Making Sense of Your Data

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Healthy Start Convention 2015
Marriot Wardman Park, Washington, DC
November 16, 2015

Learning Objectives

- To design a holistic approach to Quality Improvement Process

- To learn an integrated methodology for program design, planning and implementation.

- To adapt the Project Achievement Matrix Tool for the HRSA outcomes and indicators

Overview

General overview of Quality Improvement from Good to Great

Presentation, Group Discussion then solution-oriented Consultation addressing challenges and concerns specific to QI, monitoring and evaluation (M&E) by:

- Presentation and walking through a Project Assessment [Matrix] (PAM)

- Conducting an aggregate 'Case' review of strengths and challenges of grantee evaluation plans – Group project

- Conducting an practice-based evidence oriented case-by-case consultation to address QI and M&E questions and concerns presented by grantees

Solution Oriented Group Discussion- breakout using PAM for specific HRSA MCH outcome/indicator

Report back from group with Q&A and discussion

Quality Improvement?

"Quality is directly linked to an organization's service approach...to achieve a different level of performance (results) and improve quality (standard), an organization's current thinking patterns and practices need to change."
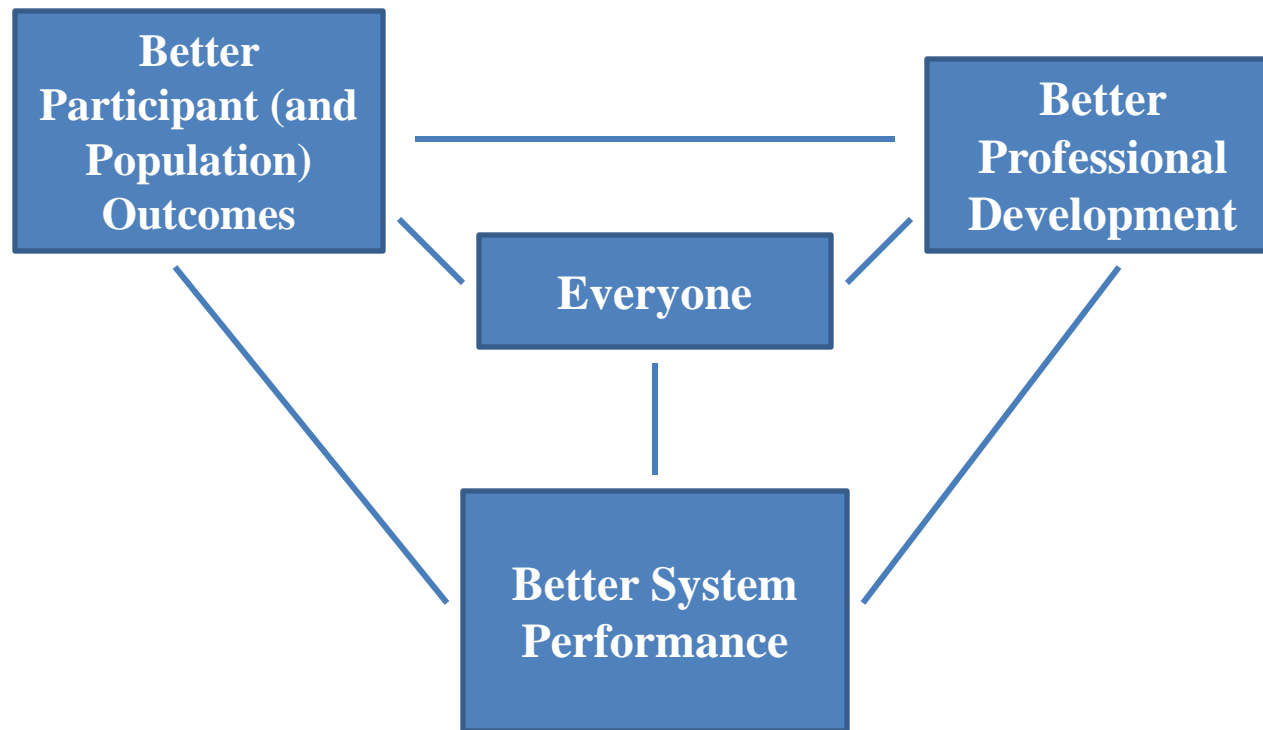
WE Deming

What is Quality Improvement?

