



## Norval Morris Project Action Plan "Promoting a Healing Environment in Corrections"

# Research In Brief

## The New Discipline of Implementation

### **SUMMARY/ CONCLUSIONS**

There is a new sheriff in town, her name is implementation science and she's coming to straighten out some of our projects. Producing good reentry or other corrections outcomes is a function of two things: 1) an effective model, strategy or EBP; and, 2) effective implementation of a proven model. A good model with poor implementation won't produce worthwhile outcomes, nor will a poor model that is well implemented. It takes both. Currently researchers, corrections administrators and the human service field in general know far more about evidence-based programs and practices than they do evidence-based implementation. However this is changing thanks to the growing implementation research, in particular the meta-analyses, and, the work<sup>1</sup> of Dean Fixsen and the National Implementation Research Network (NIRN).

After synthesizing thousands of studies with findings on implementation strategies and quality, Fixsen and his colleagues at NIRN have dedicated themselves to organizing a new discipline around the common elements found in successful implementation of evidence-based programs and practices. This emerging science provides a standardized but powerful map for guiding the implementation of new innovations to good

effect. At its core, the map or new discipline of implementation is made up of two interlocking conceptual frameworks: a sequential set of stages with clear markers for critical events in each stage, and, an integrated set of universal implementation drivers that operate in a compensatory fashion to ensure practitioner competency with the new innovation.

### **STRATEGY DESCRIPTION**

The six stages that NIRN has found common to all implementation are not strict linear milestones – organizations can and do regress and some later on resume. Similar to stages of (motivation) readiness, each implementation stage has its own set of performance requirements or tasks and failure to accomplish these tasks increases the probability for a lapsed implementation [see table on last page for the six stages].

### **COMPETENCY/ IMPLEMENTATION DRIVERS**

There are seven core implementation (drivers) components that support and shape high-fidelity practitioner behavior. These drivers are integrated and they naturally serve to compensate one another; if there is a deficiency in any one during the implementation, other drivers

are sure to be able to balance it out. The challenge for leaders and change agents is to recognize and become aware of the options – in real time – that these components provide.

#### **1) Selection:**

*Recruiting, hiring and/or selecting purveyors, trainers, project coordinators and project line staff.* Since some staff attributes or competencies are difficult to train (e.g., emotional intelligence, good judgment, heedfulness) it is all the more important to select the right staff for a given innovation and project. Recruitment and screening methods for selection and hiring vary. However, the research<sup>2,3</sup> suggests that the use of behavioral vignettes and role plays in interviews is the best discriminator for selecting the right staff.

#### **2) Staff Training:**

*Providing preservice and inservice training to all relevant levels of staff.* On the one hand training is an efficient means for introducing the innovation and project to staff. On the other hand, when the training content is quite new to staff or involves complex new skills, training alone is not likely to be sufficient for producing desired

competency levels in staff<sup>4</sup>; a program of coaching should be considered.

### **3) Coaching & Consultation:**

*Individual coaching and consultation with staff to provide them personalized support, modeling and practice for refining their new innovation skills in their actual supervision settings.* In addition, coaches often provide line staff feedback regarding how to adopt a more complete version of the innovation into their unique office setting, with higher fidelity. The four functions of a coach are: 1) supervision; teaching in real time – real work settings; assessment and feedback and emotional support<sup>5</sup>; they create a temporary ‘holding environment’ that is safe enough to optimize practice and reflection. There is some evidence<sup>4,6</sup> that, with training and support, peer coaching can be as effective as coaching provided by either supervisor or outside, independent coaches.

### **4) Staff Evaluation:**

*Conduct performance assessments of staff skills related to the core competencies of the innovation.* The content and method of these assessments is dictated by what are the innovation’s core competencies. For example, if the innovation is an interview-driven assessment tool, measures of inter-rater or inter-coder reliability would be very appropriate. However, if the innovation were multi-systemic treatment (MST) then a different assessment approach that focuses on the nine key principles of MST, called the Therapist Adherence Measures (TAM) would probably be

more appropriate. These performance assessments should be simple and practical enough for people in the organization to employ routinely, and, at the same time they should be sufficiently rigorous and relevant to the essential ingredients in the innovation. These assessments provide the first line of evidence regarding fidelity and ultimately can serve the practitioner (direct feedback), management and purveyors (for guiding the implementation) and researchers (evaluation).

### **5) Program Evaluation:**

*Institute Quality Improvement and other organizational fidelity measures that can be aggregated on a regular basis to inform staff, stakeholders and guide facilitative administration leadership.* Sound fidelity measures, whether at the staff<sup>7,8,9,10,11</sup> or organizational level<sup>12,13,14</sup> are frequently found positively correlated with desirable outcomes. Establishing the strength of these relationships at the organizational level is helpful not only for prioritizing steps for facilitative administration but for subsequent system interventions. In many cases program sustainability may depend on evaluation findings that address either the fidelity or the outcomes of the program intervention or the project implementation.

