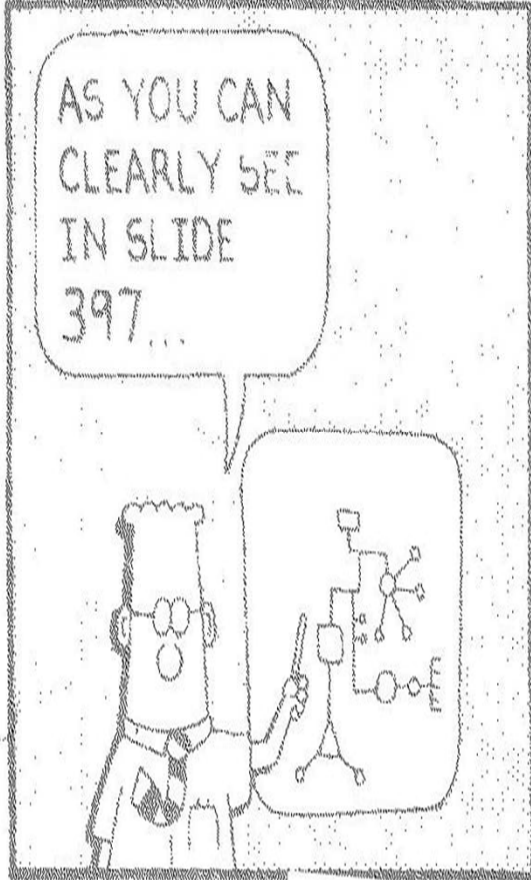


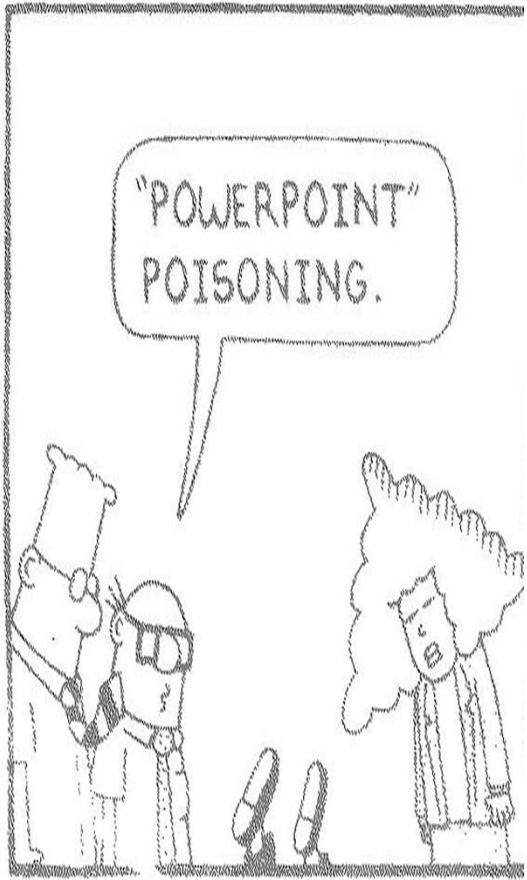
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BRIDGING THE RESEARCH-PRACTICE GAP:
BRINGING EFFECTIVE PROGRAMS
TO COMMUNITIES

Abraham Wandersman
wandersman@sc.edu
SZOLD INSTITUTE

BRINGING EFFECTIVE PROGRAMS TO COMMUNITIES

OVERVIEW

- BRIDGING RESEARCH AND PRACTICE
- BRINGING FUNDERS, RESEARCHERS/EVALUATORS, PRACTITIONERS, AND FAMILIES TOGETHER TO ACHIEVE OUTCOMES
 - *THE INTERACTIVE SYSTEMS FRAMEWORK FOR DISSEMINATION AND IMPLEMENTATION
- IMPLEMENTATION SCIENCE AND THE QUALITY IMPLEMENTATION TOOL

GAPS BETWEEN RESEARCH AND PRACTICE

THE GAP BETWEEN SCIENCE AND PRACTICE

- IN THE DOCTOR'S OFFICE

A GAP BETWEEN
SCIENCE
AND
PATIENT

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The State

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SUNDAY, JULY 10, 2005

PARADE

Bush Rejects Stem Cell Compromise
President Vows to Veto Bill as Some in GOP Seek to Avoid Showdown
From Stem Cell Opponents, Showdown
an Embryo

Now...what the American people think about

Stem Cell Research

A New PARADE/Research! America Health Poll

Catholics Split on Embryo Issue
'Adoption' Embraced by Evangelicals in Stem Cell Debate
Stem-cell research limit asked
Right to life wants legislators to restrict use of state money

Betty and Susan Ford Give Back • Music as Medicine • In Step With...Actress Jessica Bie

TAKE CHARGE OF YOUR CARE.

MEDICAL STUDIES INDICATE

MOST PEOPLE SUFFER

A 68% HEARING LOSS WHEN NAKED.



GETTING THE MOST OUT OF A VISIT TO THE DOCTOR'S OFFICE.

Take a friend, someone who will help you remember important information.

Educate yourself. Seek trustworthy information about illnesses or conditions that affect you.

Be up-front. Tell your doctors everything, or they might miss something important.

You have to ask in order to receive. If you want answers, you have to ask questions.

At United Health Foundation, we believe that the more you know, the healthier you will be. Which is why we partnered with the NATIONAL HEALTH COUNCIL to bring you these important health tips. We encourage you to get more involved in your care, to seek out information and to always make sure that the information you use comes from a reliable, evidence-based source. To find out more on this and other important topics, visit UHFtips.org.



United Health Foundation™



NATIONAL HEALTH COUNCIL

Scheiner D., Holand D., Wolan E., Salvarani M. Patients' Physical Agreement About Medical Diagnoses and Cardiovascular Risk Factors in the Ambulatory General Medical Examination. *Medical Care Proceedings*, December 1996, 71(12): 1130-1137.

