PRELIMINARY EVALUATION OF THE NACDD STAR PROGRAM

A SUMMARY REPORT

ROSS BROWNSON
MAURA KEPPER
CHERYL VALKO

PREVENTION RESEARCH CENTER IN ST. LOUIS
SEPTEMBER 2019

I. Background

Public health agencies at all levels have struggled to identify the optimum structure to support administrative and programmatic efficiencies that will maximize public health impact with the available resources. In order to support state-level chronic disease prevention and health promotion practice, the National Association of Chronic Disease Directors developed an evidence and improvement science-based approach to organizational capacity building and improved effectiveness.

The resulting model is STAR (STate Activation and Response) – a quick cycle organizational development model for improving effectiveness and efficiency in state health department chronic disease prevention and health promotion practices. STAR assesses organizational capacity using evidence-based attributes of organization and function, works with chronic disease units to identify opportunities for increasing organization capacity, and facilitates development of a six-month action plan for achieving improvements. The STAR process identifies opportunities for increasing organizational capacity, facilitates development and implementation of a six-month plan for achieving improved organizational capacity, and supports participating states during the quality improvement cycle through peer learning opportunities and mentoring.

History of STAR

- STAR (originally State Technical Assistance and Review) was developed in 2008, to increase the effectiveness of chronic disease units in state and territorial health departments, and to support states in their efforts to integrate the categorical chronic disease programs into a comprehensive approach to improve community health. The original model was based on CDC's ***Promising Practices in Chronic Disease Prevention and Control: Public Health Framework for Action***. Participating states compiled a comprehensive briefing book detailing status of more than 100 measures. A site visit team made up of 3-5 chronic disease prevention and health promotion experts from other states, NACDD, and national partners spent 4 days interviewing leadership, program staff, and partners and developed recommendations for strengthening that state's activities.
- PHFAST (Public Health Framework ASsessment Tool) was developed in 2012 to meet new demand created by the Coordinated Chronic Disease Program funding that was released to states by CDC. This tool was abstracted from STAR and measures were revised by a panel of Chronic Disease Directors. The new tool was designed to facilitate discussion.
- In 2016, STAR and PHFAST underwent a revision to update the model to reflect advances in the literature and to address evaluation findings.
- The revised STAR conceptual model and delivery format was launched in 2017

Seventeen states have applied the model in their chronic disease prevention practice units. Twelve-month follow up evaluation results show organizational capacity improvement in conceptual model measures.

II. Process Evaluation

Process evaluation examines the inputs and activities of STAR (e.g., workshops, monthly calls). The process evaluation includes summaries of the workshop evaluation surveys, facilitator debriefs (HOOPLA) and key informant interviews.

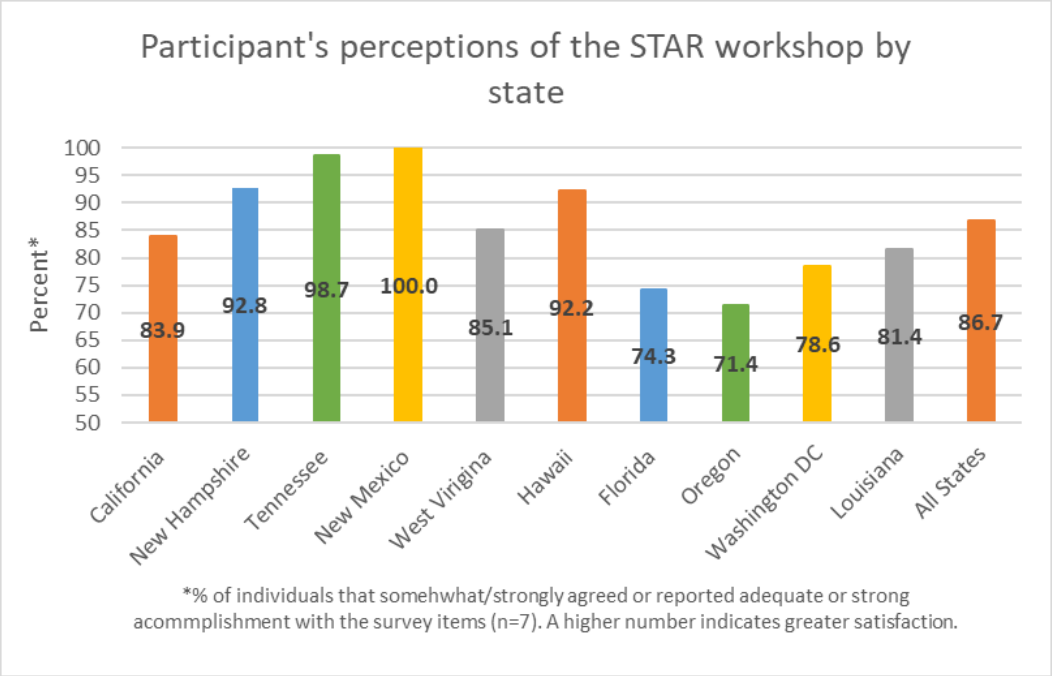
Workshop Evaluation

Summary of Workshop: Quantitative Questions

Table 1: State-level perceptions of the STAR Workshop

	N	A shared understanding of the capacity for a coordinated approach was generated.	An action plan was created.	Identified ways to strengthen the quality of chronic disease prevention efforts.	The structure of the process worked well	We created a useful product.	The STAR survey results accurately reflected our current capacity.	We are satisfied with the outcomes.
California	8	87.5	75.0	87.5	87.5	87.5	62.5	100.0
New Hampshire	14	78.6	100.0	85.7	100.0	100.0	85.7	100.0
Tennessee	11	100.0	100.0	100.0	100.0	100.0	100.0	90.9
New Mexico	10	100.0	100.0	100.0	100.0	100.0	100.0	100.0
West Virginia	24	75.0	87.5	83.3	95.8	91.7	66.7	95.8
Hawaii	24	83.3	95.8	91.7	95.8	100.0	78.3	100.0
Florida	20	70.0	65.0	60.0	95.0	80.0	70.0	80.0
Oregon	5	80.0	80.0	80.0	60.0	60.0	60.0	80.0
Washington DC	6	83.3	50.0	66.7	83.3	66.7	100.0	100.0
Louisiana	10	80.0	70.0	90.0	60.0	100.0	90.0	80.0
All States	132	83.8	82.3	84.5	87.8	88.6	81.3	92.7

*Columns indicate the percentage of respondents who somewhat/strongly agreed or reported they adequately/strongly accomplished the above statements.