The combined and unceasing efforts of everyone—healthcare professionals, participants and their families, human service providers, researchers, payers, planners and educators, etc.—to make the changes that will lead to better participant outcomes (i.e. maternal and child health), better system performance (i.e. care) and better professional development (i.e. learning and practice).

Conceptual Framework
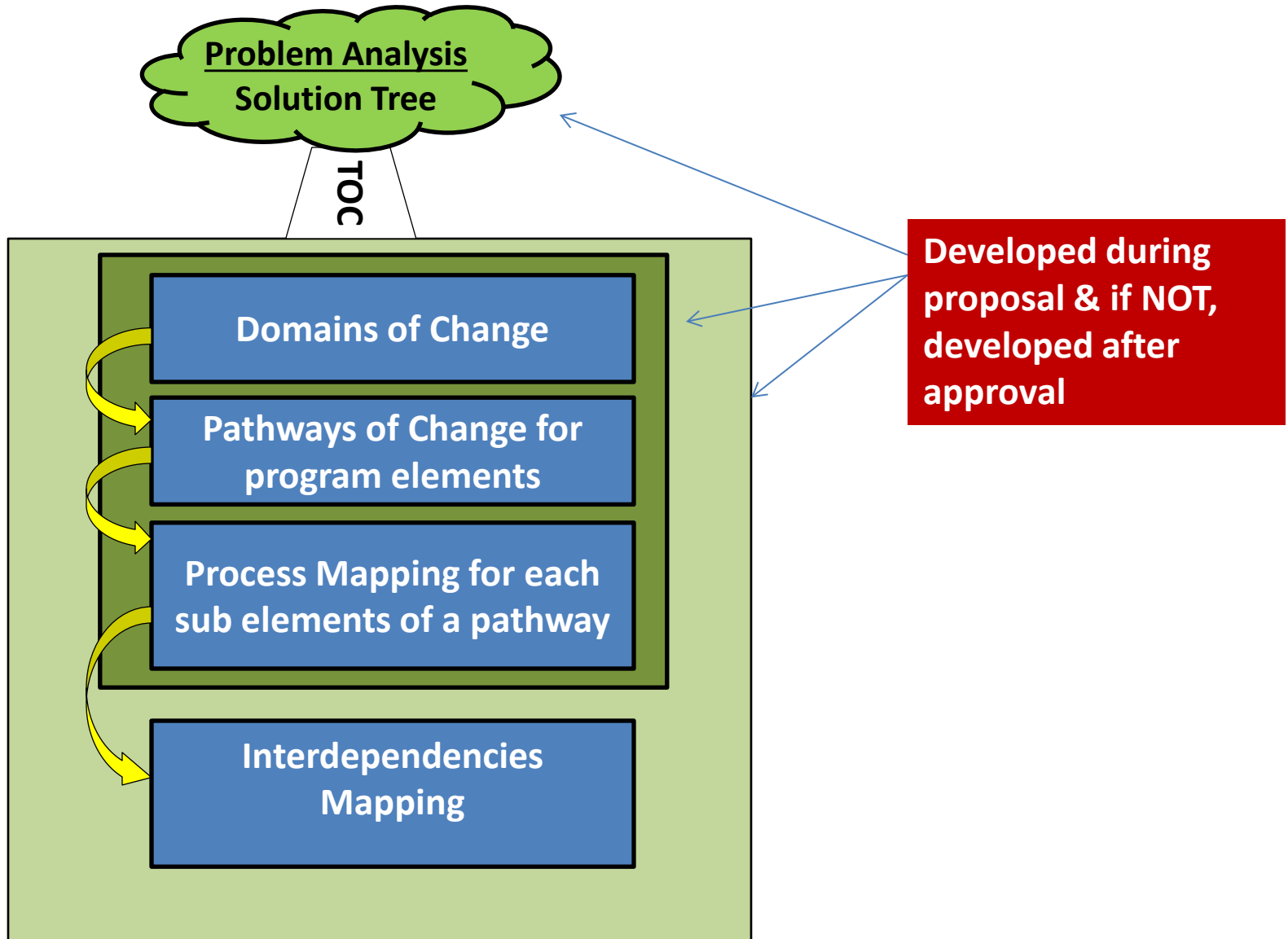
Linked Aims of Improvement

Better Participant (and Population) Outcomes — Better Professional Development — Everyone — Better System Performance