- **OVERALL 54.9% RECEIVED
RECOMMENDED CARE**

ASCH ET AL STUDY, NEJM, 2006

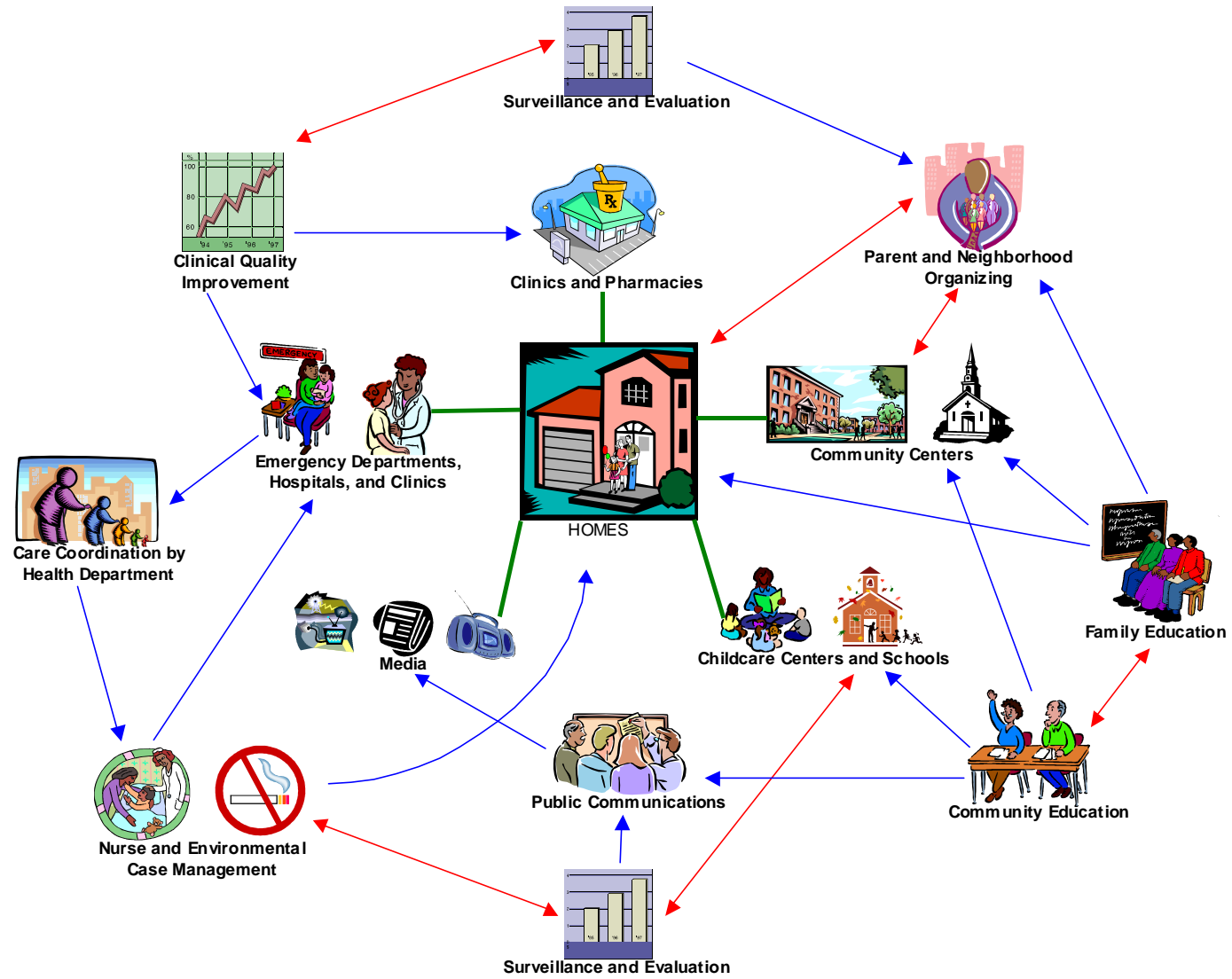
POSSIBLE SOLUTION

- VA MEDICAL SYSTEM HAS 67%
RECOMMENDED CARE
SYSTEM HAS ELECTRONIC MEDICAL RECORDS,
DECISION SUPPORT TOOLS, AUTOMATED
ORDER ENTRY, ROUTINE MEASUREMENT AND
REPORTING ON QUALITY, INCENTIVES FOR
PERFORMANCE



**As Yogi Berra
supposedly said,**

**"In theory there is no difference
between theory and practice,
but in practice there is."**



- **BRINGING EFFECTIVE PROGRAMS TO
COMMUNITIES :**

JOURNEY TO THE CENTER OF IMPLEMENTATION

BRENDAN FRASER



JOURNEY TO THE CENTER OF THE EARTH

SAME PLANET. DIFFERENT WORLD.

WRITTEN BY MICHAEL AND WALTER WELLS. DIRECTED BY JOHN DAHL. CASTING BY JUDITH WELLS. COSTUME DESIGNER: JENNIFER WELLS. EDITOR: ANDREW LOCKINGTON. EXECUTIVE PRODUCERS: PAUL MARTIN SMITH, DAVID WESTERVELT, STEVEN ROSSERHILL, ALEX HARRIS. PRODUCED BY BRENDAN FRASER, JOSH HUTCHERSON, ANITA BRIET. EXECUTIVE PRODUCERS: MICHAEL WESS AND JENNIFER FLACKLEY. PRODUCED BY LAURA LEVIN. WRITTEN BY ERIC BRONF. DIRECTED BY JOHN DAHL.

AND TAKE THE JOURNEY IN TEAL D 3D IN SELECT THEATERS

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NEW LINE CINEMA

BRIDGING RESEARCH AND PRACTICE

*WHERE DO EVIDENCE BASED PRACTICES COME FROM AND WHERE DO THEY GO

*RESEARCH TO PRACTICE MODELS

*THE INTERACTIVE SYSTEMS FRAMEWORK FOR DISSEMINATION AND IMPLEMENTATION (ISF)