Summary of Workshop: Open-ended questions

Question: What worked well?

- Facilitation
  - Excellent facilitation by the NACDD STAR team. The facilitators were flexible, well organized, knowledgeable, experienced and interactive.
- Process/Format/Structure
  - The process was interactive, a good mix of presentations and group discussion, and overall had a nice flow.
- Small Group Discussions
  - The small group discussions were well received and were helpful in facilitating focused, productive conversations.
- Open Discussion
  - Open discussions resulted in an open dialogue and team engagement.
- Action Planning
  - Working together to develop an action plan helped participants to come up with tangible goals and objectives and identify key areas for improvement.
- Survey presentation
  - Participants found the presentation on the survey results interesting and helpful in spurring discussions.
- Separating managers and staff
  - Several participants felt that separating the managers and staff helped to facilitate a more open and honest conversation and was an opportunity for staff to have their voices heard.

Question: What changes would you recommend?

- Send out the pre-assessment survey and materials sooner/prior to the meeting

- Clarify the purpose of the STAR workshop early on
- Lengthen the workshop
- Separate management and non-management to allow for more honest discussions
- Find better, more comfortable meeting rooms
- Provide clear information on future technical assistance and next steps

Facilitator Debrief (HOOPLA)

Overall – met goals and objectives for the two states in which the data was collected

- Key Lessons Learned
    - The workshop was too long for one state and too short for another state. Consider having additional calls or metrics prior to the workshop to help assess the preferred length of the workshop and tailor it to each state.
    - Send the agenda sooner with an introductory email to allow it to be forwarded to the other participants.
    - Clarify the goal of the day early on
    - Ask the Chronic Disease Director to send out the evaluation immediately after the meeting to increase response rates (add reminder in PowerPoint presentation)
    - Order name tents ahead of the meeting and have them sent to the hotel.

Key Informant Interviews

The STAR team collected qualitative follow-up data for five states. Overall, four of the five of the states had generally positive feedback on the STAR process. A few key ideas that emerged from the data included:

- Most participants felt that the process spurred continued change
- Participants appreciated being able to provide feedback on the assessment survey and agenda and tailor things for their state.
- Participants valued the ongoing technical assistance, including receiving articles and stories about other states and follow-up webinars.
- All five states found the monthly calls helpful and several specifically mentioned that they enjoyed hearing about what other states are doing.
- All five states felt that the STAR process met their expectations.

One state, Florida, had less positive feedback. The participants felt that the staff within the health department were not ready for the process and did not fully understand the key components of organizational capacity. Disagreements from the managers during the meeting created tension and upended the process. The workshop participants struggled to implement the action plan after the workshop ended.

Key lessons learned include:

- Increase understanding of state readiness prior to scheduling a workshop and engaging a state in the STAR process

- Raise awareness about the meaning of organizational capacity prior to the meeting
- Separate staff and managers to allow for open, honest discussion
- The word "competencies" may have caused some of the managers to feel threatened. Consider fully defining the word at the beginning of workshops.

Qualitative Evaluation of STAR Process: Interview Guide

The evaluation team closely reviewed the interview guide and made the following suggestions (Table 2).

Table 2: Suggested changes to interview guide

Section/Question	Recommendations
General	Consider having someone not directly involved in STAR conduct the interviews so there is less potential for social desirability bias.
Script: Thank you for taking the time to talk with us about your STAR experience. We will be asking questions about your experience with the STAR process, starting with the assessment, then the workshop and your implementation. This should take about 30 minutes.	• If you are recording the interviews, consider adding language such as, "If it is okay with you, I would like to record our conversation, because I don't want to miss anything we discuss. Our discussion today is completely confidential." • Other potential language to consider adding to the introduction: ○ "I want to let you know that your participation is completely voluntary, and if you want to stop at any time please let me know. Also, please do not hesitate to let me know if you don't feel comfortable answering a question or don't want to continue with our conversation. There are no right or wrong answers in this discussion. We are interested in knowing what you think, so please feel free to be frank and to share your point of view. It is very important that we hear your opinion."
Overall, how would you characterize your STAR experience? (prompt- If another state asked you, "Should we do this, what would you say?"	The prompt could be answered "yes/no." Consider changing the prompt to: • What do you most remember about the experience? OR Describe your STAR Experience • Are there any lasting impacts on your agency/work unit? If so, what are a few of these? OR
Assessment Survey	Consider adding intro language to set up each subsection. The more you can remind them and personalize things, the better. "You will recall we conducted an assessment survey with XX staff members before our visit."
STAR Visit	Again, consider adding introductory language. "You will recall we spent XX days with you to learn more about your programs."
STAR Action Plan/ Quick Wins	Consider adding introductory language. Would it be helpful to have the Action Plan in front of them when they answer these questions?

