Building Evidence for the Effectiveness of Workforce Interventions:
The Quality Improvement Center for Workforce Development Approach
Learning Objectives

• Participants will gain awareness of:
  • the need for effective, research supported strategies to improve recruitment and retention of the Child Welfare workforce
  • the approach used by the Quality Improvement Center for Workforce Development (QIC-WD) to identify workforce needs and suitable interventions to test
  • the need for manualized interventions and rigorous evaluation designs and how these designs minimize alternative explanations for outcomes
  • the value of assessing readiness for workforce change and evaluation
QIC-WD Purpose and Approach

Michelle Graef
Develop and test promising workforce interventions and apply best practices

Synthesize workforce research and create an online catalog

Identify and publish workforce trends

Prepare sites for continued workforce development

Improve outcomes for the children families through workforce
QIC-WD Process

- Exploration
- Full Implementation
- Initial Implementation
- Installation
Goals of Exploration Phase

• Identify and plan for implementation of a workforce strategy to find and/or keep competent and committed employees

• Understand agency capacity for:
  • Successful implementation
  • Engaging in rigorous evaluation
QIC-WD Process

1. Identify the problem we want to solve and what outcome(s) we want to target
2. Identify the population we intend to target
3. Conduct root cause analysis to identify potential causes
4. Identify barriers or facilitators to addressing the problem
5. Develop a theory of change
6. Assess and select a workforce strategy or intervention
7. Assess implementation supports
8. Develop an implementation plan
Data Mining in Exploration Phase

• Areas covered
  • Agency perception of issues affecting retention
  • Definitions/rates of turnover
  • Perceptions of culture and climate
  • Staff readiness for change
  • Attitudes toward evaluation
  • Effectiveness of agency structures and processes for:
    • Performance evaluation
    • Caseload/workload management
    • Supervision
    • Recruitment
    • Hiring
    • Training
QIC-WD Process

9. Develop or adapt intervention
10. Develop or adapt supports
11. Initial implementation and testing
12. Monitor and assess intervention
13. Plan for sustaining intervention
Video: Voices From the Field
Lessons Learned So Far...

Where’s Waldo, from HR?

Lots of Strategies, but...

Data all over the place!

...little evaluation
The Need for Manualized Interventions and Rigorous Evaluation Designs

Anita Barbee
Realistic Job Preview (RJP) Example

• Potential study: what is impact of RJP on self selection into/out of applicant pool and subsequent staff retention?

• Steps to operationalize and manualize the intervention:
  • Establish Theoretical Foundation: Review the research literature on the theory and research behind the RJP concept.
  • Establish Empirical Foundation and Identification of Key Components: Review the research literature on what key components need to be a part of an effective RJP. Hopefully some of this research is based on efficacy trials that show the impact from other fields.
  • Create Initial Intervention:
    • Create an RJP script that includes all of the key components. Note where in the script each key component falls.
    • Create an RJP video that follows the script and includes all of the key components.
RJP Study Example (continued)

- **Objective Test of Intervention During Development:**
  - Create a tool that lists all of the RJP key components with a rating scale or anchored items that can be used by objective observers to rate the RJP on the extent to which each key component is covered in the video.
  - If any key component is weak or too short compared to other components, revise the video as needed and repeat until all key components are rated by objective observers as strongly present.

- **Manualization:** Write up all of the steps that were taken to conceptualize, create and produce the RJP including where each key component resides in the video. Include results of the observations and changes that were made to lead to the final product. Include a copy of the RJP video, any instructional pieces that go with the video, and implementation steps in using the video in the manual.
Choosing and Executing a Rigorous Evaluation Design

• **Randomized Controlled Trial (RCT):** A specialized type of experimental research design that tests the effectiveness of an intervention on a research participant, team or organization to produce a desired outcome. Another term for an RCT is an *efficacy trial*.