A CHALLENGE

- RESEARCH TO PRACTICE MODELS ARE NECESSARY BUT NOT SUFFICIENT

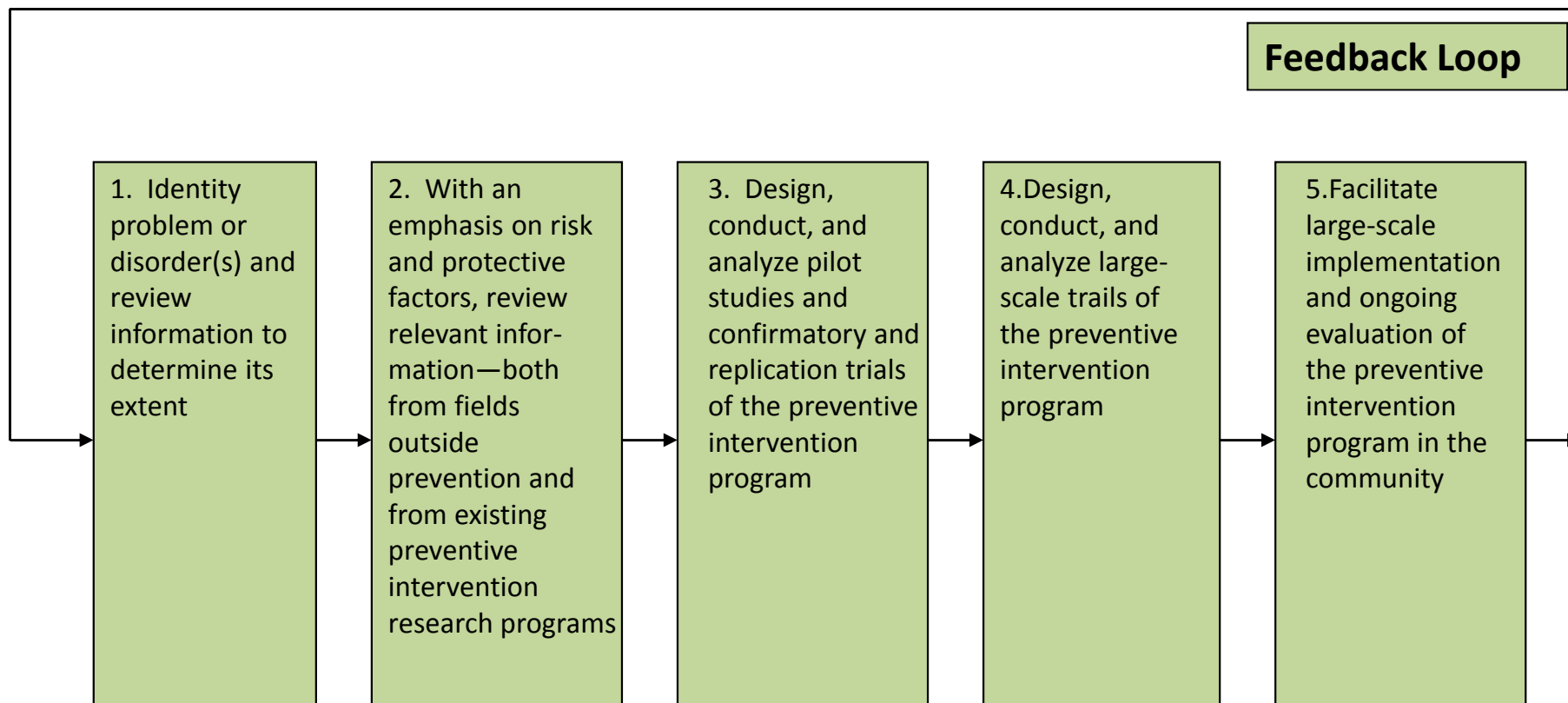
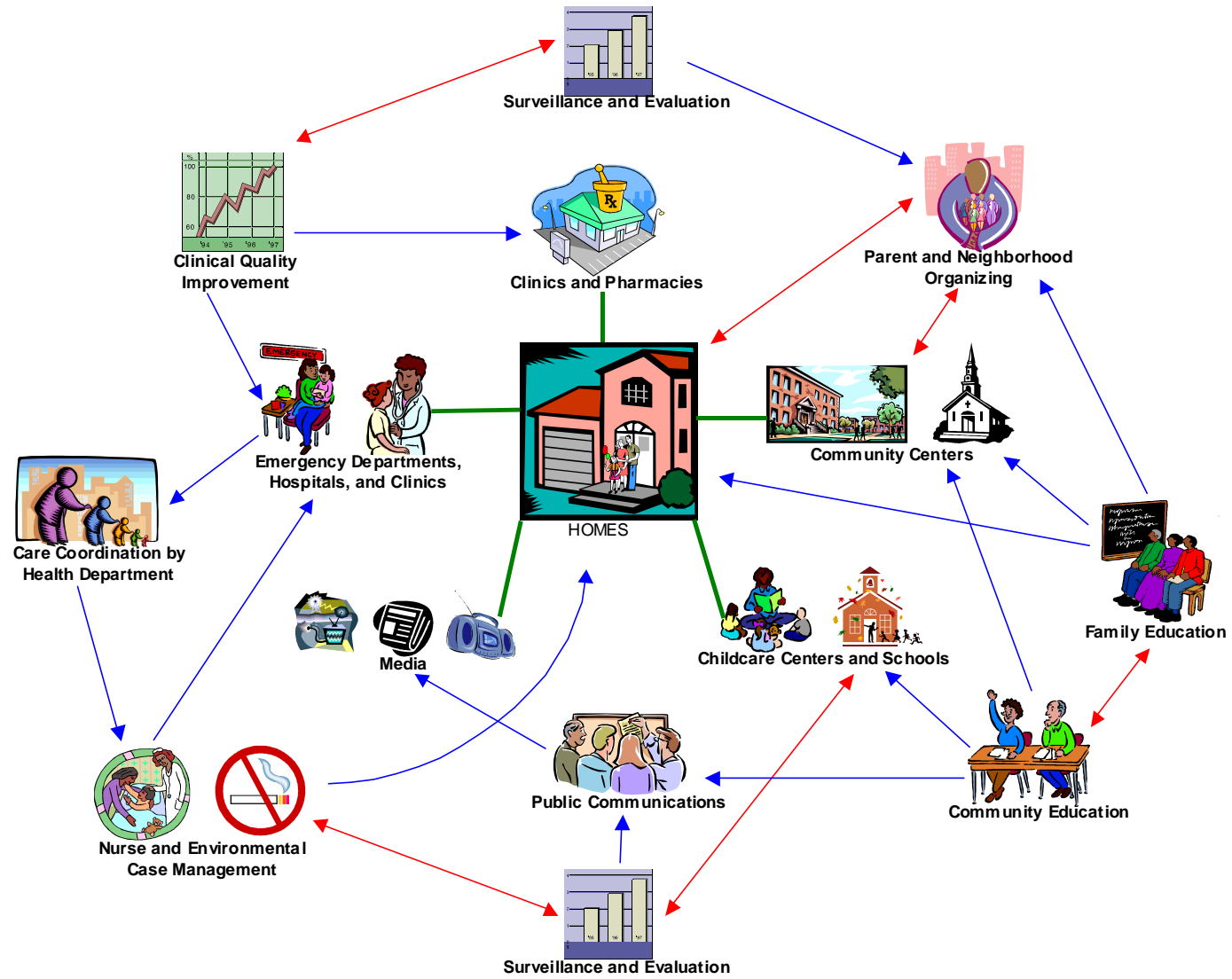
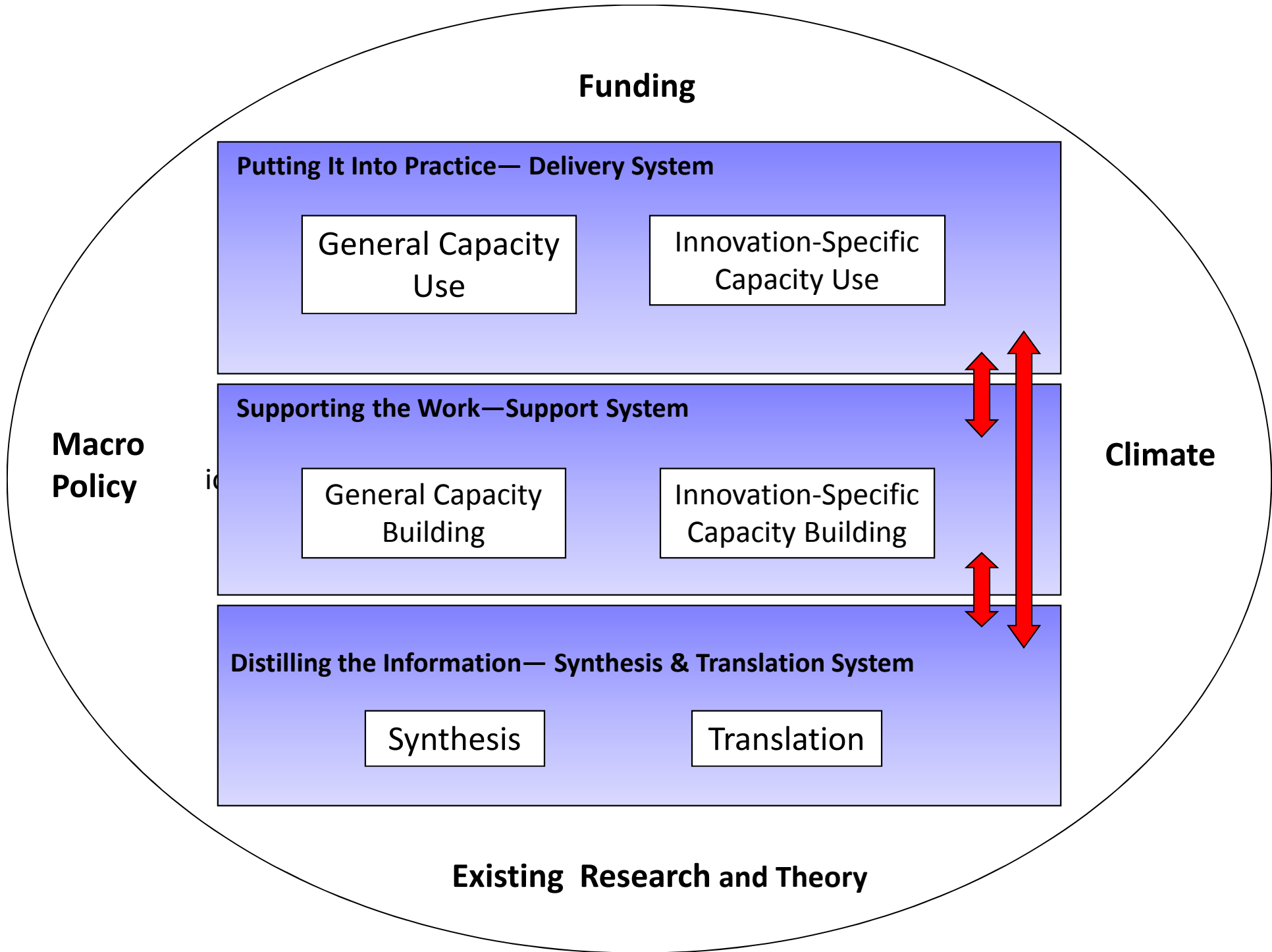


FIGURE 1.1 The preventive intervention research cycle. Preventive intervention research is represented in boxes three and four. Note that although information from many different fields in health research, represented in the first and second boxes, is necessary to the cycle depicted here, it is the review of this information, rather than the original studies, that is considered to be part of the preventive intervention research cycle. Likewise, for the fifth box, it is the facilitation by the investigator of the shift from research project to community service program with ongoing evaluation, rather than the service program itself, that is part of the preventive intervention research cycle. Although only one feedback loop is represented here, the exchange of knowledge among researchers and between researchers and community practitioners occurs throughout the cycle.



