University at Albany, State University of New York

Scholars Archive

Health and Healthcare Services Reports and Research Briefs | Health and Healthcare Services

2019

end+disparities ECHO Collaborative Intermediate Implementation Evaluation Final Report

Center for Human Research Services, University at Albany

The University at Albany community has made this article openly available.
Please share how this access benefits you.

Follow this and additional works at: https://scholarsarchive.library.albany.edu/chsr-hhs-reports-and-briefs

Recommended Citation

Center for Human Research Services, University at Albany, "end+disparities ECHO Collaborative Intermediate Implementation Evaluation Final Report" (2019). *Health and Healthcare Services Reports and Research Briefs*. 19.
https://scholarsarchive.library.albany.edu/chsr-hhs-reports-and-briefs/19

This Article is brought to you for free and open access by the Health and Healthcare Services at Scholars Archive. It has been accepted for inclusion in Health and Healthcare Services Reports and Research Briefs by an authorized administrator of Scholars Archive.
Please see Terms of Use. For more information, please contact scholarsarchive@albany.edu.

end+disparities ECHO Collaborative Intermediate Implementation Evaluation Final Report

August 30, 2019

Prepared by:

Margaret Gullick, Ph.D., Mandi Breen, Sarah Drazek, Moira Riley, Ph.D., Amanda Rószavölgyi, Jordyn Wartts, Jennifer Weintraub
Center for Human Services Research
University at Albany, State University of New York

Center for Human Services Research
University at Albany State University of New York

EXECUTIVE SUMMARY

Background

The end+disparities ECHO Collaborative is a national initiative aimed at building continuous quality improvement (QI) skills for the purpose of reducing health disparities, particularly in viral suppression rates, among four subpopulations disproportionately affected: Black/African-American/Latina Women (BAAL), men of color who have sex with men (MSM of Color), transgender individuals, and youth (ages 13-24). It was intended to create a national community of learners from diverse settings, agencies, and backgrounds, who all focus on serving individuals with HIV.

The overall purpose of this evaluation was to explore short-term and intermediate outcomes that underlie the end+disparities ECHO Collaborative's theory of change to achieve long-term goals, particularly in terms of participant engagement, activity implementation, and initial progress. A mixed-methods strategy was implemented to meet these evaluation objectives. This approach took advantage of extant data and combined it with more targeted data collection to allow confirmation, cross-validation, and corroboration across sources and findings. Stakeholder perspectives were incorporated to allow for participant-level views of project successes and challenges. Activities included review of Community Partner's quarterly reporting forms; a survey of all registered participants; and interviews with 15 selected Community Partners, including an additional in-depth conversation with one Community Partner in the form of a case study. Specifically, we assessed Community Partners' implementation of new QI project activities and "change ideas" aimed at reducing HIV disparities in their chosen disparity-based Affinity Groups; early improvements in peer networking; and benefits from participation as reported by actively involved Community Partners. This report presents analyses and results from these activities.

This evaluation thus allows for determination of current program engagement and level of project implementation by Community Partners and can inform Collaborative stakeholders of successes to celebrate and replicate at this implementation stage, and any common issues to address before moving forward.

Key Evaluation Findings

QI Project Idea Source.

- Community Partners were asked to identify the major sources of QI project change ideas. Data review, other Partner's case presentations, and Regional Group meetings were reported to be the most helpful project idea sources; while many (particularly those in the Transgender and BAAL Affinity Groups) reported their Affinity Group's feedback from their case presentation to be one source. However, none selected it as the most important source for generating their QI project ideas.
- Similarly, most interviewees noted that their project focus predated the Collaborative, or stemmed from data review during the Collaborative; while their idea was potentially refined through their Affinity Group, the group itself was not the source of the focus.

Project Implementation.

- Most survey respondents (64%) reported starting at least one PDSA (Plan-Do-Study-Act) cycle over the course of the Collaborative, indicating implementation of a change idea or QI project.
- There were some differences in implementation stages achieved by Affinity Group: fewer BAAL Group participants reported having determined a change idea or goal; more Transgender Group participants, and fewer Youth, reported seeing improvements due to their QI activities, though notably there were very few Transgender Group respondents.
- However, more than half of the interviewees (most of whom had been selected as examples of particularly active and involved Community Partners) were not able to identify a project. Definitions of a project or specific change idea were thus somewhat unclear, but participants were clearly progressing through implementation stages and attempting some QI activities.

Implementation Challenges.

- Participants were asked to identify challenges in developing and implementing QI projects. The most common responses were challenges related to competing work priorities; reaching out to, and getting interest from, and maintaining interest from, the target population; and staff turnover. Transgender Group participants particularly reported difficulties in organizational support and relationships.
- Similarly, interviewees also frequently reported difficulties due to staffing, including staff turnover; organizational support and relationships; and data.

Viral Suppression Data.

- Most survey respondents (79%) reported having submitted viral suppression data to the Collaborative at some point over the past year.
- On average, viral suppression rates for both Community Partner's entire population and for their disparity subpopulation were reported to have improved about 4% over the course of the Collaborative; these numbers were highly similar to those recorded in the end+disparities Database, demonstrating reliable data.
- Participants reported that they had used viral suppression data to track their progress toward QI goals and determine the impact of their QI projects, identify and address HIV disparities, and benchmark their performance to that of other participants.

Affinity and Regional Group Experiences.

- Partners were very positive about their Affinity Group experiences: over 85% agreed that they were helpful, over 80% agreed that they were well-run, and 74% agreed that they felt comfortable participating. They also felt that Affinity Groups kept them informed about QI information that supported their projects.
- Partners were similarly positive about their Regional Groups. Participants agreed that they strengthened partnerships (78%), coordinated efforts (79%), followed up on data (79%), and helped them prepared for QI work (87%). They also reported that Regional Groups effectively connected them to local resources relevant to their work.
- Most respondents (81%) agreed that the Collaborative had helped strengthen their Regional Group, often by increasing regional QI capacity, providing support for activities, and strengthening peer and regional networks.

- Similarly, most interviewees reported these Groups to be helpful in learning about QI, getting technical assistance, sharing resources, and providing emotional support to their peers.
- However, more than half of respondents reported that their Regional Group had not yet provided trainings for either providers (58%) or consumers (65%), as expected by the Collaborative.

Collaborative Benefits.

- Respondents typically felt that the Collaborative had a positive impact on their capacity for QI (mean = 3.04/5). Most reported significant improvements in opportunities for sharing and networking (71%), access to national benchmark data (65%), organizational (64%) and individual (63%) QI capacity, and performance measurement and disparity detection capacity (62%).
- Over half of respondents reported seeing improvements in viral suppression rates, whether for their disparity population (51%) or entire population served (38%); interestingly, many who had not yet seen this increase expected to by the end of their participation. Other frequent benefits included improvements in clinical quality management (61%), opportunities for sharing and networking (55%), and strengthened regional partnerships (51%).
- Qualitatively, interviewed Partners reported positive shifts in their organization's receptiveness to QI work, noting a change from a more "checkbox mentality" to greater investment in the process. Partners also felt more excited about implementing QI efforts within their organizations due to the Collaborative.

Sustainability.

- Over 90% of respondents reported that their agency was prepared to continue QI efforts after the formal end of the Collaborative; about 70% felt that their Regional Group would be able to sustain its work.

Organizational Readiness for Change.

- Survey respondents were asked to rate their organization's climate via the Organizational Readiness for Change scale. Interestingly, there were not differences in QI project implementation steps taken or Collaborative involvement between those who rated their organizations higher or lower.
- Those who rated their organizations higher did note more benefits of Collaborative participation. They were also significantly more likely to report increased QI capacity, establishment of sustainable Regional Groups, and improved disparity-population VS rates.

INTRODUCTION.

The end+disparities ECHO Collaborative is a national initiative aimed at building continuous quality improvement (QI) skills for the purpose of reducing health disparities, particularly in viral suppression rates, among four subpopulations disproportionately affected: Black/African-American and Latina women (BAAL), men of color who have sex with men (MSM of Color), transgender individuals, and youth (ages 13-24). Funded by the Ryan White HIV/AIDS Program (RWHAP) and led by the HRSA HIV/AIDS Bureau and the RWHAP Center for Quality Improvement & Innovation (CQII), the Collaborative was intended to create a national community of learners from diverse settings, agencies, and backgrounds, who focused on serving people living with HIV (PLWH). Agencies receiving RWHAP funding were invited to participate.

Participating agencies were expected to undertake work toward reducing disparities in suppression rates between their full caseload and these identified subpopulations, with the aim of ultimately improving viral suppression rates for their full population. Once enrolled, Partners were asked to identify the subgroup with a suppression rate disparity in their caseload, then learn about and determine improvement efforts to implement at their agency. Participants benefitted from expert guidance on both QI techniques and subpopulation-specific topics, as well as formalized communication with local and national peers and consumers, through the form of Affinity (subpopulation- or role-specific), Regional (geography-based), and consumer groups. The end+disparities ECHO Collaborative began in June 2018 and is expected to transition in December 2019 to the RWHAP recipients as part of sustainability efforts

CURRENT EVALUATION.

The overall purpose of this evaluation was to explore short-term and intermediate outcomes that underlie the program's theory of change to achieve long-term goals, particularly in terms of participant engagement, activity implementation, and initial progress. Specifically, we assessed Community Partners' implementation of new QI project activities and "change ideas" aimed at reducing disparities in their chosen Affinity Groups; early improvements in peer networking; and benefits from participation as reported by actively involved Community Partners. Stakeholder perspectives were incorporated to allow for participant-level views of project successes and challenges. This evaluation thus allows for determination of current program engagement and level of project implementation by Community Partners and can inform Collaborative stakeholders of successes to celebrate and replicate at this early stage, and any common issues to address before moving forward.

The end+disparities ECHO Collaborative includes a comprehensive, quantitative-focused evaluation aimed at assessing the final impacts of the program. In addition, the CQII team, with support by the HRSA HIV/AIDS Bureau, has requested a more immediate examination of program impacts. The Center for Human Services Research (CHSR) conducted this intermediate implementation evaluation.

A mixed-methods strategy was implemented to meet these evaluation objectives. This approach took advantage of extant data and combined it with more targeted data collection to allow confirmation, cross-validation, and corroboration across sources and findings. Activities included review of Community Partner's quarterly reporting forms; a survey of all registered participants;

interviews with selected Community Partners; and an additional in-depth conversation with one Community Partner in the form of a case study. This report presents analyses and results from these activities.

EVALUATION COMPONENTS AND RESULTS.

I. INITIAL FORM REVIEW.

The Collaborative includes a Quarterly Community Partner Form (QCPF), which participants complete on a quarterly basis. This survey includes fields for reporting improvement activities implemented; performance data over time; major accomplishments and lessons learned; major challenges; and technical assistance needs. The most recent QCPFs were reviewed in April 2019; for many Partners, these reports reflected the quarter ending in March 2019, but the most recent form for others was for a previous quarter.

Completion of these forms, and of the fields within the forms, was inconsistent: some Partners filled out the forms in detail, while others provided only a few key words to indicate their activities. As such, the QCPFs were used to develop materials for the interviews and survey, including generating questions, noting potential processes, common challenges, and unique issues, and understanding different stages of implementation.

II. ALL-PARTNER SURVEY.

Methods.
All Community Partners were asked to complete an online survey focusing on their current experiences with the Collaborative, changes in peer networks, and organizational responsiveness to change. Questions were developed based on information from review of the QCPF, Collaborative Toolkit document, and available quantitative information about the Collaborative, as well as early findings from the Key Informant Interviews. CQII and the HRSA HIV/AIDS Bureau also reviewed and gave comments on a draft of the instrument.

Individualized links were distributed in mid-July 2019 to 938 contacts in the end+disparities ECHO Collaborative contact list. Participants were given three weeks to complete the survey (i.e., through August 2, 2019).Three reminders sent during this period and several promotions from the Collaborative faculty and staff was sent during the data collection period. The survey was programmed in and distributed through Qualtrics.

In total, 145 unique Collaborative participants responded to at least one question on the survey. Ten answered the first item but no further questions, and one participant did not respond to the first item but did answer further questions; 23 further participants clicked through the survey but did not respond to any items, so had no data to include. Twelve additional responses from Collaborative faculty members were excluded.

About three-quarters (N=107, 74%) of these respondents completed the entire survey; eight more participants progressed at least halfway through the survey, and 33 completed less than half. Median survey duration for participants who completed the survey was about 23 minutes; the median duration for those who did not complete the survey was about 3 minutes.

Respondent Distributions.
Affinity Groups.
80 participants had an Affinity Group recorded in the Participant Contact spreadsheet; 20 more noted their Affinity Group in the survey. The majority of respondents were part of the Youth or MSM of Color Affinity Groups; the Transgender Group was the smallest, with only seven respondents.

		N Respondents	%
Affinity Group	Black/African American/Latina Women	22	22%
	MSM of Color	36	36%
	Transgender	7	7%
	Youth	35	35%
	Total	*100*	*100%*

About 83% of participants reported attending any Affinity Group sessions; 20 (17%) reported never attending any sessions. The Black/African-American and Latina Women Group had a higher rate of non-participant survey responders than any other group.

	Attended any Affinity Group sessions	% of Affinity Group Respondents

		N	%
Affinity Group	Black/African American and Latina Women	17	77%
	MSM of Color	31	86%
	Transgender	6	86%
	Youth	31	84%
	Total	85	83%

Regional Groups.
All Regional Groups had at least some respondents; nine additional respondents did not have a Regional Group listed. Most respondents were part of the Texas, California, Massachusetts/New Hampshire, Mavericks, North Carolina, and Washington DC/Virginia Regional Groups.

Regional Groups	N	%
Texas	14	10%
California	12	8%
Massachusetts / New Hampshire	12	8%
Mavericks	12	8%
North Carolina	12	8%
Washington, DC / Virginia	11	8%
Maryland	9	6%
Ohio	9	6%
South Carolina	8	6%
Louisiana	6	4%
Missouri	6	4%
New York	6	4%
Arizona	5	3%
South Florida	5	3%
Washington State	4	3%
Tennessee / Kentucky	3	2%
Mississippi	2	1%
None listed	9	6%
Total	*145*	*100%*

Funding Part.
As recorded in the end+disparities Database, almost all respondents received at least some Ryan White HIV/AIDS Program funding; 28 individuals were not recorded as receiving any Ryan White HIV/AIDS Program funding. Most (N=73) received at least some Part C funding, and 44 received at least some Part D. Twenty received at least some Part A, 17 at least some Part B, and 17 at least some Part F.

Funding Part	N
A	12
A/C	3
A/C/D	2
A/D	1
A/F	2
B	14

B/ADAP	1
B/D/F	2
C	38
C/D	23
C/D/F	6
C/F	1
D	6
D/F	4
F	2
None	28
Total	*145*

Collaborative Participation.
147 participants noted how many hours per week they devoted to Collaborative participation. Most (N=63, 43%) reported spending one to three hours per week on the Collaborative. Notably, 14% (N=21) reported that they were not currently participating in the Collaborative.

Hours Per Week	N	%
0/Not participating	21	14%
1-3 hours	63	43%
4-6 hours	32	22%
8-10 hours	18	12%
More than 10 hours	13	9%
Total	*147*	*100%*

Collaborative Resources Used.
120 noted which tools and resources they had used at any point in the Collaborative. Most had used Glasscubes (internal Collaborative website), had participated in Affinity Group sessions, and had taken part in Regional Group meetings. Only a few reported participating in the Collaborative's Leadership Program, data liaison calls, or consumer liaison calls. However, it is important to note that most of these last activities were aimed at a very small, targeted group of participants, and thus were unlikely to be used by the majority of Collaborative participants.

Resources used at any point	N	%
Glasscubes	97	81%
Affinity Group Sessions	91	76%
Regional Group	91	76%
Learning Sessions	78	65%
Disparities Calculator	74	62%
Collaborative Toolkit	72	60%
Zoom Technology Introduction	64	53%
Introductory Disparities Video	57	48%
Kick-off Sessions	55	46%
QI 101 Training	47	39%
Regional Group QI Coach	33	28%

Pre-Work Webinar	29	24%
Regional Group Leader Calls	24	20%
Technology Assessment Survey	23	19%
Leadership Program	14	12%
Data Liaison Calls	13	11%
Consumer Liaison Calls	9	8%
Any Response	*120*	*100%*

108 noted which resources they had used in the past month. Over half had recently participated in an Affinity or Regional Group session. Not surprisingly, very few had used any of the introductory Collaborative resources recently.

Resources used in the past month	N	%
Affinity Group Sessions	66	61%
Regional Group	58	54%
Glasscubes	52	48%
Collaborative Toolkit	25	23%
Zoom Technology Introduction	19	18%
Disparities Calculator	19	18%
Regional Group QI Coach	18	17%
Regional Group Leader Calls	13	12%
Learning Sessions	13	12%
QI 101 Training	8	7%
Leadership Program	7	6%
Data Liaison Calls	4	4%
Introductory Disparities Video	3	3%
Consumer Liaison Calls	2	2%
Technology Assessment Survey	1	1%
Pre-Work Webinar	1	1%
Kick-off Sessions	0	0%
Any Response	*108*	*100%*

Respondents were then asked to note which of the resources they had utilized they found to be most helpful for participation in the Collaborative. Participants were allowed to select up to three items; 112 selected at least one item. Half of respondents found the Affinity Group sessions to be especially helpful, and about one-quarter selected Glasscubes, Disparities Calculator, and Regional Groups.

