

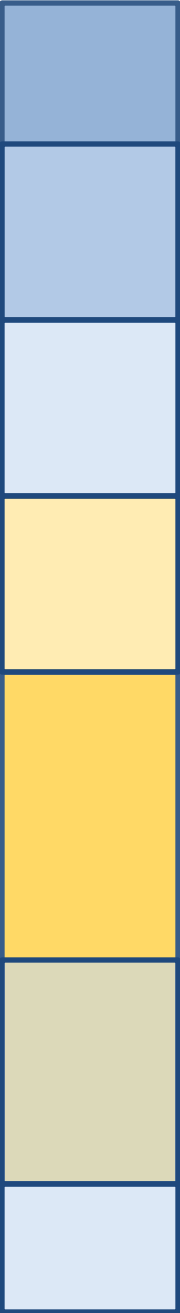


PROGRAM EVALUATION FOR PROMISING HOME VISITING APPROACHES

Charles Michalopoulos, Ph.D.
MDRC

Chris Blodgett, Ph.D.
*Area Health Education Center of Eastern Washington
Washington State University*

April 14, 2011



DOHVE: Design Options for Maternal, Infant, and Early Childhood Home Visiting Evaluation

- Working with US-DHHS to support the federal Maternal, Infant, and Early Childhood Home Visiting Program
- DOHVE:
 - ✓ Design options for a federal evaluation of evidence-based home visiting programs
 - ✓ Evaluation-related Technical Assistance (TA) for “promising approaches”
 - ✓ TA for grantees’ continuous quality improvement (CQI), Management Information Systems (MIS), and benchmarks



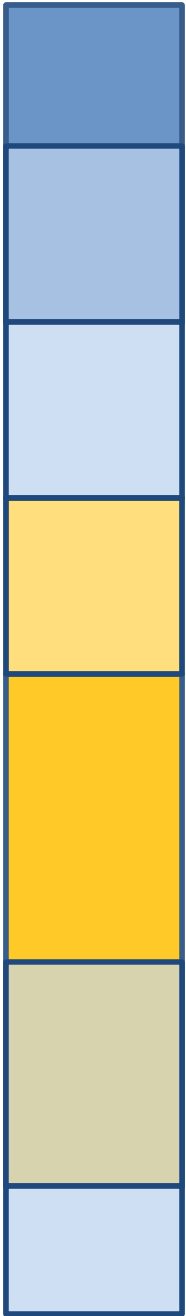
DOHVE Evaluation TA Team

- James Bell Associates (JBA)
- MDRC
- Cincinnati Children's Hospital Medical Center & Every Child Succeeds



Goals of Session

- Briefly summarize requirements for evaluations of promising approaches
- Discuss whether to conduct an effectiveness study of promising home visiting approaches
- Describe different evaluation designs
- Overview of developing an evaluation plan
- Introduce guidelines for participatory and empowerment research practices



Requirements for Evaluating Promising Approaches



Evaluation Must Be “Rigorous”

- Credibility
 - Accurate, best design feasible
- Applicability
 - Generalizable, must study relevant group
- Consistency
 - Results replicable by other researchers
- Neutrality
 - Results must be objective

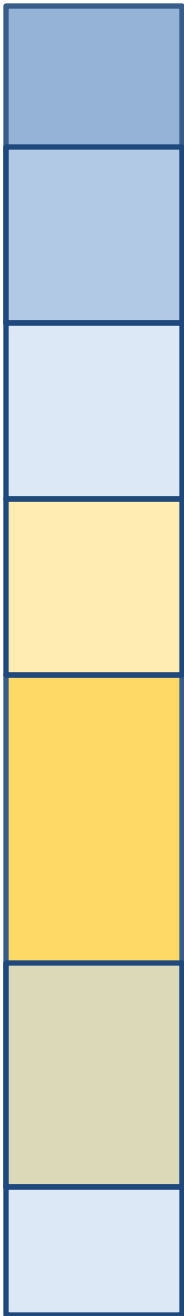
DHHS Criteria for Evidence of Effectiveness

