Healthy Start Monitoring and Evaluation: Best practices, Evidence building and Case-based Solutions

Building the Healthy Start Community Regional Meeting
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Thank You

APPROACH

Tell me ....I Forget

Show me....I remember

Engage me....I understand

Chinese Proverb (modified)

OVERVIEW (1)

- **Overview discussion of Practice-based Evidence (PBE)**
- **Discussion of Integrated Systems of Construct-Oriented Program Evaluation Model (I-SCOPE) – an approach to systematically link *Practice-based Evidence and Collaborative M & E* to your agency**

OVERVIEW (2)

- **Presentation, then *solution-oriented Consultation* addressing challenges and concerns specific to monitoring and evaluation (M&E) by:**
  - ***Presentation and walking through* a two part-Matrix approach to Project Tracking [Matrix] (PTM) and Project Assessment [Matrix] (PAM)**
  - ***Conducting* an aggregate 'Case' review of strengths and challenges of grantee evaluation plans**
  - ***Conducting* an *practice-based evidence oriented* case-by-case consultation to address M&E questions and concerns presented by grantees**
- **Closing Questions and Discussion**

Overview Discussion - Setting The Stage

Program activities to achieve five (5) approaches of the HS Model

- Improve women's health
- Promote quality services
- Strengthen family resilience
- Achieve collective impact
- Increase accountability through quality improvement, performance monitoring, and evaluation
- *Plus*: Support of HRSA Strategic Goals

Source: Healthy Start Initiative: Eliminating Disparities in Perinatal Health (CFDA) No. 93.926 *(HRSA)*

Practice-Based Evidence

Where do you Start? A Few Key Questions

- **What do I, my staff and colleagues know about the -**
  - ✓ **work we have done? – *Overall Familiarity***
  - ✓ **outcomes of this work? – Intended or Unintended (*Quantitative or Qualitative*) Benchmarks *vs*. Emerged**
  - ✓ **extent and quality of the results from this work – What does the data say? Is it any good? Fidelity?**
  - ✓ **new knowledge or evidence our results would add to *HS knowledge base*?**
  - ✓ **skills and methods our work would inform? - *Promises/ Best Practices***
  - ✓ **what is the utility of your work – Type, adequacy and rigor of implemented intervention – *Expected Activities***
  - ✓ **our perception of the dynamic tension between our work and evidence building? - *Practice-Based***

Types of Evidence in Program Research and Evaluation

Our Focus is on Promising and Best-Practice-Based Evidence

Science-Based

- Is replicable and produces desirable results in a variety of settings
- Research/Evaluation results link positive outcomes to the practice and not to outside factors

Practice-Based

- Has had expert/peer review that demonstrates effectiveness
- Has research/evaluation data that demonstrates effectiveness

Promising

- Has an evaluation plan in place to measure effectiveness
- Incorporates a process of continuous quality improvement
- Based on guidelines, standards or models that have been proven effective
- Incorporates characteristics or theoretical foundations or other effective public health practices

Adapted from: Roberts & Yeager, 2004; Telfair, 2005; Quill, et al, 2006

Practice-based Evidence (1)

- There are many widely-used practices for which little or no evidence base has been developed, but that are believed to be effective and are highly valued by families, youth, and practitioners.
  - This includes some of the work done in HS settings
- Such practices are those that can feasibly be described, tested, and brought to an "evidence-based" standard, using traditional research designs, including, but not limited to, randomized controlled trials.
  - Outcome-Based Evaluation, so forth
- These approaches have elements and characteristics that have widespread appeal to a range of multi-disciplinary practitioners (at all levels) but often lack clear definition, and have not had much systematic evaluation

Source: Horn and Gassaway, 2007

Practice-based Evidence (2)

- **As a complement to *Evidence-Based Practices*, an alternative service-to-science model, termed *'Practice-based Evidence' (PBE)* has been developed using evidence derived from routine service provision in community settings (Dunet, et al, 2008).**
- ***Not an argument* as to whether evidence should be used but rather, there is concern about inexperienced, awkward applications of EBP, & the underdeveloped state of today's evidence base**
- ***PBE* model engages service providers in the collection of data and in analyses of that data which can inform practice in local and cultural contexts (Melnyk, & Fineout-Overholt,2005; Hulme, 2010)**

Practice-based Evidence (3)

- ***PBE*** **actively utilizes the known sources of variation in service outcomes by providing practitioners with ongoing, real-time feedback regarding the target's involvement and progress in the receipt of service**

- **With *PBE*, the practitioner uses the best evidence about best practices to make decisions about care, treatment and other interventions.**

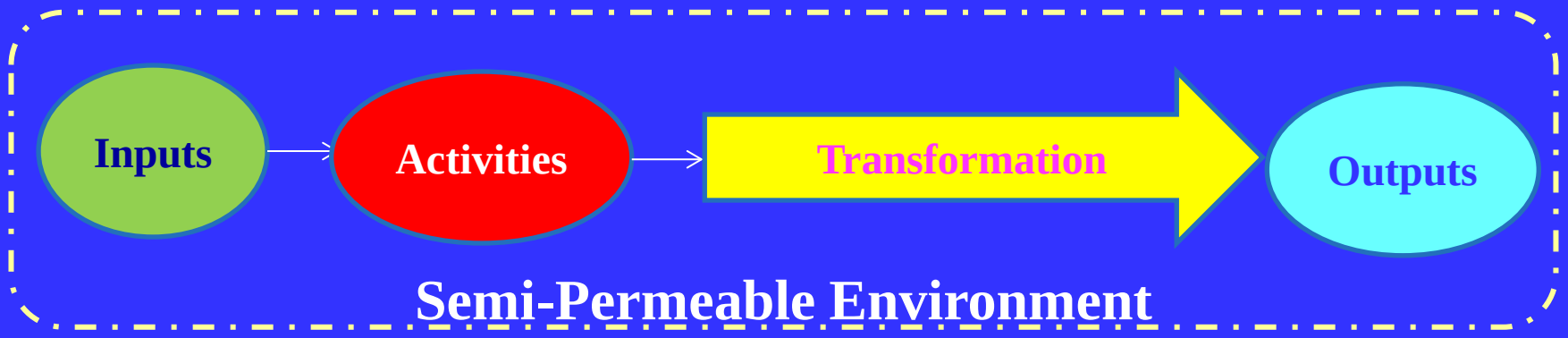
- ***PBE*** **incorporates all the necessary scientific evidence as well as information on practitioner experiences and the known sources of variations in observed outcomes is accessible to the practitioner or organization in real-time.**

Building and Assessing Evidence – Approaches, Tools and Data Collection

Linking Evidence and M & E

Type of Evidence	Type of M & E
Promising/Best	**Process Monitoring**
Practice-Based	**Process/Outcome Evaluation/Research**
Science- Based	**Outcome Evaluation/Research**

Basic Structure of an Evidence - Building Program



- **Components of a Program include:**
  - ***Inputs*** **– Stakeholders, staff, resources, funds, publications, reports, other source documents**
  - ***Activities*** **– Tasks performed for development, utilization and transformation of evidence**
  - **Outputs – Outcomes as a result of inputs and activities**
  - **Environment – Semi-permeable and ever-changing**

Practice-based Evidence (1)

- **Practice-based evidence has been, or is being evaluated and:**
  - **Has some quantitative and qualitative data showing positive outcomes, but does not yet have enough research, evaluation or replication to support generalizable positive health outcomes.**
  - **Has been subject to expert/peer review that has determined that a particular approach or strategy has a significant level of evidence of effectiveness in health research and practice literature.**