### **6) Facilitative Administration:**

*Administration actively supports and advocates for the project by removing barriers as they are identified, building stronger constituencies*

*and aligning resources.* Implementation drivers “do not exist in a vacuum”<sup>15</sup>. They operate precariously in contexts “of capricious but influential changes in governments, leadership, funding priorities, economic boom-bust cycles, shifting social priorities”<sup>15</sup> not to mention challenging inter- and intra-agency politics. While staff skill acquisition is undoubtedly important, research<sup>16</sup> suggests this is only a small part of the overall, multilevel alignment that is necessary to effectively implement a new evidence-based practice. Facilitative administration is essential for addressing the myriad factors, often considerably more behind the scenes than skill development.

### **7) Systems Intervention:**

*Organizational leaders responsively authorize necessary policy, resource and staffing changes to support the implementation drivers to operate effectively*<sup>17</sup>. In order to finesse multi-level alignment in behalf of an implementation, transformative, or at least proactive, leadership is necessary from persons within the organization with authority. It is important that at least some leaders understand the science and technical issues related to the innovation in order for them to provide timely and responsive support. Project managers, purveyors and champions of the innovation that lack sufficient authority to make these accommodating policy shifts must curry project interest and commitment from organizational leaders and key stakeholders that possess the authority and venues needed to further

align the implementation.

Implementation stages and drivers are continuously interacting and shifting in salience and priority according to the communication, feedback and influences within the organization(s) in which the implementation is taking place. This can feel like a very formative or free-wheeling process that is at times so dynamic it is almost overwhelming. However, knowledge and familiarity with the stage and driver implementation frameworks empowers and enables purveyors, project managers and coordinators to steer more proactively, regardless of the unpredictable nature of implementation.

## **PRINCIPLES OF IMPLEMENTATION SCIENCE**

There are a number of principles associated with the new discipline of implementation:

First, systems rule. Once an organization commits to installing a new innovation at a level that goes beyond drive-by or 'paper implementation' status, the project will be involved in a highly transactional process with the rest of the organization that will ultimately depend on how well organizational drivers (program evaluation, facilitative administrative supports, systems interventions) are engaged. Systems trump programs.

Second, tactics, mechanisms and objectives that produce multiplier effects need to be prioritized and perhaps disproportionately reinforced. For example, installing staff performance assessments or fidelity measures has a built-in multiplier effect – this kind of data informs the practitioner, their coach, management and the evaluator. Another example of multiplier effects takes place when an agent is trained/coached to genuine

and robust competency in an innovation – he or she become natural models and catalysts for greater viral transfusion of the innovation.

Third, implementation takes place in a multi-leveled organization, with a myriad of contexts and stakeholders, both internal and external to the agency. Inclusion and attention to the multi-hued communities the innovation will impinge upon is paramount.

Finally, implementation is a highly iterative process. Every organization has its own immune system – immunity to change<sup>18</sup> – with plenty of 'antibodies' that will resist a foreign innovation object. Therefore repeated work redesigning the implementation plan (at the tactical level), will probably be necessary, in order to embed the innovation in a sustainable manner.

## **HOW THE DISCIPLINE WORKS**

According to Fixsen's review of the implementation research<sup>1</sup> there are three levels of implementation: **paper, process and performance.**

The paper level is by far the more common<sup>19</sup> and takes place when there is a directive for some training or a written policy or procedure - but not much else occurs. This level of implementation predominates when there are outside groups monitoring for compliance, no one in leadership or management is versed in the science behind the innovation, or, there is an established track record for unsuccessful implementation.

The next level, process implementation, only occurs when an implementation produces a tangible legacy of process measures related to fidelity (e.g., inter-rater reliability of assessments, measures of working alliance between staff

and consumer/clients, dosage levels for cognitive-behavioral treatment, etc.). However, at the process level there is little assurance that much of a functional relationship exists between the new practice and how the organization generally goes about its business.

It is only at the performance level of implementation that a real and functional relationship is established between the innovation and the organization's routine business and outcomes. Thus, performance or outcome level implementation is the standard for corrections organizations that want to obtain and contribute true value through their adopted practices.