Most helpful resource	N	%
Affinity Group Sessions	56	50%
Glasscubes	31	28%
Disparities Calculator	31	28%
Regional Group	30	27%
Learning Sessions	24	21%
Collaborative Toolkit	22	20%

Regional Group QI Coach	14	13%
QI 101 Training	10	9%
Zoom Technology Introduction	9	8%
Introductory Disparities Video	5	4%
Data Liaison Calls	3	3%
Regional Group Leader Calls	3	3%
Leadership Program	3	3%
Kick-off Sessions	2	2%
Consumer Liaison Calls	1	1%
Technology Assessment Survey	0	0%
Pre-Work Webinar	0	0%
Any Response	*112*	*100%*

Learning Sessions.
Most respondents had attended at least one Learning Session (83%); almost two-thirds had attended two or three.

Learning Sessions Attended	N	%
0	17	17%
1	21	21%
2	38	38%
3	24	24%
Total	*100*	*100%*

Almost all (85%) reported the Learning Session to be effective or very effective in building their capacity for QI.

Learning Session effectiveness in building capacity for QI	N	%
Very effective	21	25%
Effective	50	60%
Neither effective nor ineffective	11	13%
Ineffective	0	0%
Very ineffective	1	1%
Total	*83*	*100%*

Change Ideas and QI Projects.
About two-thirds of participants (68%, N=73) reported that their agency had selected a QI project to work on during the Collaborative.

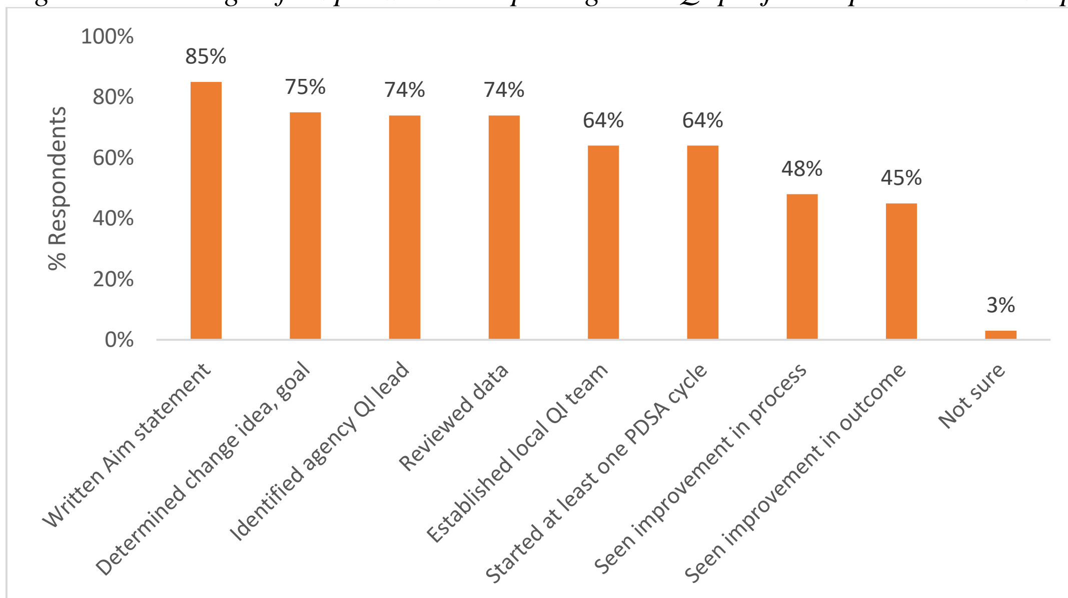
QI project selection	N	%
Yes	73	68%
No	27	25%
Don't Know	7	6.5%
Total	*107*	*100%*

Of the participants who had not selected a QI project, about half (N=12) had never submitted viral suppression (VS) data; two more were not sure if their organization had ever submitted. Six did not have RWHAP funding, and four had only Part A funding; four did not have an associated Ryan White agency. Most (N=11) were part of the MSM of Color Affinity Group; 2 did not have an Affinity Group affiliation. 3 did not have an affiliated Regional Group. Half (N=12) were at organizations rated as highly responsive to change, and half (N=11) were at low-response to change organizations (two were missing this scale). As such, there were no complete consistencies between these participants, though there were some major subgroups.

Of these, most had completed a written aim statement, reviewed performance data and Disparity Calculator results, determined a change idea, and established a local QI team. Completion dropped off with the implementation steps: about two-thirds had actually started or conducted at least one PDSA (Plan-Do-Study-Act) cycle; about half had seen improvement in a relevant process or outcome measure. Two were not sure what steps their agency had taken at this point.

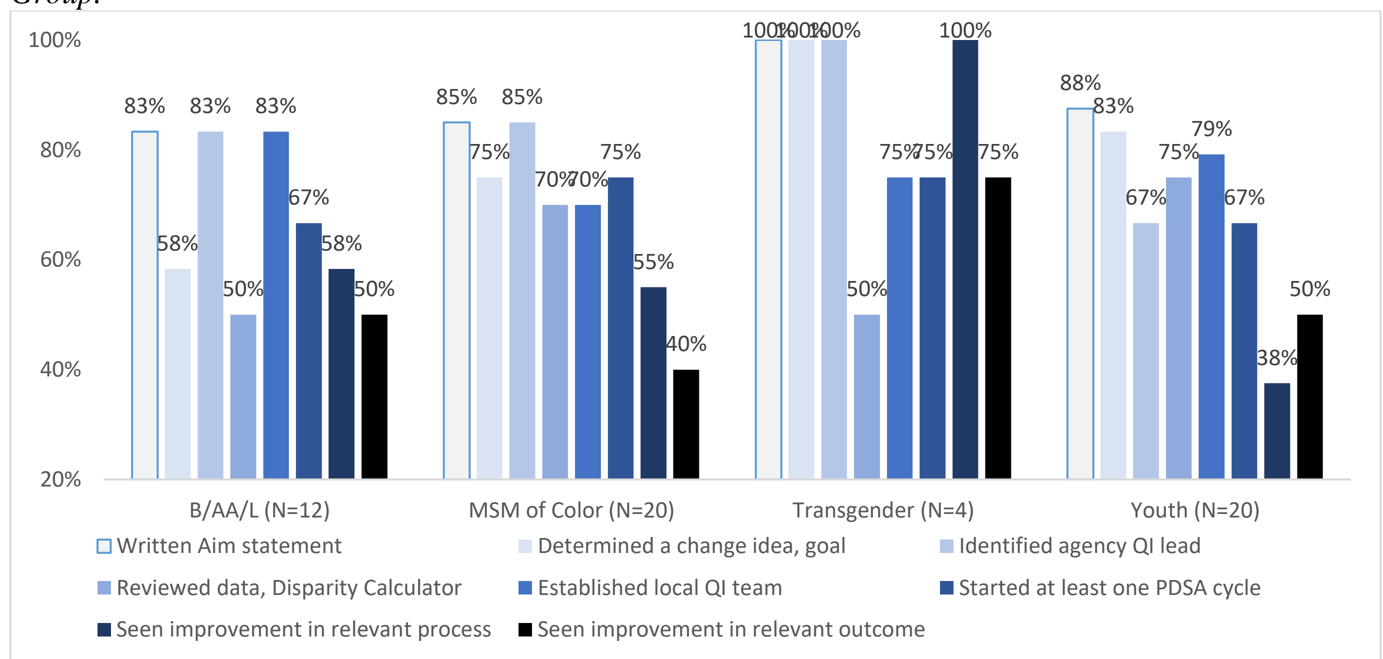
QI project steps	N	%
Written Aim Statement	62	85%
Determined change idea, goal	55	75%
Identified agency QI lead	54	74%
Reviewed data	54	74%
Established local QI team	47	64%
Started at least one PDSA cycle	47	64%
Seen improvement in process	35	48%
Seen improvement in outcome	33	45%
Not sure	2	3%
Any Response	*73*	*100%*

Figure. Percentage of respondents completing each QI project implementation step.



QI project implementation steps were then compared between Affinity Groups, for respondents who selected at least one step and had a recorded Affinity Group. For most Groups, at least three-quarters of participants reported completing at least some initial steps (completing a written Aim Statement, determining a change idea, creating a local QI team); but notably, completion of some early steps was relatively low for some groups (e.g., only half of B/AA/L and Transgender participants reported reviewing data; only 58% of B/AA/L participants reported determining a change idea or goal). Completion again dropped off for the implementation steps (e.g., starting at least one PDSA cycle, seeing improvement in relevant components), but a particularly high proportion of individuals in the Transgender group reported seeing improvements as a result of their efforts. However, note that the Transgender Affinity Group respondents includes only 4 individuals, making it harder to generalize from these results.

Figure. Percent of respondents completing each QI project implementation step, by Affinity Group.



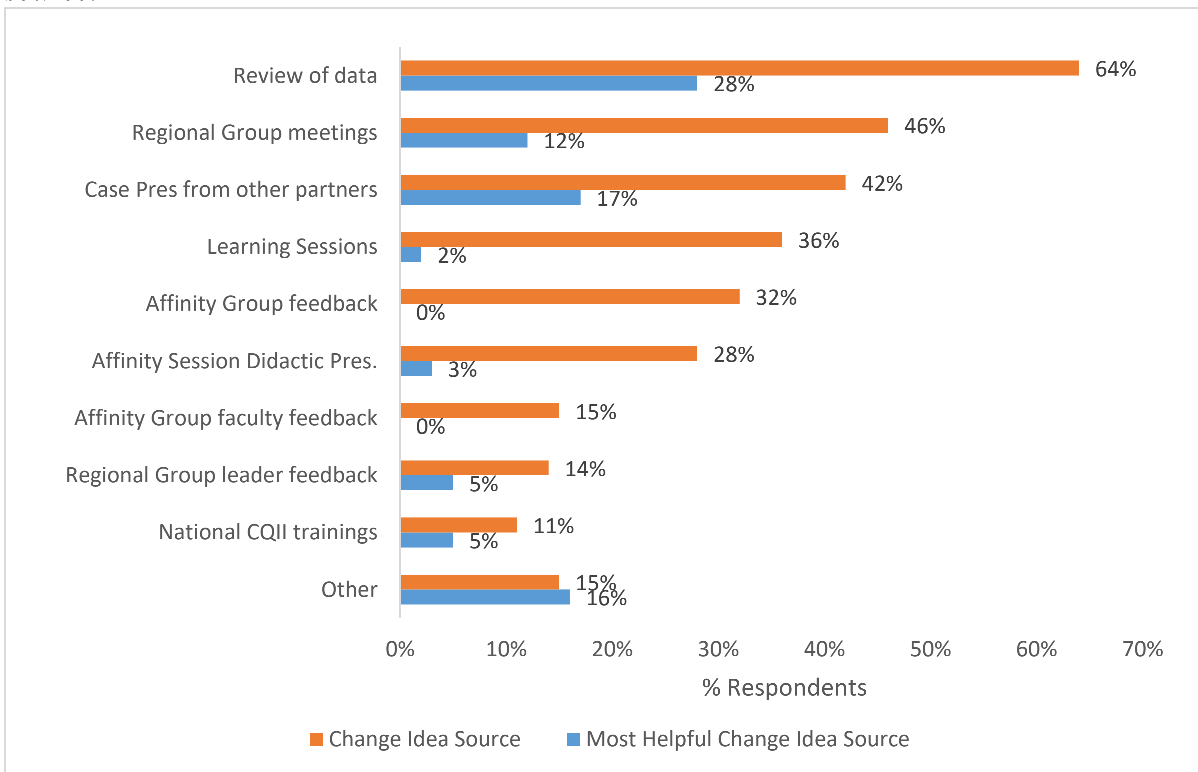
QI Implementation Steps	B/AA/L (N=12)	MSM of Color (N=20)	Transgender (N=4)	Youth (N=20)
Written Aim Statement	83%	85%	100%	88%
Determined a change idea, goal	58%	75%	100%	83%
Identified agency QI lead	83%	85%	100%	67%
Reviewed data, Disparity Calculator	50%	70%	50%	75%
Established local QI team	83%	70%	75%	79%
Started at least one PDSA cycle	67%	75%	75%	67%
Seen improvement in relevant process	58%	55%	100%	38%
Seen improvement in relevant outcome	50%	40%	75%	50%

Source of Ideas.
72 participants noted at least one source of their project's change idea, with most (74%) noting multiple sources. Almost two-thirds said that they had developed ideas from reviewing their viral suppression data; about half reported getting ideas from Regional Group meetings and from listening to Affinity Group case presentations from other partners. Fewer reported getting ideas from faculty or coach feedback, or from national trainings.

Change Idea Source	N	%
Review of data	46	64%
Regional Group meetings	33	46%
Case Presentations from other partners	30	42%
Learning Sessions	26	36%
Affinity Group feedback	23	32%
Affinity Session Didactic Presentations	20	28%
Affinity Group faculty/coach feedback	11	15%
Regional Group leader feedback	10	14%
National CQII trainings	8	11%
Other	12	15%
Any Response	*72*	*100%*

Other responses tended to focus on input from the agency's internal QI team (N=8); two reported taking ideas from evidence-based practices at other local clinics (N=2), and one said there had been no change idea sources.

Figure. Percentage of respondents reporting change idea sources, most helpful change idea source.

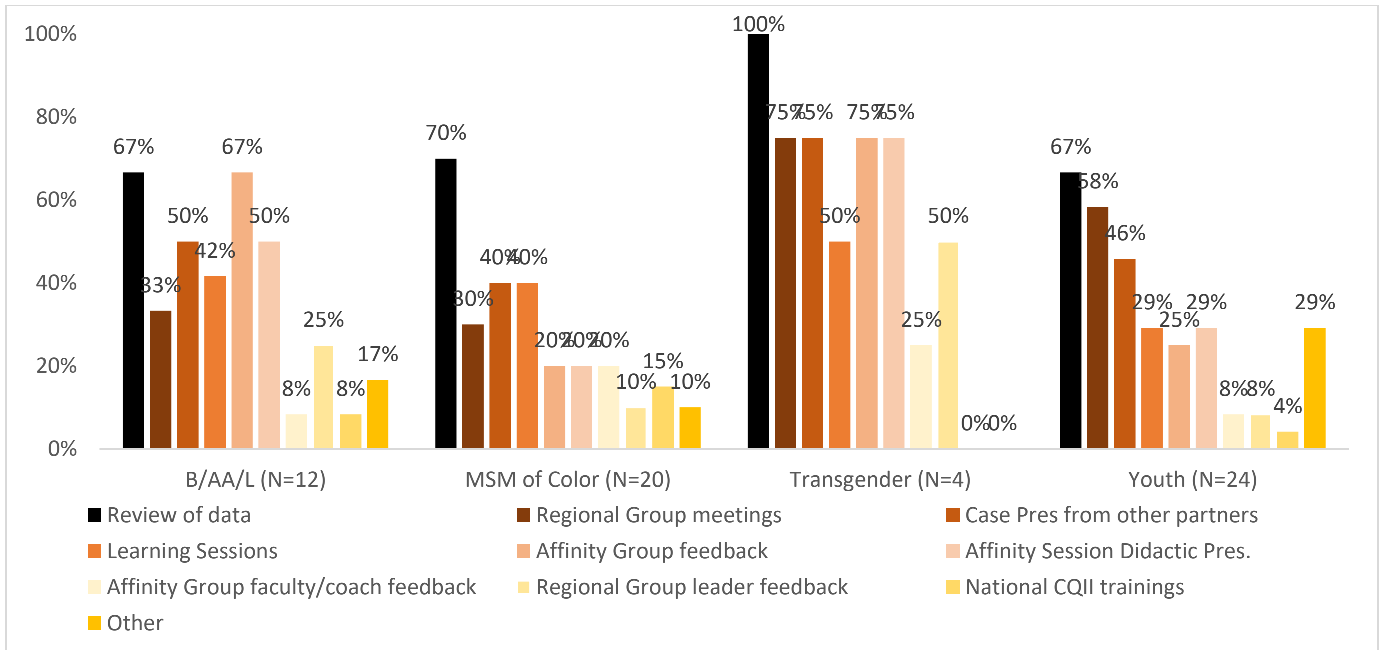


Similarly, when asked to identify the *most helpful* change idea source, about one-quarter selected data review and about one-sixth said hearing other agency's case presentations. None selected Affinity Group feedback on their own case presentation, whether from faculty or peers, and only a few reported that the Learning Sessions and Affinity Group didactic presentations were the most helpful source.

Change Idea Source: Most Helpful	N	%
Review of data	16	28%
Case Presentations from other partners	10	17%
Regional Group meetings	7	12%
Regional Group leader feedback	3	5%
National CQII trainings	3	5%
Affinity Session Didactic Presentations	2	3%
Learning Sessions	1	2%
Affinity Group feedback	0	0%
Affinity Group faculty feedback	0	0%
Other	9	16%
Any Response	*58*	*100%*

Change idea sources were then examined by Affinity Groups, for respondents who selected at least one source and had a recorded Affinity Group. While about three-quarters (75%) of Transgender Group participants reported Regional Group meetings to be a source of change ideas, only half of Youth (58%) and one-third of B/AA/L (33%) and MSM of Color (30%) participants agreed. Further, only 20% of MSM of Color Group participants, and 25% of Youth participants felt that feedback from their Affinity Group peers (8% for faculty) was an important source of change ideas; in contrast, about 60% of B/AA/L participants and 75% of Transgender participants reported it as an important source. However, note that the Transgender Affinity Group respondents includes only 4 individuals, making it harder to generalize from these results.

