DEFENSE CENTERS OF EXCELLENCE

For Psychological Health & Traumatic Brain Injury

Acting on Findings: How to Use Evaluation Results to Improve Program Quality and Effectiveness

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August 18, 2015

DVBIC Defense and Veterans Brain Injury Center

DHCC Deployment Health Clinical Center

National Center for Telehealth & Technology

Webinar Details

- This webinar presentation has been pre-recorded
- A live question-and-answer session will be held at the conclusion of the presentation
- Questions may be submitted anonymously at any time via the “Question” pod
- Audio for this presentation will be provided through Adobe Connect; there is no separate dial-in
- Live closed captioning is available in the “Closed Captioning” pod through Federal Relay Conference Captioning

Materials for Download

- Materials from this series and other program evaluation resources are available in the “Files” pod and at:

  http://www.dcoe.mil/About_DCoE/Program_Evaluation.aspx

- For information on other DCoE webinar and training series, visit:

  http://www.dcoe.mil/Training/Monthly_Webinars.aspx

Continuing Education Details

- This continuing education activity is provided through collaboration between DCoE and Professional Education Services Group (PESG).
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- The authority for training of contractors is at the discretion of the chief contracting official. Currently, only those contractors with scope of work or with commensurate contract language are permitted in this training.

Continuing Education Details (continued)

- If you preregistered for the webinar and want to obtain CE certificates or a certificate of attendance, you must complete the online CE evaluation.
- After the webinar, please visit http://dcoe.cds.pesgce.com to complete the online CE evaluation and download your CE certificate or certificate of attendance.
- The CE evaluation will be open through September 1st, 2015.

Presenter

Capt. Armen Thoumaian, Ph.D., USPHS

Deputy Chief of the Office of Integrated Services, DCoE

Capt. Armen Thoumaian is a scientist director in the Commissioned Corps of the U.S. Public Health Service (USPHS) with more than 30 years experience in health and mental health program design and evaluation.

In January 2012, Capt. Thoumaian joined the staff at the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE) to help design and implement program evaluation and improvement efforts in the Defense Department.

He holds a B.A. in psychology and sociology, an M.A. in general experimental psychology, and a Ph.D. in social welfare and social work, and has completed a National Institute of Mental Health fellowship in Community Mental Health.

USPHS Capt. Armen Thoumaian, Ph.D.

Presenters

Carter Frank, M.A., M.S.
Research Scientist, Contract Support for DCoE

Mr. Carter Frank has over 15 years of experience in program development and management at local, regional and national levels. The breadth of his 33-year career includes 11 years of military service, spans military and civilian environments, clinical and non-clinical mental health operations, training, human resource management, business development and government contracting. Mr. Frank holds a B.S. in mathematical sciences, a M.A. in counseling, and a M.S. in management information systems. He is a licensed clinical professional counselor.

Mr. Carter Frank

Debra Stark, M.B.A.
Research Scientist, Contract Support for DCoE

Ms. Debra Stark is a survey methodologist with 15-plus years of research experience. Her work includes program evaluation and monitoring, qualitative data analysis and survey instrument design. She has worked on public health services evaluation projects with various federal agencies, including the Department of Veterans Affairs and TRICARE Management Activity. Ms. Stark holds an M.B.A. from Vanderbilt University.

Ms. Debra Stark

Moderator

Carmina Aguirre, M.A.

Research Scientist, Contract Support for DCoE

Ms. Carmina Aguirre has over 14 years of experience within the Defense Department. Her background includes executive leadership, psychological health, sexual assault prevention and response, and public affairs. In addition to supporting DCoE, she serves as Chief of Public Affairs in the Florida Air National Guard. Ms. Aguirre holds a B.A. in psychology and a M.A. in human services with a specialization in executive leadership.

Ms. Carmina Aguirre

Overview and Objectives

This training presentation describes the final step in the evaluation cycle: making improvements to a program based on evaluation results. It will provide guidance on planning and carrying out improvement efforts and maintaining quality through progress monitoring. At the conclusion of this webinar, participants will be able to:

- Describe the process of selecting and planning achievable program improvements
- Identify resources and support needed to carry out improvement efforts
- Explain why ongoing evaluation should be an integral part of program operations
- Select and implement strategies to address common challenges faced when program personnel seek to improve programs

Agenda

- Identifying Opportunities for Improvement
- Selecting and Implementing Improvements
- Establishing Metrics for Progress toward Improvements
- Common Challenges
- Conclusion
- Resources and References
- Feedback and Q&A Session

Identifying Opportunities for Improvement

Program Evaluation Definition

- Assesses how well the program is working
- Process involves collection, analysis and interpretation of data
- Results of program evaluation identify:
  - Outcomes
  - Effectiveness
  - Adherence to mission
  - Areas for improvement
  - Opportunities for growth