**Bringing Funders, Researchers/Evaluators,
Practitioners, and Families Together to Achieve
Outcomes**

*** The Interactive Systems Framework for
Dissemination and Implementation**



Funding

Putting It Into Practice— Delivery System

General Capacity Use

Innovation-Specific Capacity Use

Supporting the Work—Support System

General Capacity Building

Innovation-Specific Capacity Building

Distilling the Information— Synthesis & Translation System

Synthesis

Translation

Macro Policy

Climate

Existing Research and Theory

Synthesis and Translation System



Synthesis & Translation System: Distilling the Process & the Science

Synthesis

Translation

What are we trying to 'translate'?



PUTTING WHAT WORKS TO **work**
A PROJECT OF THE NATIONAL CAMPAIGN TO PREVENT TEEN AND UNPLANNED PREGNANCY 

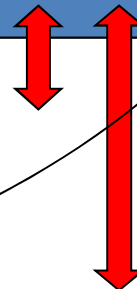


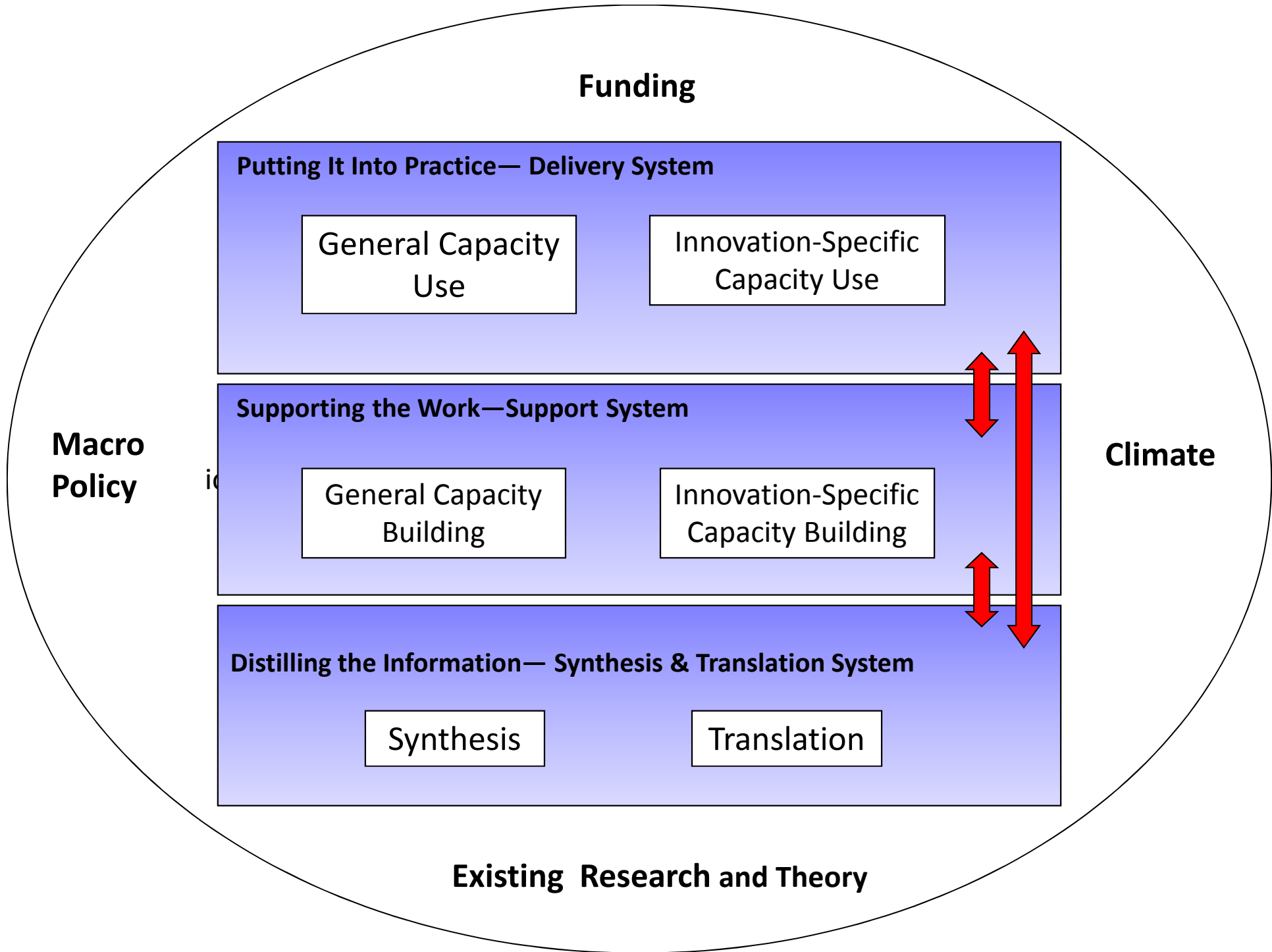
Delivery System

**Prevention Delivery System:
Local Partners Implementing Prevention—**

**General
Capacity Use**

**SBA-specific
Capacity Use**



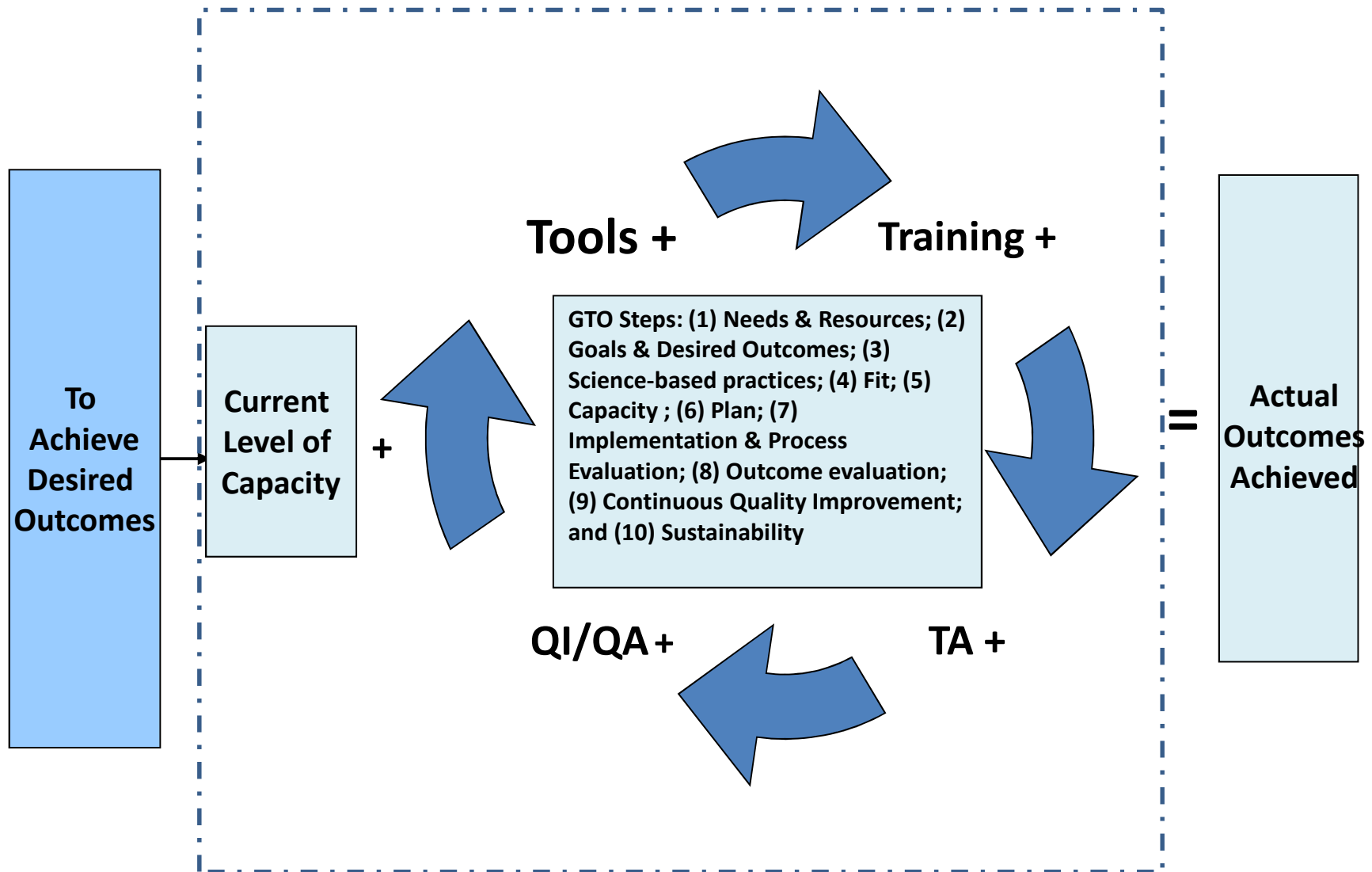


Support System

Table 1. A summary of a meta-analysis of the effects of training and coaching on teachers' implementation (Joyce & Showers, 2002).