Figure. Percent of respondents reporting change idea sources, by Affinity Group.



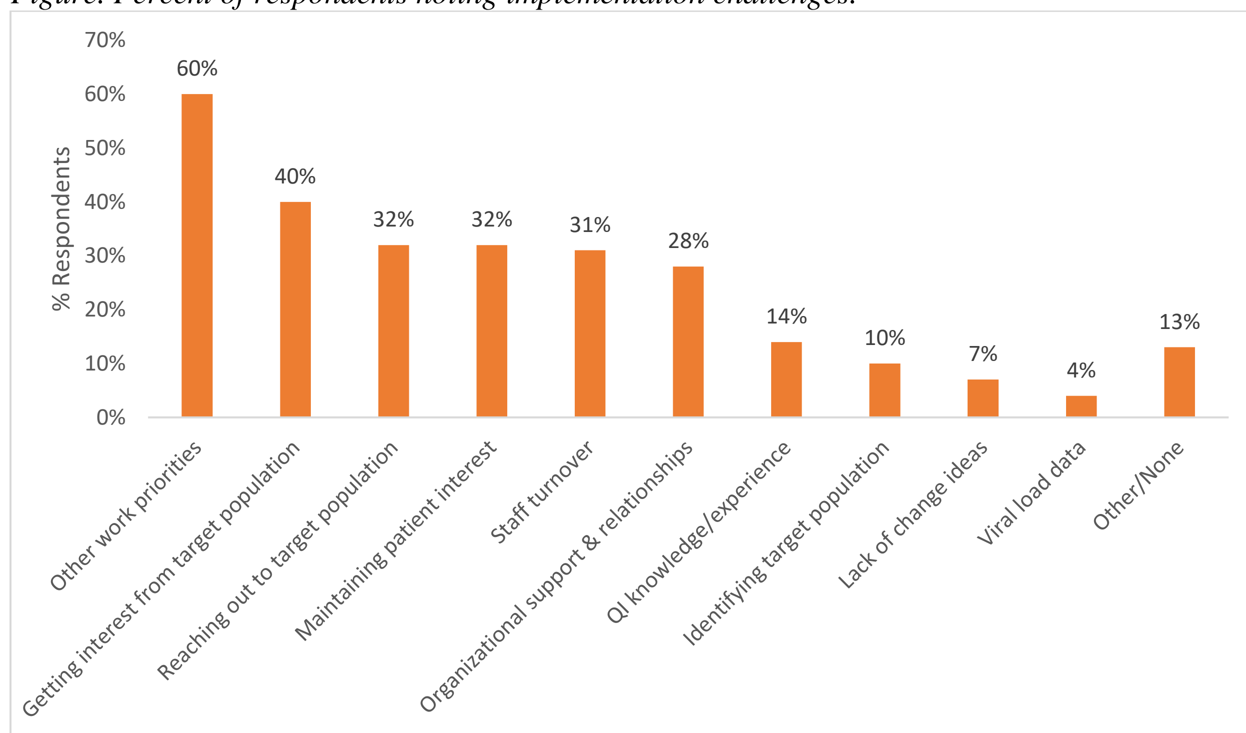
Change Idea Source	B/AA/L (N=12)	MSM of Color (N=20)	Transgender (N=4)	Youth (N=24)
Review of data	67%	70%	100%	67%
Regional Group meetings	33%	30%	75%	58%
Case Presentations from other partners	50%	40%	75%	46%
Learning Sessions	42%	40%	50%	29%
Affinity Group feedback	67%	20%	75%	25%
Affinity Session Didactic Presentations	50%	20%	75%	29%
Affinity Group faculty/coach feedback	8%	20%	25%	8%
Regional Group leader feedback	25%	10%	50%	8%
National CQII trainings	8%	15%	0%	4%
Other	17%	10%	0%	29%

Implementation Challenges.
72 participants identified at least one challenge in developing and/or implementing QI projects; most (74%) identified more than one. Most participants reported that other work priorities prevented them from spending more time working on projects. Over half reported some challenge in contacting, getting buy-in from, and maintaining interest from, their identified target population. About one-third reported difficulties related to staff turnover; several others also noted issues relating to staff's skills regarding QI.

Implementation Challenges	N	%
Other work priorities	43	60%
Getting interest from target population	29	40%
Reaching out to target population	23	32%
Maintaining patient interest	23	32%

Staff turnover	22	31%
Organizational support & relationships	20	28%
QI knowledge/experience	10	14%
Identifying target population	7	10%
Lack of change ideas	5	7%
Viral load data	3	4%
Other/None	9	13%
Any Response	*72*	*100%*

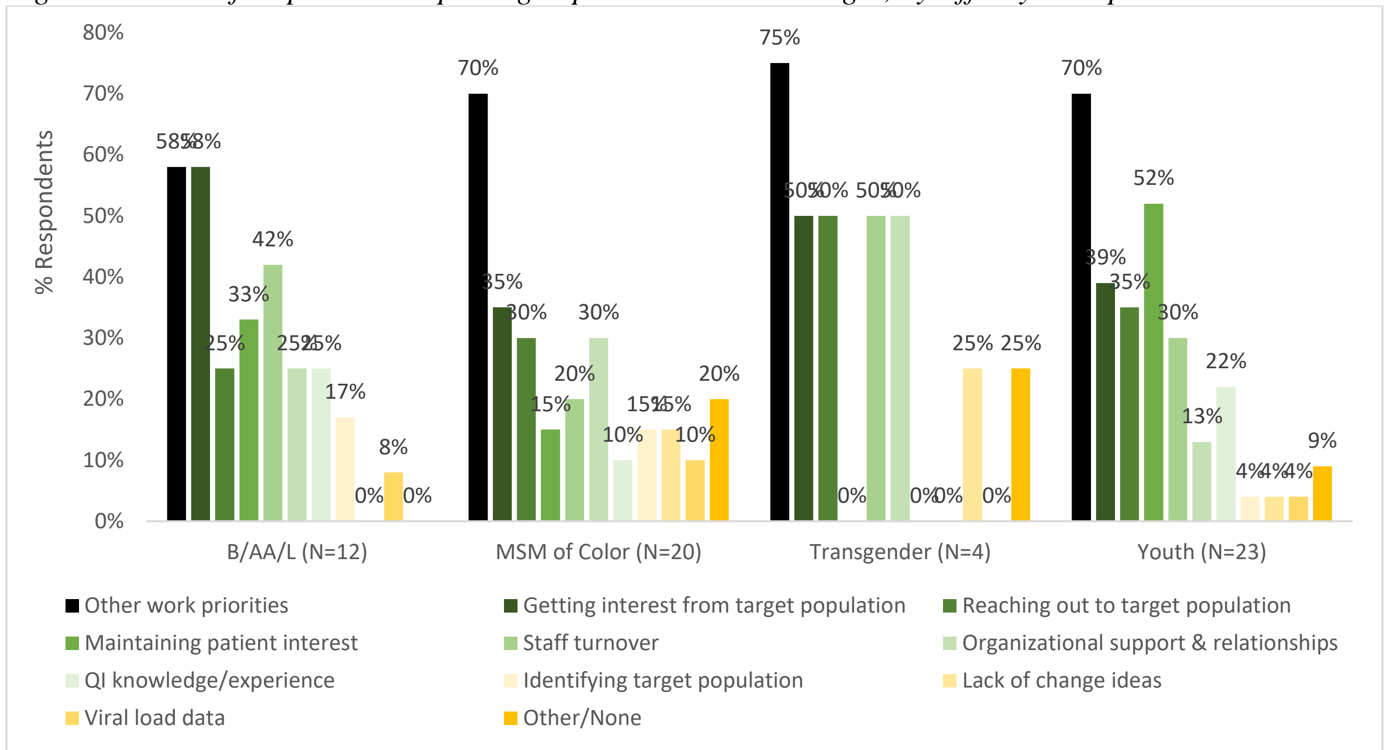
Figure. Percent of respondents noting implementation challenges.



Nine participants provided other responses. One respondent noted that "campaign fatigue" was a significant challenge, indicating that it was hard to motivate continued efforts over a long period of time, especially without clear suppression rate progress. However, three noted that they have not had any particular implementation challenges.

Implementation challenges were then examined by Affinity Groups, for respondents who selected at least one challenge and had a recorded Affinity Group. Competing priorities at work was a common challenge (58% to 75%), as was obtaining interest from the target population (35% to 58%). However, more Transgender Affinity Group participants reported difficulties with organizational support than in other groups (50% versus 25%, 30%, and 13%, respectively).

Figure. Percent of respondents reporting implementation challenges, by Affinity Group.



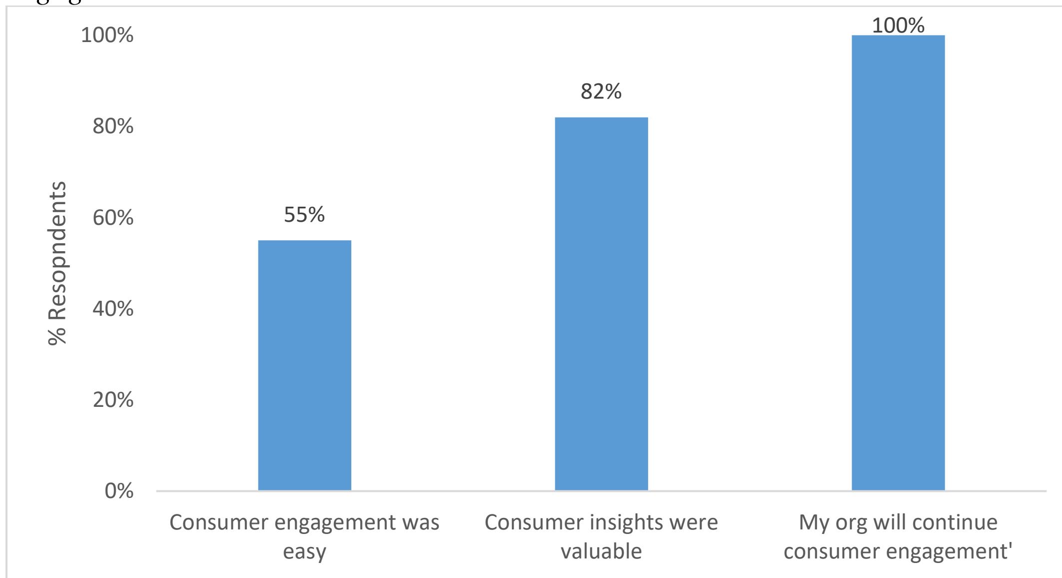
Implementation Challenges	B/AA/L (N=12)	MSM of Color (N=20)	Transgender (N=4)	Youth (N=23)
Other work priorities	58%	70%	75%	70%
Getting interest from target population	58%	35%	50%	39%
Reaching out to target population	25%	30%	50%	35%
Maintaining patient interest	33%	15%	0%	52%
Staff turnover	42%	20%	50%	30%
Organizational support & relationships	25%	30%	50%	13%
QI knowledge/experience	25%	10%	0%	22%
Identifying target population	17%	15%	0%	4%
Lack of change ideas	0%	15%	25%	4%
Viral load data	8%	10%	0%	4%
Other/None	0%	20%	25%	9%

Engagement of Consumers.
44 participants (61%) reported that their organization had engaged consumers in the QI implementation process.

QI project selection	N	%
Yes	44	61%
No	24	33%
Don't Know	4	6%
Total	*72*	*100%*

Of these, almost all respondents agreed that consumer engagement was at least mostly easy, and that their insights were valuable; all agreed that they would continue to engage consumers in future QI projects. As such, though some Partners reported struggling to engage their specific target population, general consumer engagement was typically reported to be a positive process.

Figure. Percent of respondents who agreed (strongly or somewhat) with items about consumer engagement.



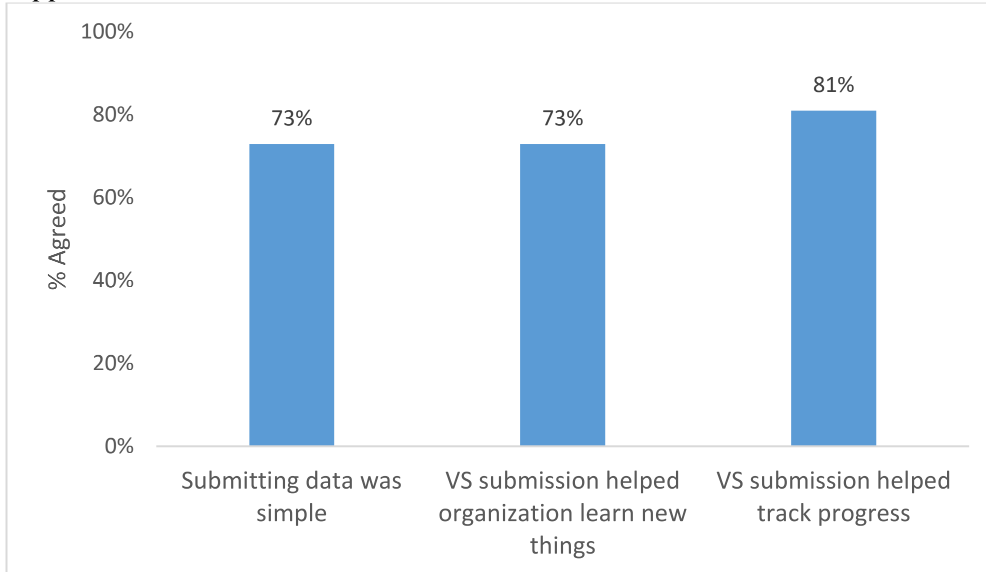
Viral Suppression Data.
Most participants reported that their agency had submitted viral suppression data at some point in the Collaborative, but 13% had not submitted, and 7% did not know.

VS Data Submission	N	%
Yes	95	79%
No	15	13%
Don't Know	8	7%
Total	*118*	*100%*

Of those who had never submitted data, eleven were part of public health departments (city, county, or state). Six received only Part A funding, two only Part B, and one received no RWHAP funding. Again, there were no complete consistencies between these participants, though there were some major subgroups.

Of those who had submitted data, most reported it to be an easy process; that it helped their agency learn new things; and that it helped their agency track their progress in improving viral suppression rates.

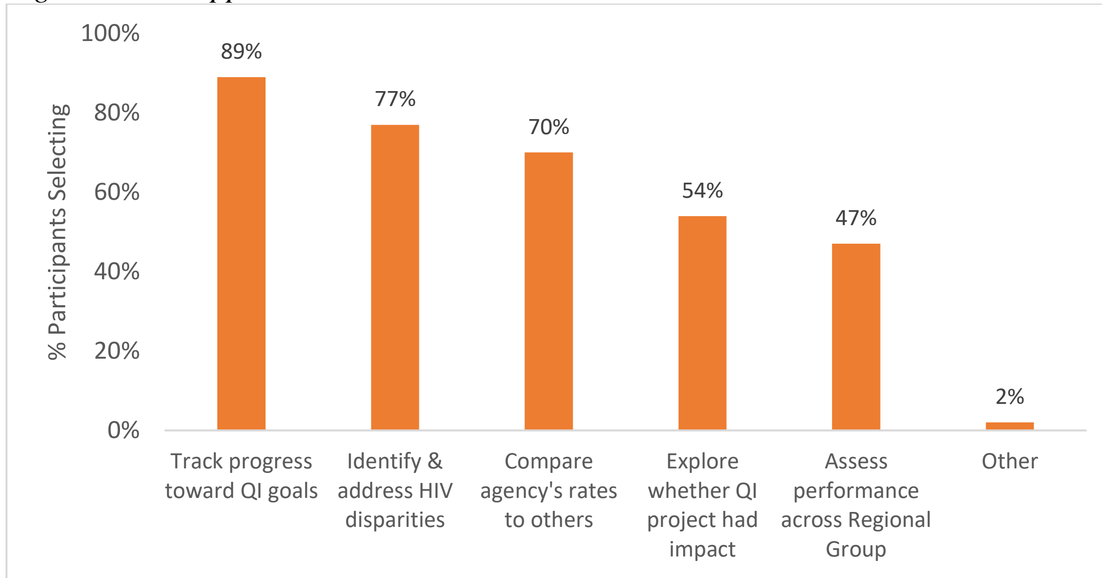
Figure. Percent of participants who agreed (strongly or somewhat) to questions about viral suppression submissions.



Most participants reported that their agency had used this viral suppression data to identify their disparity group, track their progress toward their QI goals, determine the impact of their QI project, and compare their rates to others, whether in their Regional Group or otherwise. Two participants reported other uses; one noted that examining their viral suppression data had allowed them to notice an error in their database, and another stated that it had helped them identify a QI project.

Viral Suppression Rate Use	**N**	**%**
Track progress toward QI goals	83	89%
Identify & address HIV disparities	72	77%
Compare agency's rates to others	65	70%
Explore whether QI project had impact	50	54%
Assess performance across Regional Group	44	47%
Other	2	2%
Any Response	*93*	*100%*

Figure. Viral suppression data use.