FIVE MAJOR EMPHASES of PQIF

1. Focus on PROCESS IMPOVEMENT with emphasis on CONTINOUS QUALITY IMPROVEMENT OF PROCESS

2. It plans for quality rather than inspects to find quality problems

3. Systematizes, mentors & monitors quality at the country & IO

4. Will position Organization as a leader as we move from Good TO Great!

5. PQIF links technical support, field visits, reporting, hiring, performance monitoring & quality monitoring & mentoring
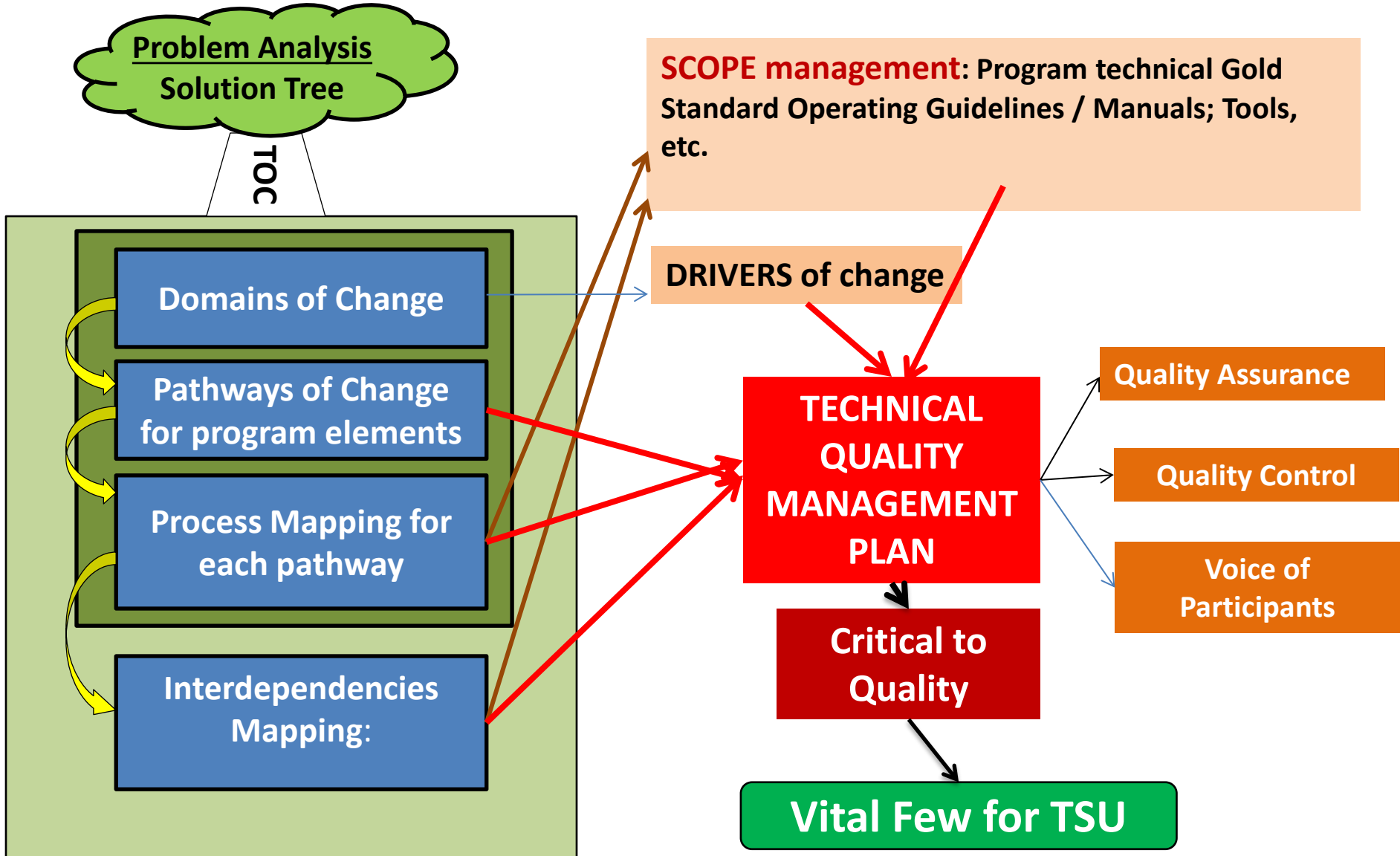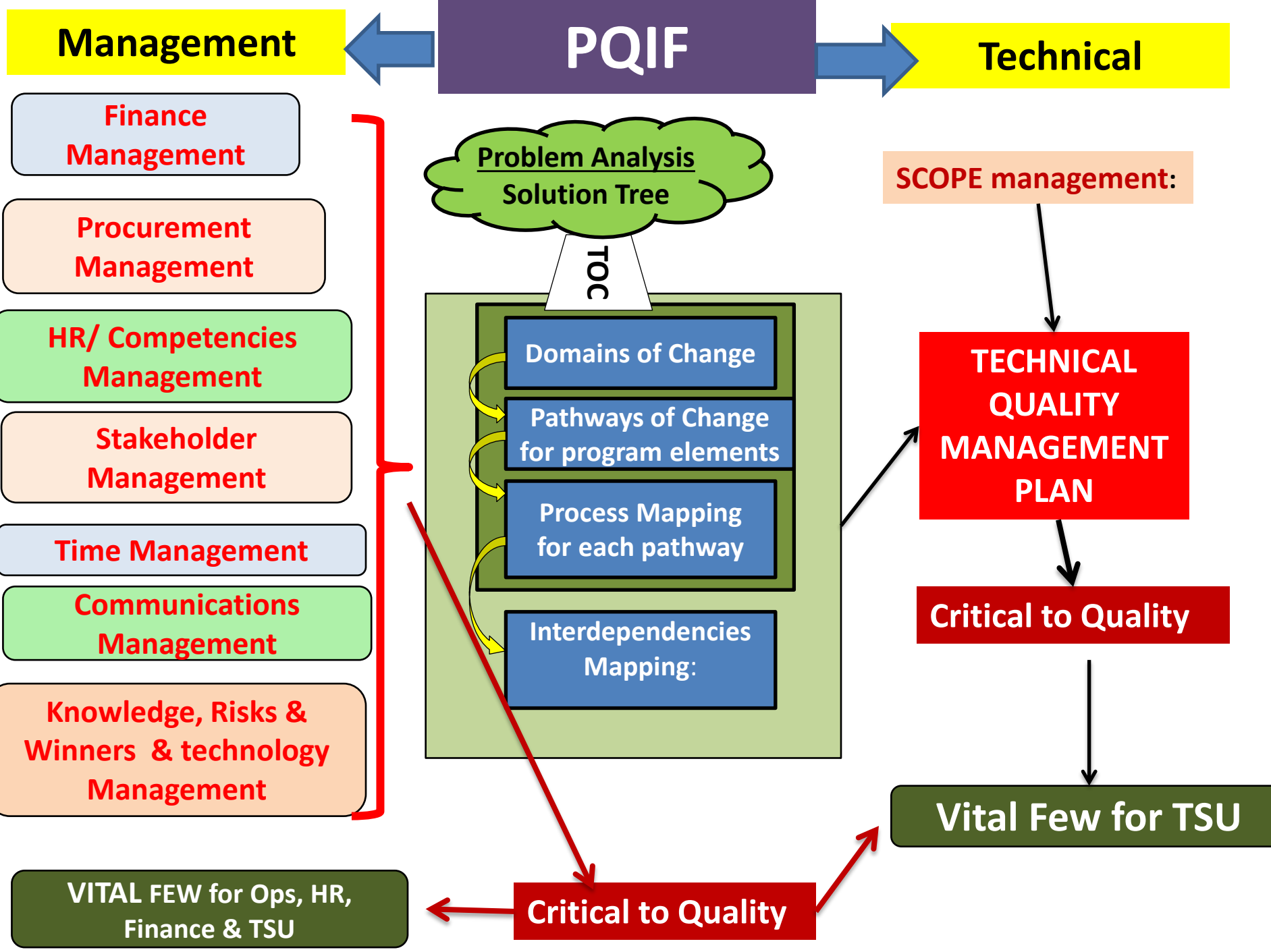
WHO benefits from PQIF?