TRAINING Components	OUTCOMES (% of Participants who Demonstrate Knowledge, Demonstrate new Skills in a Training Setting, and Use new Skills in the Classroom)		
	Knowledge	Skill Demonstration	Use in the Classroom
Theory and Discussion	10%	5%	0%
Demonstration in Training	30%	20%	0%
Practice & Feedback in Training	60%	60%	5%
Coaching in Clinical Setting	95%	95%	95%

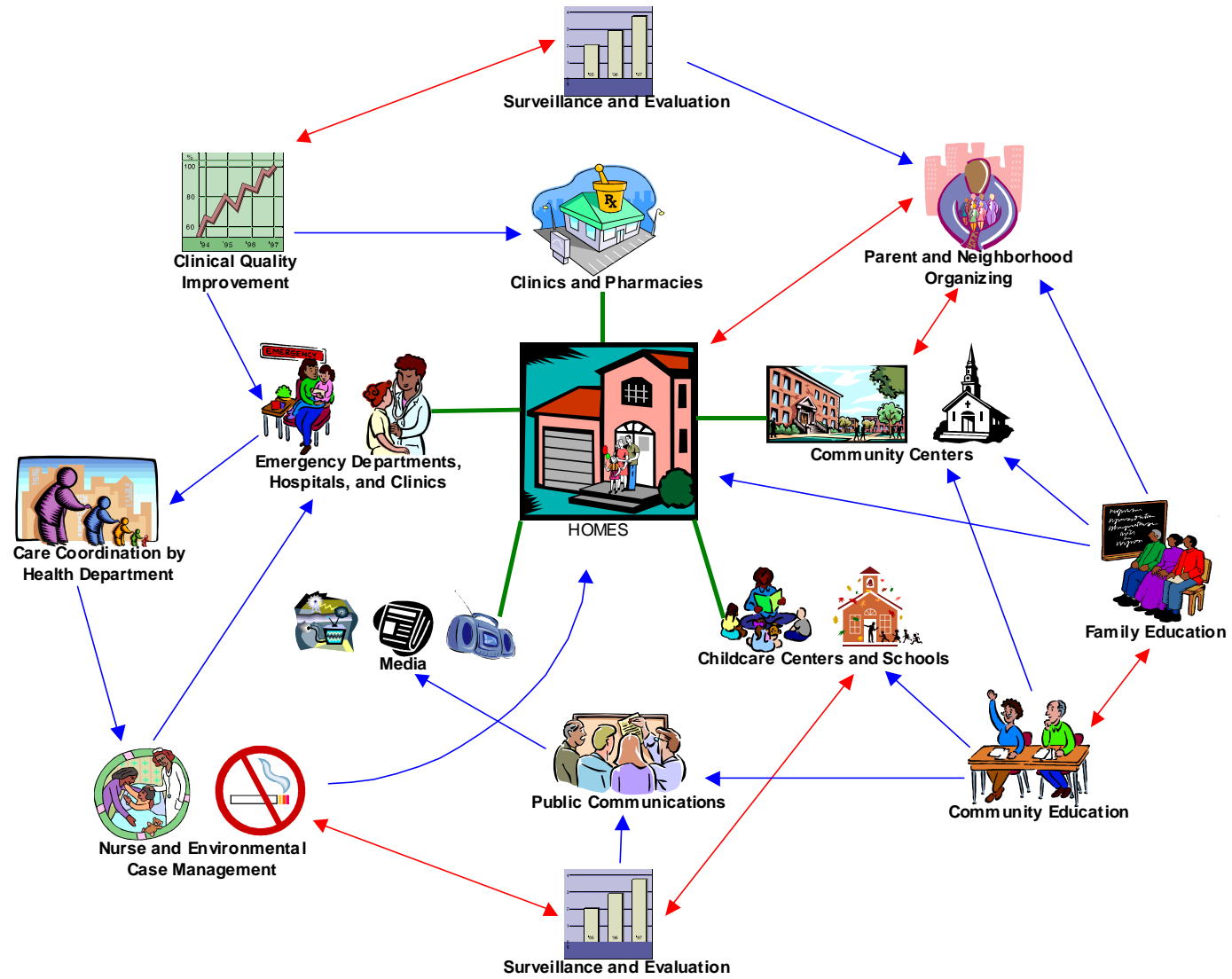
GTO Support System Model



Levels & Accountability

	Nation	State	Community	Organization	Caregiver
Accountability Question					
1. NEEDS/ RESOURCES					
2. GOALS					
3. EVIDENCE-BASED PRACTICES					
4. FIT					
5. CAPACITY					
6. PLAN					
7. IMPLEMENTATION					
8. OUTCOME EVALUATION					
9. CQI					
10. SUSTAINABILITY					