Adapted from: GAO (2011) & DCoE Program Evaluation Guide (2012)

Purpose and Benefits of Program Evaluation

- Gain Insights into Program
  - Measure program activities and outcomes
  - Identify barriers
- Refine Program Practices
  - Improve participant satisfaction
  - Improve participant access to or flow through the program
  - Improve services for program participants and their families
- Assess Program Outcomes
  - Compare costs to benefits
  - Document **success** in reaching objectives

Adapted from: CDC (1999)

Blueprint for Program Evaluation

- Define program using mission statement, goals, objectives and a logic model
- Develop evaluation strategy based to meet identified needs
- Develop a data plan that states how evaluation will be carried out

- Collect and store data
- Analyze and interpret data

- Communicate findings to stakeholder groups
- **Implement improvements based on findings**

Three Stages of Program Development

Program evaluation types, results and recommendations are based on a program's stage of development or its maturity

Formative Evaluations

Planning

- Program activities untested
- Refine plans

Process Evaluations

Implementation

- Activities tested and modified
- Improve operations

Summative Evaluations

Outcomes

- Program outcomes emerge
- Account for intended/unintended outcomes

Adapted from: CDC (1999)

Formative Evaluation Questions and Recommendations

Common areas of focus at formative stage:

- Identify needs of population and program during implementation
- Determine whether a program has enough information to be evaluated (i.e., evaluability)

Examples of Evaluation Questions and Recommendations for Improvement	
– Can the program be implemented? – Does the program address a specific need within the community and/or the target population? – Does the program have well-defined mission, goals and objectives?	– Document and analyze available resources (e.g., staff, funding, activities) to determine if the program can operate – Conduct a needs assessment of the target population and/or community – Build a preliminary logic model and develop SMART objectives

Adapted from: CDC, 2011; Windsor, Clark, Boyd and Goodman, 2004

Process Evaluation Questions and Recommendations

Common areas of focus at process stage:

- Examine whether a program operates as intended (i.e., fidelity)
- Determine if a program is reaching its target population (i.e., coverage)

Examples of Evaluation Questions and Recommendations for Improvement	
– How similar are participants to the target population for which the program was designed?	– Compare the participants demographics with the target population demographics to determine if the program is operating as intended
– Are participants being followed during and upon conclusion of program services?	– Examine the program's resources for adequacy to track participant outcomes and service utilization

Adapted from: CDC, 2011; Windsor, Clark, Boyd and Goodman, 2004

Summative Evaluation Questions and Recommendations

Common areas of focus at summative stage:

- Determine whether a program is achieving its intended outcomes
- Examine whether outcomes can be attributed to a program
- Compare program benefits to costs and/or alternative programs

Examples of Evaluation Questions and Recommendations for Improvement	
– To what extent did the program achieve its desired outcomes?	– Evaluate data collected to determine the extent and areas for improvement
– Did the program impact vary across groups?	– Ensure data collection includes group specifications from the start
– Does the benefit of the program warrant its cost?	– Ensure costs and outcomes measures are captured

Adapted from: CDC, 2011; Windsor, Clark, Boyd and Goodman, 2004

Preparing for Implementation

Important considerations for selecting specific opportunities for improvement include:

- Compatibility with
  - program intent
  - program stage of development
  - available resources
  - stakeholder interests
- Technical merit/Best practices
- Addresses the problem

Selecting and Implementing Improvements

Four-Step Process for Improvement Selection and Implementation

1. Analyze program evaluation results
2. Identify available and potential resources
3. Prioritize improvement efforts
4. Implement improvement efforts

Analyze Program Evaluation Results

Program Evaluation results and recommendations are often based on the program's stage of development or its maturity:

Planning

- Documented Authorization
- Organizational Clarity
- Focused Mission Statement
- Unified Goals
- SMART Objectives