Adapted from: Telfair, 2005; Quill, et al, 2006

Practice-based Evidence (2)

- **Practice-based evidence may also result in evidence of ineffectiveness, including approaches with either no evidence of effectiveness or statistically significant negative effects.**
- **Evidence of positive outcomes as defined in the area pregnancy intervention programs meets the criteria of a best practice.**

Adapted from: Roberts & Yeager, 2004; Telfair, 2005; Quill, et al, 2006

Practice-based Evidence (3)

- When considering the Practice-based evidence generated by your or others programs also consider what has been the:
  - Degree of collaboration/integration
  - Objectives/rationale behind it
  - Efficiency
  - Demonstrated sustainability
  - Impact/effectiveness
  - Lessons Learned/New Knowledge and Skills Gained
  - Replicability and Rigorous Testing

Adapted from: Roberts & Yeager, 2004; Telfair, 2005; Quill, et al, 2006

Integrated Systems of Construct-Oriented Program Evaluation Model (I-SCOPE)

I-SCOPE: Central Tenets (1)

- Program evaluation must be consistent with the guiding principles of evaluation (AEA, 2004) which include systematic inquiry, competence, integrity/honesty, respect for people and responsibilities for general and public welfare

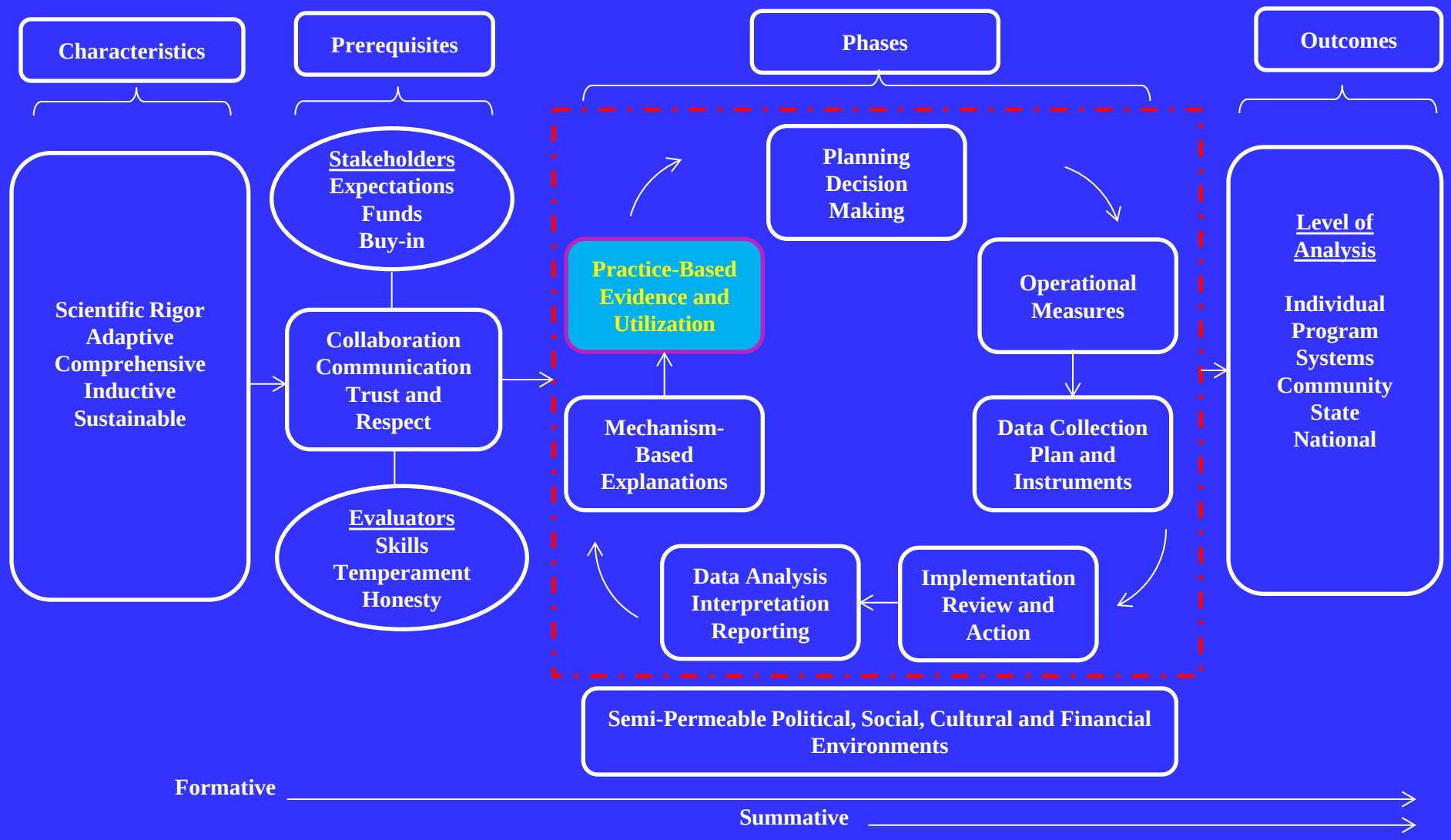
- Program evaluation must be contextually relevant and reflect the realities of the political, social, cultural and financial environments of the health program

I-SCOPE: Central Tenets (2)

- Program evaluation must be driven by inductive reasoning and logic to construct practice-based evidence and relate it to current evaluation practice and findings

- Program evaluation must represent those involved in delivery and receipt of services thereby fostering maximal participation, informed decision-making and utility oriented outcomes

I-SCOPE Framework



I-SCOPE Constructs: Characteristics

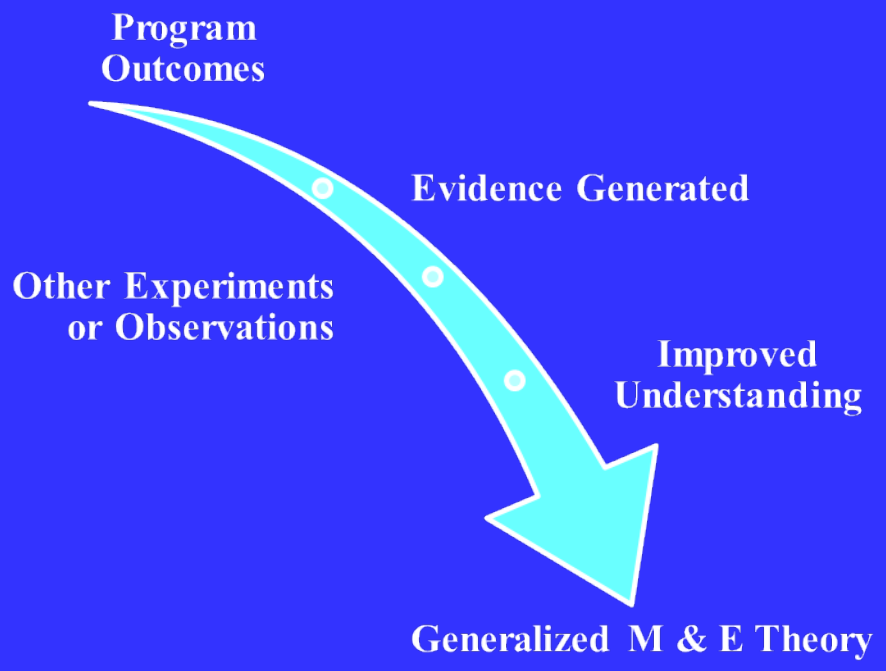
- The I-SCOPE process adopts and implements *rigorous* methods that are grounded in *science* for practical application
- The I-SCOPE plan is malleable and adapts to diverse models of practice and expectations of all stakeholders
- The I-SCOPE recognizes the dynamics and contexts of a given program and *comprehensively* assesses its processes, users, and environment.
- The I-SCOPE uses an *Inductive-Deductive-Verification* approach to review existing and current practices and construct practice-based evidence
- The I-SCOPE guides primary and secondary end users to understand, assess and transform outcomes into *sustainable* results