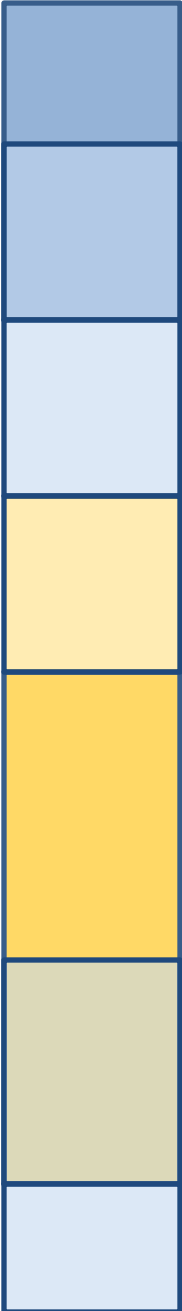
Studies that use a comparison condition:

- Randomized controlled trials (RCTs)
- Quasi-experimental designs (QEDs)
 - Matched comparison designs
 - Single case designs (SCDs)
 - Regression discontinuity designs (RDs)

Studies are assigned a rating based on the study's ability to provide credible estimates of a program model's impact.

- **High:** Well implemented RCTs, SCDs, RDs
- **Moderate:** RCTs, SCDs, RDs with problems; well implemented QEDs
- **Low:** Did not meet standards for high or moderate

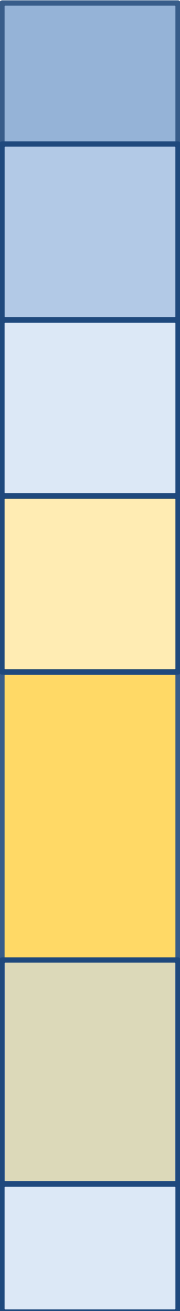




DHHS Criteria for Evidence of Effectiveness (continued)

DHHS set the criteria for an “evidence-based early childhood home visiting service delivery model:”

- At least 1 high- or moderate-quality impact study with favorable, statistically significant impacts in 2 or more of the 8 outcome domains, or
- At least 2 high- or moderate-quality impact studies (with non-overlapping analytic samples) with 1 or more favorable, statistically significant impacts in the same domain



DHHS Criteria for Evidence of Effectiveness (continued)

- Impacts must be either:
 - Found for the full sample
 - If found in subgroups only, be replicated in the same domain in 2 or more studies using non-overlapping samples
- Following the legislation, if evidence is from RCTs only:
 - At least 1 statistically significant, favorable impact must be sustained for at least 1 year after program enrollment
 - At least 1 statistically significant, favorable impact must be reported in a peer-reviewed journal



Updated State Plan Must Describe the Evaluation

- How the evaluation will be conducted
 - Evaluation methods, measurement, data collection, sample, timeline, IRB review, analysis
- Identify evaluator
 - Can use in-house or outside evaluator
 - Evaluator must be independent, objective
- Logic model and conceptual framework
 - Shows links between services and outcomes



Whether to Conduct an Effectiveness Study



Two Broad Types of Evaluation

- Effectiveness study
 - How much does the approach improve outcomes for families compared to what would have happened without the approach?
- Process study
 - Is the promising approach being implemented as intended?
 - How could implementation be improved?



Examples of Questions Answered by the Two Types of Evaluations

Process study

- How many families were served?
- How often were services provided?
- How long did families participate?
- How closely did services correspond to the model?
- How satisfied were families?

Effectiveness study

- How much did child and maternal health improve (because of the approach)?
- Was child abuse and neglect reduced?
- How much did child development and school readiness improve?



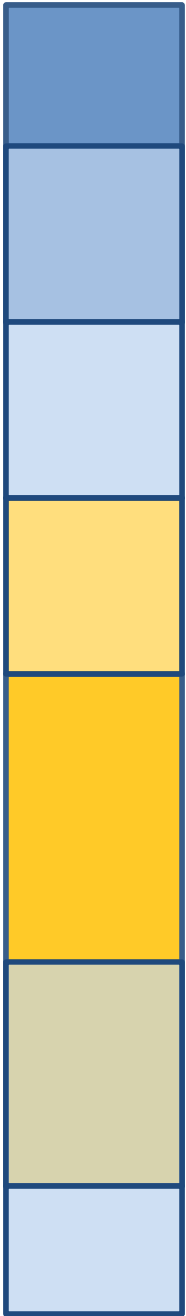
Pros and Cons of an Effectiveness Study

- Pros

- Can provide data to move the approach into the evidence-based category
- Can benefit the state and the field in understanding what home visiting approaches benefit families