Was the STAR action plan useful for your organization?	Avoid Yes/No questions. Maybe reword to "Describe how your organization used the STAR action plan."
Have you been able to utilize the action plan to help reach your goals?	Consider adding a prompt after the question: (If yes, how? If no, why not?)
What about your organizational context helped you accomplish the action plan?	Consider changing the wording from "support accomplishing" to "accomplish."
What was challenging?	This question could potentially be interpreted in two ways: 1). What was challenging regarding their "organizational context" when accomplishing the action plan? or 2). What was challenging about "accomplishing the action plan?" You may want to consider clarifying the question to make sure the participant understands the question.
Were you successful in completing any of the items on your "Quick Wins" list?	Would it be helpful for the participant to have this out in front of them? Reword so that it is not a yes/no response: "What items on your "Quick Wins" list did you successfully complete?"
Cohort	Consider changing the name of this section. In the epi world "cohort" has a very specific meaning. Or at least provide a one sentence description.
What did you learn during the monthly calls that was valuable?	This question may be leading. Consider "Tell me about what you learn from the monthly calls." Or "Did you learn anything valuable during the monthly calls? If so, what are a few things you learned?
If you received any follow-up materials, how useful were those?	Do you want to know if there are other materials they wished they had received? If so, consider adding a probe. Add probe to take note to send follow-up materials if they have not received them.
Ongoing Technical Support	This is different from the monthly calls? Might these two items get conflated?
Has NACDD provided adequate technical assistance in reaching your goal after the STAR visit?	This could lend to a Yes/No Answer. Add "How" at the beginning of the question.
Final thoughts	
Did the STAR process meet your expectations?	This question could lend to a yes/no answer. Consider rewording to: "In what ways did the STAR process meet your expectations?" Consider providing a scale to start the conversation: "On a scale from 1-5 with five being the highest, indicate how the star process met your expectations." Then you can follow up with questions about the positive or negative response. Do we want to know why they decided to do it?
Any other comments on the process?	Could add an additional question: Do you have ideas on how we might recruit other states to participate in the STAR process?

*Question not included in the table above did not have suggested changes.

Monthly Calls Summary: (Call Notes, Key Informant Interviews and STAR Cohort Discussion)

The STAR monthly calls are an important component of the STAR process and are a way for states to share data and debrief. The process evaluation includes summaries of the monthly call notes and the Monthly STAR Cohort Discussion (September 2018). The key informant interviews asked three questions about the monthly calls: 1) *What did you learn during the monthly calls that was valuable?*; 2) *What else would you have liked to occur during the monthly calls?*; and 3) *If you received any follow-up materials, how useful were those?*. The answers to these three questions were also summarized.

A few key ideas that emerged from the data included:

- The calls were highly attended (see Table 3) and were seen as a valuable use of time
- Participants felt that the calls allowed for open conversations
    - One participants said "There is a comfort on this call that is unique." Another person said "I feel safe on this call."
- Several states mentioned that they enjoy hearing what other states are doing
    - They appreciated learning about barriers and struggles
- Learning from other states helps them to feel more connected and less alone in the challenges they face

A few participants gave suggestions for ways to improve the monthly calls:

- Add specific topics to the calls to make them more meaningful
    - Focus on climate/social aspects of organizational change and organizational structure
- Have states do a one-pager on what they have accomplished through the STAR process

Table 3: Overview of STAR Monthly Call State Attendance in 2019

Month of Call	Number of States Participating
January	4
February	5
March	7
April	5
May	5
June	5
July	2*

*Low turnout due to a competing CDC meeting

III. Impact Evaluation

At the time of this report, only three of the STAR states had both pre and re-assessment data, making it impossible to truly measure the impact of the program through this evaluation. Our team analyzed the quantitative pre and re-assessment data for two of the three states: Idaho and New Mexico. California was not included in this report due to the different population that was surveyed versus the other two states. We also closely reviewed the survey instrument and made suggested changes to improve the capacity to better measure impact in the future.