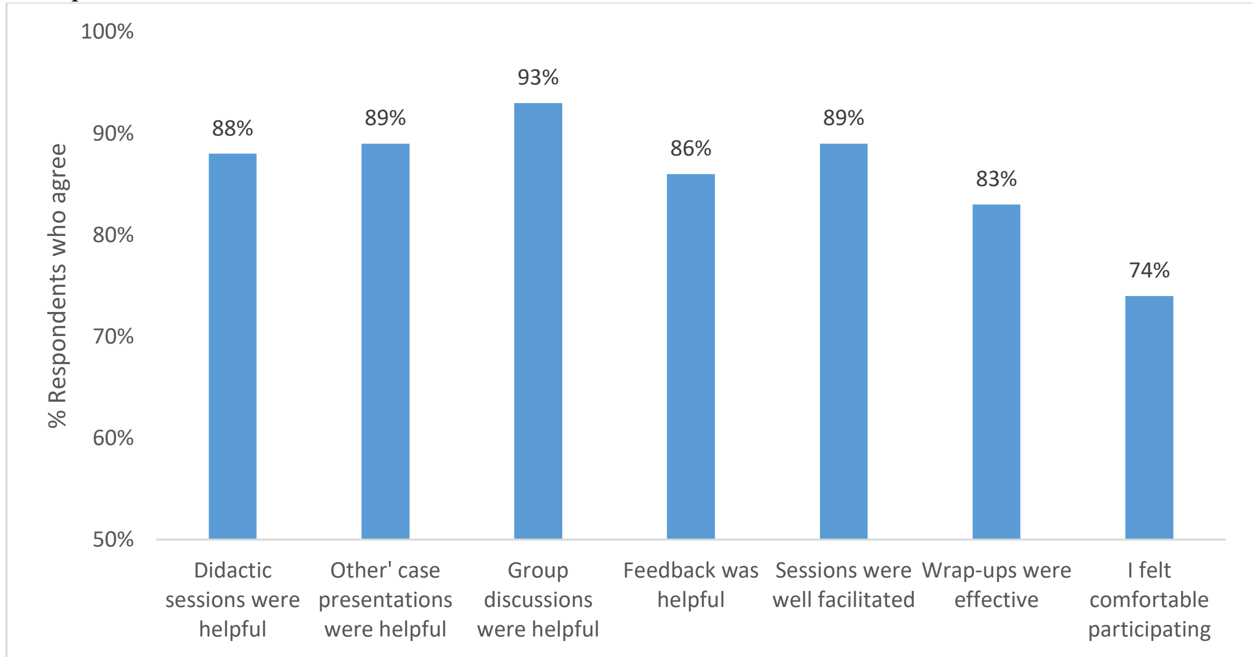
82 participants reported their organization's approximate viral suppression rates. On average, a small (approximately 5%) difference between the overall population and identified disparity population was reported at the start of participation, but a similar target suppression rate was set for the two (e.g., elimination of the disparity and improvement for all clients). Both overall and disparity populations were reported to have improved about 4% since starting the Collaborative; notably, these numbers were reasonably consistent with the viral suppression numbers submitted directly to the Collaborative, which showed increases of about 3%.

Approximate VS Rates			
Population	**Timepoint**	**N**	**Mean (SD) Rate**
Entire population	At start	83	82% (13%)
	Target	82	88% (12%)
	Current	82	86% (12%)
Disparity population	At start	53	78% (12%)
	Target	53	87% (9%)
	Current	54	82% (12%)

Affinity Group Session Evaluation.

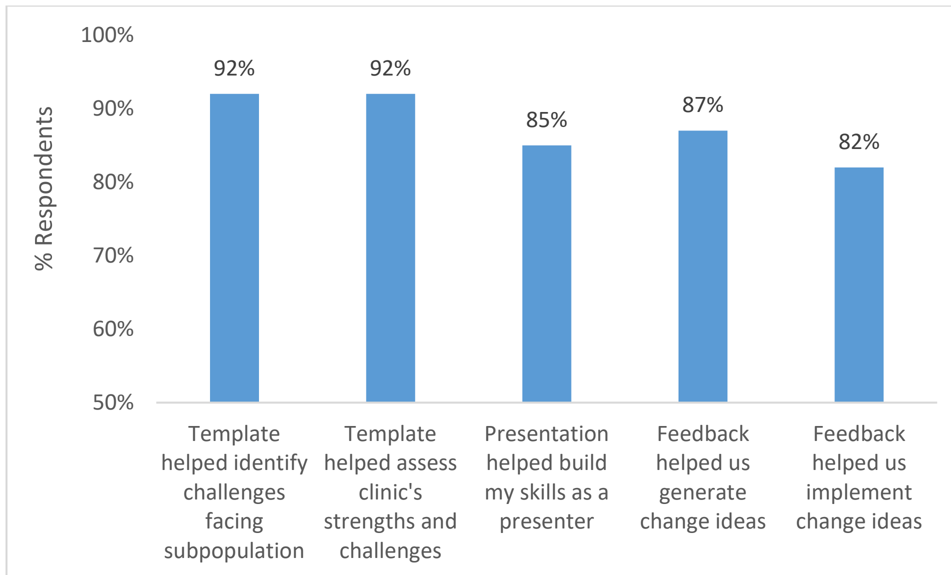
Over 80% of respondents agreed at least somewhat that the Affinity Group sessions were helpful (mean response=4.39 out of 5, indicating high agreement). And about three-quarters of participants reported feeling somewhat or very comfortable speaking up and participating in Affinity Group sessions. These responses were not significantly different between the four Affinity Groups (all p's > 0.5), demonstrating similar satisfaction with Affinity Group meetings across the subpopulations.

Figure. Percent of respondents who agreed (strongly or somewhat) with items about Affinity Group sessions.



39 participants had given a case presentation. Almost all were also very positive about the case presentations (mean response = 4.29 out of 5); over 80% somewhat or strongly agreed that the experience was helpful.

Figure. Percent of respondents who agreed (strongly or somewhat) with items about Case Presentations.



A higher proportion of Transgender Group participants had given a case presentation (83%, or 5 of 6 respondents) than for other Affinity Groups (41%, 43%, and 47%, respectively); however, for those who had given a case presentation, evaluations of the experience were similar between

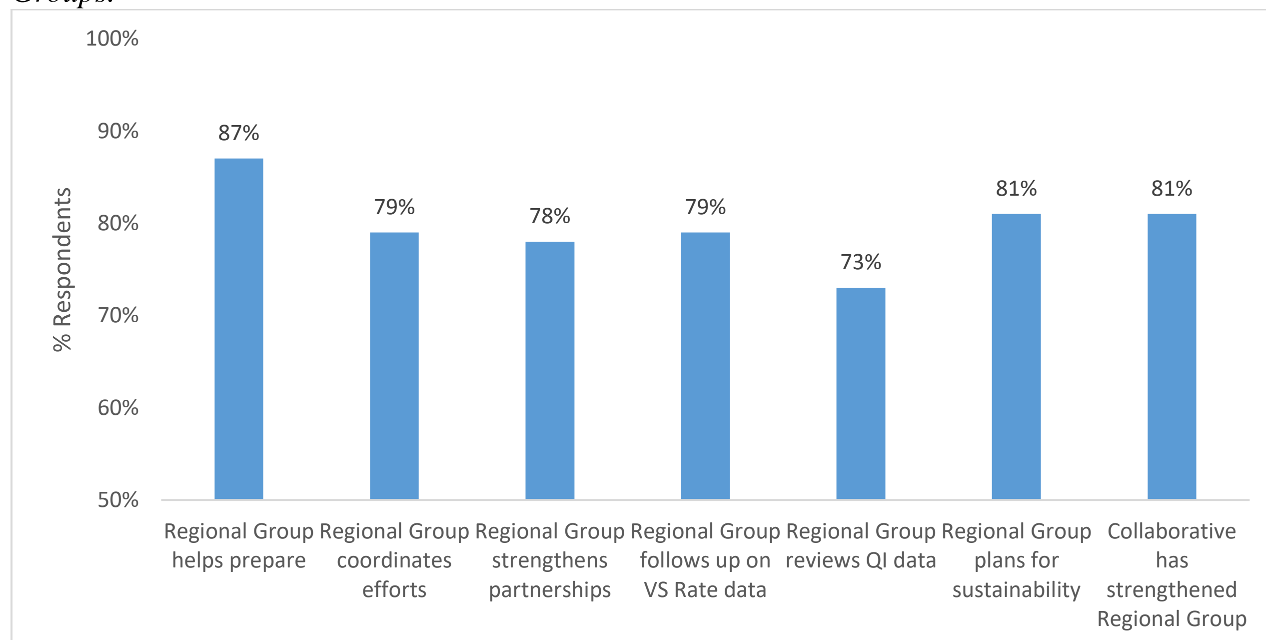
the Groups. There was a marginally significant difference on agreement of whether Group feedback on their presentation helped their team implement meaningful change ideas (B/AA/L participants agreed the most strongly, mean=4.57, and MSM of Color the least, mean=3.62, p=0.08), but all other answers were highly similar (p's >0.2).

Regional Group Evaluation.
Most participants had attended at least a few Regional Group meetings, but only one-quarter had attended more than six.

Regional Group attendance	N	%
0 meetings	12	27%
1-3 meetings	35	34%
4-6 meetings	27	26%
More than 6 meetings	30	29%
Total	*104*	*100%*

Most respondents agreed that their Regional Group experiences were positive, and that the groups helped them prepare, review data, and strengthen local partnerships (mean response=4.1 out of 5, indicating high agreement). Fewer participants agreed that their Regional Group followed up on or reviewed viral suppression or QI data, but agreement was still generally high. Further, over 80% of participants agreed that the Collaborative had strengthened their Regional Group, and that they had plans to sustain their Group beyond the Collaborative.

Figure. Percent of respondents who agreed (strongly or somewhat) with items about Regional Groups.

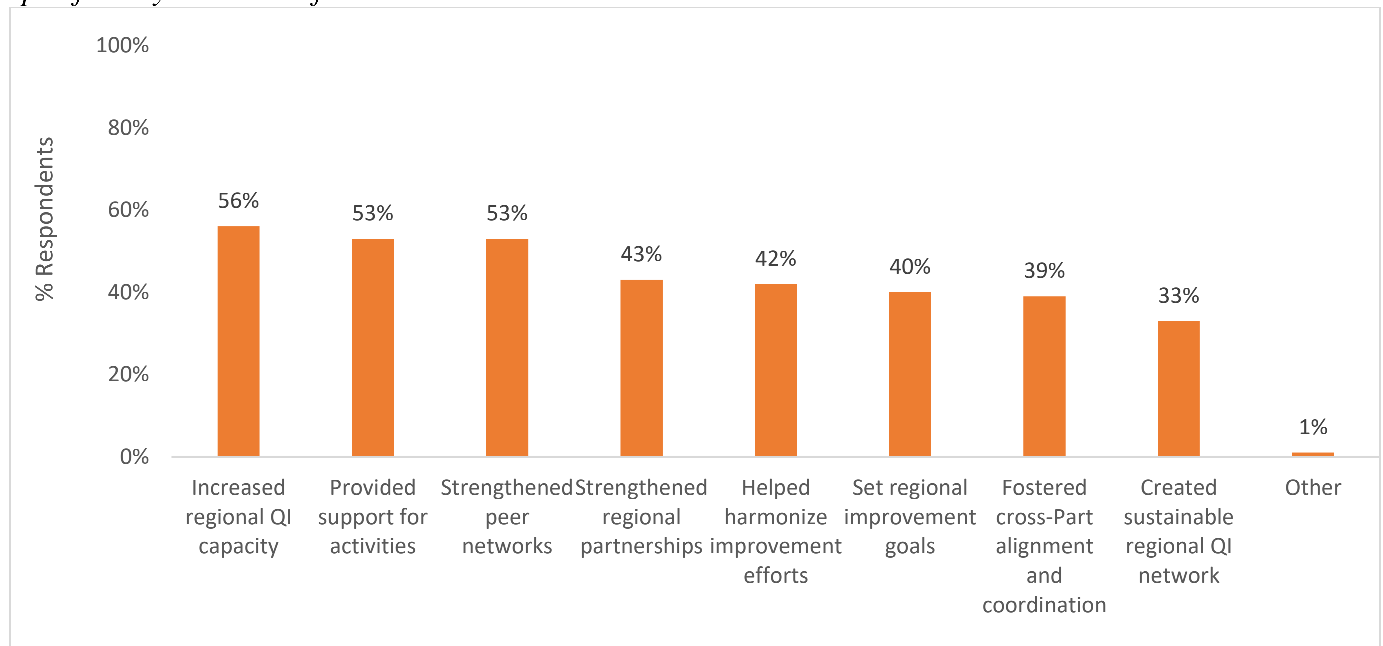


72 respondents noted at least one way in which the Collaborative had strengthened their Regional Group, with most (82%) selecting multiple. Over half of participants agreed that their region's QI capacity had increased, that the regional group provided support for Collaborative

activities, and that it had strengthened peer networks; fewer felt that the Collaborative had led to a sustainable regional QI network.

Collaborative strengthened Regional Group by…	N	%
Increased regional QI capacity	40	56%
Provided support for activities	38	53%
Strengthened peer networks	38	53%
Strengthened regional partnerships	31	43%
Helped harmonize improvement efforts	30	42%
Set regional improvement goals	29	40%
Fostered cross-Part alignment and coordination	28	39%
Created sustainable regional QI network	24	33%
Other	1	1%
Any Response	*72*	*100%*

Figure. Percent of respondents indicating that their Regional Group had been strengthened in specific ways because of the Collaborative.



While a small portion of respondents had attended a Regional Group-hosted training for providers or consumers, or at least knew of one, most respondents reported that their Regional Groups had not provided the expected trainings or did not know whether these trainings had been conducted.

QI Training for Providers	N	%
Yes: Attended	25	28%
Yes: Did not attend	13	14%
No	27	30%
Don't Know	25	28%
Total	*90*	*100%*

QI Training for Consumers	N	%
Yes: Attended	10	11%
Yes: Did not attend	21	24%
No	24	27%
Don't Know	33	38%
Total	*88*	*100%*

40 participants reported having roles in their Regional Groups. One respondent did not recall their title, one reported that their group did not use formal titles, and another noted that their role had changed halfway through the Collaborative.

Regional Group Role	N	%
Team Lead/Co-Lead	11	28%
QI Liaison	8	20%
Data Liaison	7	18%
Consumer Liaison	4	10%
Secretary/Recorder	3	8%
Communications Lead (PR/Alignment)	2	5%
Trainer	1	3%
Other	3	8%
Any Response	*40*	*100%*

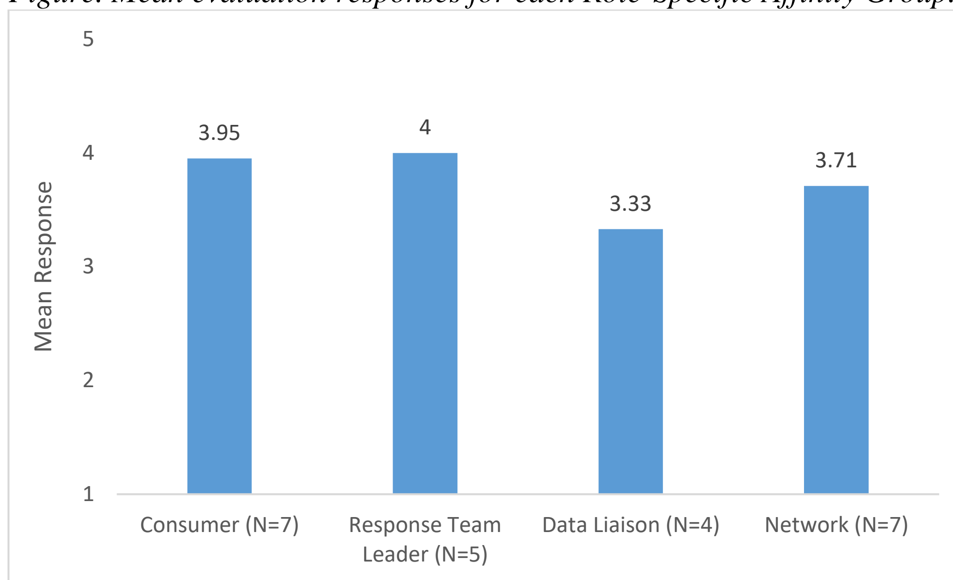
24 respondents had participated in a Role-Specific Affinity Group. Two were part of both the Response Team Leader and Network groups, and two were part of both the Consumer and Network groups.

Participated in Role-Specific Groups	N	%
Consumer	8	9%
Response Team Leader	5	5%
Data Liaison	4	4%
Network	7	7%
None	69	73%
Any Response	*94*	*100%*

Respondents' ratings of the helpfulness of these groups in supporting needs, allowing participants to share perspectives, and build skills or answer questions, were typically high, but did vary some between the groups. Ratings from respondents in the Response Team Leader and Consumer groups were slightly more positive than those in the Data Liaison group.

Role-Specific Group Mean Responses	N	Mean
Consumer	7	3.95
Response Team Leader	5	4.00
Data Liaison	4	3.33
Network	7	3.71

Figure. Mean evaluation responses for each Role-Specific Affinity Group.