When considering adopting a new innovation, management teams that are guided by the new science of implementation would recognize the need to empanel an '**exploration group or committee**' from a cross-section of their staff and stakeholders. They would provide a mandate for this group to conduct the necessary inquiries and discussions around the agency and consumer/client needs, and how the new innovation, given its core components, would specifically meet these needs. Also included in their investigation would be an examination of the strengths, weaknesses, threats and opportunities (SWOT) of the innovation as compared to other alternatives. This would be a very disciplined process, guided by worksheets and prescribed due-diligence activities designed to deliberately explore and determine the fitness of possible innovation, its core components and its fit, within the existing organization. The state and availability of the necessary implementation drivers to implement the innovation would form a key thread in this investigation. Once the group completes this task they

would report back to senior management and engage a collaborative consensus-making process that would result in an informed senior management decision whether to implement the innovation.

In a similar fashion, explicit considerations for the stages and drivers of implementation would follow and blossom as the management team designated the scope of implementation, selected a purveyor for guiding the implementation, and designated the necessary staff to begin the implementation. At every subsequent implementation stage, management would use the lens of implementation drivers to view all the moving parts, apprise themselves, and reinforce the desired progress. This model assumes the management team has acquired a sufficient expertise in the new science of implementation and if this isn't the case there is an alternate possibility.

The senior management could proactively empanel a team representing interdisciplinary interests within their organization to become implementation experts. Sometime referred to as a **'transformation team'**<sup>20,21</sup> this group would be mandated to engage and master the organizing, coordination and timing skills of implementation science. They would also be responsible for obtaining comfortable familiarity with innovations on the horizon and in the line of sight for agency adoption. The transformation team would ultimately be tasked with guiding multiple implementations for the organization and serve as an ongoing reservoir of implementation knowledge and practice expertise.

## **CONSIDERATIONS**

Implementation is a transactional process: bringing an organization to scale with a given intervention,

minimally, implies a multilevel undertaking. The more complex the setting, the more the old-train-and-pray approach is ill-suited for achieving performance level implementation. Different areas (regions, divisions, units) can and most likely will present somewhat different barriers to the implementation. Outputs from one part of the system may be inputs to another part. Such complex relations continually require fluid, transactional responses that serve to consistently knit the implementation pieces together. Understanding the dynamic nature of stages and drivers enables better system responses and communication.

Implementation is always about two parallel processes: in any implementation there is the process and procedures specified within the innovation being implemented, and, the process and use (or lack of use) of the core implementation (drivers) components. Each has their own performance and outcome measures and it is important to keep track and be mindful of this as the implementation unfolds.

The National Implementation Research Network (NIRN) is a source for comprehensive implementation literature and planning resources: NIRN, managed through the University of North Carolina, provides readily accessible and comprehensive implementation literature resources. These resources are organized and available at different sound bite levels for different audiences.

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Stage:	Tasks:
Exploration	<ul style="list-style-type: none"> <li>- Identify the need(s) for the intervention/ innovation</li> <li>- Acquire information via interactions with one another and form some consensus on the intervention</li> <li>- Assess the fit between the intervention program and the community needs</li> <li>- Prepare the org.'s staff and resources by mobilizing information &amp; support</li> </ul>
Installation	<ul style="list-style-type: none"> <li>- Starts when organization decides upon an innovation</li> <li>- Active work to get things set up (e.g., recruitment, contracting with purveyor, etc.)</li> <li>- Designing a decision support data system to provide feedback on both implementation process and processes for achieving competency with innovation</li> <li>- The first practitioner has not begun working with the first consumer/client</li> </ul>
Initial Implementation	<ul style="list-style-type: none"> <li>- Starts when the first newly trained practitioner attempts to use new innovation with a real consumer/client</li> <li>- Coaching and consultations routinely take place</li> <li>- Performance assessments are used to provide feedback and to support practitioners in their approach to fidelity</li> <li>- Use of facilitative administrative supports &amp; systems interventions are quite likely</li> </ul>
Full Implementation	<ul style="list-style-type: none"> <li>- Begins when 50% of the staff that the innovation was intended for are at proficiency according to fidelity measures</li> <li>- Use of facilitative administrative supports &amp; systems interventions continue</li> <li>- Evaluating the implementation thus far to establish fidelity before next stage</li> <li>- For those exceptional program implementation projects that achieve full implementation it generally takes between 2 to 4 years</li> </ul>
Innovation	<ul style="list-style-type: none"> <li>- Refine the treatment practices and programs</li> <li>- Assess the fidelity of the core program/ practice components</li> <li>- Reviewing deviations from fidelity to discriminate what is program 'drift' and what are promising innovations</li> <li>- Review findings with author(s) of innovation when possible</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>- Enact strategies for stable and adequate funding</li> <li>- Maintain stakeholder support</li> </ul>

**For more information on NIRN visit <http://www.fpg.unc.edu/~nirn/resources/publications/Monograph/>**

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