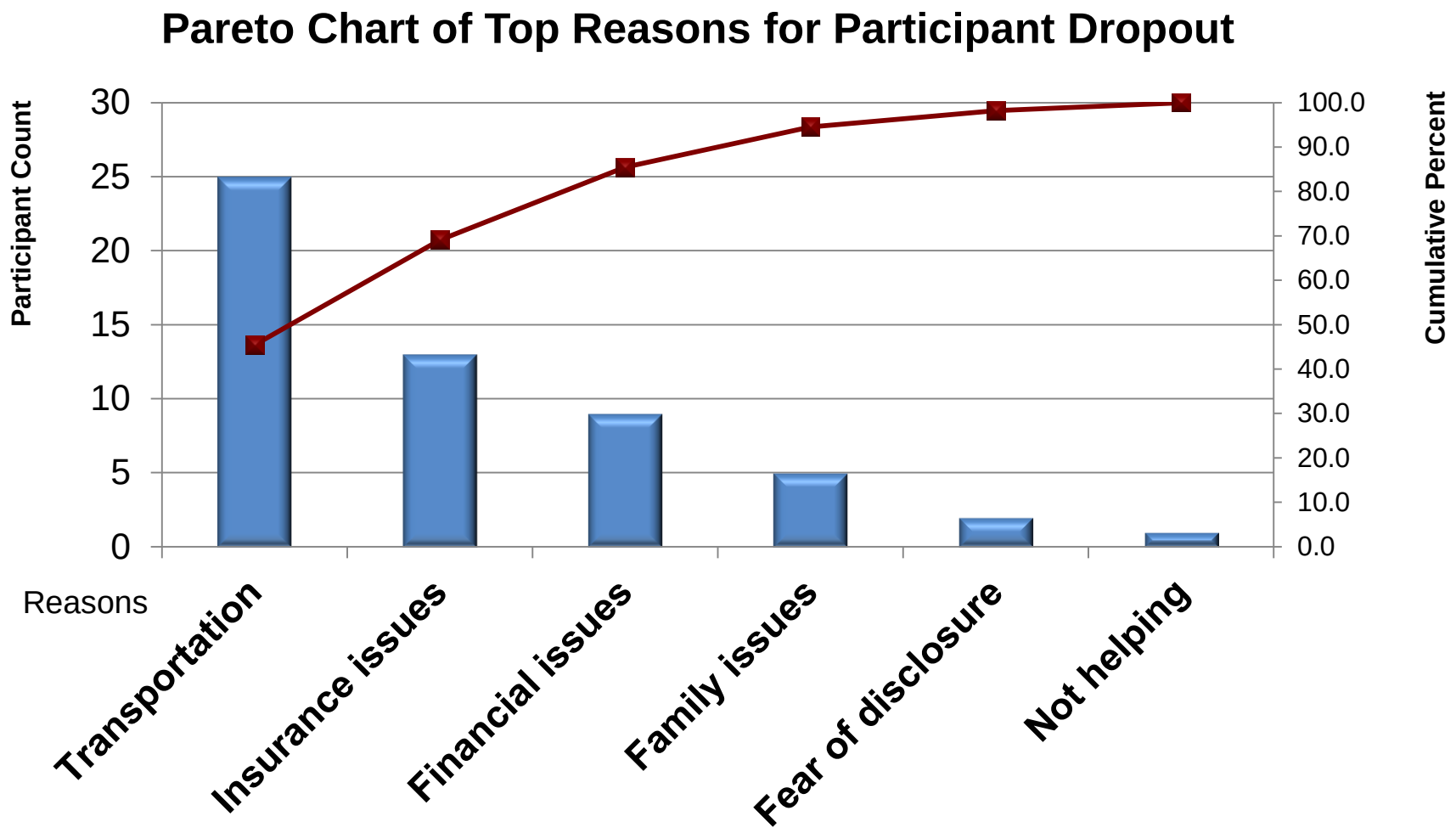
Implementation

- Established Logic Model
- Identified Inputs
- Defined Activities
- Data-supported Outputs
- Process Improvement Initiatives

Outcomes

- Efforts Transitioning Outputs to Outcomes
- Carefully Selected Outcome Measures
- Enhanced Data Collection Methods

Analyze Program Evaluation Results (continued)