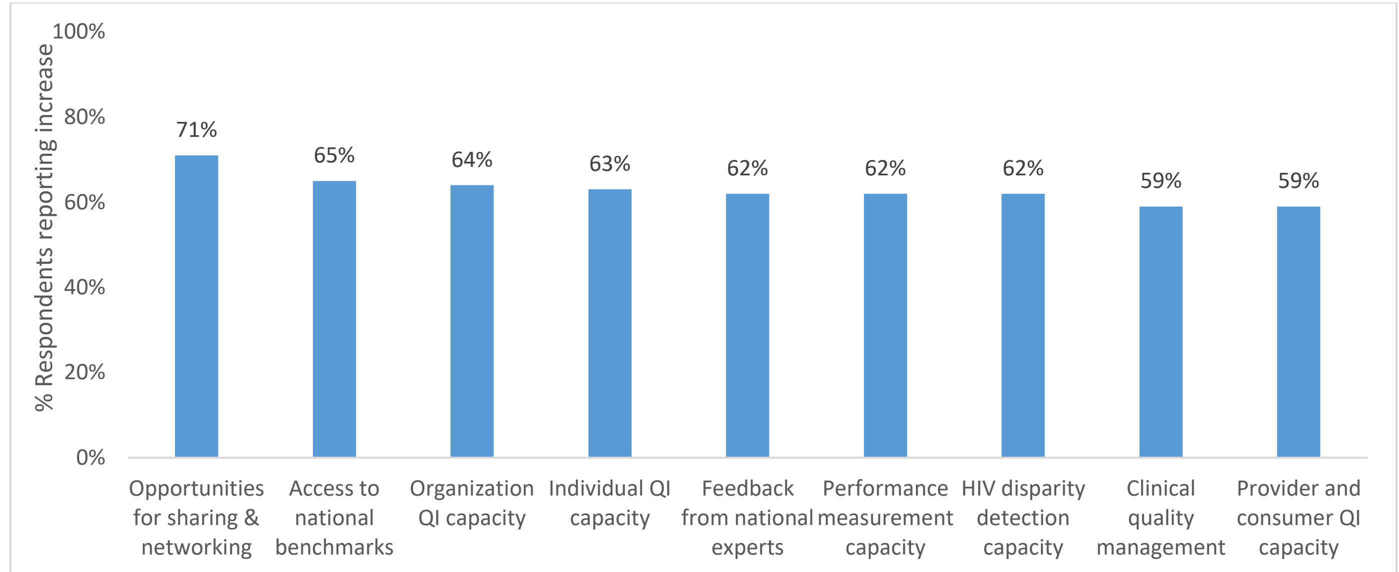


Benefits of the Collaborative.

Impact of the Collaborative on Capacity.

Respondents generally felt that the Collaborative had had a positive impact on their, and their organizations', capacity for quality improvement and on their peer network (mean = 3.04, out of 5, indicating some increase). Around 10% reported no change due to the Collaborative. However, 41% felt that the Collaborative had slight or no impact on their organization's clinical quality management, and 38% that there had been almost no impact on their organization's performance measurement capacity to track viral suppression rates. But about half felt that the Collaborative had improved their opportunities for sharing and networking (some increase to significant increases reported by 71% of respondents) and had improved their access to national benchmark data (65%).

Figure. Percent of respondents reporting some to significant increase in capacity due to Collaborative in each domain.



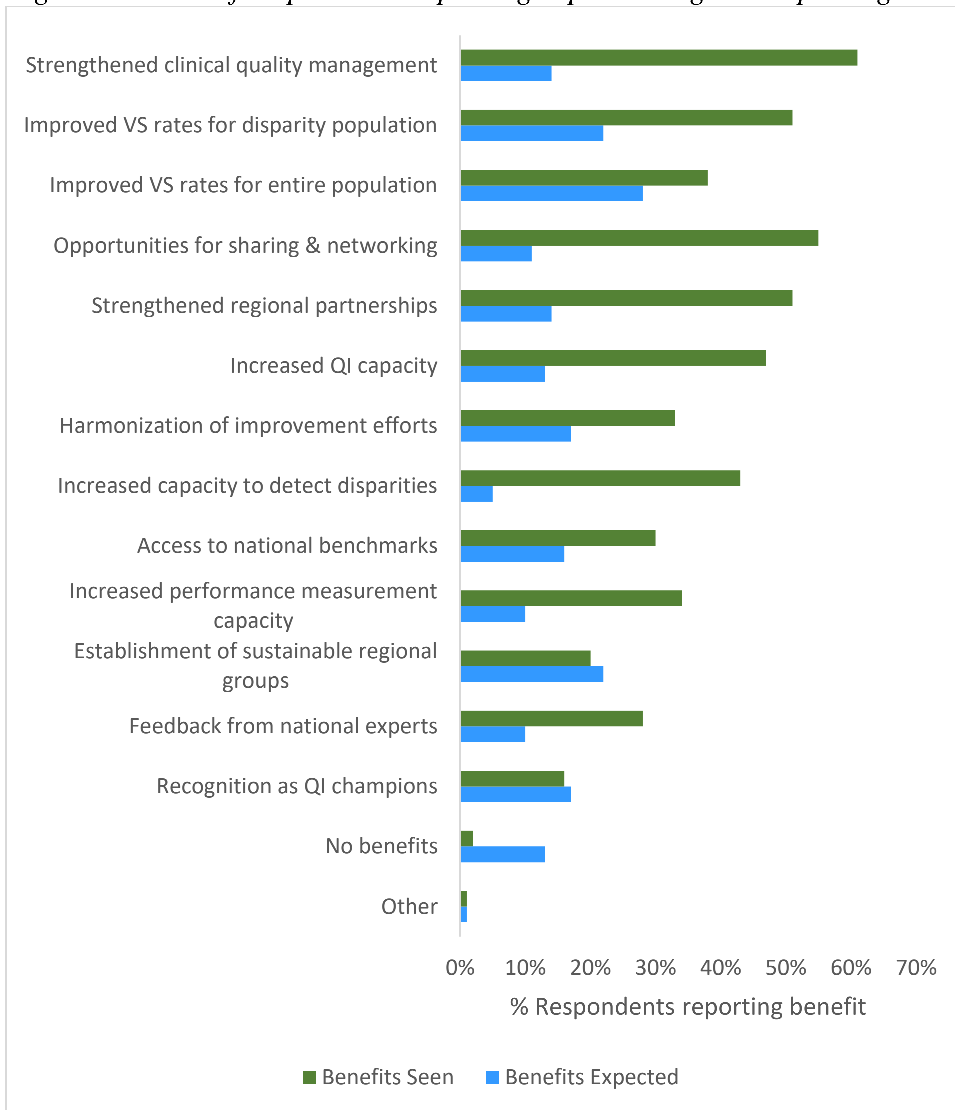
Benefits Seen and Expected.

96 participants noted at least one benefit of the Collaborative, with most (90%) reporting more than one. Most felt that the Collaborative had strengthened their clinical quality management program, provided opportunities for sharing and networking, improved their viral suppression rates, and strengthened regional partnerships. Few felt that feedback from national experts or recognition as QI champions were notable benefits.

Only two reported no benefits from the Collaborative. One participant noted that they still have not been able to access data pertaining to disparities but hope to be able to soon.

When asked about any benefits expected, but not yet experienced, about a quarter reported expecting to see viral suppression rate improvements over the remaining Collaborative time; eleven did not expect to see any further benefits beyond those already experienced.

Figure. Percent of respondents reporting experiencing and expecting each Collaborative benefit.



Not surprisingly, one-third of participants agreed that the single benefit with the biggest impact on their organization has been the improvement of viral suppression rates, either for their disparity population (21%) or entire caseload (12%). Almost one-quarter noted some form of communication with peers to have had the biggest impact (strengthening of regional partnerships and opportunities for sharing and networking). Interestingly, 61% reported strengthened clinical quality management as the biggest benefit; while almost half of participants felt that the Collaborative had slight or no impact on their organization's capacity for clinical quality management (see Figure above), it appeared to be a more important benefit for those who it did effect.

Again, few participants reported feedback from national experts, recognition as QI champions, increased capacity to detect disparities, harmonization of improvement efforts, and access to national benchmarks as the biggest benefit of the Collaborative. Few felt that the establishment

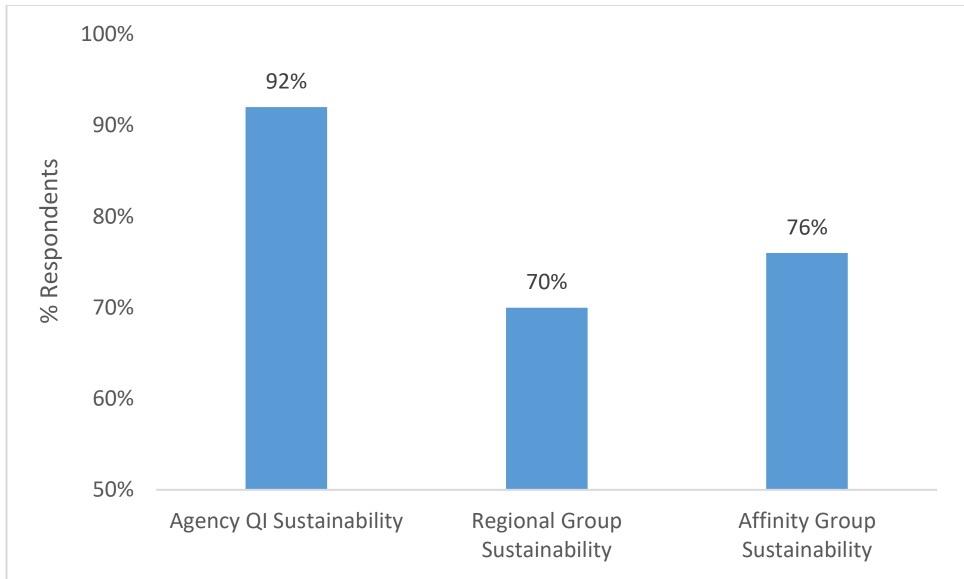
of sustainable Regional Groups was a major benefit, likely because many were already operational pre-Collaborative.

Figure. Percent of respondents reporting each item as biggest benefit of Collaborative.

Networking Benefits.
Most respondents noted some slight increases in their interactions with other agencies since joining the Collaborative (mean = 3.79, out of 5, N=101), indicating some improvements in inter-agency communication and collaboration. About one-third of participants reported no changes; almost none reported any decreases.

Sustainability.
Over 90% of respondents felt that their agency was prepared to continue QI efforts after the end of the Collaborative; about 70% felt that their Regional Group would be able to sustain its work. Three-quarters reported being likely to participate in a peer-lead Affinity Group session after the Collaborative.

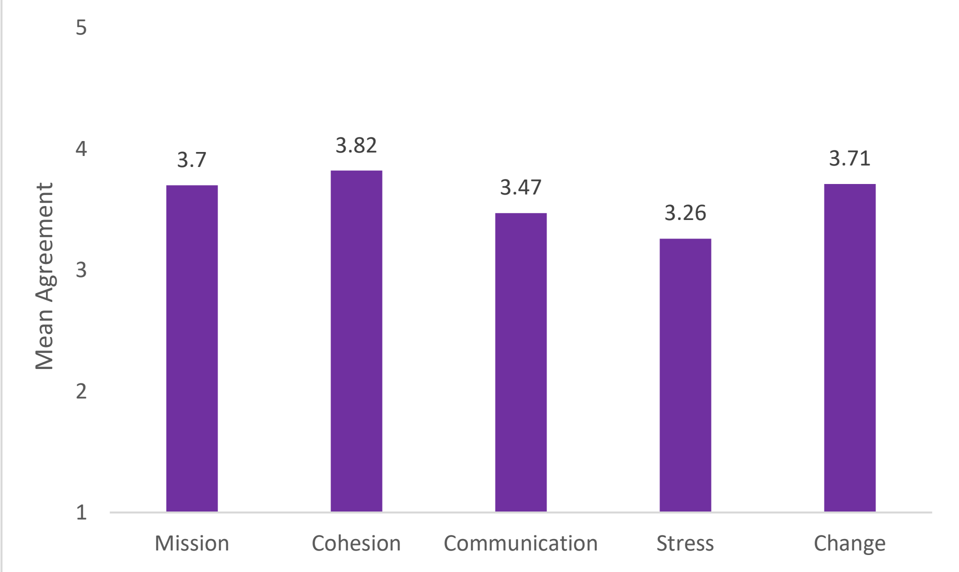
Figure. Percent of respondents reporting that their agency and Regional Group were prepared (very prepared or prepared) to continue QI efforts, and percent reporting that they were likely (very likely or likely) to participate in a peer-lead Affinity Group meeting.



Organizational Readiness for Change (ORC).
Five subscales, of five items each, were selected from the Organizational Readiness for Change D4 (ORC-D4) Organizational Climate Scales. Participants were asked to rate their agreement each item on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

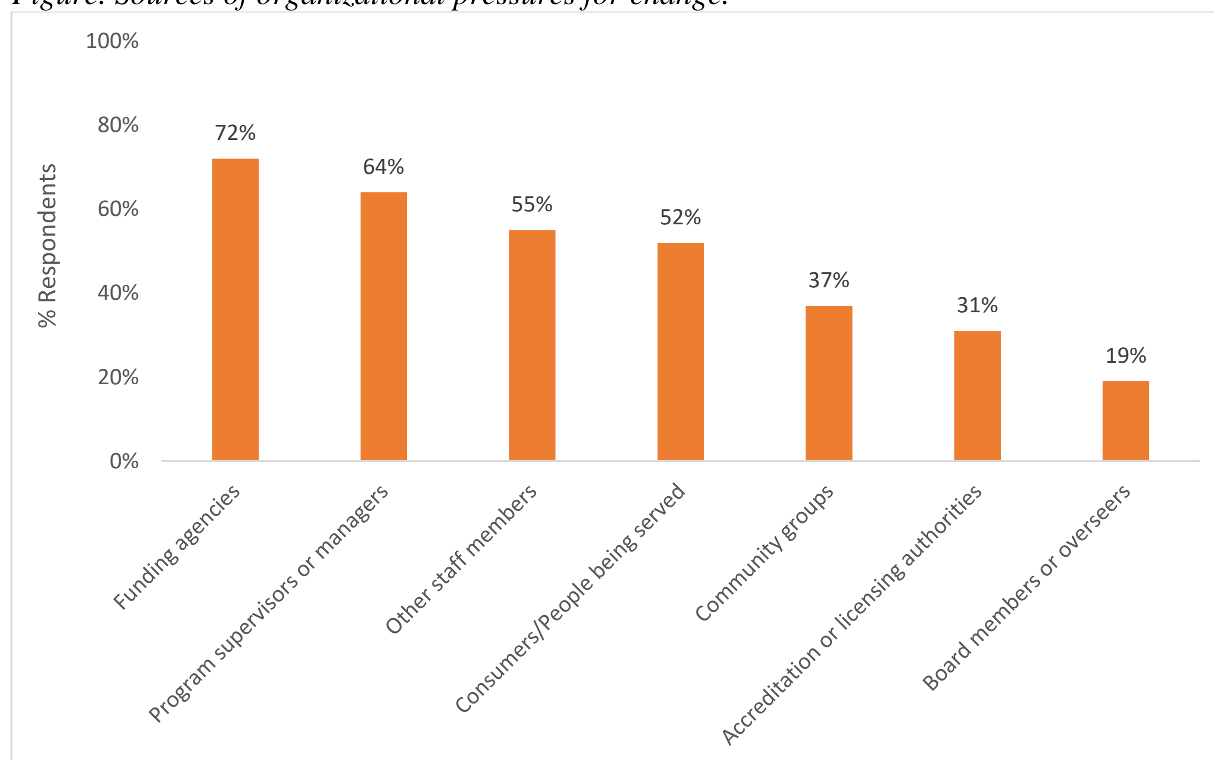
On average, respondents somewhat agreed that their organization had a clear *mission* that was reflected in staff's roles; that staff were able to work together *cohesively*; and that their organization was positively responsive to *change*. Respondents were more equivocal about whether their organization evidenced strong internal *communication*. Importantly, respondents were more likely to agree than disagree that their staff were *stressed* or frustrated by their work.

Figure. Mean agreement with Organizational Response to Change scales, out of 5.



Most respondents agreed (somewhat or strongly) that funding agencies were a source of pressure to change, followed by program administrators; about half of respondents felt that other staff members and consumers were major sources of pressures for change. Fewer respondents felt that community groups, accreditation or licensing agencies, or board members were major sources of pressures for change.

Figure. Sources of organizational pressures for change.