WHO?	What Benefits?
Program Participants	Improved quality of service delivery from Organization; their voice is heard in defining quality
Program Managers	Clarity on quality, tools for implementation, easy to manage PQ, Evidence based information on quality; Continuous improvement of quality
Director	Ownership for continuous quality improvement, marketing success, increased capacity to drive for quality
Operations	Focusing on vital few; clarity on role and responsibility; more fruitful conversation with program staff
Donor	PCI's success in implementation, pathways & evidence based tools; more priming opportunities
Organization	Ability to sell processes, systems and tools that have great impact in quality; moving from Good to Great

Foundation of PQIF

Problem Analysis Solution Tree

TOC

Domains of Change

Pathways of Change for program elements

Process Mapping for each sub elements of a pathway

Interdependencies Mapping

Developed during proposal & if NOT, developed after approval

PROGRAM TECHNICAL QUALITY IMPLEMENTATION FRAMEWORK

Problem Analysis Solution Tree

TOC

SCOPE management: Program technical Gold Standard Operating Guidelines / Manuals; Tools, etc.

DRIVERS of change

Domains of Change

Pathways of Change for program elements

Process Mapping for each pathway

Interdependencies Mapping:

TECHNICAL QUALITY MANAGEMENT PLAN

Quality Assurance

Quality Control

Voice of Participants

Critical to Quality

Vital Few for TSU

Quality Improvement: A Case Model

Building a Pocket of Greatness to Last
"From Good to Great"- Jim Collins

Drivers of Quality: Disciplined People

Hiring team to align with Organization's culture

1. Behavior and competency group interview.

2. Comprehensive training at the start up.

3. Mentoring on staff core competencies to adhere to implementing program standards.

4. **Emphasis on continuous quality improvement through reflective supervision & mentoring of staff.**

5. Quality circles twice a week to share personal & programmatic challenges & successes (Monday & Friday mornings).

6. Provide Wellness training and team charter.

Drivers of Quality: Disciplined Process

Dr. Telfair's presentation on:

- Practice- based Evidence (PBE)

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

- Project Achievement Matrix (PAM)

Drivers of Quality: Disciplined Action

- Regular, frequent and consistent quality assurance review with staff resulting in continuous quality improvement.

- Participating local consortiums, community action networks, state & nationwide networks to learn new ways and to innovate program implementation.

- Program participant is mentored to be part of the local consortia.

- Collective Impact process in all of the above led by key staff.

- Follow closely Sustainability process with pro-planning and visioning.

Conclusion

Effective planning and evaluation helps to meet performance targets:

- Helps in the efficient application of resources

- Provide assurances to stakeholders

- Supports evidence–based decision making

Quality improvement (QI) helps us achieve good health outcomes:

- Provide assurances to stakeholders

- Supports evidence –based decision making

- Secures funding and strengthens program growth and sustainability

APPROACH

Tell me ....I Forget

Show me....I remember

Engage me....I understand

Chinese Proverb (modified)

OVERVIEW

- **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**

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

Science-Based

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

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

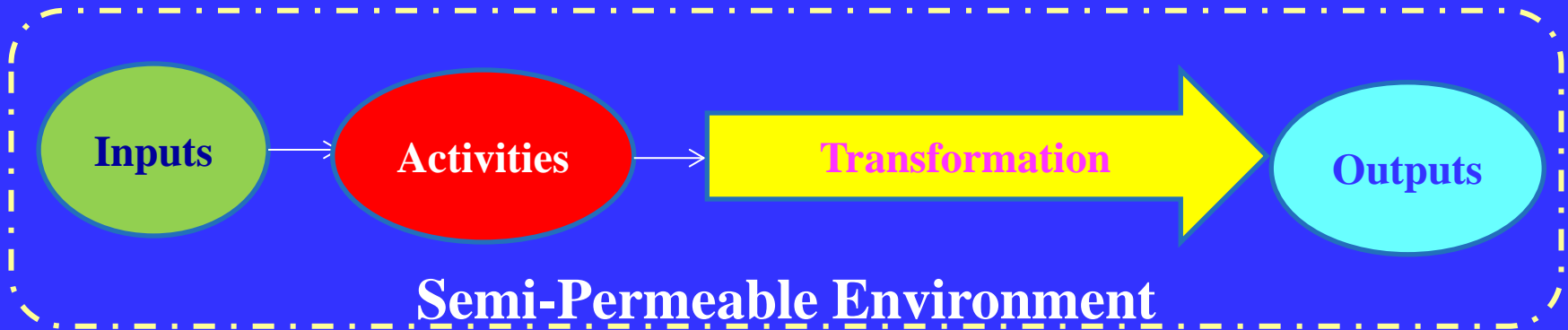Based on guidelines, standards or models that have been proven effective

Incorporates characteristics or theoretical foundations or other effective public health practices

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

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
Science- Based	Outcome Evaluation

Basic Structure of an Evidence - Building Program

Inputs → **Activities** → **Transformation** → **Outputs**

Semi-Permeable Environment

- **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.