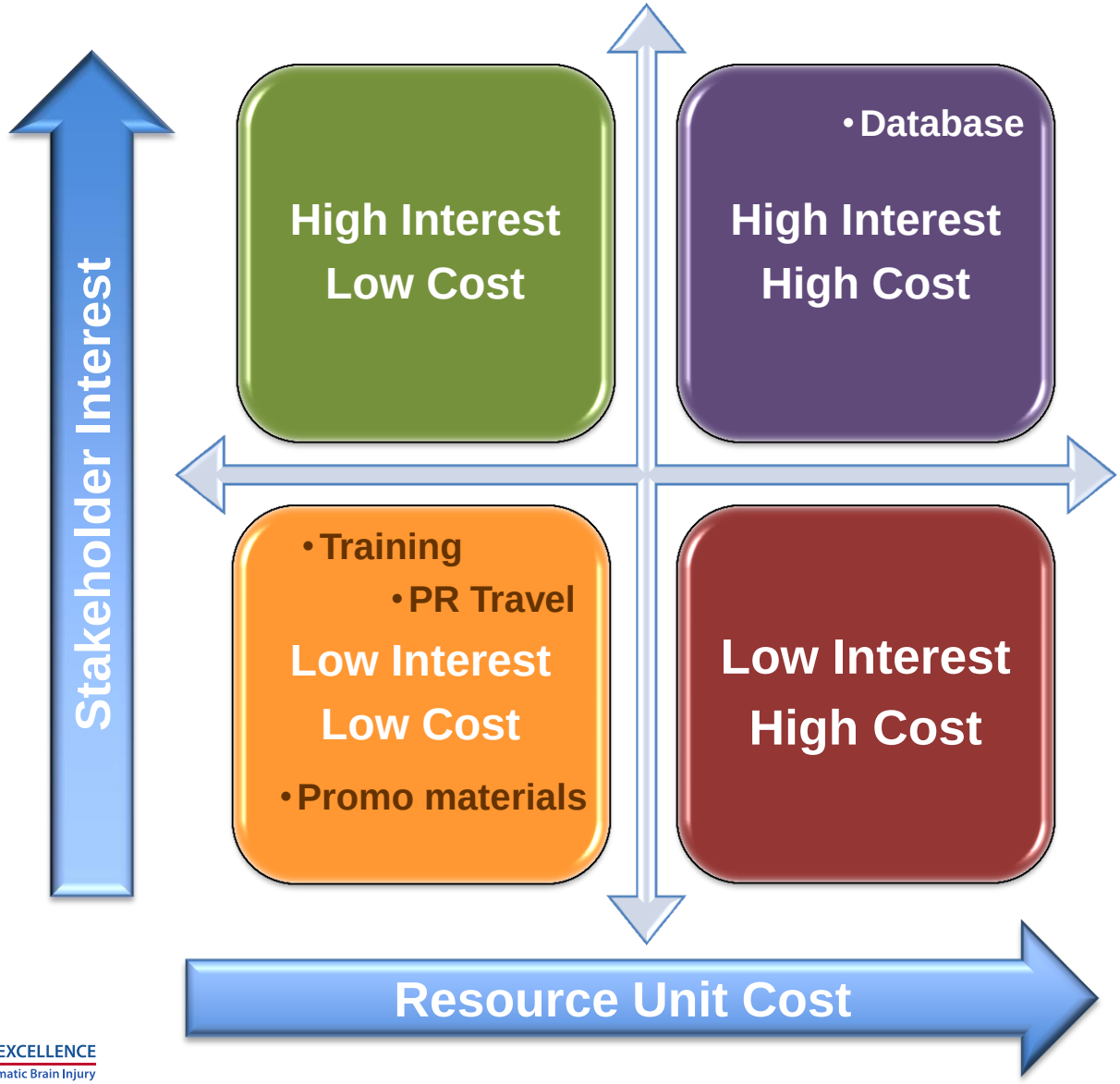
Identify Available and Potential Resources

- Re-evaluate current resource allocations
- Contact partnering agencies about resource strategies and relevant funding streams
- Quantify and categorize potential resources (e.g., manpower and personnel allocations vs. funding for services)
- Assign probabilities for obtaining additional resources

Potential Barriers to Improvement

- Policy
- Inadequate funding
- Stakeholder resistance
- Inability to follow participants
- Insufficient training
- Lack of program resources (e.g., staff, database, tracking mechanisms)

Prioritize Improvement Efforts



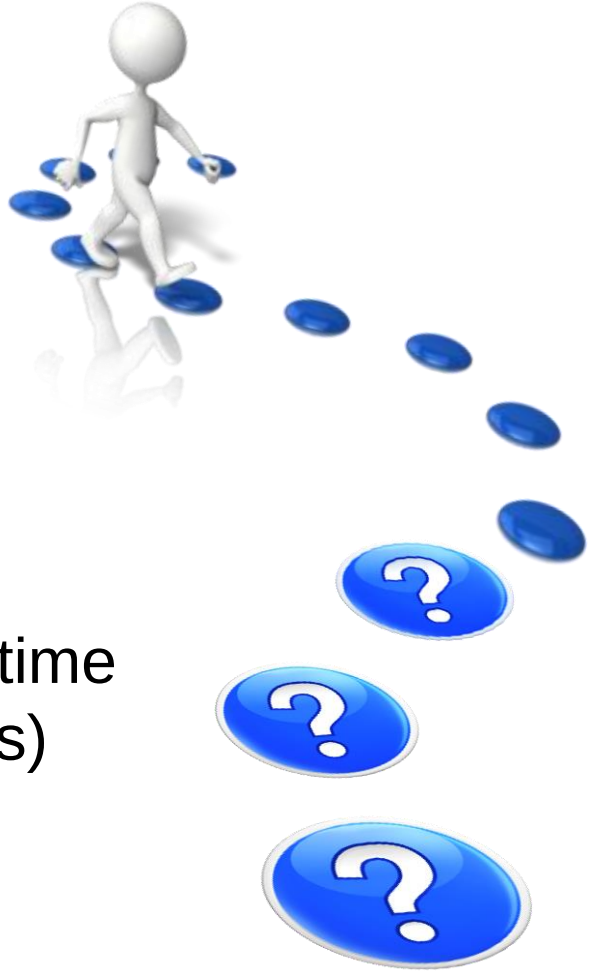
Implement Improvement Efforts

Program administrators and senior leadership may:

- Acquire additional staff
- Conduct additional staff training
- Simplify program mission, goals, objectives to ensure they are aligned
- Review/update program logic model
- Collect new or additional data (e.g., output or outcome information)
- Increase staff and/or improve participant satisfaction and outcomes

Example: Use Evaluation Results to Improve Program Processes

Finding: Program does not collect follow-up data on participants after program completion



Improvements:

- Record program participant baseline information
- Follow-up with participants at select time intervals (e.g., 3, 6, and/or 12 months)
- Maintain database to track program participants' baseline and follow-up information

Example: Use Evaluation Results to Improve Program Outcomes

Finding: The program could not demonstrate an effect on participants

Improvements:

- Compare participant baseline data (e.g., knowledge, attitudes) to data from program completion and follow up to demonstrate program effects (if any)
- Compare participants to similar individuals who did not participate to demonstrate program effects (if any)

Evaluations Should Stimulate Action

"Knowledge isn't power until it's applied."

--Dale Carnegie

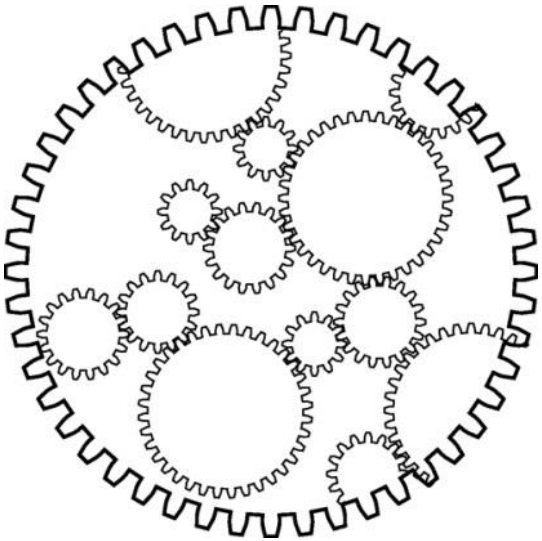
Image: Wikipedia

Establishing Metrics for Progress toward Improvements

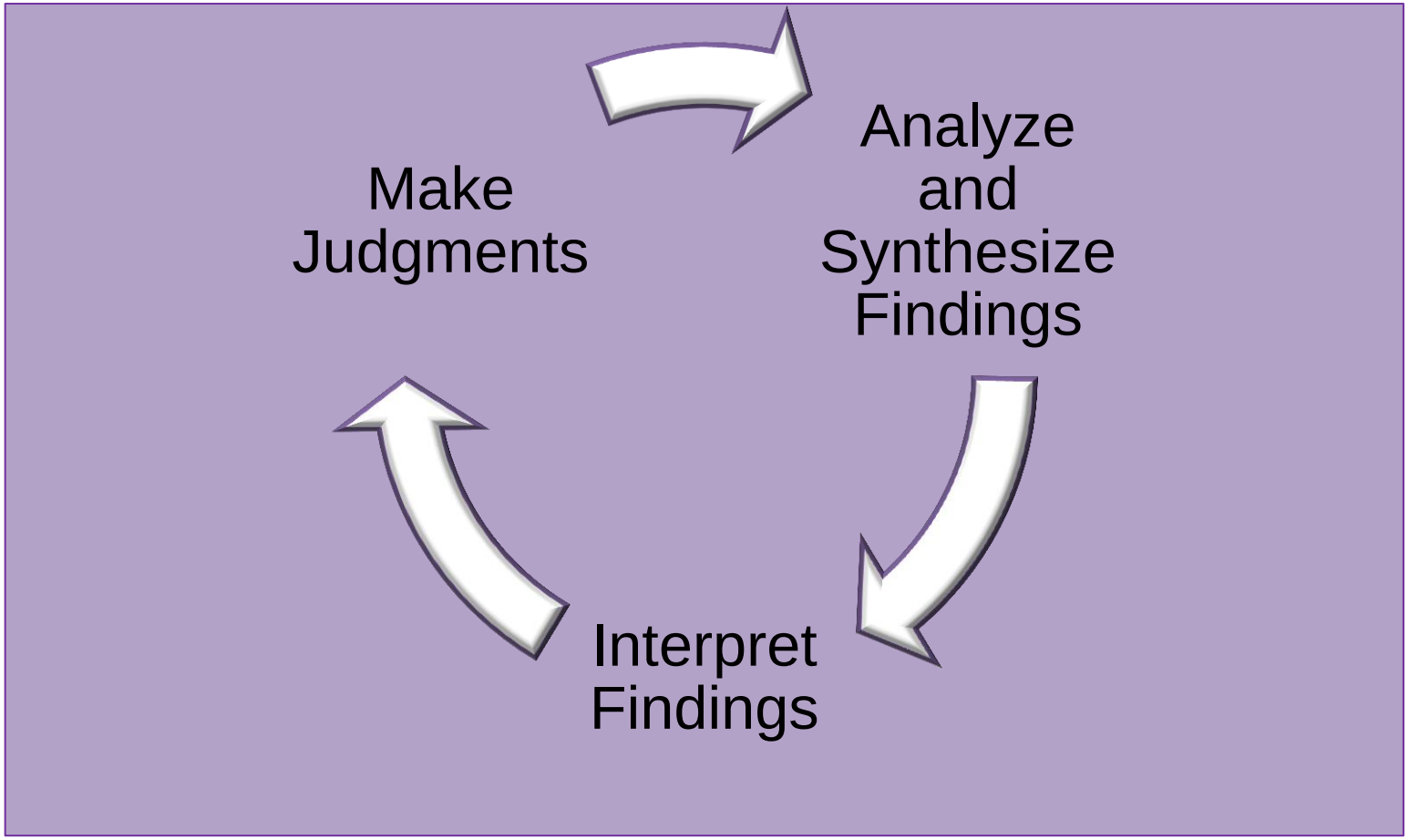
Implementing Change

"You are never sure any one thing is going to work. Until it does."

--Centers for Disease Control evaluation coordinator



Evaluate Your Progress Toward Improvement



Checklist: Gather Credible Evidence

- ☑ Identify indicators of success for processes and activities
- ☑ Determine whether existing indicators will work or whether new ones must be developed
- ☑ Consider the range of data sources and choose the most appropriate one
- ☑ Consider a mixed methods approach to data collection
- ☑ Develop a detailed protocol for modifications
- ☑ Pilot test modifications

Identify Indicators for Success

Indicators can be developed for activities (process indicators) and for outcomes (outcome indicators)

- Process indicators
  - Help define activity statements, such as “establish good coalition,” “provide culturally competent training,” and “deliver appropriate quality care”