I-SCOPE Constructs: Phases (1)

- Constructing Practice-Based Evidence:
  - Ask key questions
    - What were the expectations of the program? (stakeholder defined)
    - How were program goals and objectives accomplished? (process data)
    - What were the program outcomes? (outcomes and impact data)
    - What new evidence does the program add to current research and practice? (knowledge/behaviors/skills generation)
  - Review extent and quality of results generated
  - Identify best-fit program findings

I-SCOPE Constructs: Phases (2)

- Constructing Practice-Based Evidence (cont'd):
  - Compare your evidence to other data within your program (*All Level/Type*)
  - Compare your evidence with results of other programs (*Collaboration*)
  - Apply inductive logic



I-SCOPE Constructs: Phases (3)

- **Practice-Based Evidence Utilization:**
  - **Foster stakeholders understanding of evaluation results**
  - **Establish best-fit of program results on the continuum of practice-based evidence**
  - **Make conclusions and postulate generalized M & E theory**
  - **Work with primary end users, stakeholders and funders to identify opportunities for utilization of outcomes**
  - **Maximize potential for transforming evaluation results into sustainable practices/policies/laws**

Process Monitoring Data Tool – Project Tracking Matrix

Tool – Process Monitoring (1)

- *Objective:* To use a tool that allows for periodic collection and assessment of basic evidence on the activities of service or program
- Differs from traditional evaluation in terms of scope, depth, time-frame and type of information/ data collected (process)
- Collect at least (evidence):
  - Who is being served? (Demographic)
  - What activities & tasks are being targeted? (Program or Service Component)
  - Number of specific activities completed (Program Outcomes)

Tool – Process Monitoring (2)

- Project Tracking Matrix (Project Overview Template - PTM)
- Overview of service/program narrative - snapshot of programmatic goals, objectives, tasks, measures, expected/final outcomes and data (evidence) sources and evaluation capacity

Review Service/Program Narrative (Description)

↓

Enter Information and Complete PTM

↓

Review PTM for Accuracy

↓

Conduct Periodic Review (Baseline, 3 months, etc)

↓

Highlight Accomplishments and Document Gaps

↓

Refine and Review

Tool – Project Tracking Matrix (PTM)

- **Practice-based evidence building - monitoring activities**

Insert Name of the Program(s)						
Insert: Program Contact Personnel Insert: Data Contact Personnel Insert: Monitoring and Evaluation (M & E) Contact Personnel						
Goals	Objectives	Tasks	Expected Outcomes	Measures (Indicators)	Final Outcomes	Data Source
Insert overall goals of the program	Insert objectives corresponding to each goal	Insert all tasks corresponding to each objective	Insert expected outcomes for the objective	Insert measures to indicate completion of task	Insert final outcomes as a result of the completed task	Insert data source used to record the task
Improve Women's Health: % of Pregnant/Parenting Participants that Acquire Health Insurance (> 90%) n=300	(Benchmark 1): By 5/31/2016, increase the proportion of HS participants with health insurance to 70% (n=100). Baseline: 60% of HS program participants have insurance (Source: Local HS)	Over project year: a) identify participants w/o ins; b) reach out/engage identified assessing ins need; c) enroll Id participants; and d) document/track enrollment process.	a)All identified participants assessed (target /100); b)All assessed /verified participants enrolled in health ins (/100). C)Benchmark Documentation complete (/100)	Total number of HS participants enrolled with health insurance (/) divided by the total number of HS participants identified	Projected: _% HS participants have health insurance	List of identified Pregnant/Parenting Participants Case manager Activity logs Enrollment documentation sheet

Tool –Process Monitoring (3)

- ***PTM Advantages*:**
  - **Systematic**
  - **Technically simple**
  - **Relatively Inexpensive**
  - **Limited resources/expertise**
  - **Periodic comparisons**
  - **Retrospective**
  - **Evidence for Evaluation and Dissemination**
- ***PTM Disadvantages(?)*:**
  - **Limited scope – Service/Program Specific**
  - **Limited depth – Process Data**
  - **Not employ traditional science-based methods (?)**

Process Evaluation Data Tool – Project Achievement Matrix

Tool – Process Evaluation (1)

- ***Objective*:** To use a tool that allows for ongoing collection and assessment of all evidence on the intervention (change) elements of the program
- Differs from process monitoring in terms of scope, depth and time of information collected - rigor
- ***Collect*:**
  - Scope and depth of intervention
  - Targeted risk/behavior
  - Expected program intervention outreach and outcomes
  - Quantifiable data (mixed)

Tool – Process Evaluation (2)

- Project Achievement Matrix (PAM)
  - Measures gaps between actual and expected levels of achievement (Intended/Unintended)
  - Based on the tool 'Progress Towards Achievement' developed by Peoples-Sheps and Telfair (2005) and modified/used by Telfair and Dave (2008, 2011) (following slides)
  - Assigns achievement scores to individual tasks that reflect the degree of completion of a task, level of achievement of the corresponding objective, intervention-based change and identification of gaps for program improvement

Tool – Process Evaluation (3) (PAM)

- **Project Achievement Matrix**
  - **Comprehensive documentation of program narrative i.e. detailed snapshot of programmatic goals, objectives, tasks, persons responsible, timeline, measures, expected/final outcomes, formula to measure progress, achievement scores and data sources**

Review Program Narrative

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Enter Information and Complete PAM

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Review PAM for Accuracy

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Conduct Ongoing Review (monthly, quarterly, annually)

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Highlight Achievements and Document Gaps

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Troubleshoot and Resolutions

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Refine and Review

Tool – Project Achievement Matrix

Improve Women's Health: % of Pregnant/Parenting Participants that Acquire Health Insurance (> 90%)								
Objectives	Tasks	Timeline	Expected Outcomes	Measures (Indicators)	Final Outcomes	Formula to Measure Progress	Achievement Scores	Data Source
Insert objectives corresponding to each goal	Insert all tasks corresponding to each objective	Insert the timeline to conduct corresponding task	Insert expected outcomes for the objective	Insert measures to indicate completion of task	Insert final outcomes as a result of the completed task	Insert the formula here (Example)	Insert achievement scores for each corresponding task	Insert data source used to record the task
(Benchmark 1): By 5/31/2019, increase the proportion of HS participants with health insurance to 90%. Baseline: 70% of HS program participants have insurance (Source: Local HS)	Over project year: a) identify participants w/o ins; b) reach out/engage identified assessing ins need; c) enroll Id participants; and d) document/track enrollment process.	a) 09/1/2015 - 05/31/16 b) 11/1/1015 – 05/31/16 c) 11/1/15 – 05/31/2015 d) Continuous	a)All identified participants assessed (target /100); b)All assessed /verified participants enrolled in health ins (/100). C)Benchmark Documentation complete (/100)	Number of participants per focus group Number of focus group meetings Total number of participants Timely completion of tasks	Projected: _% HS participants who have health insurance	75/100 (Identified) 65/100 engaged 60/100 enrolled	0.75 0.65 0.60	List of identified Pregnant/Parenting Participants Case manager Activity logs Enrollment documentation sheet

Tool – Process Evaluation (4) (PAM)

- Achievement Scores Interpretation
- Achievement Objective = 1
- Achievement Tasks = 3
- Achievement Processes = 5 (quantitative = 3 and qualitative = 0)
- Achievement Index = Cumulative achievement scores = (1.05 + 1 + .65) / 3 * 100 = 90%
- The program staff was able to complete 98% of their tasks in a timely manner. What about the remaining 10%?