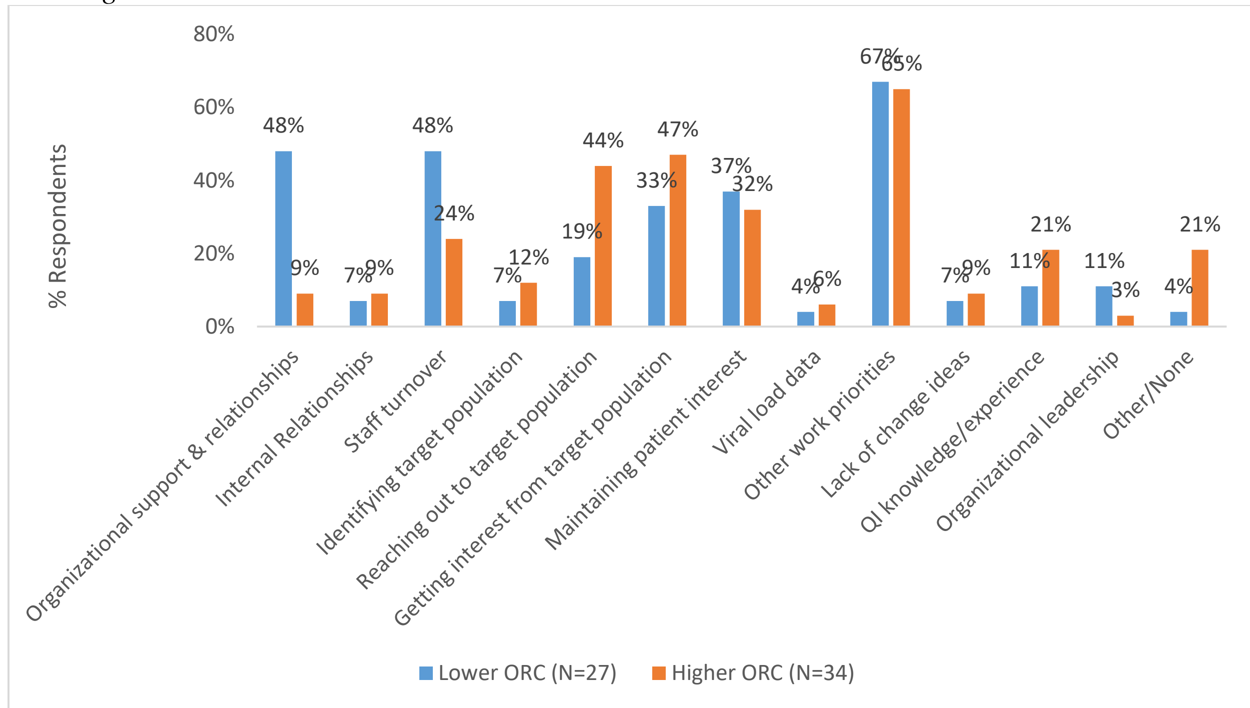
Mean ORC scale responses were then calculated, using reversed stress subscale scores. Based on these responses, respondents were divided into those working at organizations rated as more responsive to change (N=51, mean scores 3.5 to 4.8), and those whose organizations were less responsive to change (N=47, mean scores less than 2.2 to 3.47). These two groups were then compared, using independent samples t-tests, on a variety of survey measures potentially impacted by organizational responsiveness to change.

Notably, these two groups did not differ on Collaborative involvement (hours per week, submission of VS data, Affinity Group or Regional Group attendance, giving a case presentation, engagement of consumers; p's > 0.2). Further, more responsive organizations were not more likely to have implemented a QI project or completed any implementation steps; they were more likely to report seeing improvement in a relevant process (62% of Higher ORC, versus 33% of Lower, reported seeing improvement in a relevant process, t=2.262, p=0.027).

However, there were some significant differences on identification of implementation challenges. Lower ORC respondents were more likely to report challenges in organizational support and relationships (t=3.807, p>0.001) and staff turnover (t=2.046, p=0.045); higher ORC

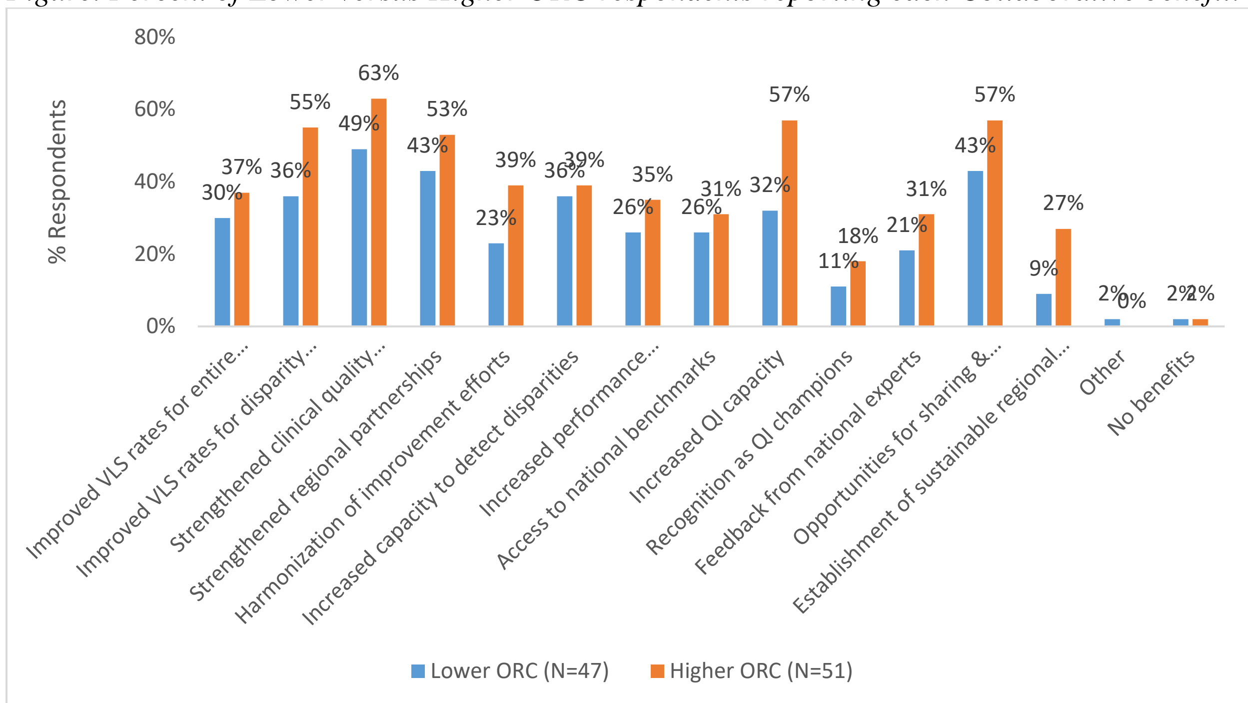
respondents were more likely to report challenges in reaching their target population (t= -2.161, p=0.035). No other items were significantly different.

Figure. Percent of Lower versus Higher ORC respondents reporting each implementation challenge.



Further, higher and lower ORC respondents differed on some of the benefits seen. First, higher ORC respondents (mean=5.43) noted more benefits of participation in the Collaborative than lower ORC participants (mean=3.85, t=2.421, p=0.017). Higher ORC respondents were also significantly more likely to report increased QI capacity (t=2.536, p=0.013) and establishment of sustainable Regional Groups (t=2.469, p=0.015), and were marginally more likely to report seeing improved VS rates for their disparity population (t=1.873, p=0.064). There were no differences in benefits expected by ORC score, though.

Figure. Percent of Lower versus Higher ORC respondents reporting each Collaborative benefit.



Open-Ended Items.
The survey also included several free-response items. Respondents were asked to write about the most valuable and least valuable parts of the Collaborative, provide any further comments about QI projects, and give any final thoughts about the Collaborative as a whole.

Most survey respondents noted the increased opportunities to network with, and talk to, other organizations as the *most* valuable component of the Collaborative. Participants were able to discuss common problems and patient barriers, and learn how other organizations address those challenges. The increased networking led to an increase in collaboration among agencies. One respondent noted that the collaboration will result in better service provisions across the populations they serve. The resources and ideas members shared during the Collaborative provided participants with new QI knowledge, skills, and tools that they were able to apply to their work in order to meet their goals related to reducing disparities in their given population. Participants found the Affinity Group and Learning Sessions very helpful, as well as the feedback they received from other members on their case presentations.

Generally, survey respondents believed that the time commitment and added workload to their schedules was the *least* valuable component of the Collaborative. Respondents stated that there were too many deliverables, and smaller organizations especially had a hard time balancing the requirements while carrying out their day-to-day work. Some respondents thought that the meetings and sessions were too long and occurred too frequently. Several survey respondents noted that since participating organization are so diverse, they were not always able to relate to, and use, the information from other agencies since it did not apply to them. A small number of respondents reported that they did not like Glasscubes and found it difficult to navigate, thus they did not see it as valuable.

Several survey respondents stated that the Collaborative has motivated them and their organization to make QI a priority. One respondent shared that they are hoping to start their own ECHO collaborative next year. Some respondents would like to see staff at their organization who are new to QI receive some coaching so they become more familiar and comfortable with things such as getting buy-in and support from leadership. Others shared that they thought the support from CQII leaders is wonderful and they are making progress with their QI project.

Overall, end+disparities ECHO Collaborative participants responded that they enjoyed the experience, received useful information, and thought it was worthwhile. Some survey respondents noted concerns with the limiting nature of the disparity groups and would like to see efforts expand to a greater population. Others noted concerns with a drop-off in engagement due to the high workload and time commitment.

III. KEY INFORMANT INTERVIEWS.

Methods.

Sample.

Collaborative Partners were selected for telephone-based Key Informant Interviews based on recorded involvement in the Collaborative, organizational demographics, and Collaborative faculty and staff feedback. The interviews focused on Collaborative involvement and activities; only Partners who had demonstrated participation were selected. “Active” interviewees were defined as those who had done a case presentation in their Affinity Group and had attended at least five Affinity Group meetings. “Intermediate” interviewees had attended at least four Affinity Group sessions but had not given a case presentation.

All potential interviewees were required to have a listed email address. None had only Part F funding. Of the approximately 1,000 individuals registered with the Collaborative, about 131 Collaborative participants met at least the criteria for Intermediate candidacy; about 52 met the criteria for Active involvement.

Selections were also made in an attempt to both sample the breadth of participant backgrounds, and balance between active and intermediate interviewees: funding Part, Regional Group membership, organization type, and organization caseload size were considered.

In total, three to five “active” and one or two “intermediate” interviewees were selected for each of the four Affinity Groups. This list was reviewed by Collaborative faculty and staff and adjusted based on their feedback.

Data Collection.

A semi-structured interview protocol was developed, which included both initial questions and follow-up probes. Questions focused on quality improvement project selection and implementation, organizational factors related to Collaborative participation, and peer networking. Participants were asked to identify current successes within their efforts in the Collaborative and any barriers to participation in each domain. Collaborative leadership also reviewed and gave comments on a draft of the instrument.

Interviewees were first contacted in June 2019; all interviews occurred between June 12 and July 15. Interviews typically lasted for approximately 30-50 minutes; all interviews were audio recorded and summary notes were compiled. Immediately upon completion of each interview, notes were edited and arranged into a data matrix for the purposes of identifying relevant themes of discussion across interviewees and within subgroups.

Respondent Distributions.

Affinity Group.

In total, 15 interviews were completed. Eleven interviews were with Active Partners and four with Intermediate (see Table below for relationship between Affinity Group membership and level of activity). In four cases, two Partners from the same organization were interviewed; three of these interviews were conducted as a pair; one set had separate interviews (one informant had

recently moved on from the position and provided the contact information for her successor), and their data was collapsed.

		Level of Activity		
		Active	Intermediate	*Total*
Affinity Group	Black/African American/Latina Women	3	1	4
	MSM of Color	3	1	4
	Transgender	2	1	3
	Youth	3	1	4
	Total	11	4	15

All Community Partners were recorded as having attended at least 4, and up to 12, Affinity Group sessions as of June 2019 (mean = 9.4, median = 10); attendance was not significantly different between Active and Intermediate participants.

Regional Group.

Respondents represented 13 of the 17 different Regional Groups, including Arizona, California, Louisiana (N=2), Maryland, Massachusetts/New Hampshire, Mavericks, Missouri, North Carolina, Ohio, South Carolina, South Florida, Tennessee/Kentucky, and Washington State (N=2). Cases with two respondents from the same Regional Group included one Active and one Intermediate respondent. Further, five interviewees (including one Intermediate Community Partner) had a formal role in their Regional Group (three were Regional Group Leaders, one was a Data Liaison, and one a "PA").

Organization Type and Size.

Most Community Partners worked at community-based clinics (Community-based/Outpatient Ambulatory/Primary Medical Care Clinic/Freestanding Clinic, N=3) or at hospitals (Hospital/Medical Center/University, N=4). Two represented community-based service providers, one a non-profit agency, and one a federally-qualified health center (FQHC). Four worked at various government agencies (State Departments of Health, N=2, County/City Department of Health, N=1, City Government, N=1).

Three Partners had at least some Part A funding; two had Part B (both representing state Departments of Health); eight had Part C; seven had Part D, and three had Part F. Seven had funding from multiple Parts, most frequently C/D (N=5). Importantly, the only two respondents with only Part A funding were both Intermediate.

Organizational caseloads varied widely. One (City Government, corresponding to an Intermediate participant) reported no caseload, and one (County/City Department of Health) reported a caseload of 15,000, but the remaining reported between 300 and 8,200 clients (mean = about 2,000, median = 900).

Interviewee Characteristics	N
Regional Group	
Arizona	1
California	1
Louisiana	2
Maryland	1
Massachusetts/New Hampshire	1
Mavericks	1
Missouri	1
North Carolina	1
Ohio	1
South Carolina	1
South Florida	1
Tennessee/Kentucky	1
Washington State	2
Organization Type	
Government Agency	4
Community-based Clinic	3
Hospital	4
Community-based Service Provider	2
Non-profit Agency	1
FQHC	1
Organizational Caseload	
0/None	1
300-600	5
601-1,500	3
1,501-9,000	5
More than 9,000	1
Funding Part	
A	3
B	2
C	8
D	7
F	3

QI Projects and Change Ideas.
Partners were asked to describe their current change ideas and improvement activities to this point, including the source of ideas for the project, development process, implementation stage, and any current challenges and successes.

Notably, the interview used the language of "QI projects" (see Appendix A1. Key Informant Interview Protocol). However, no formal definition of a "QI project" was provided; interviewees were simply asked about their "QI projects and activities so far." Some Partners described work that was clearly preliminary to more formal Plan-Do-Study-Act processes (e.g., data review, communication with other agencies), while others were able to speak to specific improvement

plans and ideas. This work is here referred to as "change ideas or QI projects," thus including both ends of the implementation spectrum seen.

Three of the four Intermediate Partners did not have a clearly defined change idea or QI project. Two had only Part A funding and reported working with other agencies and partners to ensure project implementation or provide data but were not directly involved in any projects themselves; the third was also working with other agencies to identify non-suppressed clients, but again was not doing the QI work themselves. The final Intermediate Partner was working on a project focused on better engaging non-suppressed patients in case management on an individual level; beyond hiring a new case manager, they were not implementing new agency-wide strategies or practices aimed at engagement of this population.

Interestingly, only about half (6 of the 11) of the Active Partners were able to identify a specific change idea. This level of implementation was related to Affinity Group: both of the Transgender interviewees and all three of the Active B/AA/L interviewees reported a specific idea; only 1 MSM of Color interviewee did so. Two further Community Partners (one MSM of Color, one Youth) were in the process of identifying issues or barriers to care through data collection or focus groups but had not yet chosen a specific project or topic. The final three Partners (one MSM of Color, two Youth) reported "*using data*" as their project. These Partners may thus be undertaking an initial step toward developing a more formal QI project.

		Active Partners: Specific QI Project Status			
		Yes	In Process	No	*Total*
Affinity Group	Black/African American/Latina Women	3	0	0	3
	MSM of Color	1	1	1	3
	Transgender	2	0	0	2
	Youth	0	1	2	3
	Total	6	2	3	11

Notably, two of these three Active Partners, and one of the Intermediate Partners who was not identified as having a project, were identified by the AIDS Institute as having developed "change ideas" during the course of the Collaborative. In these cases, the Partners had implemented several new activities during the Collaborative year, including collecting data, performing analyses, providing data to partner agencies, holding meetings, hiring new staff, and running focus groups with either staff or their disparity subpopulation. This work thus represents effort towards addressing HIV disparities, but under the language used in the interview, these Partners were not able to identify this work as part of their organization's QI projects.

The six Active Partners who were able to report specific QI projects were showing great strides in this process; several actually had implemented, or were in the process of implementing, multiple projects. Two Partners had begun using UberHealth to address transportation issues within their population. Three Partners were focused on improving engagement in case management. Two had hired new case manager staff for this role; one specifically hired a bilingual case manager to better serve their Spanish-speaking clients. Additionally, three other

Partners were planning on hiring; two were searching for a peer to work as an advocate or run a support group, or act as a focus group facilitator.

Two agencies from the Transgender Affinity Group were implementing projects based on improving inclusive language in their work. One had updated a form to better capture sexual orientation and gender identity information for their clients; the other had worked to change their documents and forms to give more pronoun and gender identity options and had updated language throughout their procedures.

Two others noted that their agencies were working to better address individual client's needs through case management by connecting them with other needed services (e.g., for mental health, substance use, or domestic violence issues). In one case, the Partner paired staff members with individual clients and used motivational interviewing to identify barriers to care and determine solutions; another Partner planned to link unsuppressed clients with suppressed clients and trained peer educators. These change ideas thus represent additional work meant to address disparities and improve client outcomes, but will be implemented on an individual client-level.

Two agencies reported project ideas that were planned but not yet implemented, including beginning a support group for their disparity population, and providing improved support to clients in the postnatal period to improve retention and care in the months immediately following birth to prevent client dropout during this vulnerable time.

Source of Ideas.

The majority of Partners stated that the idea for their QI project predated the Collaborative. In most cases, this project idea was not related to HIV disparities or particular subpopulations but was an issue that had been noted for their overall client population and continued to be relevant when their Affinity subpopulation was identified. Three had already been focusing on a disparity group similar to that in the ECHO Collaborative. Two reported that the idea was based on their organization's knowledge of, and experience working with, their population; others said that the project was consistent with previous QI efforts. One had adapted their strategy from information shared at a previous RWHAP Part A conference, and one noted that the project idea had come from their organization's leadership, in an effort to find a change idea that would be effective but not too laborious.

However, two Partner's ideas were generated more in response to Collaborative-based activities: one from their Needs Assessment, and one from a recent focus group. Multiple Partners noted that they had examined their data to identify needs during the course of the Collaborative.