- Outcome indicators
  - Provide clearer definitions of outcome statements

Clinicians use in-session practice to assist participants in learning new skills

Participants report practicing deep breathing and journaling activities three times each week, on average

Set Standards, Maintain Compliance

Use existing standards and objectives as a starting point to compare your improvement metrics to others':

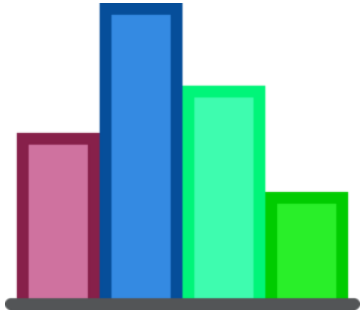
- Performance by similar program
- Performance by a control or comparison group
- Judgments of participants, experts and funders

Ensure that program improvements comply with:

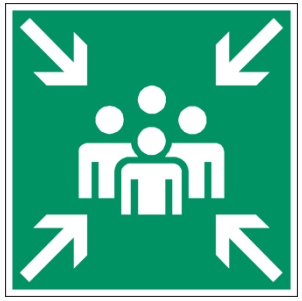
- Service expectations and norms
- Program mission and objectives
- Program protocols and procedures
- Mandates, policy, regulations and laws

Potential Data Sources

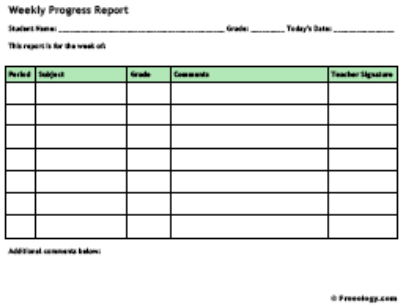
- Who might you survey or interview?
  - Participants, non-participants
  - Staff, POCs, administrators
  - Partner agency staff
  - Key members of community



- What might you observe?
  - Meetings
  - Special events
  - Service encounters



- Which documents might you analyze?
  - Meeting minutes
  - Charts
  - Registration, enrollment or intake forms



Weekly Progress Report

Student Name: _____ Grade: _____ Today's Date: _____

This report is for the week of:

Period	Subject	Grade	Comments	Teacher Signature

Additional comments below:

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Data Collection Methods and Sources

Improvement(s) Implemented	Methods and Sources
A series of three trainings will be conducted in two regions	Training logs, sign-in sheets
Nurse educators will present trainings to new recruits	Training logs, sign-in sheets
Physicians will host peer education	Conference agenda
Trainings will be well-attended and represent all units	Registration information
Providers will show increases in knowledge, attitudes and skills	Survey of providers, focus groups, intercept
50%+ providers who receive the toolkit will report use of it	Survey of providers, focus groups, intercept
Provider intent to refer out decreases	Electronic Medical Records