IMPLEMENTATION



GTO[®] as a Painter's Palette



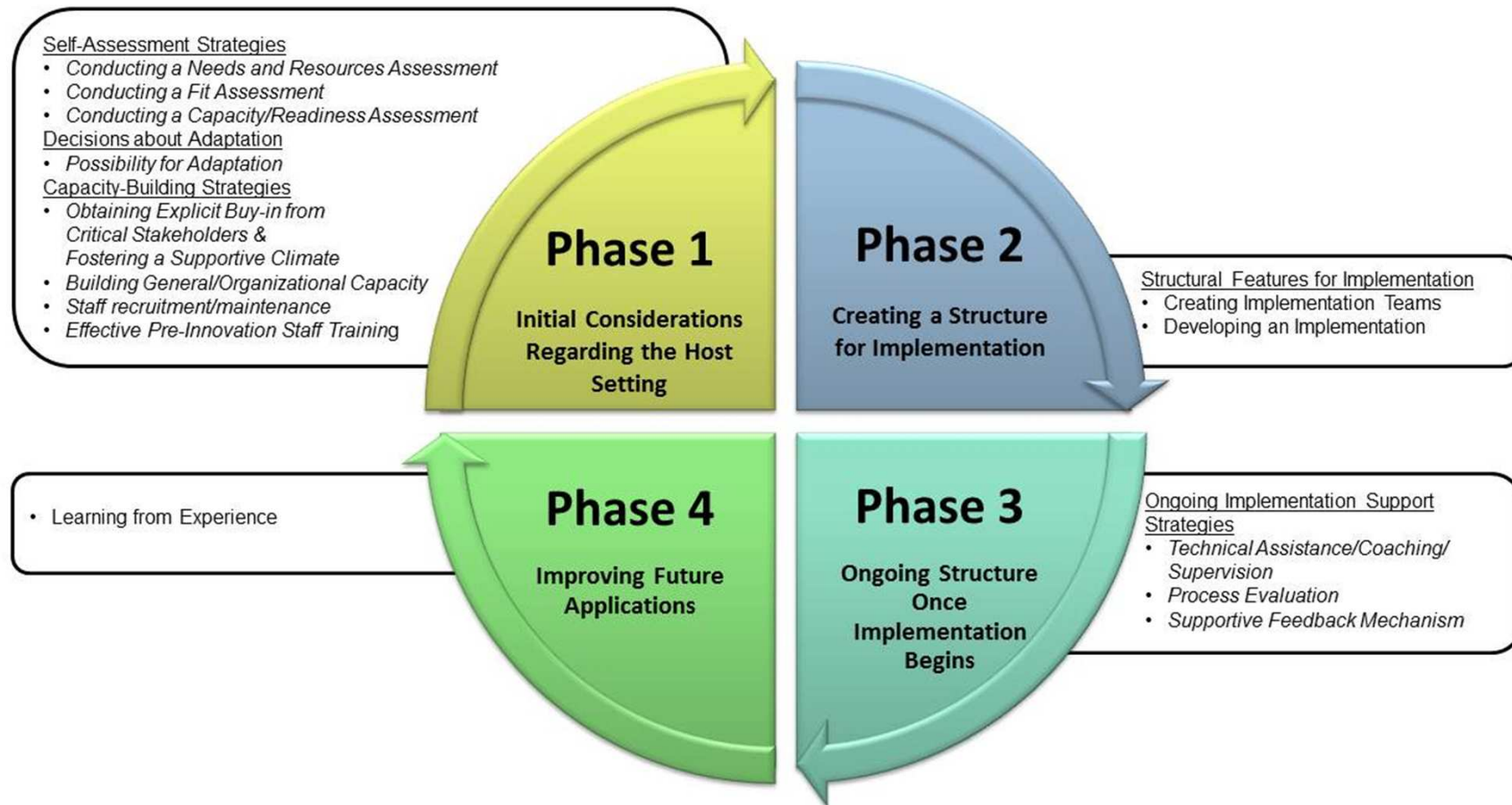
IMPLEMENTATION SCIENCE

- Implementation Science will encompass all aspects of research relevant to the scientific study of methods to promote the uptake of research findings into routine settings in clinical, community and policy contexts.

Source: Implementation Science

<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1436009>

IMPLEMENTATION SCIENCE



SYNTHESIS OF IMPLEMENTATION FRAMEWORKS

Meyers, Durlak & Wandersman

- Review of implementation frameworks
 - Implementation Action strategies used in literature
 - Action steps for implementing technologies, practices, and/or processes in organizations and/or communities
 - 15 frameworks were retained (e.g., framework by Dean Fixsen and colleagues)

Methods

- Quantitative and qualitative articles were retained.
- Peer-reviewed publications, book chapters, dissertations, or non-peer-reviewed monographs
 - Articles which were retained had to include an implementation framework
- Elimination of categories that were redundant with GTO

Results

- 18 categories of implementation action strategies were identified

Innovation Fit Assessment	Training Program
Needs and Resources Assessment	TA / Coaching / Supervision
Capacity/Readiness Assessment	Supportive leadership
General/Org. capacity building	Adequate resource provision
Identified champion	Implementation aspects
Implementation team	Feedback mechanism
Staff recruitment/maintenance	Quality improvement
Implementation Plan	User-developer collaboration
Supportive Policies	Community participation

Results

- 6 categories were non-redundant with existing GTO steps

Innovation Fit Assessment	Training Program
Needs and Resources Assessment	TA / Coaching / Supervision
Capacity/Readiness Assessment	Supportive leadership
General/Org. capacity building	Adequate resource provision
Identified champion	Implementation aspects
Implementation team	Feedback mechanism
Staff recruitment/maintenance	Quality improvement
Implementation plan	User-developer collaboration
Supportive Policies	Community participation

Quality Implementation Tool (QIT)

- QIT can be applied to:
 - Planning for implementation
 - Thinking through implementation dimensions a priori can help systematize implementation
 - Monitoring implementation
 - Use of the checklist during implementation can inform needs for mid-course correction
 - Evaluating implementation
 - Checklist can be used for retrospective evaluation of implementation in relation to outcomes

1. Develop an implementation team	Before implementation, how are you PLANNING for this action step?	During implementation, how are you MONITORING progress on this action step?	After implementation, how are you EVALUATING how well this action step happened?
1.1 Decide on structure of team overseeing implementation (e.g., steering committee, advisory board, community coalition, workgroups)			
1.2 Identify an implementation team leader			
1.3 Identify and recruit content area specialists as team members			
1.4 Identify and recruit other agencies and/or community members (e.g., family members, clergy, and business leaders) as team members			
1.5 Assign team members documented roles, processes, and responsibilities			

2. Foster supportive organizational climate and conditions	<i>Before implementation</i>	<i>During implementation</i>	<i>After implementation</i>
2.1 Identify and foster a relationship with a champion for the innovation			
2.2 Communicate the perceived need for the innovation within the organization/community			
2.3 Communicate the perceived benefit of the innovation within the organization/community			
2.4 Create policies that counterbalance stakeholder resistance to change			
2.5 Create policies that enhance accountability			
2.6 Create policies that foster shared decision-making and effective communication (vertical and lateral)			
2.7 Ensure that implementation has adequate administrative support			

3. Receive training and technical assistance (TA)	<i>Before implementation</i>	<i>During implementation</i>	<i>After implementation</i>
3.1 Determine specific needs for training and/or TA			
3.2 Identify and foster relationship with trainer(s) and/or TA provider(s)			
3.3 Ensure that your trainer(s) and/or TA provider(s) has sufficient knowledge about your organization/community's needs and resources			
3.4 Ensure that your Trainer and/or TA provider has sufficient knowledge about your organization/community's goals and objectives			
3.5 Work with TA providers to implement the innovation			

4. Develop an implementation plan	<i>Before implementation</i>	<i>During implementation</i>	<i>After implementation</i>
4.1 List specific tasks required for implementation			
4.2 Establish timeline for implementation tasks			
4.3 Assign implementation tasks to specific stakeholders			

5. Practitioner-developer collaboration in implementation

Before implementation

During implementation

After implementation

5.1 Collaborate with expert developers about factors impacting quality of implementation in your organization/community

5.2 Engage in problem solving

6. Evaluate Aspects of Implementation	<i>Before implementation</i>	<i>During implementation</i>	<i>After implementation</i>
6.1 Measure <i>fidelity</i> of implementation			
6.2 Measure <i>dosage</i> of the innovation			
6.3 Measure the <i>quality</i> of the innovation's delivery			
6.4 Measure <i>participant responsiveness</i> to the implementation process			
6.5 Measure degree of <i>program differentiation</i>			
6.6 Measure <i>program reach</i>			
6.7 Measure <i>adaptation</i>			