Several (4 of the 15) did note that refinements had come after they presented their QI idea to their Affinity Group: their peers gave input on particular tools or instruments to use, or feedback on their survey. However, these groups were not reported as the *source* of any project ideas or as involved in the development of projects. As one Partner noted, "*I had my Affinity presentation at the end of February and so we had already been kind of at this for a while*." One Partner felt that the Collaborative was helping them learn about QI but was not involved in guiding their activities. In contrast, one Partner felt that the feedback they received from their Affinity Group was not helpful, preferring the internal input from their organization. As they stated, "*They [the*

Collaborative] certainly have come up with a lot of initiatives that have helped… I think in terms of development of QI projects and development of research, I guess we're more of leaders in that sense." While this Partner appreciated the work of the Collaborative, they found that they were often ahead of their Group peers when it came to research and QI.

Successes & Challenges.

Successes: Viral Suppression Rate Improvements.

Five Partners had seen population-level improvements in viral suppression rates. Several Partners noted that QI efforts had been ongoing over the past decade, with the Collaborative only the most recent push, making it difficult to separate the impact of these different efforts. As one partner stated, "*We've been really tracking this for the last 10 years*." Others had especially high (85% or higher) rates to start, so while some improvement was seen, it was not as dramatic an increase. One such Partner was weighing the benefits of the Collaborative versus the effort involved: "*Our viral load suppression rates have consistently been high, in the 90s, so we felt like it [the Collaborative] might be a lot of time to do for a very small results.*"

However, several Partners did report that they had seen some successes in viral suppression on an individual basis. One reason for this lack of group-level changes was likely to be shifts in patient cohorts over the course of Collaborative participation: rates often fluctuated as newer, unsuppressed clients joined and older clients fell out of contact. One Partner simply noted that "*…the numbers fluctuate*." These impacts were particularly felt when the cohort itself was on the smaller end: "*...we have several new patients that came in with high viral loads. In a small group like this, those 3 new patients really affected our numbers.*"

Successes: Qualitative Improvements.

Additionally, some Partners noted more qualitative improvements due to their projects. The two Partners implementing UberHealth services stated that clients had responded very positively to the service, and were now more able to make and keep their appointments. As one Partner stated, "*So far to date, the patients love [UberHealth] and we've had good follow-through... When I talked to the nurse, everyone she's made an appointment with kept their appointment.*" These scheduling successes will hopefully result in improvements in viral suppression rates.

Two felt that, due to efforts from the Collaborative, staff and patient understanding of QI techniques had improved, evidenced by increased client interest in events and participation in clinic activities. Others noted improved familiarity with their work from agency leadership. One reported noticeable improvement in consumer engagement, explaining the change as being able to *"...[walk] through the clinic and seeing them smile, and hearing them laugh, when they communicate with [the new bilingual CMA]. It's just very beautiful, and I don't know how you measure that.*" Another described improvement in engagement with care management for particularly hard-to-reach clients.

Further, multiple Partners reported shifts in their organizational culture since joining the Collaborative. Several reported that the Collaborative has changed the way the agency approaches quality improvement and has improved awareness of, and interest in, QI, potentially due to increased knowledge of resources for this process. One Partner noted that, "*[b]efore I came, they weren't doing QI projects, so it's changed from a culture of a checkbox mentality to a*

process… it just changes the way you think about quality." Another felt that they were more excited about continuing to implement QI efforts within their agency as a result of participation: "*…[j]ust listening to people talking about what they're doing at their various organization ignites excitement in me, wanting to use a little bit of what everybody is sharing to bring it to our program.*" One felt that their organization was now more trauma-informed.

Challenges: Staffing.

Partners also noted some significant challenges in project implementation. Over half reported difficulties due to staffing. Some noted that staff turnover negatively impacted patient engagement, making it difficult to keep clients connected to services or to the intervention. As one Partner explained, "*…we know that people that like what they do and feel good about the work they do provide even better care and the clients feel that and they want to be there too… we have a lot of turnover, it's very hard for patients to feel connected and to feel that they're getting that patient-centered approach to care*." Others felt that they did not have sufficient staff to implement projects, whether because of hiring freezes, lack of a dedicated staff member working on the initiative, or simply the intense amount of time needed to implement individualized strategies. One Partner noted that, though they try to emphasize individual successes, staff motivation was also waning as organization-level viral suppression rates stagnated.

Challenges: Organizational Context.

Over half of Partners reported organization-level difficulties as well. A lack of organizational agreement or commitment to a QI plan was noted to impede progress. One Partner expressed their frustration with this barrier, stating that "*If we can pick one project and have everyone do the same project across the board and just get commitment for that, that would make me very happy. Right now we haven't done that yet, we're kind of talking through it*." Further, others noted that higher-level administrators were not always supportive of either a disparity-based focus, or of the proposed changes themselves, particularly in more conservative environments. For example, one Partner working at a local government agency felt that her immediate supervisor was supportive, but that state-wide implementation has been slower than might be expected in a more liberal setting: "*We're in a really conservative state, and if we can even get a seat at the table to have these discussions, we don't ever get a lot of traction, so that's been a real challenge.*" In another case, a Partner felt that the Quality Managers at her organization were not interested in focusing on a disparity group, but instead wanted to examine their whole population, making it difficult to get institutional support for disparity-aimed projects.

Challenges: Data.

Data-wise, two main issues were noted. Some Partners did not have direct access to data in order to be able to monitor or adapt programs; others noted that reporting groups were unreliable in their data submissions. As one explained, "*In terms of data, that is one of the biggest problems. We're not able to get enough accurate data from our databases that allows us to quickly know what's going on. I have to manually do a lot of the data analysis and data mobilization and it's so time-consuming.*" One Partner also felt that the Collaborative had not been supportive in data submissions: they had not received any feedback on the viral suppression reports submitted over their participation, and were thus not interested in continuing to submit this information. They noted that they had learned a lot from their experience working with this data, but also that they could use more guidance from the Collaborative leadership:

"...it's sometimes hard to know, really, if this data is significantly significant, and no one there in terms of the Collaborative staff has, has really, like, weighed in on that, or offered kind of insight, or knowledge into that area. And then also, like every other month, you have to report, you know, our HIV caseload and then the cohort percentage of the viral load suppression rate on both of them and no one ever really responds to that data, and it would be interesting to hear their feedback, because they are so well-versed in this area. It feels like a disconnect."

One also felt that Glasscubes was difficult to navigate and use effectively, though others reported that it was easy to use.

Other Challenges.

Finally, the two Part A-only Partners noted that their involvement in the Collaborative was necessarily limited, as they did not work with clients directly, but instead worked with other organizations who worked with clients.

Organization-level Participation.

The number of staff at an organization participating in the Collaborative varied widely, and was not related to level of activity, Affinity Group, or presence of a specific change idea, or even to organization size. In the majority of cases (and for all of the Partners with larger caseloads), a small workgroup or subcommittee of staff were particularly involved in the Collaborative. However, two Partners reported that their whole organization was involved and two reported that at least half of their agency was involved; on the other end, three Partners said that they were the only person at their organization who was participating in the Collaborative. In all cases, though, only one or two people at an agency were participating in the regular Collaborative calls and meetings; any other involved staff were thus learning from the information those representatives brought back to the group and were only focused on change idea implementation.

		Organizational Participation in QI		
		One Person	Small Group	Half to Entire Organization
Organizational Caseload	0-300	1	3	2
	301-600	0	2	1
	601-15,000	2	3	1

Organizations also varied in the level of support provided to Partners. Support typically came in the form of money (e.g., monetary incentives for client participation, paying for client transportation or focus group lunches, funding to attend Learning Sessions, etc.) or staff time (e.g., allowing staff to spend more time on Collaborative activities in lieu of other responsibilities, allocating new staff to the project). Four Partners reported increased interest in QI activities from organization leadership. For example, one Partner noted that a senior director was interested in staying abreast of QI activities and progress: "*...she has been supportive of us participating in any of the quality improvement projects and is very much interested in looking at the data and wants to know what's going on and what kind of things are happening*." However, one Partner reported that though there had been "*micro-level*" leadership interest in their data, their agency had not given any other support for QI efforts; another stated that their organization was simply not particularly aware of this work, as they are only a small workgroup within the larger agency (though both had still managed to implement projects).

Consumer Involvement
Consumer involvement in the QI process was also very different across Partners. Three reported that consumers were involved in the QI process, whether through developing survey questions or helping plan programs. One Partner detailed the steps they had taken in soliciting input from their target community: "*...we actually did reach out to some of the transgender leaders in our community and ask for their input. We were successful in engaging a few members of the community that way, so that we weren't just deciding what that was going to look like ourselves... We're trying to get better about including more people from the community in these different decision-making groups and meetings*." Three had also hired, or planned to hire, a consumer as a peer facilitator, navigator, or advocate. Two noted that consumers were actively engaged in their Regional QI Committee calls. The remaining Partners had not yet engaged consumers in their QI activities and did not report concrete plans to do so.

Networking.
Participants' responses on the networking items were mixed. Half of the respondents reported that their interactions with other agencies had not changed since the start of the Collaborative. In several cases, interviewees noted that their Regional Group was already operational, and that their relationships with other agencies pre-dated the Collaborative. The other half reported positive changes in their interactions with other agencies over the past year. Several noted increased collaboration and/or communications with the organizations in their Groups, whether Regional or Affinity. Others felt that it helped them form closer relationships with local partners.

Partners perceived some interesting differences between their Affinity and Regional groups in their roles and focuses. The Affinity Groups were noted to meet more frequently, either biweekly or monthly (though one partner felt that this was too frequent, as this timeline did not allow enough space between meetings for progress and took more time away from other work). Partners also reported declining Affinity Group participation over the course of the year, with less discussion and engagement than earlier in the cycle; one Partner stated that their group was not currently meeting at all, potentially due to Partner turnover. As one Partner reflected,

> "*I've also noticed as this has gone on, we kind of had our peak engagement and now it kind of started to drop off again. We have these really interesting presentations. But when the presenter is done speaking, there aren't a whole lot of people asking questions or engaging with the content. And then when we have our Affinity group members presenting on their updates their data, we also don't have a whole lot of engagement*."

Regional groups were reported to meet monthly, bimonthly, or quarterly; one Partner felt that the quarterly meetings they experienced were spaced too far apart for effective communication, but none others commented on this aspect.

For the most part, Affinity Groups were described as more "structured," including didactic presentations or information on the QI model. Partners felt they were useful for learning about QI and getting technical assistance for their projects and "thinking through details" with their peers. As one Partner explained, "*In our Affinity Group, I think we were really trying to get to the nitty-gritty and, and I believe that it was really nice to have some of that local sense of, what are we doing, and what are other people experiencing?*" However, because these groups were started at the inception of the Collaborative, trust between partners required time to build, so these groups could not be as strong from the start: "*The only difference would be that the other*

groups, we have a long-standing relationship. With any new group, you have to build that relationship and build that trust." However, this component was not seen as a negative aspect of the Affinity Groups, and the Partner expected this barrier to be surmounted with sufficient time.

The Regional group meetings were described as more "functionally" focused and based on providing more specific support and resources for Partners. One Partner explained that "*...the Regional groups help in that it does provide resources to people that you might not know about, you know, if you stay so close to home, you don't really get to hear what else is happening out there."* Partners felt that they were able to provide more targeted content, as they could focus on particular challenges within their area. However, two Partners felt that their Regional groups (one state-based, one in the non-geographic "Mavericks" group) were limited by jurisdictional differences between agencies. Some stated that the meetings were more used for Partner check-ins and updates, while others reported talking more about general QI processes. One Partner noted that "*The regional group is more focused on processes for quality, rather than specific intervention. And it's just more of a support, just because we have multiple states.*"

Respondents did note some common benefits about these Groups. They most frequently (N=5) cited the utility of having a forum to share ideas and learn from each other, whether about challenges to avoid, or about other potential resources, whether for QI or other needs. One Partner explained that "*…it's been helpful to hear what's going in states that are kind of ahead of us in this department; things they've tried, successes or challenges that they've had in that process so that we can kind of be aware of them as we move forward or avoid their same mistakes.*" Another reported that the Groups lent them emotional as well as concrete support, which aided their progress: "*And I think it's very comforting, at least what I was learning through these meetings was that everyone else is struggling with sometimes with the same thing and there are resources that maybe we just hadn't thought up, to help us move along, or ways of organizing ourselves that we hadn't thought of that might be beneficial, and maybe move the needle, getting quality improvement to be part of a routine process and thinking*." Not surprisingly, the resources shared in the Affinity Groups were noted to be about QI in general, while those from the Regional group were more specific to local challenges.

Partners also appreciated the opportunity to speak with other participants for broader reasons. Four Partners reported that they received helpful technical assistance and problem-solving support from these groups. One felt that they both benefited from this support and were able to give something back as well, stating that "*...we get the technical assistance, we get to create a community of folks who are focused on similar tasks, and hopefully we are trying to sincerely end disparities.*" Two noted improved relationships with local Partners due to their Regional group interactions. As one articulated, "*...it's nice to collaborate with people who are working to meet similar goals.*" The Collaborative appeared to be effective at fostering these inter-agency connections.

However, some challenges were also identified. One Partner noted that communication remained a challenge within their Regional group, as the other involved agencies were not as responsive, even on issues of coordinating care for common patients. Another pointed to agency staff turnover as a barrier to continued communication.

IV. KEY INFORMANT CASE STUDY.

These ideas were echoed in the conversation with Mr. Daniel Wakefield, the Director the Ursuline Sisters HIV/AIDS Ministry, a mid-sized (about 350 patients) HIV/AIDS nonprofit agency in the Midwest. Mr. Wakefield was identified as having been highly active in the end+disparities ECHO Collaborative since its inception, completing all steps as expected. Mr. Wakefield has uploaded an Aim Statement, submitted viral suppression load data in multiple cycles since the start of the Collaborative, completed the Community Partner reporting form every quarter, and attended at least one Learning Session. He gave a Case Presentation in the summer of 2018, at the beginning of the Collaborative, and has attended over ten Affinity Group sessions. Further, the Ursuline Sisters HIV/AIDS Ministry has implemented multiple Quality Improvement projects over the course of the Collaborative year, with some significant early successes, making them a useful model through which one example of successful participation in the Collaborative can be examined.

Organizational Context.

Importantly, the Ursuline Sisters HIV/AIDS Ministry has a strong history of participation in QI initiatives; they took part in a previous CQII project that successfully reduced viral suppression rates (though for a different population). As such, staff at the agency had a high familiarity with the QI process and ideas, and program leadership were supportive of such ideas. While the agency did not allocate much additional money for these efforts (beyond a small amount for client incentives and new advertising), they did allow re-allocation of staff time. This background likely allowed them to jump in to this new Collaborative and implement new ideas quickly.

Further, Mr. Wakefield reported that almost all agency staff were involved in QI work. Only Mr. Wakefield consistently attended Collaborative sessions, and he aimed to "*take back to the staff information that was gained or gleaned or maybe some ideas to share that we can try.*" Further, a consumer often joined the Regional meetings, and other staff participated in individual webinars and trainings of interest. As such, all staff were consistently thinking about QI work and learning about these processes, which removed any internal barriers to implementation. This team approach also fostered strong relationships between clients and staff at all levels, from reception through treatment practitioners, thus encouraging clinic participation:

> "*We do kind of like an all-hands-on-deck for the intervention. We recognize that… the relationships are what matters. In some cases, people might actually have a relationship with the social worker, in other cases it might be a nurse, in other cases it might be our clinic director, in other cases it might be the front desk receptionist, as they're coming in for their appointment.*"

By including all staff in this approach, no opportunities for client connections were missed.

QI Project Selection and Implementation.

Affinity Group Selection, Aims Statement.

Mr. Wakefield's group identified an almost 10% disparity in viral suppression rates between their overall population (N=350) and the MSM of Color subpopulation (N=77): while their overall rate was nearing 90%, the rate for this group was about ten points lower, demonstrating an absolute and comparative disparity. Though another subpopulation also showed a similar disparity, "*…our team felt that the MSM of Color subgroup was one that has not been the focus*

of previous QI initiatives, and we felt that this would be a subgroup which individualized support could assist." In their Aim Statement, Mr. Wakefield set some ambitious goals for viral suppression rate improvements for the course of the Collaborative for both this disparity group (improvement of viral suppression rates; elimination of suppression disparity) and their whole population, but also set goals for client outreach and activities (high rates of contact for our-of-care clients).

Review of Data and Identification of Key Causes.
The agency started by first reviewing their viral suppression data to determine if there were any common reasons for non-suppression among the members of this disparity group that could guide QI activities. They identified several "key causes," including a lack of appropriate peer navigation, and a resistance to such when it was available; issues surrounding stigma, including clients' wishes for privacy and confidentiality when they visited the clinic; lack of necessary staff time to allow individual client support; and an insufficient amount of available appointment times with appropriate doctors. But they also felt that there were "*a variety of situations and circumstances that are keeping some of the clients from being suppressed*." As such, they decided a multi-pronged, individualized approach was most appropriate to address these additional circumstances.

Selection of QI Activities.
Mr. Wakefield's group thus decided to implement several pieces to address these needs, to be rolled out over the course of the Collaborative. These included a "needs assessment" survey to get further feedback on the clinic operations and potential changes; implementation of individualized staff contact and interventions with non-suppressed and at-risk clients, based on each client's particular needs; and expansion of the available clinic times by hiring another doctor.