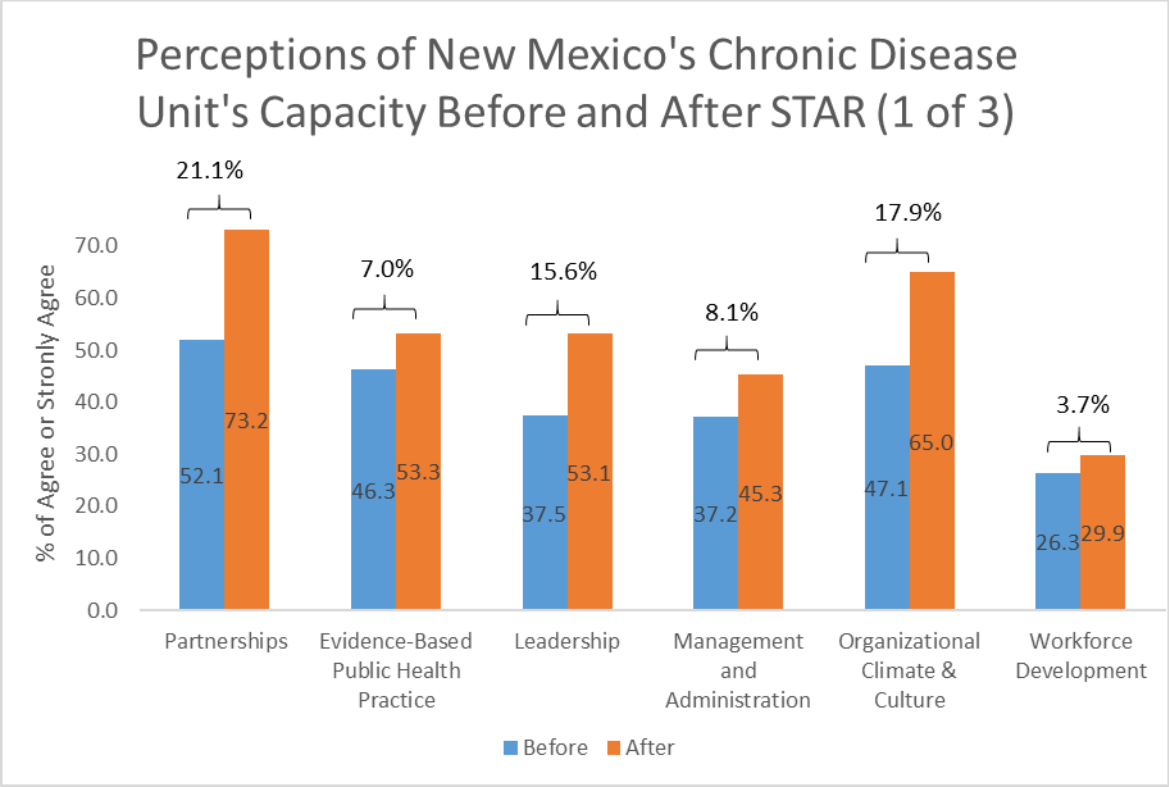
Quantitative Pre- and Re-assessment

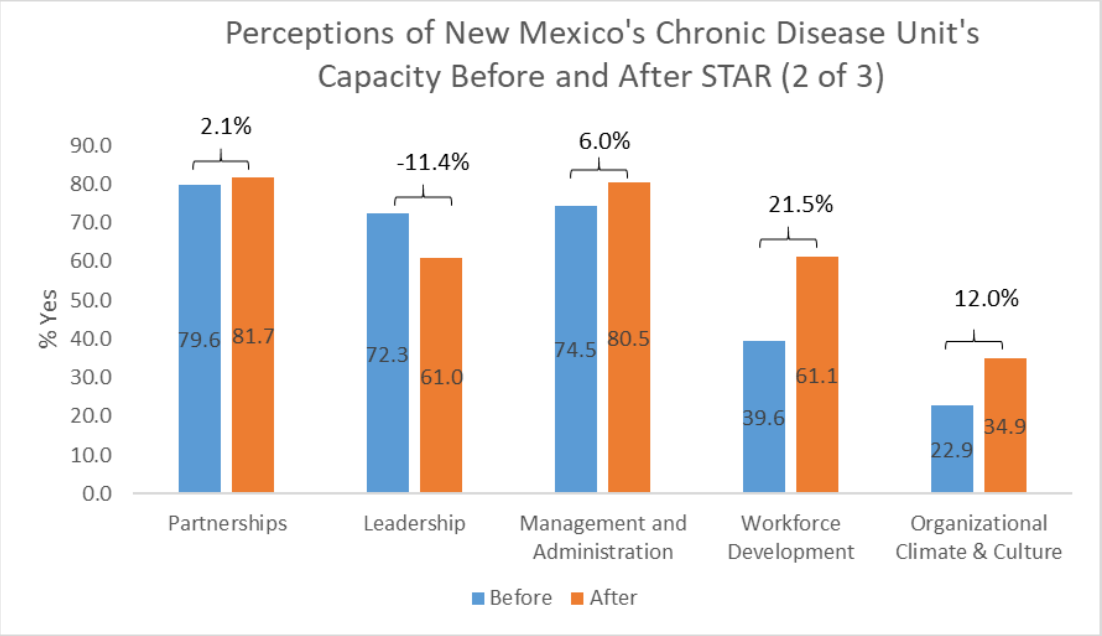
Quantitative Pre and Re-assessment data was available for 3 states: Idaho, California, and New Mexico. The number or respondents at pre-assessment (2017) and re-assessment (2019) for each state is shown in Table 3 below.

Table 4: Sample Sizes for Quantitative Pre and Re-Assessment

	2017	2019
Idaho	30	31
California	205	137
New Mexico	48	41

Below is a summary report on the impact of STAR in New Mexico and Idaho, the two states that surveyed similar populations. We do caution about making state-level inferences from small sample sizes.





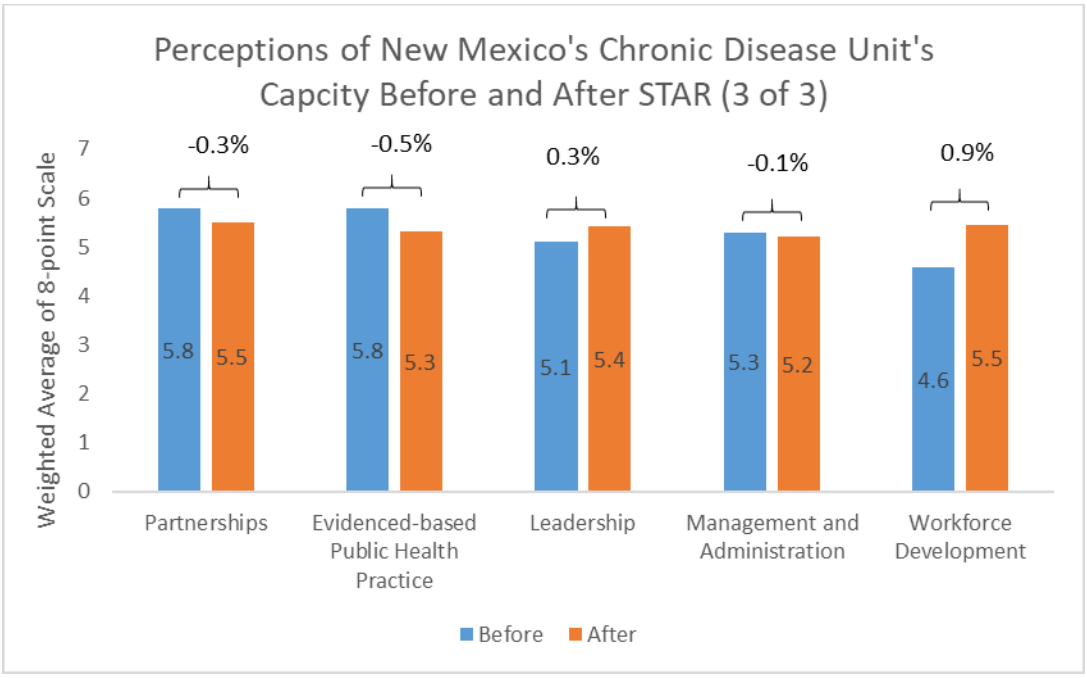


Table 5: Perceptions of New Mexico's Chronic Disease Unit's Capacity Before (2017) and After (2019) STAR			
	2017	**2019**	**Change**
	% or weighted average		
Partnerships			
Health equity is explicitly stated as a priority in our collaborations.[1]	52.1	73.2	21.1