PAM Link to Benchmark Areas (Targets) Considerations

Program Activity Cluster	Number of Benchmarks Areas (Targets) End of Project Period (2018) [Individual Area/Aggregate Cluster]
Improve Women's Health	Four areas
Promote Quality Services	Seven areas
Strengthen Family Resilience	Nine areas
Achieve Collective Impact	Two areas
Increase Accountability through QI, PM and Eval	Two areas
Support of HRSA Strategic Goals	Open

Tool – Process Evaluation (5) (PAM)

- *PAM Advantages:*
  - Systematic
  - Ongoing assessments
  - Scope, depth and time-based
  - Link to Testable Program Concepts & Models
  - Link to Rigorous Assessment Design/Methods
  - Continuous opportunities for program refinement
- *Disadvantages (?):*
  - Technically Rigorous, Training
  - More Expensive/More Capacity
  - Requires Dedicated resources

Outcome Evaluation Data Tool

Elements of Outcome-Based Evaluation (1)

- Outcome-based evaluation begins by asking questions.
  - What outcome is my program producing in its service recipients (pro-gram evaluation)?
  - Is my program meeting its goals and objectives (effectiveness evaluation)?
  - Is my program better than others (impact evaluation)?
  - Does this policy work (policy evaluation)?
  - How can outcome information be used to improve programs or policies (evaluation utilization)?
- Some of these questions relate to the focus of evaluation (organization or individual) and some to the standard of evaluation (performance)
- Outcome-based evaluation involves description, interpretation, and value judgments

Source: Schalock (2001, modified); Telfair, J (2005)

Elements of Outcomes-Based Evaluation (2)

Questions Asked

Type of Evaluation
- Program
- Effectiveness
- Impact
- Policy

Focus of Evaluation
- Organization
- Individual

Standard of Evaluation
- Performance
- Value

Outcome Measures
- Organization Performance
- Organization Value
- Individual Performance
- Individual Value

Measurement Approaches
- Performance Assessment
- Consumer Appraisal
- Functional Assessment
- Personal Appraisal
- Performance Assessment

Results & Interpretation
- Internal Validity
- External Validity
- Clinical Significance
- Attrition
- Contextual Variables

Utilization
- Purpose
- Success Factors

***Source*: Schalock (2001) Outcome-Based Evaluation Second Edition, pg. 8.**

OBE Measurement Approaches (1)

Review program narrative

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Document objectives, tasks and expected outcomes

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Operationalize measures/indicators

↓

Select data collection method/type

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Qualitative

- Case Study
- Grounded Theory
- Ethnography
- Phenomenology
- Field Research

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- Interview Guides
- Focus Groups
- Observation

Quantitative

- Surveys
- Questionnaires
- Medical Records
- National/State Databases
- Self-report/Program/Clinical Data

OBE Measurement Approaches (1)

- ***Organization*** **performance outcomes *e.g.*, service coordination**
- ***Organization*** **value outcomes e.g., access to services**

***Source*: Schalock (2001) Outcome-Based Evaluation Second Edition**

OBE Measurement Approaches (2)

- *Performance* assessment (performance): the preferred evaluation method for measuring organizational performance outcomes. performance planning, performance indicators
- *Consumer* appraisal (performance): the preferred evaluation method for measuring organizational value outcomes. customer satisfaction surveys, measures of fidelity to the service delivery model.
- *Functional* assessment (value): the preferred evaluation method for measuring 'individual performance outcomes. rating scales, status indicators (such as education, living, employment status).
- *Personal appraisal (value):* the preferred evaluation method for measuring individual value outcomes. quality of life evaluations

Source: Schalock (2001); Sheps, MP & Telfair, J., (2005)

Tools – Outcome Evaluation (1)

- **To use a tool ‘best fit’ to capture relevant practice-based data and assess programmatic and individual outcomes as they relate to corresponding objectives of a program**
- **Assess change via comparison models/groups**
- ***Good Fit*: Assess level of knowledge/ awareness and Assess behavior/knowledge/ skill change via pre-test/post-test surveys**
- ***Ex*: Client satisfaction (survey), program staff assessment (interview guides), trainings (post if-then surveys), Program Model testing (Mixed methods) awareness (pre/post-test survey), best practices (focus groups)**

Tools – Outcome Evaluation (2)

- To use a tool ‘best fit’ to capture relevant data and assess individual outcomes as they relate to corresponding objectives of a program
- Bad Fit: Assess knowledge change via focus groups
- Good Fit: Assess level of knowledge/awareness via focus groups OR Assess knowledge change via pre-test/post-test surveys
- Example: Client satisfaction (survey), program staff assessment (interview guides), trainings (post if-then surveys), awareness (pre/post-test survey), best practices (focus groups)

Tools – Outcome Evaluation (3)

- Review existing literature
- Compile items from multiple sources (choose standardized instruments if possible)
- Plan, review, refine…
- Designate resources (staff, data, funds, time)
- Pairing best alternatives for maximal response (CME credits, incentives, post if-then instead of pre/post)

Tools – Outcome Evaluation (4)

- *Examples*:
  - Client satisfaction (measures, Qs)
  - Program staff assessment (interviews, performance assessment tools)
  - Trainings (post if-then Qs)
  - Program Model testing (Mixed methods)
  - Awareness (pre/post-test Qs)
  - Practice-based (focus groups, observations)

Tools – Outcome Evaluation (5)

- **Procedures/Method:**
  - Review existing program documents, reports, published literature, etc.
  - Compile items from multiple sources (choose strong designs, standardized instruments if possible)
  - Plan, review, refine…
  - Designate resources (staff, data, funds, time)
  - Pairing best alternatives for maximal response (CME credits, incentives, post if-then instead of pre/post, mixed designs, comparisons)

Challenge: Measuring Outcome Indicators

- Finding measures of intermediate steps toward longer-term outcomes (e.g., community-wide data on skills and knowledge, positive aspirations of youth).
- Obtaining data: common, context and site specific
- Know Population group(s) data is available for (e.g., young children only)
- Know Availability of recent values for each data type/indicator
- Know reference source, person(s), person(s) knowledge of data/indicator, and person(s) length of time working with data
- Know source for high risk or “difficult to access” populations
- Know existing data source, numerator
- Know existing data source, denominator
- See State-Level Examples (next slide)

Outcome Mapping (OM) (1)

- **A methodology for planning, M & E development initiatives**
- **OM provides a framework to:**
  - **collect data on immediate/intermittent, basic (*proximal*) changes that**
  - **leads to longer, more (*Distal*) transformative change,**
  - **allows for the plausible assessment of the initiative's contribution to results (*outcomes – impacts*)**

Outcome Mapping (OM) (2)

- OM
  - *enhances* team and program understanding of change processes,
  - *improves* the efficiency of achieving results
  - *promotes* realistic and accountable reporting

Ideal → Real

- **In deciding upon the evaluation designs, data collection methods and tools for progras/services in diverse settings.**
- **Ideal → Real**
- **This approach is based on the fact that there is a need to assess the capacity that exists or needs to be developed in order to carry out that evaluation.**
- **How have you operationalized (defined) your indicators?**
- **In the REAL, you must determine what information do you have available to you and what adjustments do you have to make to address the indicators.**

REMEMBER….