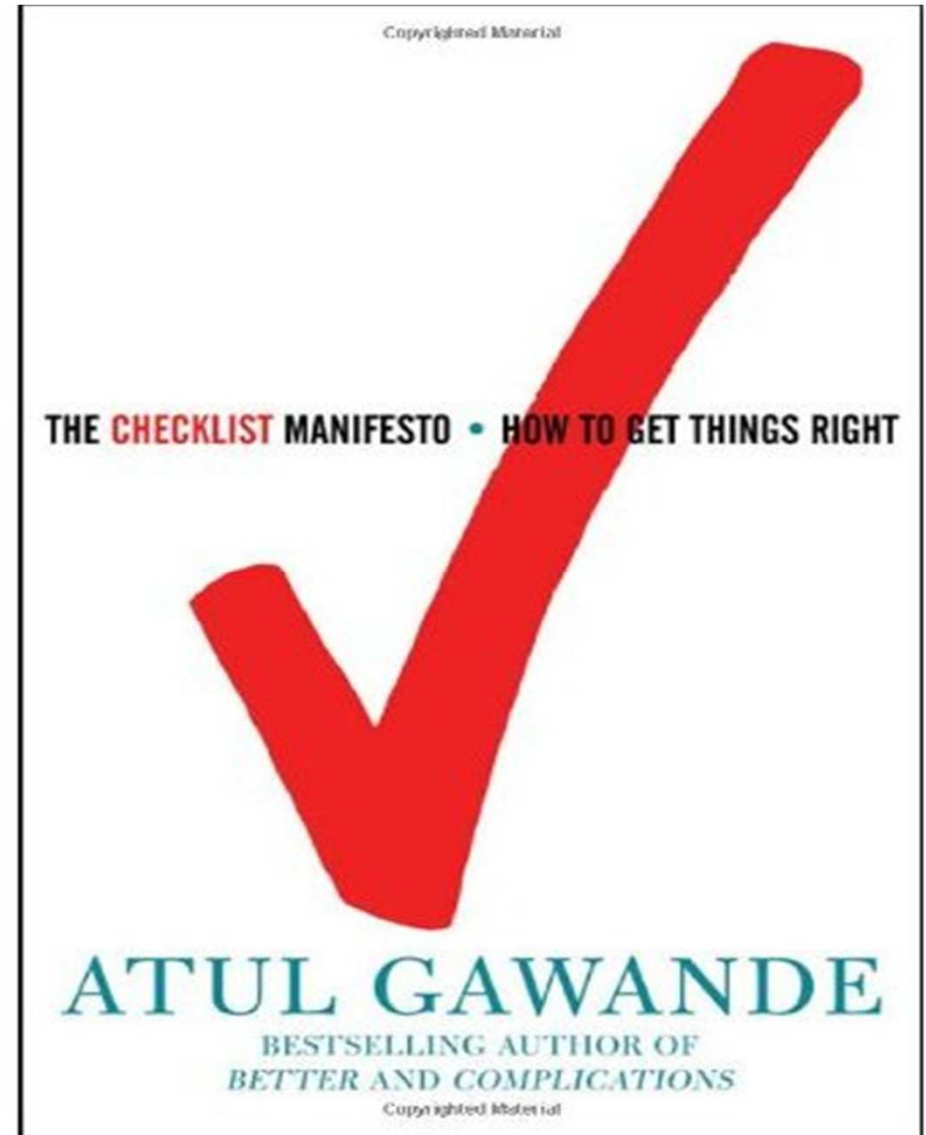
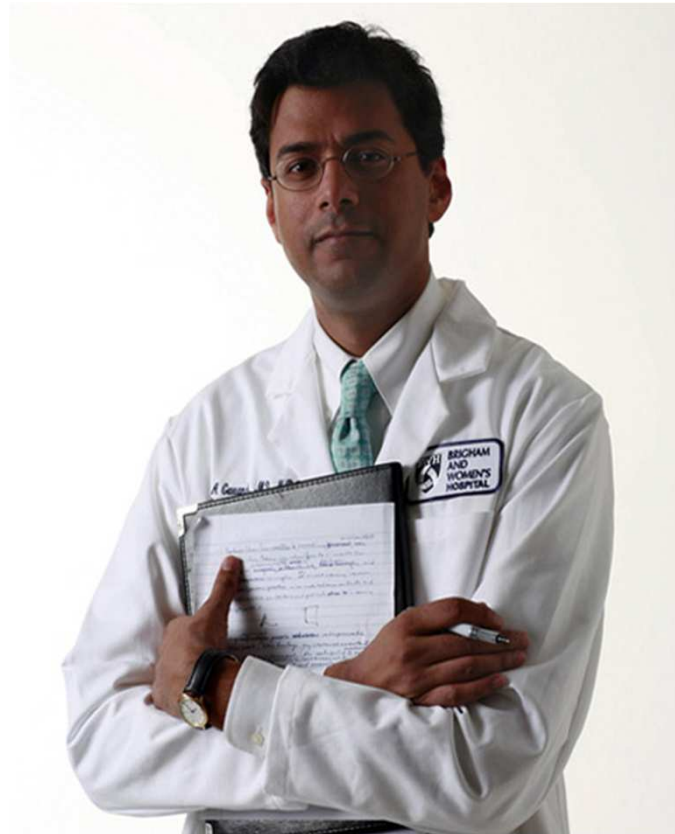
Implications

- Quality implementation tools (both checklist and worksheet) are research *and* practice informed
 - Synthesis and translation of the implementation literature
 - Ongoing piloting process to enhance practical application of tools and ease of use

Future Directions

- Development of a QIT manual
- QIT checklist

Why is a checklist helpful?



Surgical Safety Checklist



World Health
Organization

Patient Safety

A World Alliance for Safer Health Care

Before induction of anaesthesia

(with at least nurse and anaesthetist)

Has the patient confirmed his/her identity, site, procedure, and consent?

- Yes

Is the site marked?

- Yes
 Not applicable

Is the anaesthesia machine and medication check complete?

- Yes

Is the pulse oximeter on the patient and functioning?

- Yes

Does the patient have a:

Known allergy?

- No
 Yes

Difficult airway or aspiration risk?

- No
 Yes, and equipment/assistance available

Risk of >500ml blood loss (7ml/kg in children)?

- No
 Yes, and two IVs/central access and fluids planned

Before skin incision

(with nurse, anaesthetist and surgeon)

Confirm all team members have introduced themselves by name and role.

Confirm the patient's name, procedure, and where the incision will be made.

Has antibiotic prophylaxis been given within the last 60 minutes?

- Yes
 Not applicable

Anticipated Critical Events

To Surgeon:

- What are the critical or non-routine steps?
 How long will the case take?
 What is the anticipated blood loss?

To Anaesthetist:

- Are there any patient-specific concerns?

To Nursing Team:

- Has sterility (including indicator results) been confirmed?
 Are there equipment issues or any concerns?

Is essential imaging displayed?

- Yes
 Not applicable

Before patient leaves operating room

(with nurse, anaesthetist and surgeon)

Nurse Verbally Confirms:

- The name of the procedure
 Completion of instrument, sponge and needle counts
 Specimen labelling (read specimen labels aloud, including patient name)
 Whether there are any equipment problems to be addressed

To Surgeon, Anaesthetist and Nurse:

- What are the key concerns for recovery and management of this patient?

EXAMPLE

Implementing a Project to Enhance Client
Outcomes in a University-based Community
Mental Health Facility

Developing an Innovation

- Setting:
 - Psychological Services Center (PSC)
 - Psychology Department at the University of South Carolina
 - Non-profit service, training, and research facility
 - Established to provide assessment and treatment services for community members

Commitment to:

- Theoretically grounded & empirically guided intervention work
- Ongoing professional development
- Demonstration of effectiveness in service provision

Developing an Innovation

Psychological Services Center (continued):

- Key Stakeholders:
 - Doctoral student therapists
 - Faculty supervisors
 - PSC Administrative Staff

Developing an Innovation

- Assessment of clinical outcomes (e.g., client progress) at the PSC is a critical component of training
 - Historically, it has been approached by having therapists work individually with supervisors to identify appropriate assessment instruments based on clients' individual treatment plans

Developing an Innovation

- While individualized assessment strategies enable therapists to work with specific issues relevant to individual clients:
 - Lacking a standardized system for tracking outcomes has led to much variability among therapists in regard to assessment
 - *Without a standardized system for tracking outcomes, the PSC cannot investigate how well client needs are being met*

Developing an Innovation

The outcome tracking system is the innovation we are in the midst of developing and implementing

Use of the QIT

- Planning for quality implementation
 - The QIT was used as a consultation tool
 - Facilitator initiated planning for quality implementation by generating discussion around each of the components of the QIT
 - Together, the components that were most critical to the project were identified
 - The consultant took the lead on use of the QIT
 - Sought steering committee guidance regarding the feasibility, adequacy, and relevance of the content on the tool

Use of the QIT

- Planning for quality implementation
 - Components of the tool were used to ensure that the implementation process would be guided by action steps promoted & encouraged in the implementation science literature

Use of the QIT

- QIT Components of quality implementation
 - Developing an Implementation Team
 - Fostering a supportive organizational climate and conditions
 - Developing an Implementation Plan
 - Providing training and technical assistance (TA)
 - Practitioner-Developer collaboration
 - Evaluating effectiveness of implementation

Planning for Quality Implementation

- ***Developing an implementation team***
 - Form of support that helps to ensure that the outcome tracking system is put into practice as planned
 - Takes the lead during preparatory implementation activities
 - Provides ongoing support throughout the implementation process

Planning for Quality Implementation

- ***Developing an implementation team (cont.)***
 - Action steps related to this component of quality implementation:
 - Identify an implementation team leader
 - Identify and recruit content area specialists as team members
 - Assign team members documented roles, processes, and responsibilities
 - Decide on structure of team overseeing implementation (e.g., steering committee)