  • Participants, teams or organizations are randomly assigned to either the experimental (intervention) or control (business as usual) conditions.
  • Random assignment increases the chances that results of the study are due to the intervention to which the participants are exposed, rather than to some other variable.
Quasi-Experimental Designs

• Researcher controls the assignment to the treatment and comparison conditions, using criteria other than random assignment.

• Even though attempts are made to manage threats to the validity of the study, it may not be possible to demonstrate a causal link between the treatment condition and observed outcomes.

• Use of pre-intervention and post-intervention measurement to calculate equivalence of groups at baseline can strengthen the rigor.
Propensity Score Matching

- Statistical matching technique that attempts to estimate the effect of an intervention by accounting for the covariates that predict receiving the treatment.
- Attempts to reduce the bias due to confounding variables that could be found in an estimate of the treatment effect obtained from simply comparing outcomes among units that received the treatment versus those that did not.
Regression Discontinuity Design

- A quasi-experimental pretest-posttest design
- Examine the causal effects of interventions by assigning a cutoff or threshold above or below which an intervention is assigned
- By comparing observations lying closely on either side of the threshold, it is possible to estimate the average treatment effect in environments in which randomization is not feasible (e.g. comparing those that reach a cut off to receive a scholarship to those that just miss the cut off)
Multiple Time Series Design

• Estimates the treatment effect on subjects (analyzing differences over time at multiple time points)

• Can also be coupled with a cross-section estimate of the treatment effect which measures the difference between treatment and comparison groups
RJP Example

• RJP is a perfect intervention for an RCT
• Individual candidates can be randomly assigned to be exposed to the RJP or not (using a flip of a coin or random number generator)
• Offices can be randomly assigned to have job applicants exposed to RJP or not
• Counties can be randomly assigned to have job applicants exposed to RJP or not
• Conduct a power analysis to determine the number of people exposed to RJP vs those not exposed to RJP
Alternate RJP Study

• Could create two RJP videos varying the components or dosage of components
• Individual candidates can be randomly assigned to be exposed to Version 1 vs. Version 2 of the RJP
• Offices can be randomly assigned to have job applicants exposed to V1 of the RJP, V2 of the RJP, or no RJP
Readiness to Undertake a Workforce Change Including Evaluation

Cindy Parry
Why Assess Readiness?

Greater Readiness

Greater Effort, Persistence, & Cooperation

Better implementation & data quality
The QIC-WD Readiness Survey

• Surveyed staff in each of the 8 sites to understand how people in the organization would view the implementation and testing of new workforce initiatives

• Assessed
  • Organizational readiness for change
    • Change commitment
    • Change Efficacy
  • Support for research
    • Individual
    • Agency
Survey Scales and Subscales

**Change commitment** – measures perceptions of a shared resolve to implement a change

- (e.g. “People who work here will do whatever it takes to implement this type of change effort.”)

**Change efficacy** – reflects respondents’ belief in their collective capability to implement a workforce change

- (e.g. “People who work here feel confident that they can handle the challenges that might arise in implementing this type of change effort.”)
Readiness for a Workforce Related Organizational Change
Survey Scales and Subscales

**Self—Individual support for research and evaluation**
- Measures individual attitudes toward research, pro and con
  - (e.g. “People who work here will do whatever it takes to implement this type of change effort.”)

**Agency—Perceptions of agency support for and use of data and research**
- Measures perceptions of agency support for research and use of data
  - (e.g. “People who work here feel that management supports research”, “Staff use data to inform their decision making.”)
Individual and Agency Support for Research

![Graph showing individual and agency support for research across different agencies.](image-url)
Exercise: Rate your Readiness

1. Take a few minutes to rate your agency’s readiness on the QIC-WD survey
2. Discuss in your small group
3. Identify
   • one area of strength
   • one area where you feel work would be needed to support evaluation of a workforce project
   • one strategy to build evaluation or change readiness
4. Identify someone to take notes and report out
5. Share your areas and strategies