Practice-based Evidence (2)

- **Practice-based evidence** may also result in evidence of ineffectiveness, including approaches with either <u>no evidence</u> of effectiveness or <u>statistically significant negative effects</u>.

- 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**

Integrated Systems of Construct-Oriented Program Evaluation Model (I-SCOPE)
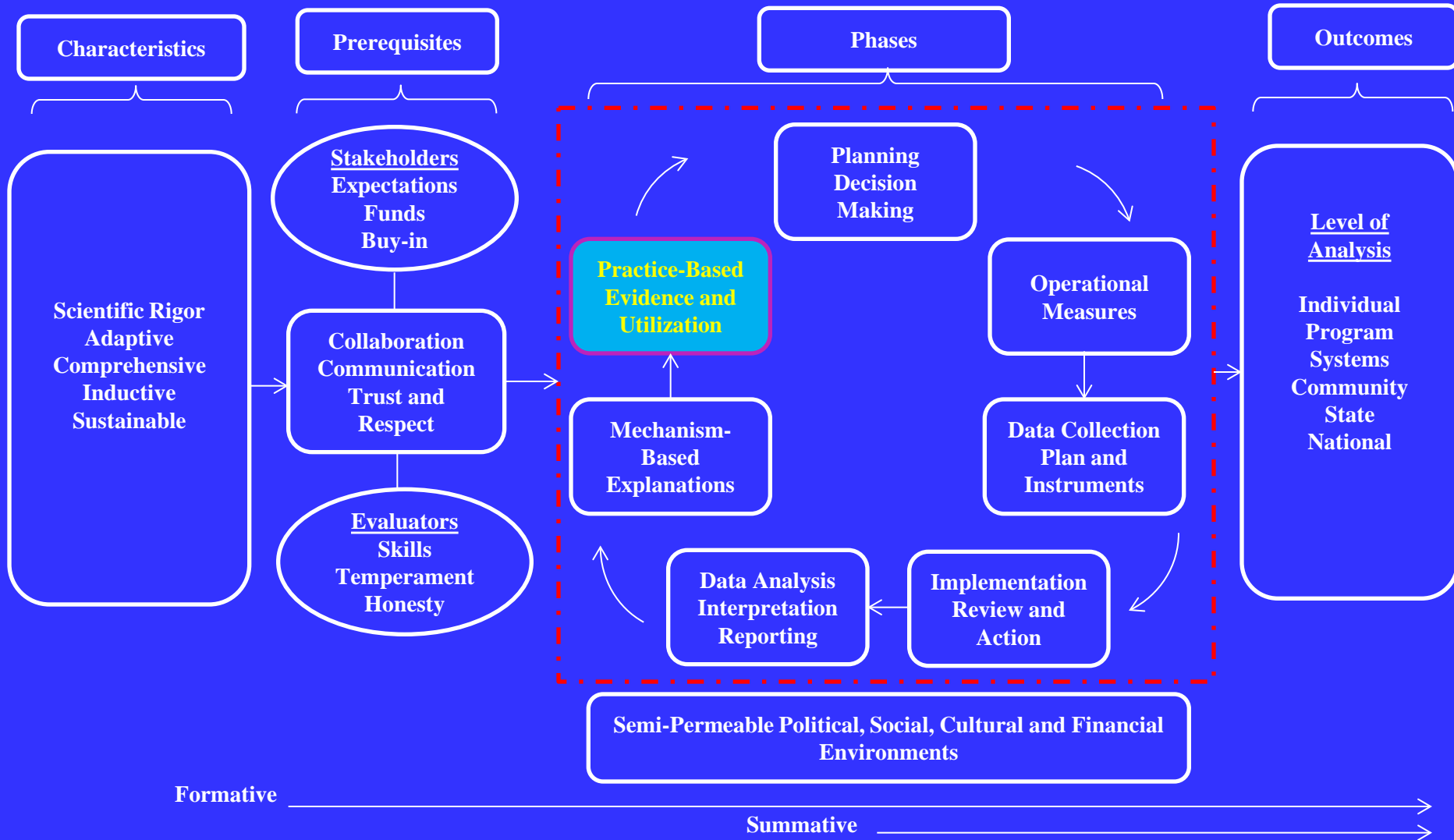
I-SCOPE: Central Tenets (1)