"Success is to be measured not so much by the position one has reached in life as by the obstacles which have been overcome while trying to succeed“

Booker T. Washington

Part II: Solution-oriented Consultation

QUESTIONS AND DISCUSSION

Supplemental Slides (Elaboration and References)

Presentation Takeaway: *HOPE*

- **TO:**
  - **Highlight the importance of developing and utilizing a Practice-based Evidence and Collaborative M & E model in your Agency/ Program**
  - **Outline systematic steps to link Practice-Based Evidence concepts with M & E Approaches**
  - **Provide an overview of tools and resources to conduct Practice-based Evidence and Collaborative M & E in your agency**
  - **Examples and solution-oriented Consultation**

Evidence-based Practice (1)

- **Concerns expressed about the <u>limitations</u> of EBPs for use in community practice and M & E include:**
  - **The determination of what constitutes evidence is narrow and focuses on linear cause-effect relationship – *A Challenge***
  - **Randomized Control Trials (RCTs) exclude representative samples who receive services in non-institutional settings such as communities, *and* such as culturally diverse groups, and persons who are less able to participate because of socioeconomic or cultural factors**
  - **EBP findings may lack relevance and generalizability to practice in community settings**
  - ***EBPs exclude* newly developed interventions, traditional healing practices, and therapies developed by specific cultural groups EBPs neglect the social, cultural and contextual influences participants**
  - **There is often a lack of attention to a true participatory approach**

Sources: **Braithwaite & Taylor, 1992; Green, 2001; Sackett, et al. 2000; Horn, SD and Gassaway J, 2007**

Evidence-based Practice (2)

- **Green points out that 'No single study of behavior or social change can establish causation'**
- **We must 'Learn from each other, build on previous experience, look for similarities in context'**
- **He argues that '*The evidence-based practice movement needs to direct some energy and resources to developing and applying criteria and measures of external validity for relevancy to population-based and PH practice.*'**
- **Green asks "Where did the field get the idea that evidence of an intervention's efficacy from carefully controlled trials could be generalized as the "best practice" for widely varied populations and settings?"**

Source: **Green LW. From research to "best practices" in other settings and populations. Amer J Health Behav 2001;25:165-178.**

Practice-based Evidence (3)

- *PBE* is the systematic collection of data about clients, groups, special populations (target) progress generated during service delivery (care, treatment, specific intervention) to enhance the quality and outcome of care
- *PBE* is information gathered from practitioners [of all disciplines] and clients [those served, treated] used to identify effective interventions and areas for program or practice improvement [Westfall, Mold, & Fagnan, 2007]
- *PBE* consists of real-time outcomes information/data [lessons learned, best practices] utilized by practitioners in treatment and other interventions to make decisions about effectiveness of the treatment(s) or intervention(s) –
  - Were the intended outcome (e.g., cost-effective treatment, reduced waiting times for care, improved literacy and systems navigation, so forth) achieved?

Practice-based Evidence (5)

- ***Evidence*** **is from the real world settings outcome measurement on the target population at all levels (individual, group, local, state, national, global) across the entire care, treatment, intervention continuum (inpatient, outpatient, residential, targeted services, population-level programs and so forth)**
- **A *PBE* approach involves the use of participatory methodologies to identify goals, describe the experience of giving and receiving services, and identify desired outcomes for the system being addressed (i.e., individuals, families, groups, organizations)**
- **Within *PB M & E*, the aim is to compare the processes and outcomes of targeted services against a standard – criteria/ reference points that can be used to interpret data**
- **These data determine what interventions and variables are validated and appear to be the most important**

Practice-based Evidence (6)

- **For a diversity of practices, there is a need for strategies for describing and documenting the practices, and for reviewing and/or developing evaluation approaches to identify the program theory and important activities and processes involved so that their effectiveness can be evaluated.**
- ***Participatory M & E (PME)* is well-suited to this task because the evaluator builds relationships with participants, practitioners and other service providers and stakeholders to discover the relevant questions, to gain rich and detailed data, and to analyze, interpret, and report findings to maximize knowledge development**
- ***PME* information that is in line with expected outcomes parallels practitioners' use of assumed methodological information to guide them through the care/treatment decision-making processes**

Best Practices/Evidence (1)

- What is the fit of your work/data on the "best practices/evidence" continuum of practices, interventions, services, programs and policies ranging from Promising to Practice-based to science-based
- This determination of best practices requires the identification and establishment of evidence – how good is yours?

Adapted from: Roberts & Yeager, 2004; AMCHP, 2011

Best Practices/Evidence (2)

- Practice-based Wisdom suggest that client, family and community participation and engagement are key to the development of and building evidence for effective, quality health systems and services
  - Testing of Best Practices to Build Evidence – Deduction to Verification to Induction - *Repeats*
- Requires an Approach to Research and Evaluation that is Practical, Realistic and to the best our ability meets scientific rigor.
- Thus, Practice-based Evidence – What have you or your colleagues done?

Adapted from: Telfair, 2005; Quill, et al, 2006

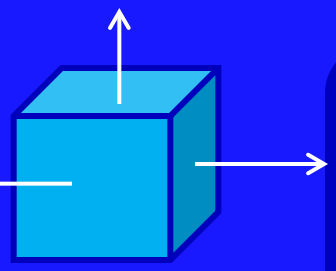
Program M & E Basic Types

The 3D Concept

- **Why is program M & E important?**

Accountability - Did the program achieve it's programmatic goals and objectives as intended?

Developmental – How did the program track and refine it's activities?



Knowledge – What were the outcomes of the program?

Identification of -
Gaps/Challenges
Resolutions and Refinement
Lessons Learned

Program M & E?

- ***Program M & E*** **is the application of process assessment and evaluation approaches, techniques and knowledge to systematically track, assess and improve the planning, implementation and effectiveness of programs (Chen, 2005 - modified)**

- **Simple, systematic and scientific approach to:**
  - **Plan and document program inputs**
  - **Plan and assess program activities**
  - **Identify gaps and challenges**
  - **Troubleshoot resolutions on an ongoing basis**
  - **Collect program data**
  - **Report program outputs**

Program Evaluation - Types

- **Process (formative) Evaluation: [*Includes monitoring*] Assessment of processes involved in planning, implementation and transformation phases**
  - **Providing tracking information to the address questions of whether the program or project is progressing/functioning as planned or designed (monitoring pahse)**
  - **Measures gaps between actual and expected levels of achievement**
  - **Mainly used to track, refine and improve programmatic efforts**
  - **Microscopic**
  - **Ongoing (monthly, quarterly, annually)**

Program Evaluation - Types

- **Outcome (summative) Evaluation: Assessment of short-term and intermediate program outputs**
  - **Measures achievements of goals and objectives**
  - **Mainly used to collect data and report outputs**
  - **Macroscopic**
  - **Not ongoing (annually, end of grant period)**

