues,\textsuperscript{11} it may be easier for staff to learn motivational interviewing by first letting go of behaviors that are inconsistent with the method.

- **Hiring staff matters.** Hiring staff with aptitudes for person-centered work and existing reflective listening skills would likely accelerate the motivational interviewing learning process because these new staff would be onboarding with a strong foundation. To accomplish this, North Central Health Care Department of Community Treatment should consider incorporating a pre-employment empathy screen into the interview protocol.\textsuperscript{22} This screen has been shown to effectively differentiate applicant listening skill level with prediction of future success using motivational interviewing and “may prove to be a cost-effective criterion when hiring providers in agencies where motivational interviewing is offered.”\textsuperscript{23}

- **Continue implementation process improvement.** Analysis of coaching attendance suggested staff experienced the best learning outcomes when at least 80% of monthly sessions were attended. While the average attendance rate in 2019 was comparable (\(M = 79\%\)), the Motivational Interviewing Implementation Committee should continue to focus process improvement efforts in this area to ensure staff experience the learning benefits that can accrue from coaching.

- **Design a more comprehensive future evaluation.** The Table 1 logic model identified coaching inputs, outputs, and expected outcomes. The relationship between these variables offer a guide for designing a future coaching program evaluation. For example, a future evaluation could better link coaching competencies and in-session activities with staff motivational interviewing performance assessment results. Moreover, consumer and organizational outcomes could be directly linked to staff achievement of fidelity and to the quality of implementation.
References


APPENDIX A

Participants of the North Central Health Care – Department of Community Treatment
Motivational Interviewing Implementation Project, 2018-2019

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APPENDIX B

Motivational Interviewing Coaching Session Checklist

Staff:     Coach:      Date:

At the end of each session, check all that occurred. Take notes and document activities.

Engaging
□ General check in: How has it been going with motivational interviewing?
□ Careful listening; more reflections than questions.
□ Look for strengths and affirm.

Focusing – use Agenda Map to collaboratively set the agenda.

Evoking – use selected tools to explore and develop staff’s motivations, experiences, and learning of motivational interviewing.

□ Getting Ready for Motivational Interviewing

□ Integrating Motivational Interviewing into Everyday Practice

□ Case Consultation
  ○ Case Consultation Questions
  ○ Motivational Interviewing Session Checklist

□ Fidelity Review and Feedback
  ○ Motivational Interviewing Performance Assessment Results
  ○ Skill Count Sheet + Global Ratings
  ○ Test of Knowledge score

□ Documenting Motivational Interviewing

□ Skill Practice

□ Developing Knowledge

□ Other Area of Focus

Planning – collaboratively develop the Motivational Interviewing Implementation Plan.
□ Developed/revised SMART goals
□ Agreed upon next step or assignment
□ Administered coaching session evaluation