Track Implementation

Track all modifications that are made in order to:

- Achieve insight into how and why goals were accomplished
- Provide documentation for funders about the progress of a project
- Support and maintain the project over the long-term
- Increase the power and relevance of your modification

Create a Continuity Book

Maintain a continuity book:

- For yourself, for colleagues, and for others
- Keep the continuity book where it will be available
- In building a good and useful continuity book, you can create additional knowledge about your effort among program personnel

Include:

- Points of contact
- Duties and responsibilities
- Information on how to accomplish common tasks
- SOPs, policies, mission statements
- Personnel and equipment data

Program Sierra Implementation Example: Recommendation

- Program Sierra receives an evaluation recommendation:
  - Follow-up on program participants' signs and symptoms on an ongoing basis to determine needs and response to services
  - "Administer assessment checklist" is listed as an *activity* in Program Sierra's logic model, but the *output* shows only a 22% rate of follow-up assessments being completed
  - Program staff report insufficient time to complete assessments during allotted meetings with participants
- Program leadership, staff and stakeholders establish an implementation plan to address this recommendation, while consider existing resources and potential barriers

Program Sierra Implementation Example: Planning

- The implementation plan specifies the following details:
  - Program Sierra participants will be able to access a secure online portal where they may complete a behavioral health questionnaire before appointments and will be notified 72 hours prior to each appointment
  - Participant data will be reviewed by program staff prior to appointments
  - The progress metric for this recommendation is set at 50% within six months of implementation and 80% within one year

Program Sierra Implementation Example: Data Collection Methods and Sources

Modification(s) Implemented	Methods and Sources
Online portal is created for program participants to increase completion of follow-up information	Administrative records
Program participants use portal to provide requested information, which enhances communications with providers	Database logs Questionnaire
Program providers use behavioral health information to increase the quality of encounter communications	Weekly team meeting minutes

Program Sierra Implementation Example: Results

- One-year implementation results were as follows:
  - The rate of completed self-report follow-ups increases from 22% to 43% at six months and 70% at one year, indicating the need for additional progress or modification of objectives
  - Program participants and staff reported that this approach was helpful in providing better services while not being disruptive or overly intrusive
  - Implementation revealed the need for family members to have the opportunity to provide similar input as well; plans for adaptation of the portal are underway

DoD photo by Pat Cubal

Checklist: Justify Your Conclusions

- ☑ Check data for errors
- ☑ Consider context when interpreting data
- ☑ Assess results against available literature and results of similar programs or results from prior years
- ☑ If multiple methods have been used, compare different methods for consistency of findings
- ☑ Consider alternate explanations
- ☑ Compare actual with intended outcomes
- ☑ Examine the limitations of your evaluation

Common Challenges

Common Challenges FAQ

- What if I don’t have implementation data?
- How do I convince staff that the selected change will address the problem?
- What are the best ways to engage staff buy-in?

What If I Don’t Have Implementation Data?

- If you don’t have metrics or measures data, consider qualitative data. Conduct a case study or studies
  - A case study is a qualitative method for finding out “how or why” an intervention works well (Yin, 2009)
  - A non-experimental design that provides an in-depth comprehensive description and understanding of an intervention as a whole and within its context (Imas and Rist, 2009)
- Focus on individuals who typify your population or typical situations
- Qualitative data are data!

How Do I Convince Staff That the Selected Change Will Address the Problem?

- Make sure you have scientific evidence to support interventions
- Staff overseeing intervention should be well-briefed
- Engage staff in developing logic model to illustrate how participant experiences and outcomes are likely to be affected by intervention
- Use well-facilitated forums to discuss the evidence

What Are The Best Ways To Engage Staff Buy-in?

- Middle managers and frontline staff may be particularly challenged because of complex tasks and competing demands
- Help staff see connections to accepted professional norms
- Evoke staff commitment to program participants
- Engage staff in selecting priorities

Conclusion

Key Takeaways

- ✪ Program improvements should be selected according to best practices and stakeholder interests
- ✪ Successful implementation of program modifications should be carried out in a systematic manner
- ✪ High-quality measurement efforts will ensure accuracy in evaluating and reporting on targeted program improvements

Photo by: Stewart Leiwakabessy

References and Resources

Resources

DCoE Program Evaluation Guide:
http://www.dcoe.mil/About_DCoE/Program_Evaluation/2015_Resources_and_Training.aspx

Centers for Disease Control and Prevention:
http://www.cdc.gov/eval/index.htm

Institute for Healthcare Improvement:
http://www.ihi.org

Substance Abuse and Mental Health Services Administration:
http://captus.samhsa.gov/access-resources/reporting-your-evaluation-results

National Network of Libraries of Medicine:
http://nnlm.gov/evaluation/guides.html