Our collaborative partners have missions that align with ours.[3]	76.6	80.5	3.9
We engage in collaborative planning with our partners.[3]	82.6	82.9	0.3
Engaging partners within the state health department. [4]	5.7	5.6	-0.1
Engaging external partners such as public state and local agencies. [4]	6.0	5.7	-0.3
Engaging external partners such as private sector organizations. [4]	5.3	5.1	-0.3
Engaging external partners such as non-profits and community-based organizations. [4]	6.1	5.7	-0.4
Evidence-Based Public Health Practice			
We use evidence-based decision making principles to guide our efforts. [1]	68.8	85.4	16.7
The unit includes economic evaluation in its decision making about programs and policies. [1]	31.9	36.6	4.7
Plans for evaluation are developed prior to implementation. [1]	57.4	48.8	-8.7
Information is widely shared in my work unit so that everyone who makes decisions has access to all available knowledge. [1]	27.1	42.5	15.4
Gathering, analyzing, and disseminating epidemiology and surveillance data to monitor population health.[4]	5.8	5.3	-0.5
Leadership			
The unit has a vision that aligns all programs. [1]	29.2	48.8	19.6
The chronic disease unit serves as the primary and expert resource for others both inside and outside the state health department. [1]	45.8	57.5	11.7
We engage community in assessment and decision making.[3]	72.3	61.0	-11.4
Effectively communicating the value of chronic disease prevention to decision makers and partners. [4]	5.5	5.9	0.4
Maintaining a plan for urgent and non-urgent communications. [4]	4.7	5.1	0.4
Planning and implementing strategic communications that translate data for stakeholders, decision makers, partners, funders, and the public. [4]	5.1	5.3	0.2
Management and Administration			
The unit hires staff with appropriate skills and expertise. [1]	47.9	48.8	0.9
The unit actively works on succession planning. [1]	20.8	36.6	15.8
Evaluation data is used to monitor and improve interventions. [1]	56.3	51.2	-5.0
Communications networks and tools are in place for sharing of information among staff and programs. [1]	25.0	41.5	16.5
Skills needed are reflected in job descriptions for staff. [1]	41.7	43.9	2.2
Accountability is demonstrated through transparent financial processes. [1]	35.4	34.1	-1.3
The unit embodies a team approach to decision making. [1]	29.2	48.8	19.6
Unit leadership is transparent and communicates effectively with staff. [1]	41.7	57.5	15.8
Our work is funded through a variety of sources.[3]			
Facilitating interactions between related programs. [4]	5.3	5.5	0.2
Using a performance management system to monitor achievement of organizational objectives. [4]	5.0	5.0	0.0
Conducting evaluation to inform, prioritize, deliver, monitor, and improve programs. [4]	5.5	5.1	-0.4
Organizational Climate & Culture			
The unit actively seeks to cultivate a diverse workforce (age, gender, race/ethnicity) that reflects that population the unit serves. [1]	43.8	75.6	31.9

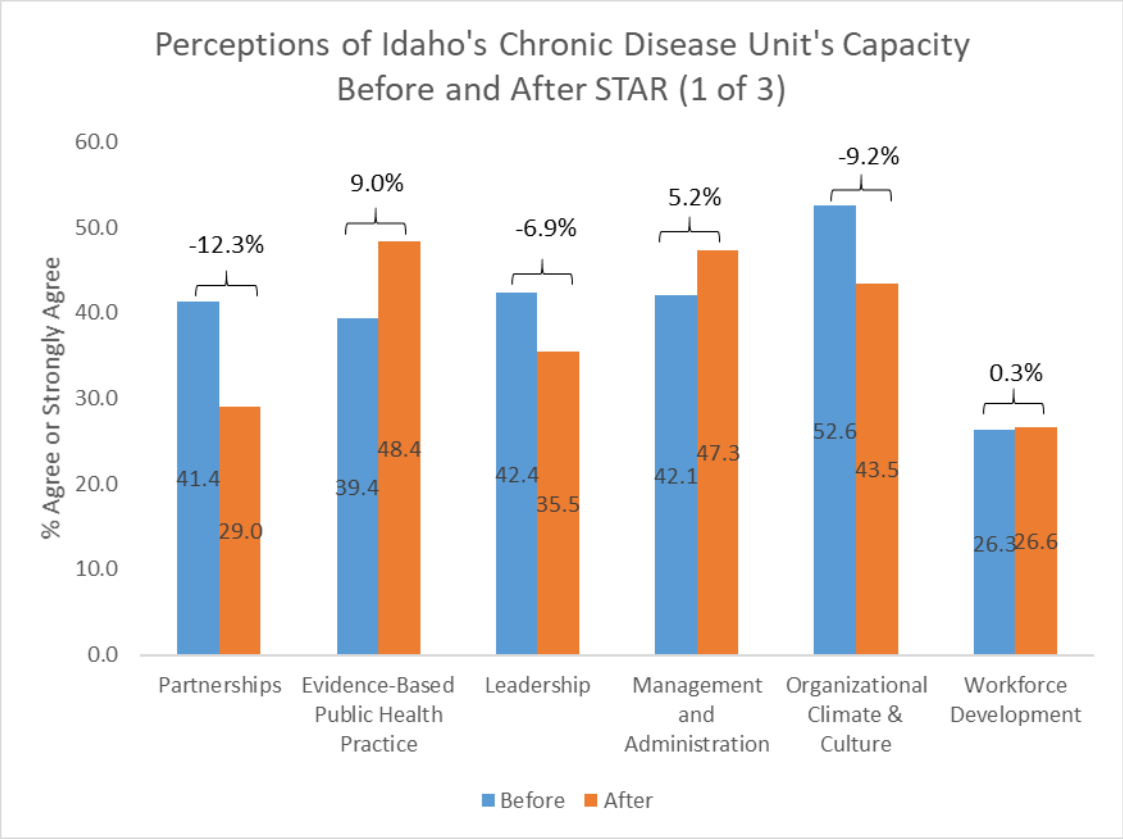
The unit culture supports processes and practices that facilitate high performance. [1]	47.9	61.0	13.1
The unit consciously strives to create an innovative environment. [1]	29.2	56.1	12.3
Feelings of energy, excitement, and passion[2]	43.8	70.0	11.7
Extra outcomes are achieved as a result of working together[2]	58.3	57.5	-1.2
Working together to effectively problem solve and overcome difficulties[2]	56.3	65.0	10.8
Experience personal satisfaction and fulfillment from work activities[2]	54.2	72.5	28.8
The skills and unique perspectives of each part of the chronic disease unit complements each other[2]	43.8	62.5	18.8
The unit implements effective flex time policies. [3]	43.8	62.5	60.4
The unit implements effective tele-work policies. [3]	2.1	7.3	5.2
Workforce Development			
There are opportunities to take on stretch assignments. [1]	31.0	48.8	17.8
The unit provides public health training for those without previous public health training or education. [1]	16.7	22.6	5.9
Professional competencies are assessed at the individual level. [1]	36.7	35.5	-1.2
Professional competencies are assessed across teams. [1]	20.7	12.9	-7.8
My individual development plan includes education and training objectives. [3]	54.2	58.5	4.4
I have access to training on evidence-based decision making. [3]	45.8	65.0	19.2
I have access to training on quality improvement processes. [3]	39.6	61.0	21.4
I have access to training on effective management practices. [3]	29.2	62.5	33.3
I have access to training on performance assessment. [3]	37.5	61.0	23.5
I have access to leadership training. [3]	31.3	58.5	27.3
Conducting workforce development activities for chronic disease unit staff. [4]	4.6	5.5	0.9