- **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 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
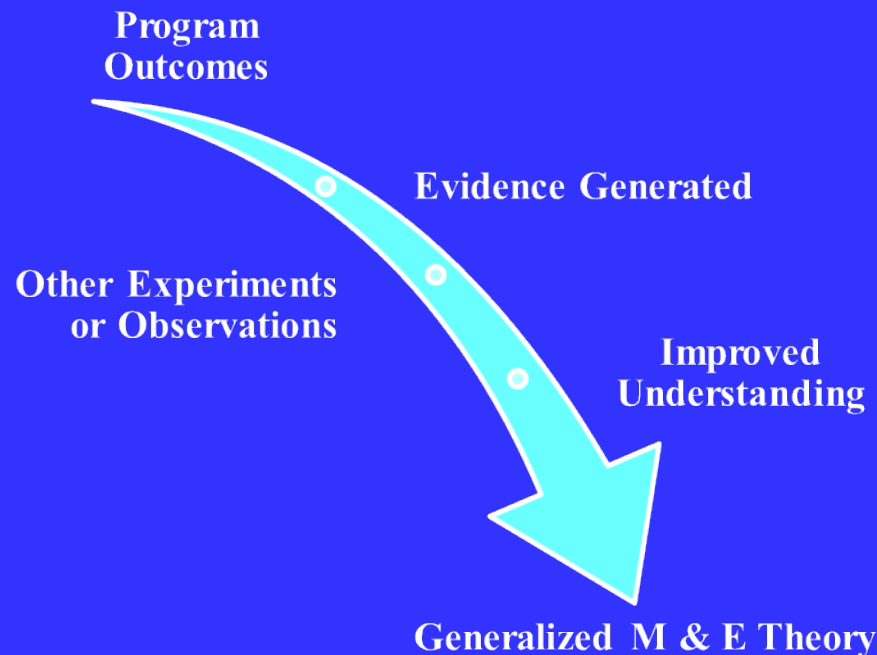
I-SCOPE Constructs: Phases (1)

- **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**

Data → Results → Evidence

- **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**

Program
Outcomes

Evidence Generated

Other Experiments
or Observations

Improved
Understanding

Generalized M & E Theory

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 Evaluation Data Tool – Project Achievement Matrix

Tool – Process Evaluation (1)

- *Objective*: **To use a tool that allows for <u>ongoing</u> collection and assessment of <u>all</u> 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**
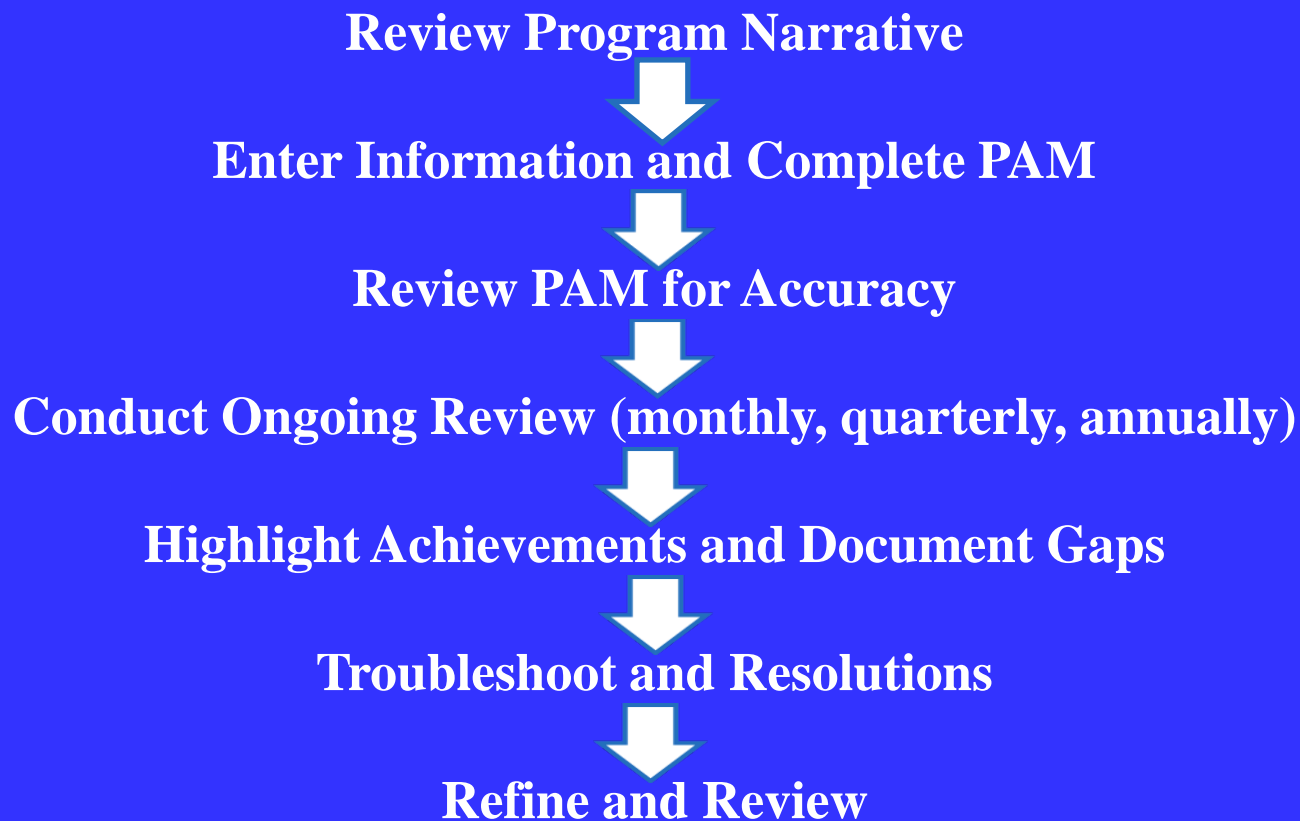
  - **Quantifiable data (mixed)**