- Cons

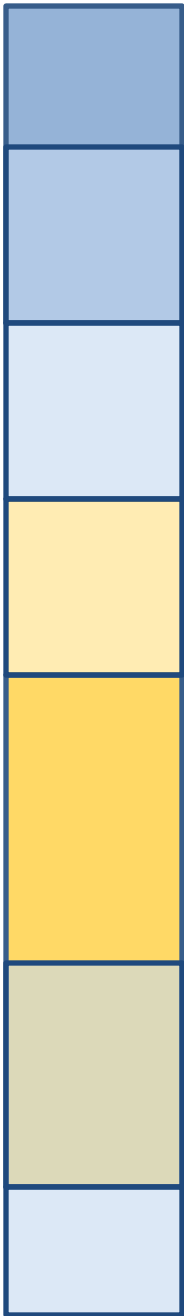
- Resources needed for data on comparison group
- Need many families to obtain precise estimates
- Process study can be useful to strengthen the program before measuring impacts



Overview of Effectiveness Designs

Effectiveness Designs: Random Assignment

- Families are assigned at random to home visiting or a control group
 - Requires more families than are served
 - Sometimes used to compare two different approaches
- Pros
 - Only method guaranteed to provide unbiased estimates of the program's effects
- Cons
 - Some eligible families will not receive the promising approach



Random Assignment: How Many Families Do You Need?

Size of program group	Size of control group	Detectable effect on % of mothers with depression
30	30	17.5
50	50	13.5
100	100	9.6
200	200	6.8
500	500	4.3

Example: 30 families in each group could detect drop in depression from 88 percent of the control group to 70.5 percent of the program group

Key result: detectable effect drops in half as the sample quadruples

Results even less precise with comparison group, regression discontinuity



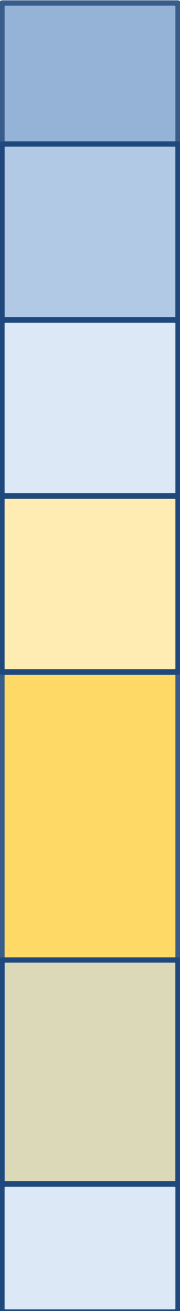
Effectiveness Designs: Comparison Group Methods

- Comparison group is deliberately (i.e., not randomly) chosen
 - Can come from a waiting list, families not referred for home visiting, those who decide not to receive home visiting, other parts of the state, etc.
- Pros: do not have to deny families services
- Cons: subject to selection bias
 - Families receiving home visiting may be fundamentally different than the comparison group
 - Results would reflect those differences as well as the effects of home visiting



Effectiveness Designs: Regression Discontinuity

- Appropriate if families are ranked and those above a threshold are eligible for home visiting
- Pros:
 - Do not have to deny services to eligible families
 - Provides unbiased estimates for families near the threshold
- Cons:
 - Provides information only on the effects for families near the threshold
 - Requires more families than other designs