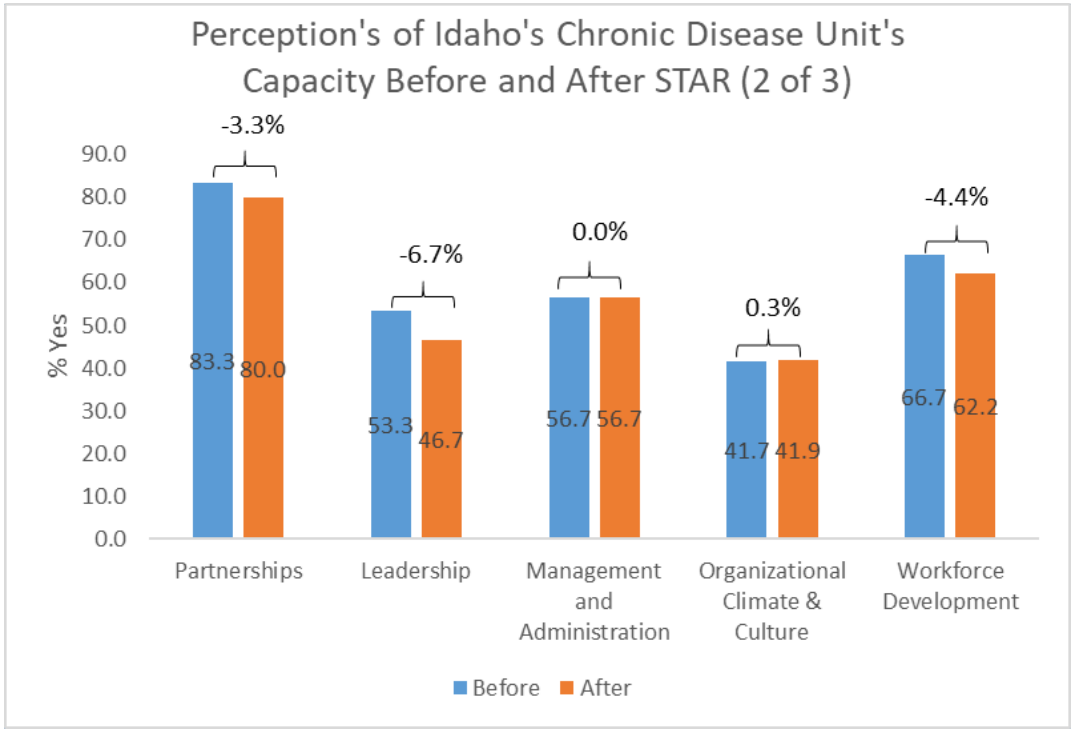
[1]Items were assessed using a 7-point Likert scale (strongly disagree to strongly agree). Percentages indicate the number of individuals who agreed/strongly agree. Items represented in figure 1.

[2]Items were assessed on a 5-point Likert scale (never to always). Percentages indicate the number of individuals who reported often or always. Items presented in Figure 1.

[3] Items were assessed with yes/no response options. Percentages indicate the number of individual who responded yes. Items presented in Figure 2.

[4] Items were assessed on an 8 point scale. Percentages indicate the number of individual who responded yes. Items presented in Figure 3.