Resources (continued)

Deployment Health Clinical Center:
http://www.pdhealth.mil/

Defense and Veterans Brain Injury Center:
http://dvbic.dcoe.mil/

National Center for Telehealth and Technology:
http://www.t2.health.mil/

The Community Tool Box, University of Kansas:
http://ctb.ku.edu/en

Minnesota Department of Health:
http://www.health.state.mn.us/divs/opi/qi/toolbox

Michigan Public Health Training Center:
http://miphtcdev.web.itd.umich.edu/trainings

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Feedback and Question-and-Answer Session

Feedback and Question-and-Answer Session

- We are now open for a live question-and-answer session. Please submit your questions anonymously via the Question box located in the center of your screen.
- Your feedback is important!
  - After the Q&A, please follow the displayed link to complete the Interactive Customer Evaluation (ICE) card
  - Or, you may immediately access the ICE card via the Chat box
- Additional questions and comments may be directed to

Capt. Armen Thoumaian

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Save the Date

The next webinar in the DCoE PEI Webinar Series will be broadcast November 17, 2015 from 1–2:00 p.m. (ET)

Please join us!

November 2015						
S	**M**	**T**	**W**	**Th**	**F**	**S**
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	**17**	18	19	20	21
22	23	24	25	26	27	28
29	30					

Program Sierra Example

Continued from Episode 3 (February 2015) in the FY2015 DCoE PEI Series

Non-Clinical Program Example

Mission: At Program Sierra[1], we seek to ensure that service members who are wounded, ill or injured successfully reintegrate into civilian life or return to duty in the military. By performing our mission effectively, we hope to enhance force readiness and improve the quality and efficiency of services across the Defense Department

DoD photo by Pat Cubal

[1]Formerly known as Program Echo

Non-Clinical Program Example (continued)

Goal 1: Program Sierra helps service members transition to civilian life or return to duty with increased functioning and a sustainable, individualized system of support and care to meet ongoing needs

- **Objective 1A:** To assess all service members referred to the program and work with the service member and his or her family or caregiver to determine their needs and develop a plan for reintegration, followed by guidance sessions and service referrals
- **Objective 1B:** To increase use of services and supports for participating service members and enhanced functioning in targeted areas measured on an ongoing basis
- **Objective 1C:** To ensure continuous access to medical and non-medical services from point of illness/injury and for as long as needed to secure resilience and stability

Non-Clinical Program Example (continued)

Goal 2: Program Sierra provides media materials and outreach in order to enhance service members' knowledge and awareness of the support and services available to assist them with reintegration

- **Objective 2A:** To produce and deliver media materials to targeted locations in order to increase awareness of services and supports as indicated by reports from other programs regarding source of referral or knowledge
- **Objective 2B:** To increase service use and improve quality by promoting effective support and care services to those who need them

Non-Clinical Program Example (continued)

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES		
			Short	Medium	Long
Target Population Seriously wounded, ill or injured service members and their families *Staff* 21 including non-medical care mangers, recovery care managers and military (Division Chief) *Stakeholders* Service Branch Leadership, Secretary of Defense, Congress *Funding Past 5 Fiscal Years* 2013 - $5.5M 2012 - $1.5M 2011 - $1.2M 2010 - $1.2M 2009 - $800K	*Care Coordination* ▪ Administer assessment checklist to determine needs within 7-phase continuum of care ▪ Complete comprehensive recovery plans and quarterly progress update ▪ Provide consultations and educational material	*Guidance Sessions Completed* ▪ Benefits/ entitlements ▪ Financial ▪ Employment ▪ Integrated Disability Evaluation System *Referrals of participant, family member, caregiver to:* ▪ Local resources ▪ Other DoD programs	Improved attitudes and confidence Increased use of medical and non-medical services and supports throughout recovery and rehabilitation	Improved quality of life and stability Reduced delays and gaps in treatment (medical) and support services (non-medical)	Increased force readiness Improved service continuity
	Outreach ▪ Develop content for articles, news bulletins, Facebook and website ▪ Conduct outreach activities	*Information delivered* ▪ Access service outreach materials (e.g., downloads, hits) ▪ Report of program as source of information by select other programs	Increased knowledge of benefits, entitlements, resources and transition services	Increased resilience and retention Successful reintegration into military or civilian life	Improved service quality and reduced costs

Non-Clinical Program Example (continued)

ASSUMPTIONS	EXTERNAL FACTORS
Care coordination is required for target population to effectively access available services and supports	Program is highly political – care for wounded service members is a priority issue for President, Congress and senior leaders in the Defense Department and Department of Veterans Affairs There is widespread community support for assisting wounded, ill and injured service members

An additional example for a clinical program is provided in DCoE's *Program Evaluation Guide* (2nd Edition), Appendix A