Program Evaluation - Types

- **Impact Evaluation: Assessment of long-term program outputs**
  - **Measures impact of program beyond programmatic parameters (participants)**
  - **Mainly used to prove program sustainability, and justify future funding**
  - **Global**
  - **Not ongoing**

Mixed Methods Approach

Key Program Monitoring and Evaluation Design

Mixed Methods Terminology

- ***Multiple types*** **of qualitative data or using experts with different academic backgrounds ("triangulation").**
- ***Newer:*** **Integrating qualitative and quantitative data collection together**

Mixed Methods Designs

A smaller qualitative study designed to provide data for a larger quantitative one (*often survey based*)

qual ⇨ QUANT
qual preliminary

quant ⇨ QUAL
quant preliminary

QUANT ⇨ qual
qual follow-up

QUAL ⇨ quant
quant follow-up

Mixed Methods Designs

A small quantitative study that is the set- up for the major qualitative study to follow.

qual ⇨ QUANT
qual preliminary

quant ⇨ QUAL
quant preliminary

QUANT ⇨ qual
qual follow-up

QUAL ⇨ quant
quant follow-up

Mixed Methods Designs

A major quantitative study that uses qualitative data to gain insight into its findings.

qual ⇨ QUANT
qual preliminary

quant ⇨ QUAL
quant preliminary

QUANT ⇨ qual
qual follow-up

QUAL ⇨ quant
quant follow-up

Mixed Methods Designs

A major qualitative study that uses a follow-up quantitative study at the end.

qual ⇨ QUANT
qual preliminary

quant ⇨ QUAL
quant preliminary

QUANT ⇨ qual
qual follow-up

QUAL ⇨ quant
quant follow-up

Mixed Methods Designs

Time and emphasis (in CAPS).

qual ⇨ QUANT qual preliminary	quant ⇨ QUAL quant preliminary
QUANT ⇨ qual qual follow-up	QUAL ⇨ quant quant follow-up

Integrated at Analytic Level

- These designs can be simultaneous and/or sequential.
- Attention needs to be to key challenges of:
  - Participants may be challenged to complete all portions of the data collection process
  - These cases may not always lend themselves readily to analytic integration if data is incomplete

Simultaneous Design

Where qualitative and quantitative methods reinforce simultaneously.

qual ⇨ QUANT
qual preliminary

quant ⇨ QUAL
quant preliminary

QUANT ⇨ qual
qual follow-up

QUAL ⇨ QUANT
performed @ same time

Simultaneous: *Best Method*

- Quantitative (demographics, surveys, clinical) and qualitative data is collected from all participants.
- Analysis plan integrates the quantitative / qualitative data together.
- Few examples, but is the best method for fully interpreting data in an empirical study.

Challenge: Selecting Appropriate Outcomes to Achieve

- Being clear on the ultimate goal—why?
- Picking a manageable number of well-defined outcomes that we can demonstrably impact within a reasonable time frame.
- Choosing outcomes that reflect your values and priorities about what is important.
- Gaining broad community involvement, including key interest groups, to insure buy-in on outcomes that are relevant to the local community.
- Achieving a critical mass of supporters/leaders/funders who will work together on achieving improved outcomes.
- Identifying whose outcomes you are measuring, who is responsible for achieving them.

Challenge: Developing a Strategy For Achieving the Intended Outcomes

- Transferring the strategy that details the immediate outcomes or milestones from the program level to the community level.
- Assembling the relevant knowledge, including research and practice, to structure the relationships in the logic model.
- Finding key leverage points beyond individual programs.
- Having criteria for establishing the linkages: identifying key relationships, sequencing outcomes.
- Focusing and identifying a manageable scope.
- Keeping the logic model comprehensive but simple and actionable.
- Mapping existing capacity, actions/efforts, resources/ assets, and context.

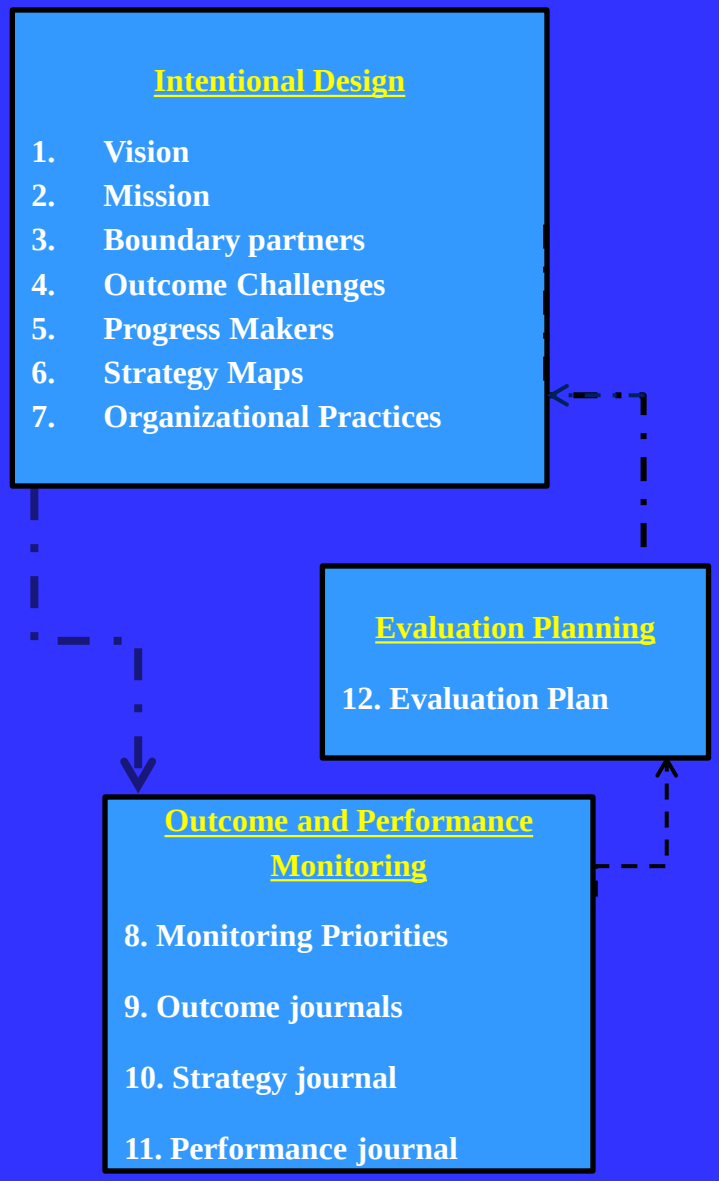
Challenge: Creating and Implementing an Action Plan

- Working with Community Partners to Verify Program Goals and Objectives, Linking them to Clearly Laid Out Immediate, Intermittent and Long-term Outcomes
- Working with Community Partners to Identify and Define S.M.A.R.T. Components of Program Objectives that will allow for the Intended Outcomes to Be Measured
- Linking Objectives with Steps/Activities/ Interventions that will lead to Achievement of Intended Outcomes
- Carrying Out Steps/Activities/ Interventions As intended