Perceptions of Idaho's Chronic Disease Unit's Capacity Before and After STAR (1 of 3)
% Agree or Strongly Agree
60.0
50.0
40.0
30.0
20.0
10.0
0.0
-12.3%
9.0%
-6.9%
5.2%
-9.2%
0.3%
41.4
29.0
39.4
48.4
42.4
35.5
42.1
47.3
52.6
43.5
26.3
26.6
Partnerships
Evidence-Based Public Health Practice
Leadership
Management and Administration
Organizational Climate & Culture
Workforce Development
Before
After


Perception's of Idaho's Chronic Disease Unit's Capacity Before and After STAR (2 of 3)
% Yes
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
-3.3%
-6.7%
0.0%
0.3%
-4.4%
83.3
80.0
53.3
46.7
56.7
56.7
41.7
41.9
66.7
62.2
Partnerships
Leadership
Management and Administration
Organizational Climate & Culture
Workforce Development
Before
After

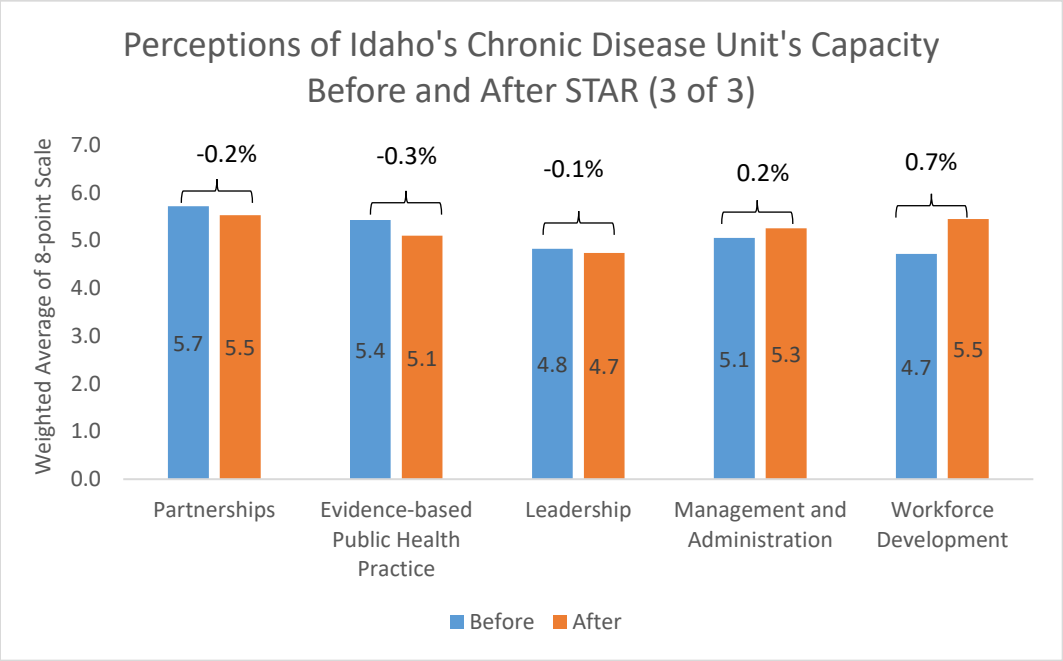


Table 6: Perceptions of Idaho's Chronic Disease Unit's Capacity Before (2017) and After (2019) STAR			
	2017	**2019**	**Change**
	% or weighted average		
Partnerships			
Health equity is explicitly stated as a priority in our collaborations.[1]	41.4	29.0	-12.3
Our collaborative partners have missions that align with ours.[3]	83.3	86.7	3.3
We engage in collaborative planning with our partners.[3]	83.3	73.3	-10.0
Engaging partners within the state health department.[4]	6.2	5.7	-0.5
Engaging external partners such as public state and local agencies.[4]	6.1	5.9	-0.2
Engaging external partners such as private sector organizations.[4]	4.9	5.0	0.1
Engaging external partners such as non-profits and community-based organizations.[4]	5.6	5.5	-0.1
Evidence-Based Public Health Practice			
We use evidence-based decision making principles to guide our efforts.[1]	63.3	61.3	-2.0
The unit includes economic evaluation in its decision making about programs and policies.[1]	27.6	32.3	4.7
Plans for evaluation are developed prior to implementation.[1]	30.0	58.1	28.1
Information is widely shared in my work unit so that everyone who makes decisions has access to all available knowledge.[1]	36.7	41.9	5.3

Gathering, analyzing, and disseminating epidemiology and surveillance data to monitor population health.[4]	5.4	5.1	0.7
Leadership			
The unit has a vision that aligns all programs. [1]	43.3	45.2	1.8
The chronic disease unit serves as the primary and expert resource for others both inside and outside the state health department. [1]	41.4	25.8	-15.6
We engage community in assessment and decision making.[3]	53.3	46.7	-6.7
Effectively communicating the value of chronic disease prevention to decision makers and partners. [4]	5.4	5.1	-0.3
Maintaining a plan for urgent and non-urgent communications. [4]	4.2	4.4	0.2
Planning and implementing strategic communications that translate data for stakeholders, decision makers, partners, funders, and the public. [4]	4.9	4.8	-0.1
Management and Administration			
The unit hires staff with appropriate skills and expertise. [1]	60.0	66.7	6.7
The unit actively works on succession planning. [1]	17.2	32.3	15.0
Evaluation data is used to monitor and improve interventions. [1]	69.0	61.3	-7.7
Communications networks and tools are in place for sharing of information among staff and programs. [1]	46.7	38.7	-8.0
Skills needed are reflected in job descriptions for staff. [1]	50.0	51.6	1.6
Accountability is demonstrated through transparent financial processes. [1]	13.8	63.3	49.5
The unit embodies a team approach to decision making. [1]	46.7	32.3	-14.4
Unit leadership is transparent and communicates effectively with staff. [1]	33.3	32.3	-1.1
Our work is funded through a variety of sources.[3]	56.7	56.7	0.0
Facilitating interactions between related programs. [4]	5.1	5.4	0.3
Using a performance management system to monitor achievement of organizational objectives. [4]	4.4	4.7	0.3
Conducting evaluation to inform, prioritize, deliver, monitor, and improve programs. [4]	5.7	5.7	0.0
Organizational Climate & Culture			
The unit actively seeks to cultivate a diverse workforce (age, gender, race/ethnicity) that reflects that population the unit serves. [1]	31.0	16.1	-14.9
The unit culture supports processes and practices that facilitate high performance. [1]	46.7	32.3	-14.4
The unit consciously strives to create an innovative environment. [1]	36.7	19.4	-17.3
Feelings of energy, excitement, and passion[2]	50.0	50.0	0.0
Extra outcomes are achieved as a result of working together[2]	63.3	50.0	-13.3
Working together to effectively problem solve and overcome difficulties[2]	53.3	66.7	13.3
Experience personal satisfaction and fulfillment from work activities[2]	70.0	60.0	-10.0
The skills and unique perspectives of each part of the chronic disease unit complements each other[2]	70.0	53.3	-16.7
The unit implements effective flex time policies. [3]	76.7	80.6	4.0
The unit implements effective tele-work policies. [3]	6.7	3.2	-3.4
Workforce Development			
There are opportunities to take on stretch assignments. [1]	31.0	35.5	4.4