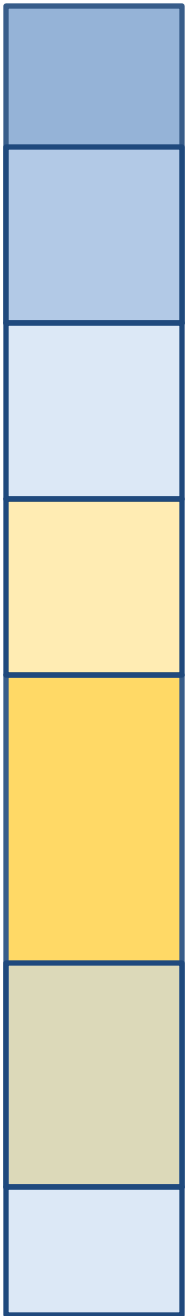


Effectiveness Designs: Single Case Design

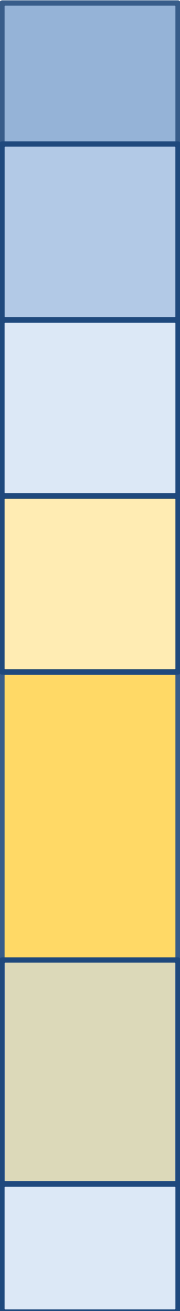
- Repeated observations of families before and after promising approach is used
 - Does the trend in a family's outcome improve after they receive the promising approach?
- Pros:
 - HomVEE standards can be satisfied with small samples
 - Do not have to deny families services
- Cons:
 - Intervention should have large and rapid effects
 - Requires substantial information on families prior to home visiting

Effectiveness Designs: Which One to Choose?

- Can all eligible families be served?
 - Randomization can be a fair way to determine who receives services while providing the best evidence of effectiveness
- Are there quantifiable criteria that determine eligibility?
 - If so, a regression discontinuity design might work
- Will the effects be immediate and large?
 - Single case design might work
- Else, choose a non-random comparison group
 - But results are subject to selection bias



Getting to Effectiveness Evaluation Includes Some Critical Development Steps

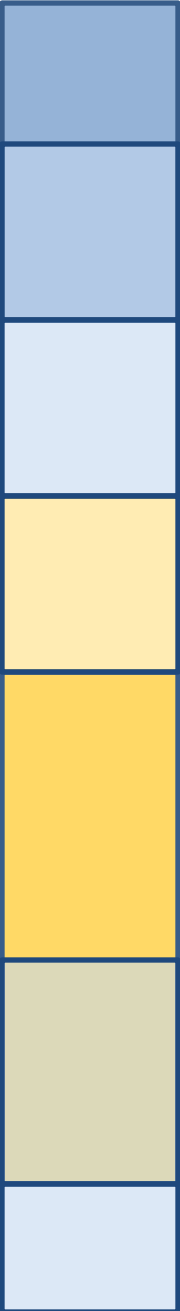
- 
- Level of development for a promising model
 - Successful effectiveness evaluation requires ready staff and data collection practices to describe program impacts and outcomes
 - Getting to this level of readiness may involve sequenced steps in an evaluation plan
 - Participatory research methods are practical steps in conducting a quality effectiveness evaluation in routine service settings