Planning for quality implementation

Developing an implementation team

- **Implementation team developed to foster and support quality implementation**
 - Team comprised of:
 - Identified Leader who is responsible for providing oversight and guidance
 - PSC Director
 - Additional team members recruited from psychology department
 - Student Therapists
 - Currently receiving training related to psychological intervention & assessment
 - PSC Staff
 - Graduate students who coordinate client services

Planning for quality implementation

Developing an implementation team

- **Implementation team developed to foster and support quality implementation (cont.)**
 - Established documented roles, processes, and responsibilities for implementation team members
 - *Logistical*
 - *Training support*
 - *Data management and dissemination*
 - *Technical assistance*
 - *Evaluation support*

- Lessons Learned

- Very useful as a consultation tool

- Takes a lot of time and energy

- Level of detail needed when completing the tool will depend on:

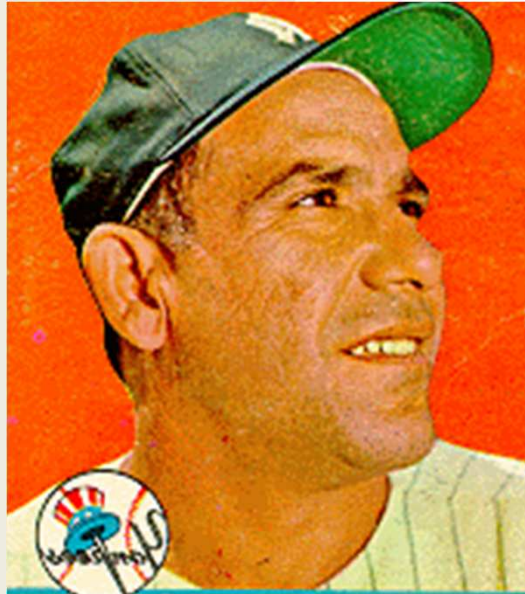
- The innovation itself (e.g., complexity of the innovation, complexity of host environment)

- Resources (e.g., time)

- Preferences for how well-documented the organization/community wants the process to be

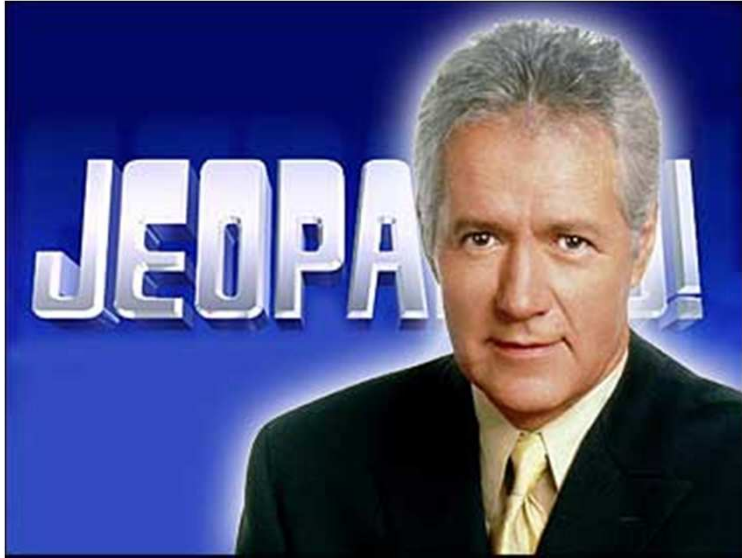
- Lessons Learned (continued)
 - Worth the effort as the tool:
 - Facilitated the creation of a product designed to ensure quality implementation
 - Product is a resource which can be used to engage stakeholders
 - Helped to fulfill a requirement for documentation
 - Not all action steps will be relevant to each project and the relevance of each should be assessed on a project-by-project basis

PAIR EXERCISE



As Yogi Berra
supposedly said:

“It’s déjà vu all over again.”



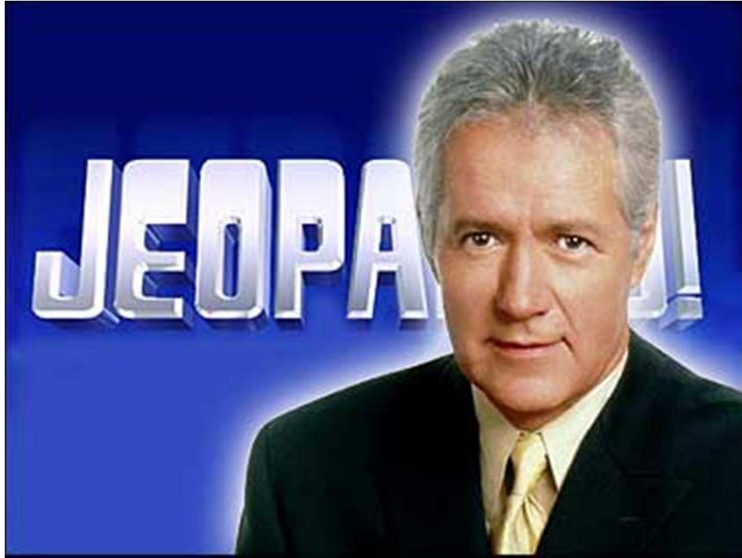
JEOPARDY

ANSWER

- GETTING TO OUTCOMES

QUESTION

- WHAT IS THE NAME OF A 10 STEP RESULTS-BASED APPROACH TO ACCOUNTABILITY THAT HAS IMPLEMENTATION AND PROCESS EVALUATION AS STEP 7



JEOPARDY

ANSWER

- INTERACTIVE SYSTEMS
FRAMEWORK FOR
DISSEMINATION AND
IMPLEMENTATION (ISF)

QUESTION

- WHAT IS THE NAME OF A FRAMEWORK FOR BRIDGING RESEARCH AND PRACTICE THAT INTEGRATES RESEARCH-TO-PRACTICE MODELS WITH COMMUNITY-CENTERED/PRACTICE CENTERED MODELS



JEOPARDY

ANSWER

- QUALITY IMPLEMENTATION TOOL (QIT)

ANSWER

- WHAT IS THE NAME OF A TOOL BASED ON A SYNTHESIS OF IMPLEMENTATION SCIENCE FRAMEWORKS TO HELP GUIDE QUALITY IMPLEMENTATION

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- **Dr. von Eschenbach:** I believe we are at what I call a strategic inflection in biology, which means we're at a point of unprecedented growth in three key areas related to cancer research: knowledge, technology, and resources. The integration of growth in these three sectors provides an opportunity for exponential progress. To achieve this progress, we must set a clear direction and focus our efforts into a cohesive strategy.

- The goal of eliminating suffering and death due to cancer provides this focus. It does not mean "curing" cancer but, rather, it means that we will eliminate many cancers and control the others, so that people can live with -- not die from -- cancer. We can do this by 2015, but we must reach for it. We owe it to cancer patients around the world -- and their families -- to meet this challenge.

May 16, 2003 *BenchMarks*

HEALTHY PEOPLE 2010

Healthy People 2010 Objectives

- Target:** 1.0 new case per 100,000 persons.
- Baseline:** 19.5 cases of AIDS per 100,000 persons aged 13 years and older in 1998. Data are estimated; adjusted for delays in reporting.
- Target setting method:** Better than the best.
- Data source:** HIV/AIDS Surveillance System, CDC, NCHSTP.

Persons Aged 13 Years and Older, 1998	New AIDS Cases		
	13-1. Both Genders	Females*	Males*
	Rate per 100,000		
TOTAL	19.5	8.8	30.8
Race and ethnicity			
American Indian or Alaska Native	9.4	4.5	14.5
Asian or Pacific Islander	4.3	1.2	7.8
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	DNC	DNC	DNC
White	DNC	DNC	DNC
Hispanic or Latino	33.0	13.8	52.2
Not Hispanic or Latino	DNC	DNC	DNC
Black or African American	82.9	48.5	122.9
White	8.5	2.2	15.2
Family income level			
Poor	DNC	DNC	DNC
Near poor	DNC	DNC	DNC
Middle/high income	DNC	DNC	DNC
Sexual orientation	DNC	DNC	DNC

- *eliminate homelessness among veterans by 2015*

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