The unit provides public health training for those without previous public health training or education. [1]	16.7	22.6	5.9
Professional competencies are assessed at the individual level. [1]	36.7	35.5	-1.2
Professional competencies are assessed across teams. [1]	20.7	12.9	-7.8
My individual development plan includes education and training objectives. [3]	90.0	76.7	-13.3
I have access to training on evidence-based decision making. [3]	60.0	53.3	-6.7
I have access to training on quality improvement processes. [3]	96.7	100.0	3.3
I have access to training on effective management practices. [3]	53.3	50.0	-3.3
I have access to training on performance assessment. [3]	53.3	53.3	0.0
I have access to leadership training. [3]	46.7	40.0	-6.7
Conducting workforce development activities for chronic disease unit staff. [4]	4.7	5.5	0.7

[1]Items were assessed using a 7-point Likert scale (strongly disagree to strongly agree). Percentages indicate the number of individuals who agreed/strongly agree. Items represented in figure 1.

[2]Items were assessed on a 5-point Likert scale (never to always). Percentages indicate the number of individuals who reported often or always. Items presented in Figure 1.

[3] Items were assessed with yes/no response options. Percentages indicate the number of individual who responded yes. Items presented in Figure 2.

[4] Items were assessed on an 8 point scale. Percentages indicate the number of individual who responded yes. Items presented in Figure 3.

Recommendations: How to change data collection to better measure impact

- Consistency in data collection across years.
- Collect data using the same scales in the assessment surveys in order to generate summary reports that include all questions for key areas: evidence-based public health practice, leadership, partnerships & relationships, management and administration, organizational climate and culture, and workforce development.
- Use a data capture software (e.g. qualtrics, REDCap) that will result in cleaner data.
- Store data raw data at an individual-level with a row for each respondent. Use unique identifiers for the individual and state in order to calculate statistics that will demonstrate significant change (e.g. chi-square test, Ttest, etc.).
- Review survey to eliminate redundancy in questions. In California survey, 2 questions were asked twice.

Quantitative Pre/Re-Assessment Tool: Survey Instrument

The evaluation team closely reviewed the survey instrument and made following suggestions (Table 5).

Table 7: Suggested changes to survey instrument	
Section/Question	**Recommendations**
Introduction	The team gave a few recommendations on the wording (additions in blue):

	Thank you very much for completing this STAR pre-assessment survey. We estimate completion will take you less than 30 minutes of your time.
Question 1 **How long have you been in your current position?** ○ Less than 1 year ○ 1 - 5 years ○ 5 - 10 years ○ More than 10 years	• Convert all Likert scale anchors to a 5-point scale throughout the document. An adjective should correspond to only one #/data point on the Likert scale. • Change the response option from 5-10 to 6-10 so that the response options are mutually exclusive.
Question 2 **What is your primary role?** ○ Management ○ Administrative ○ Program implementation ○ Research/analyst ○ Other (please specify)	Consider using the longer list that was used in the NACDD National survey to include the following roles: • Program Manager or Coordinator (1) • Health Educator (2) • Epidemiologist (3) • Statistician (4) • Program Evaluator (5) • Communications Specialist (6) • The overall director of chronic disease and or health promotion programs (7) • Other Division or Bureau Head/ Deputy Director (8) • Department Head (9) • Community/Public Health Nurse (10) • Social Worker (12) • Dietitian/Nutritionist (13) • Other (please specify) (11)
Question 3-8 (see survey instrument)	Consider adding a Don't know/Not sure choice to questions 3-8 to remain consistent with the don't know options for questions 9-12.
Questions 5-8 (see survey instrument)	Recommend that all "agreement" questions follow the same 5 point Likert scale.
Question 10 (see survey instrument)	Recommend changing the response option of this question to match the other "agreement" questions above, rather than yes/no.
New Question	Consider one open-ended item at the end: For Example: 1. What is the single most important thing that needs to happen to improve the organizational capacity of your unit to address chronic diseases? OR 2. What is one thing your organization does well…--and then --what is one challenge to improve the organizational capacity of your unit to address chronic diseases?

Table 8: Priority action areas

• Scale back process evaluation and increase impact evaluation components
• Implement revision to data collection instruments
• Increase consistency in data collection methods
  ○ Use same scales within surveys
  ○ Keep surveys consistent across years
  ○ Develop a system to ensure data collection for every state
• Increase understanding of state readiness prior to scheduling a workshop and engaging a state in the STAR process
• Review process evaluation recommendations above to consider changes regarding: reformatting workshop length, clarifying the purpose, separating management and non-management during discussions and timing of pre-workshop materials delivery.