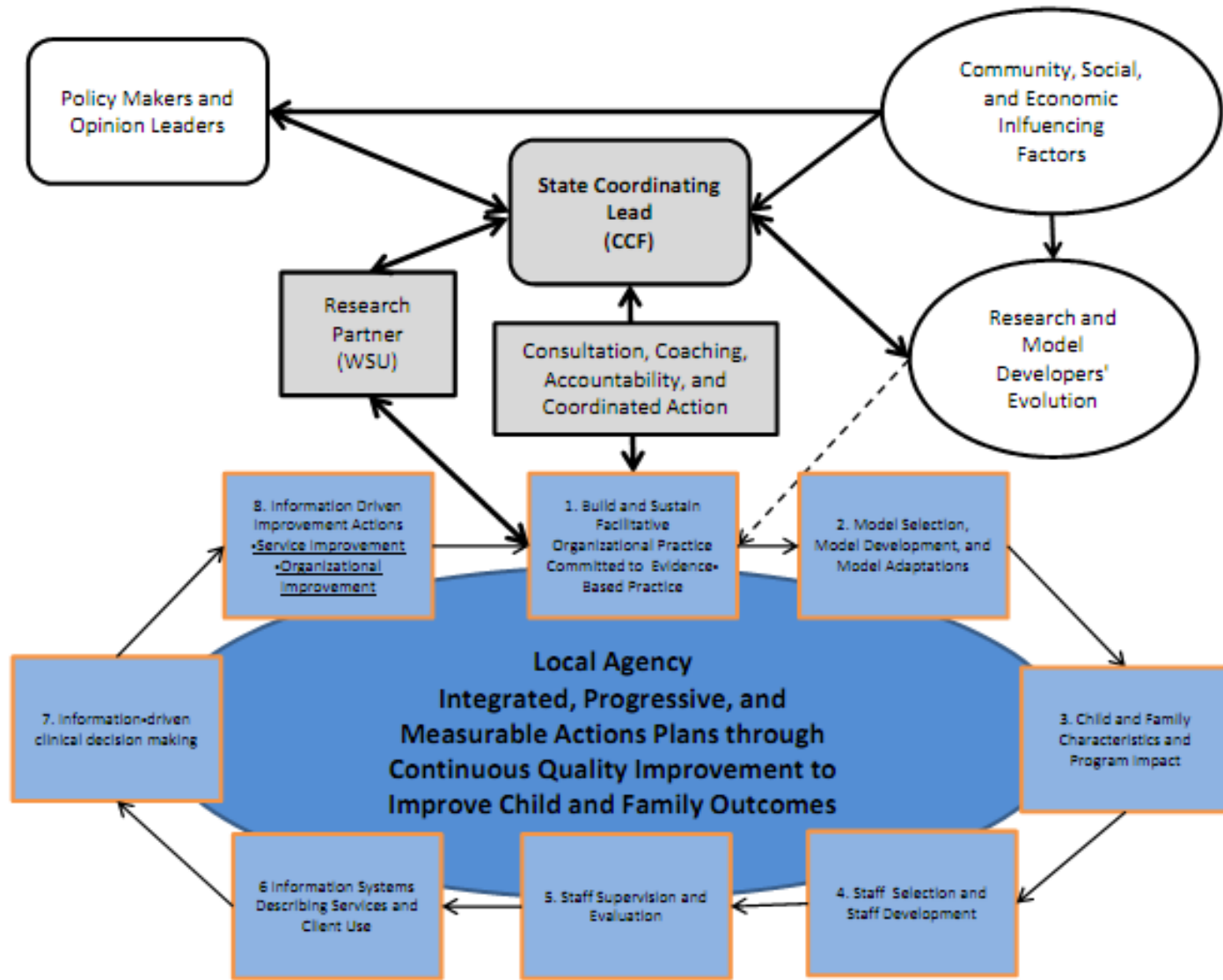
Laying the Groundwork for Promising Approach Evaluation

- A developmental progression in documenting program model efforts and client outcomes
 - Clarity in defining and documenting the model's intervention (Can you measure what you do?)
 - Capacity to describe who you serve and what they need (Can you effectively describe who you serve?)
 - Capacity to measure outcomes aligned with the model and capacity of your providers (Do you have the systems, tools, and skills to succeed?)

Steps to Guide Evolution to Effectiveness Research in Promising Approach Evaluation

- 
- Model's intervention activities are clearly defined and can be measured (dose and content)
 - Clients can be clearly described within the model and on dimensions related to the outcomes
 - Staff are capable of collecting information and a data system is in place
 - Baseline to outcome data collection practices developed
 - Culturally acceptable and sensitive measures of program impact and client change are in place
 - The providers are committed to evaluation and CQI
 - There are feedback mechanisms to have information guide practice

An Implementation Development and Research Model for Home Visiting System Development





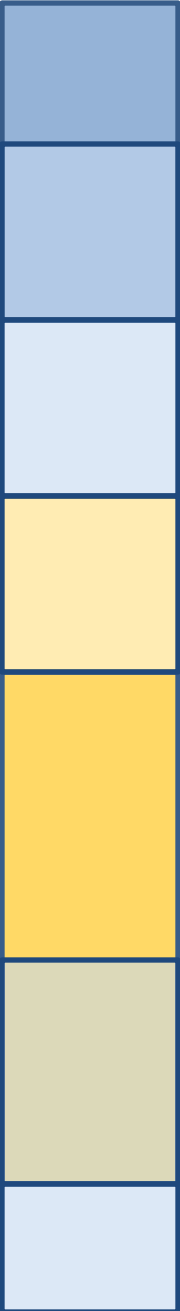
Building an Evaluation and Implementation Team

- Investing in evaluation and building support for this investment
 - Locating/hiring an evaluator
 - 15-20% of budget
- Engaging your community in selection and support (formative evaluation task in SIR)
 - Build the plan
 - A cycle of continuous activities and relationship development to support CQI
- Participatory and empowerment evaluation

Steps in the Evaluation Process

- 
- Determination of key participants, roles, decision-making, and communication
 - Establish the formal research agreement
 - Engagement and consent
 - Question, intent, roles, decision-making
 - Maintenance and development of the collaborative
 - Participant learning and benefit as explicit values

Steps in the Evaluation Process (cont.)