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

⬇

Enter Information and Complete PAM

⬇

Review PAM for Accuracy

⬇

Conduct Ongoing Review (monthly, quarterly, annually)

⬇

Highlight Achievements and Document Gaps

⬇

Troubleshoot and Resolutions

⬇

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	105/100 (Identified) 100/100 engaged 65/100 enrolled	1.05 1 0.65	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%?**

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**

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

Solution-oriented Group Discussion Use of PAM tool

1. Choose one Indicator from HRSA Outcome
2. Use PAM tool and discuss process
3. Report back

Healthy Start Outcomes

1. Improve Women's health
- ↑ % of clients with health insurance to 90%
- ↑ % of clients who have a documented reproductive life plan to 90%
- ↑ % of clients who receive a postpartum visit to 80%
- ↑ % of clients who women, infants, and children participating in HS who have a medical home to 80%
- ↑ the # well women visits among HS participants to 80%

2. Promote quality services
- ↑ % of clients receiving prenatal care in the 1st trimester, and at least 10 prenatal visits over the course of the pregnancy
- ↑ % of HS infants who are ever breastfed to 82%
- ↑ % of HS infants who are breastfed at 6 months to 61%
- ↑ abstinence from cigarette smoking among HS pregnant women to 90%
- ↓ the # of HS pregnancies conceived within 18 months of a previous birth to 30%
- ↑ well child visits (including immunization) for HS participants' children between ages 0-24 months to 90%
- ↓ the # of HS participants with elective delivery before 39 weeks to 10%

3. Strengthen family resilience
- ↑ % of clients who receive:
  - Perinatal depression screening and referral to 100%
  - Follow up services for perinatal depression to 90%
  - Intimate partner violence (IPV) screening to 100%
- ↑ % of HS grantees that demonstrate father and/or partner involvement (e.g. attend appointments, classes, infant/child care)
  - During pregnancy
  - With child 0-24 months to 80%
- ↑ % of clients that read daily to a HS child between the ages of 0-24 months to 50%

4. Achieve Collective impact
- ↑ % of HS grantees with a fully implemented Community Action Network (CAN) to 100%
- ↑ % of HS grantees with at least 25% HS participant membership on their Community Action Network (CAN) membership to 100%

5. Increase accountability through quality improvement and performance M&E
↑ % of HS grantees who establish a quality improvement and performance monitoring process to 100%

↑ % of HS grantees that have a fully implemented CoIN process to 90%

Report back from groups

DISCUSSION AND QUESTIONS

Supporting communities to
give every child a Healthy Start.
Healthy Start EPIC Center

Thank you!

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(Handout) Tool – Project Achievement Matrix

Group Exercise - **Example of Your Group's Program Activity Cluster and Linked Benchmark Indicator((s)**

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