Challenge: Identifying Indicators of Success

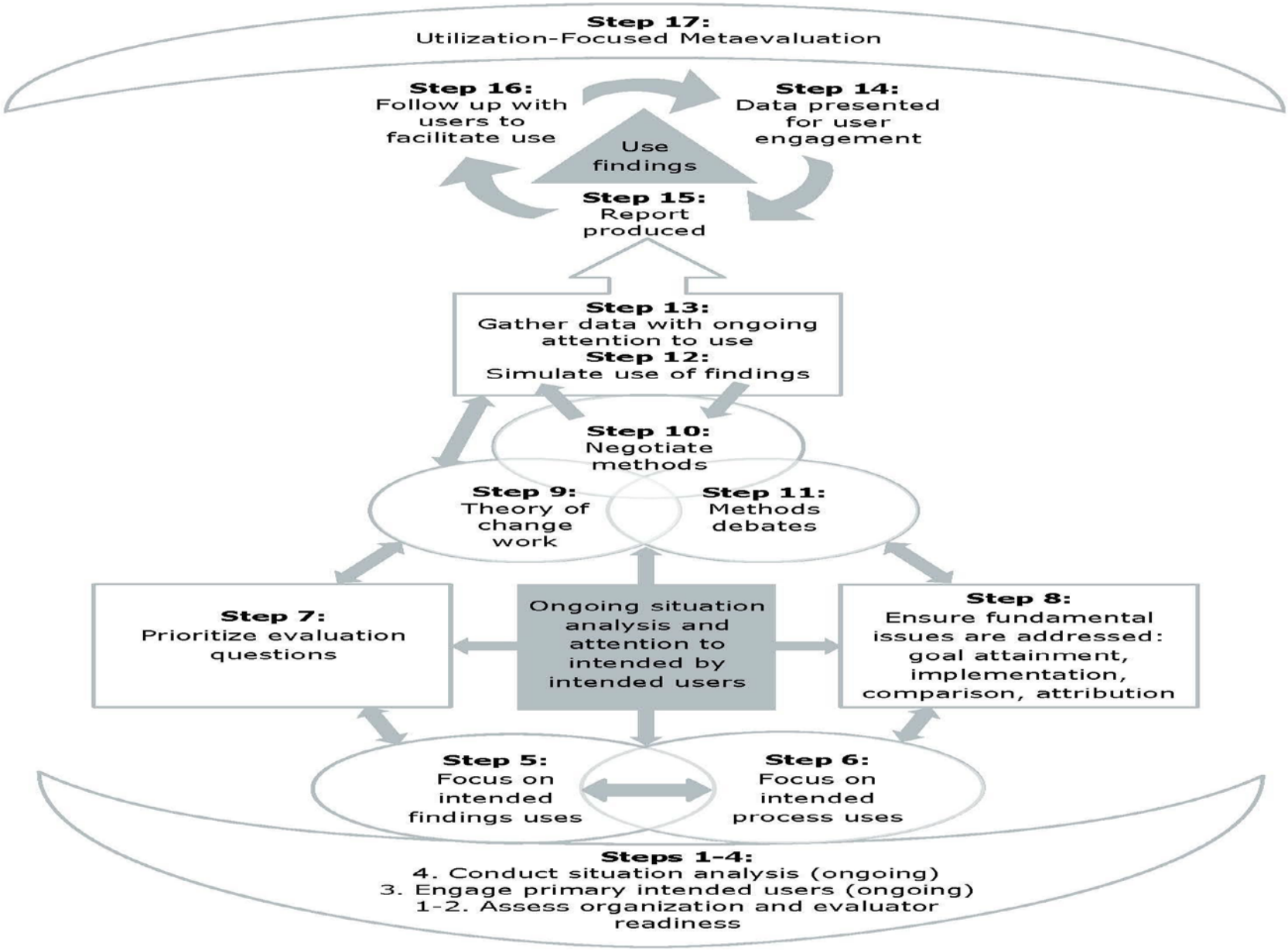
- Selecting valid indicators (just the right number) that are correlated to objective, outcomes, intervention and longer-term outcomes.
- Choosing indicators most relevant to what you want to achieve.
- Selecting indicators that are understandable and convincing to the public/donors.
- Selecting indicators that have data available or are measurable at a reasonable cost.
- Gaining agreement on whose success you are measuring.
- Being able to compromise when an ideal indicator is not available and move ahead anyway.

The three stages and twelve steps of outcome mapping



Source: Earl, S, Carden,F, Smutylo, T (2001). Outcome Mapping, Fig. 1, pg. 4)

Seventeen steps to Essentials of Utilization-Focused Evaluation (Patton, 2012) - *Interactions among all 17 steps*



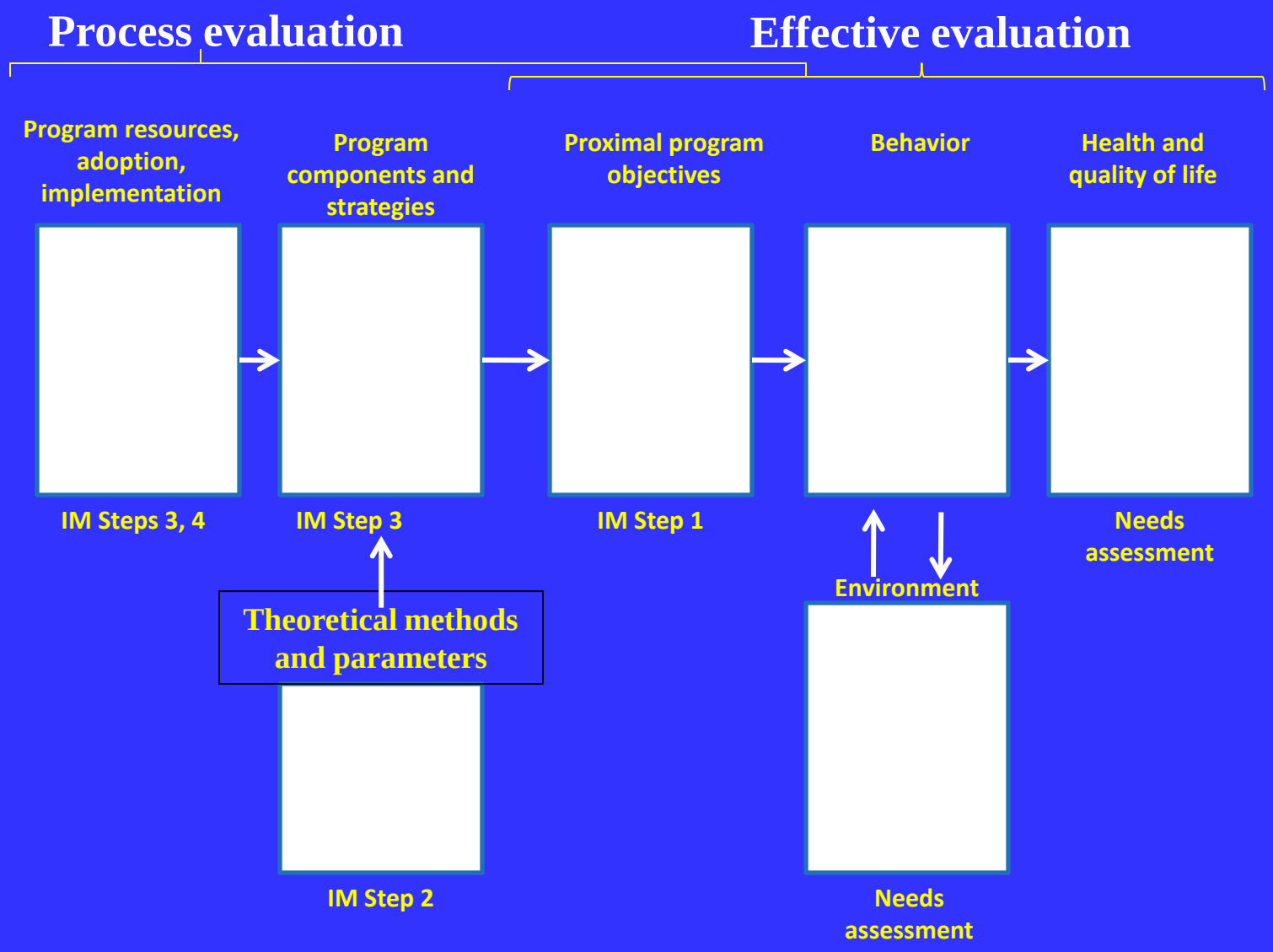


Figure 9.3 Bartholomew et al., 2001, From *Intervention Mapping: Designing Theory and Evidence-Based Health Promotion Programs* [pp. 327], *modified*)