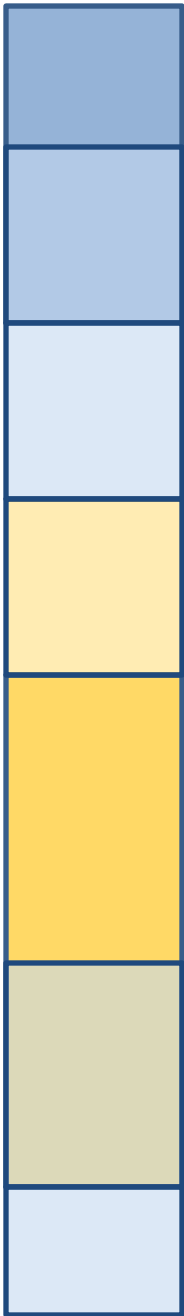
- 
- A clear theoretical problem statement guides the research
 - Evidence-informed conceptual framework
 - Define research questions and methods
 - Rigorous research implementation and data collection methods
 - Research is an iterative process to be specified and managed
 - Use process evaluation to address
 - Fidelity to the research method
 - Threats to internal and external validity
 - Benefits of the participatory process

Next Steps

Stay tuned for additional webinars, individualized TA, and other information from the DOHVE Evaluation TA team...

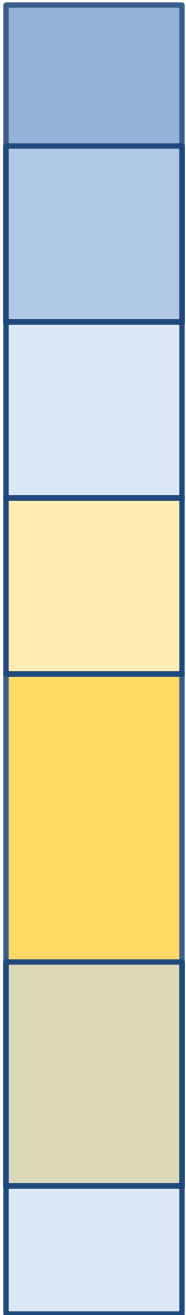
✓ Developing evaluation plans

- Developing logic models
- Identifying data collection methods and sources
- Developing IRB protocol
- Analysis strategies

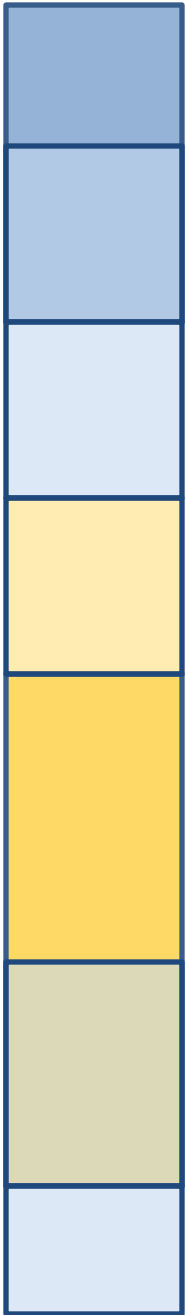


Recent Webinars

- Building a culture of quality in home visiting-
January 13, 2011
- Designing and Using an Effective Data
Management System: Components and
Considerations- February 24, 2011
- Measuring Benchmarks: Indicators and Tools-
March 3, 2011
- All webinar slides and recorded sessions are
available at:
http://www.mdrc.org/project_12_104.html



Questions and Comments





For more information...

Charles Michalopoulos, MDRC
Charles.Michalopoulos@mdrc.org

Christopher Blodgett, Area Health Education Center of
Eastern Washington, Washington State University
blodgett@wsu.edu

Carlos Cano, Health Resources and Services Administration
ccano@hrsa.gov

Lauren Supplee, Administration for Children and Families
lauren.supplee@acf.hhs.gov