Table (R-6.1) Summary of the Five-Tiered Approach to Evaluation

	Purpose of Evaluation	Tasks	Types of Data to Collect/Analyze
Tier 1: Needs Assessment	Document problems Determine unmet need Propose program options Set data baseline	Review existing data, get additional data Identify resource gaps, unmet need Set goals & objectives Recommend program model	Extant data on target population, services; Interviews/survey data from community leaders, prospective participants Information about similar programs
Tier 2: Monitoring & Accountability	Monitor program performance; Meet demands for accountability Build constituency Aid planning & decision-making Lay foundation for later evaluation activities	Determine needs & capacities for data collection, management; Develop consistent data collection procedures; Gather & analyze data re: clients, services, staff, & costs.	MIS data Case material from record reviews, program contact forms, etc.
Tier 3: Quality Review & Program Clarification	Develop detail re: implementation Assess quality & consistency of intervention Articulate theory(ies) of change Provide information to staff for program improvement	Review monitoring data Expand program description Compare program with standards; Examine participants' perceptions about effects of program; Clarify program goals & design	MIS monitoring data Case material, other qualitative & quantitative data on program operations, satisfaction & perceived effects; Questionnaires, interviews, observations, focus groups.
Tier 4: Achieving Outcomes	Determine what changes have occurred among program participants Attribute changes to the program; Provide information to staff for program improvement	Choose short-term objectives Selective appropriate research design Determine measurable indicators of success for outcomes Collect and analyze information about effects on beneficiaries	Client-specific data (questionnaires, interviews, goal attainment scaling, observations, functional indicators) Client & community social indicators MIS data Comparable data for comparison group(s)
Tier 5: Establishing Impact	To contribute to knowledge development in the field; Product evidence of differential effectiveness of treatment Identify models worthy of replication	Pick impact objectives re: Tier 4 results; Choose rigorous research designs & control groups; Identify techniques & tools to measure effects in treatment & control groups; Collect & analyze information	Client-specific data (questionnaires, interviews, goal attainment scaling, observations, functional indicators); Client and community social indicators; MIS data; Comparable data for control group(s).

Adapted from Jacobs, R.H. (2003). Child and family program evaluation: Learning to enjoy complexity. Applied Developmental Science, 7(2), 62-75

Evaluation

Step 1 **Needs Assessment**	– Plan needs assessment with PRECEDE model – Assess quality of life, behavior, and environment – Assess capacity – Establish program outcomes
Step 2 **Matrices**	– State expected changes in behavior and environment – Specify performance objectives – Specify determinants – Create matrices of change objectives
Step 3 **Theory-based Methods and Practical Strategies**	– Review program ideas with interested participants – Identify theoretical methods – Choose program methods – Select or design strategies – Ensure that strategies match change objectives
Step 4 **Program**	– Consult with interested participants and implementers – Create program scope, sequence, theme, and material list – Develop design documents and protocols – Review available materials – Develop program materials – Pretest program materials with target groups and implementers, and oversee materials production
Step 5 **Adoption and Implementation Plan**	– Identify adopters and users – Specify adoption, implementation, and sustainability performance objectives – Specify determinants and create matrix – Select methods and strategies – Design interventions to affect program use
Step 6 **Evaluation Plan**	– Describe the program – Describe program outcomes and effect questions – Write questions based on matrix – Write process questions – Develop indicators and measures – Specify evaluation design

Implementation

Source: Intervention Mapping Steps (Bartolomew et at (2001) Figure 1.2 [Modified])

DATA COLLECTION SCHEMES FOR ANALYSIS OF PROGRAMS AT ALL LEVELS

“UMBRELLA” PROGRAM/AGENCY

- Funds and/or oversees many programs/services
- These are generally Multi-type programs or services aimed at achieving a specific outcome or a set of global outcomes, e.g.,
  - population specific wrap-around services programs
  - prevention initiatives
  - systems development initiatives
  - poverty programs

"UMBRELLA" PROGRAM/AGENCY

Data Category	Overall Common Data Old and New (Always)	+	Content Area Common Data Old and New	+	Site/Service Specific Data Old and New	=	Evaluation data to be collected
DATA TYPES	— CORE (longitudinal e.g. demographics, key indicators not expected to change over time.)		— CORE (longitudinal , e.g. demographics, key indicators not expected to change over time.)		— CORE (longitudinal, e.g. demographics, key indicators not expected to change over time.)		
	— Data linked to purpose/ intent/ expectations of the agency/program; e.g. performance indicators		— Content linked data based on the literature, research and purpose/intent of the program's focus (e.g., data on referral/follow-up support for prenatal care and quality of care outcome indicators)		— Data of concern, interest, usefulness of/to site (e.g., who uses services and why?)		
	— Time/Stage/Phase of project data (e.g. data that is expected to						

SINGLE FOCUS PROGRAMS

- These are generally Single-type or focused programs or services aimed at achieving a specific outcome or a set of outcomes, e.g.,
  - WIC
  - immunizations
  - job/skill training
  - self-efficacy development

SINGLE FOCUS PROGRAMS

Data Category	Overall Common Data (Always)	+	Site/Service Specific Data	=	Evaluation data to be collected

DATA TYPES		
	— CORE (longitudinal e.g. demo key indicators not expected to change over time.)	— CORE (longitudinal , e.g. demographics, key indicators not expected to change over time.)
	— Data linked to purpose/ intent/ expectations of the agency/ program; e.g. performance indicators	— Data of concern, interest, useful-ness of/to site (e.g., who uses services and why? How are clients benefiting?)
	— Time/Stage/Phase of project data (e.g. data that is expected to change)	

IN CONCLUSION (1)

- Advantages and Disadvantages of a Collaborative Mixed-Model Assessment
  - Is a valuable tool for identifying, building and establishing evidence
  - Is a valuable tool for planning, management and assessment decisions
  - The approach is relatively reasonable in time, expense, personnel and can be applied readily across single and multiple services and programs

IN CONCLUSION (2)

- Advantages and Disadvantages of a Collaborative Mixed-Model Assessment (cont)
  - It includes a flexible set of methods that can be modified to accommodate the needs of each service program at both the state and local level
  - Requires staffs to develop objectives that serve as the basis of the service delivery process and then to plan for necessary data so that the capability for tracking progress, idence is assured

IN CONCLUSION (3)

- Another important advantage is that it encourages the production of information for critical management decisions, assessing outcomes and building evidence in both short- and long-term time frames and across all levels of the service delivery process and program functioning
- Thus, it is compatible with a diversity of service and programmatic guidelines and rigorous assessment requirements - Bridging

IN CLOSING

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