1. Client survey.
The agency first created a "needs assessment" survey to learn more about what members of this subpopulation thought about their clinic (e.g., strengths, weaknesses, improvement suggestions), and identify additional barriers and potential areas for change.

Feedback on the survey was obtained from their clinic's Advisory Board, Consumer Advisory Board, and the Collaborative MSM of Color Affinity Group. Mr. Wakefield noted that the Affinity Group suggested a few particularly useful survey items, including a question on preferred contact method: "*One of the really great ideas we had from the Collaborative was well, have you ever considered asking people their preferred contact method? We didn't have that as a survey question, so it's something we could add.*" Further, their Consumer Advisory Board gave input on question phrasing, particularly towards developing wording that would help the agency obtain critical feedback:

> "*…we didn't want all of the survey results that came back to be worded in a way that people would just respond and say everything is great. We were trying to develop questions where we would get some feedback some way on ways we could improve. The consumer group [Consumer Advisory Board] really helped us to hone in on some wording or ways to ask the questions that would get at that.*"

The survey was implemented in the clinic about four months into the Collaborative. Interestingly, despite efforts to encourage suggestions for change, almost all of the responses they obtained were highly positive: Mr. Wakefield's team found this result to be encouraging, but not as helpful for directing future efforts as hoped. However, they tried to use the survey results as an opportunity to bolster current efforts: "*...we took what was good about the clinic, and tried to extend that even more so*." For example, clients mentioned that they appreciated being welcomed and encouraged by clinic staff. In response, staff have both continued to be actively warm in their in-person interactions, but have also put more effort into encouraging notes or cards (e.g., "Keep up the good work!") for clients, whether distributed at the end of appointments or through the mail. The agency also purchased some small encouragement "tokens" for clients, as a tangible reminder of both the clinic and of clients' efforts in getting treatment. After discussion with staff and peers, tokens were inscribed with the message "*Keep believing in your power*," and were distributed to all clients, but were hoped to be especially meaningful to clients struggling to become suppressed.

They did learn that clients often preferred text-based communication instead of phone calls, which lead staff to prioritize other contact methods when reaching out to all clients. Staff downloaded a texting app to their work tablets and have used this app as a primary method of client contact. This shift to text-based communications particularly resulted in higher rates of successful contact with hard-to-reach clients:

> "*Even though it sounds trivial, I really think that something like that made a big difference for us, when we're working on these interventions: because people we were previously unable to get ahold of we now were able to because they were able to access text messages even if they were out of their phone minutes or situations like that.*"

One theme from the responses was a desire for connection among HIV+ clients. As Mr. Wakefield, explained, "*...they felt the clinic was very supportive and encouraging, but in their own personal lives they felt that they were very isolated... there was a real desire for additional opportunities for people to connect with one another.*" This idea is particularly interesting given the agency's earlier identification of stigma as a barrier to treatment: while many clients were fearful of "outsiders" knowing about their HIV+ status or being seen at the clinic, they still desired interaction with other "insiders." The agency thus worked with Consumer partners to implement more group programming and social events, such as a six-week yoga series, and more activities (an ice cream social, a movie night, bingo night, etc.) are currently being planned. These activities have been successful in bringing clients together, with high attendance and satisfaction.

2. Individualized interventions.

Mr. Wakefield's group decided to take an individualized approach to determining potential client needs and intervention strategies. This idea stemmed from a previous experience with CQII, where it was implemented to successfully improve viral suppression rates for individuals struggling with mental health and/or substance abuse issues; as such, this strategy was here adapted for individuals in the MSM of Color disparity population.

First, the agency dedicated more staff time and resources to allow for individualized interventions. Clinic staff were paired with about 15 non-suppressed clients, and clients thought to be at risk for non-suppression. Staff were asked to reach out individually to make contact with

these clients to set up a series of meetings bringing them back in to clinic so they could learn more about clients' individual needs that might impact their access to, and ability to obtain, treatment, using motivational interviewing techniques: "*During those interventions, staff were trying to really work with what their individual needs were. So in some cases, you know, we identified people who had some transportation issues that we were previously not aware of, in many cases there were issues with mental health or substance abuse issues.*" As an incentive to remain involved through the full series, clients were promised a $10 gift card at the last meeting. Staff also developed a list of local community resources to aid in finding solutions to clients' barriers to treatment. The Ursuline Sisters HIV/AIDS Ministry has more recently implemented systems to track referrals and appointment histories to better understand the immediate impact of these strategies.

The agency also involved Peer Navigators in this process. Peer Navigators were clients who were interested in becoming more involved with the clinic and were able to successfully keep appointments. At the start of this year, Peer Navigators were simply recommended by current staff, though the agency has since created a more formal "interest application" and description of responsibilities. In this case, Peer Navigators assisted in interviewing individual clients alongside clinic staff and were able to provide patient-level insights into barriers to treatment and potential solutions.

As the Ursuline Sisters HIV/AIDS Ministry had used this individualized technique before, they did not need as much feedback on the strategy itself, though they did adopt some suggested workarounds from other Collaborative members. For example, they first heard about UberHealth from a peer agency in a Regional Group meeting; upon learning it was available in their more rural area of the state, they started using it to resolve some of the transportation issues identified in the individual client sessions. Mr. Wakefield reported this service to be a great success:

> "*It's been a big game-changer… So often staff will get a call the morning of an appointment, or the day before an appointment, from someone whose car broke down, or who had a ride but they got called into work or something, so being able to have that as a resource to make sure people get to their appointments… that would not have been possible, I was unaware that Uber offered UberHealth services, all those things we have been able to incorporate in our clinic, it's in part from what we've learned through the Collaborative and through all of the resources that have been shared.*"

As such, even a few months of UberHealth utilization lead to concrete improvements in clients' ability to make and keep their clinic appointments, thus addressing a common barrier to treatment noted from these individual sessions.

Mr. Wakefield reported this highly personalized strategy to be highly effective. First, staff were able to re-establish contact with almost all available clients (several were deceased, had moved out of the area, or were in prison). Of the remaining, about two-thirds have since become suppressed. Several other clients identified as at-risk for non-suppression were also successfully contacted, and staff were able to encourage clients to keep up their activities to maintain suppression.

Mr. Wakefield did note some particular challenges to this method. For one, it requires a large amount of staff time, and some staff are better at managing this component than others. The

agency is now developing some expected timelines for client contact and structures for staff time to address this issue. Further, some staff were more successful than others at re-establishing contact with clients, and at conducting these individualized sessions and "problem-solving" to find solutions. In these situations, it was noted to be difficult to determine if the issue arose because of the staff member's skill in this area, or because of the vast differences in individual client needs: "*…we do talk about this at staff meetings, and share strategies, but it's hard because every case is so different*."

3. Extended clinic hours.
Finally, the agency planned to increase their available clinic hours by contracting with another Infectious Disease doctor for an additional day. After about six months, the Ursuline Sisters HIV/AIDS Ministry was able to extend their clinic hours by hiring a new doctor who would work later hours during the week. As a result of this shift, more appointments have been available at night; these evening hours have been a popular option, demonstrating the need for more flexible scheduling to help clients with timing restrictions receive the care they need: "*Before, it was a barrier, especially for the clients we had who weren't in during the day, but now having evening hours, they're more able to make these appointments.*"

Successes and Challenges.
As such, the Ursuline Sisters HIV/AIDS Ministry was able to successfully implement several change ideas and QI projects over the course of the ECHO Collaborative, resulting in improved client contact, access to care, and viral suppression rates for individuals in their population. They have been able to continue or establish contact with unsuppressed clients, and work with them to identify and overcome barriers to treatment. They have addressed client needs through changes in staff efforts and new clinic programming and have extended clinic hours to better serve both their disparity and overall population. This work has resulted in the new suppression of several previously-unsuppressed patients, and continued suppression of several at-risk clients.

However, population-level changes in viral suppression rates have been difficult to establish. The client cohort has shifted significantly over the year, with the introduction of many new unsuppressed MSM of Color clients. As he explained, "*For example, of the 15 individuals that we began the Collaborative with, that we were focused on, 3 ended up moving out of state, or within the state to a different city, so we ended up having 12 individuals who we were really kind of working with… However, we have had a lot of new patients over the past year: we have people coming in who are new to our clinic, who are out of care, who are now reengaging in care.*" As such, their overall suppression rates are similar to the rates at the start of the Collaborative. Some staff have found this lack of "global progress" somewhat demoralizing; in response, Mr. Wakefield has instructed staff to focus on the impact they are able to make in individual cases, instead of only looking at the average rates: "*Sometimes if we're looking at overall numbers, they're doing a lot of good work, and obviously they're seeing results on an individual basis with people that they're working with, but it's reminding them of the difference that they're making… I didn't want staff to feel like, you know, we've been doing this intervention since July and we've only increased 2% overall.*" Mr. Wakefield also mentioned that implementing individualized interventions also takes a significant amount of staff time, and some staff are more successful at (and some clients more receptive to) this approach than others.

Benefits of the Collaborative.

Mr. Wakefield also noted the impact of Collaborative participation on their agency's staff. All staff were involved in the Collaborative and in QI projects to some degree. The Collaborative was seen as a useful way to help new staff learn about QI and its impact:

> "*For new staff, the introduction of those types of concepts, brought kind of understanding of the need and the reason for why it is important to continue to strive and improve, and strive to evaluate what you're doing and how you could do better. It helps to see that as an organization we emphasize that, but it helps seeing that as part of a larger initiative and feel so that was something that was beneficial.*"

But even older staff were felt to benefit from the chance to learn about new tools, resources, and approaches, and to have the opportunity to re-evaluate current practices and ensure a focus on the end goals:

> "*…it's always helpful to kind of get a refresher and to hear about different types of strategies and different types of things that are available, different tools you can use, I know sometimes we get a little bit bogged down on a favorite tool or one used most often, so seeing different options, how different tools help with types of things you're trying to achieve or accomplish was really helpful for us.*"

As such, the organization's participation in the Collaborative was able to reinforce key messages across all levels of the agency and help both veteran and new staff think about QI in a new way.

Mr. Wakefield also reported some other ideas that had come directly from their participation in the Collaborative. As noted, their Agency's awareness, and subsequent successful use, of UberHealth followed learning about the service from a fellow participant. They also began advertising HIV screening appointments on a newer LGBTQ-focused social media platform after hearing about a peer's use of the service, which resulted in "*…an uptick there with testing in our clinic in the months we did advertising, and that directly came from CQII.*" While this component did not fit in to their QI schema otherwise, it still served their agency's goal of identifying and treating as many HIV+ clients as possible.

The Ursuline Sisters HIV/AIDS Ministry had already been a participant in their Regional group before the Collaborative, but still appreciated the opportunity to "*share best practices*" with their peers. They felt that both the Affinity and Regional groups were valuable, as they were able to learn about new ideas and "translate" them into practices that would work for their area. As Mr. Wakefield explained, "*People in other states have really, really great ideas and things that they're doing, and that would be things I that I would not be aware of, if we were focused simply on our Region. It's really helped me think on a larger scale and expanded my thinking on many different things.*" For example, as no one else in their Region had been using UberHealth, they were only able to learn about its potential application to their work from the Affinity Group. But they also noted that their Regional peers were important for figuring how best to work around some of their local challenges. And further, Mr. Wakefield felt that the Regional Group had helped him meet and form connections with some of his colleagues, as he is newer to his position.

INTEGRATION OF DATA: CROSS-CUTTING THEMES.

Several themes were identified as consistent between the different sets of data. It should be noted that the Community Partners selected for Key Informant Interviews were a much smaller group than that of the surveyed Community Partners and were also specifically chosen to include particularly active individuals. Even so, across these two components, several cross-cutting themes emerged in the analysis as consistent between these Partners, particularly regarding the Affinity and Regional Groups, sources of change ideas, organization-level factors, and staff turnover.

Affinity and Regional Groups Were Positive Experiences for Partners.

All respondents were generally positive about their experiences with both their Affinity and Regional Groups. Participants reported that the meetings were helpful, well-run, and supportive, and connected them with local resources and/or QI information that supported their QI work.

Most respondents agreed that the Collaborative had strengthened their Regional Group, even if they had already been a part of it. About half of interviewees noted that their involvement in their Regional Group preceded the Collaborative, pointing to preexisting relationships between local Partners. But those who reported more recent involvement still reported increased communication and/or collaboration between agencies. Survey respondents typically agreed that their Regional Groups strengthened partnerships, coordinated efforts, and planned for sustainability.

Interestingly, while the Affinity Group meetings and Case Presentation experiences were typically rated positively, Affinity Group feedback was not reported to be the major source of QI project change ideas. As such, these meetings may have more served other purposes: interviewees reported that the meetings were helpful for learning about QI, finding resources related to QI in general, and getting specific technical assistance. However, Affinity Group participation may also be declining at this point: Partners reported less-frequent meetings and decreasing attendance and engagement at the end of the first year.

As such, these Regional and Affinity Groups appear to be fulfilling their roles of providing and encouraging QI learning opportunities, peer-to-peer support, and allowing a forum for resource sharing, though they may not have reached their full potential outside of these meetings.

Change Ideas Often Came From Outside the Collaborative.

Interestingly, most respondents reported that their QI project change ideas either predated the Collaborative, or came from review of their own data: as such, the idea may have been refined during the Collaborative, but was not generated in this window. However, many did report getting at least some ideas from Collaborative-specific work: survey respondents noted that the review of data (undertaken in response to Collaborative participation, and thus likely with an eye towards disparities) was the most helpful source of change idea. Several interviewees noted the same.

Few interviewees and survey participants felt that direct feedback from within their Affinity Group was the most helpful source, though several did select it as one source of many.

Interviewees noted that the timing of their case presentation might have impacted how much the Affinity Group could be of use: too early, and the group has not learned enough to give helpful feedback; too late, and implementation may have already started. Among survey respondents, this experience appeared to differ by Affinity Group (with Transgender participants especially likely to report their Affinity Group as a useful source of ideas, and Youth and MSM of Color respondents especially unlikely), though the starkly uneven group sizes must be taken into account when interpreting this pattern.

Interestingly, many survey participants reported getting change ideas from other Partners' case presentations, or from their Regional Group meetings. As such, they were still able to learn from others, though perhaps less directly than anticipated (e.g., not from feedback to their own case presentation).

Organizational Factors Impact QI Experience, if not Progress.
Organization-level factors frequently impacted Partner's Collaborative experiences. Interestingly, organizational support did *not* appear to impact implementation of QI projects: several interviewees noted that their agencies were not particularly supportive of their work but had managed to implement multiple QI projects. Additionally, survey respondents at organizations rated as less responsive to change did not report completing fewer project implementation steps or lower Collaborative involvement. As such, small QI groups within even unsupportive environments were able to make progress on their ideas, at least within their immediate domain. In these cases, organizational leadership may not have been concretely supportive, but their non-involvement may have allowed Partners to move their ideas forward without institutional hindrances.

However, low organizational support still presented an impediment to progress in some regards. Partners at organizations rated as less responsive to change were more likely to report challenges in organizational support and relationships and in staff turnover, likely reflecting barriers in broader implementation, and tended to report fewer benefits of participation. In particular, Partners from the Transgender Affinity Group were especially likely to report this component as a barrier; as one interviewee noted, some more conservative environments may be less interested in implementing changes focused on improving services for this group.

This situation can be contrasted with that of the interviewees who noted that their organizations had previously participated in QI initiatives: this group was able to make significant progress in the Collaborative, implementing multiple projects with support from their leadership. This experience may have allowed these Partners to get new ideas off the ground faster, leading to further progress. In other cases, Partners reported that the Collaborative motivated them and their organizations to prioritize QI; these more-responsive organizations may be more likely to see more benefits from participation in the near future.

Staff Turnover Negatively Impacts QI Capacity.
Another commonality between interviewees and survey respondents was the difficulties brought on by staff turnover. About one-third of surveyed Partners reported staff turnover as a major challenge of project implementation; similarly, several interviewees reported that staff turnover made it hard to keep clients connected to services, and put a strain on the organization in terms

of training other staff to take on the work. Alternately, an agency's progress may have stalled when a particularly engaged "QI champion" staffer was promoted out of their role or left the organization, resulting in the rest of the group having to rebuild from scratch. Additionally, staff turnover was also noted to impact inter-agency collaboration, as changing Partner contacts over the course of the Collaborative year created a barrier to continued close communication.

FUTURE DIRECTIONS.

Based on these results, some next steps are proposed, for both the remaining months of this Collaborative and for future initiatives.

First, the Collaborative should consider methods to maintain engagement through the full participation period. Several Partners felt that involvement in their Affinity Group had decreased significantly from the start of the project. Some "settling in" is to be expected, and Collaborative leadership has noted a reduction in the number of attendees over the past year, though this change was thought to correspond to increased participation of the remaining Partners. However, one interviewee reported that there was little discussion among their Group's members at this point. And though all groups are currently meeting, another stated that their Group was on hiatus. Opportunities to reset the group dynamics and ensure high levels of engagement among attending Partners may be important to identify and implement.

Multiple participants reported difficulties in either submitting data or getting support regarding their data. The Collaborative should consider more specifically monitoring whether Partners are getting such feedback on their submitted data, instead of leaving it more to the discretion of the Regional Group leaders.

Over half of survey respondents reported that their Regional Group had not provided a QI training for providers, or a training for consumers. Collaborative leadership may want to consider whether this outcome represents a reasonable goal for the remaining months of the grant, and if it should be included in future iterations of this framework.

At the start of future initiatives, participants should be asked to determine the extent to which their organization has previously participated in similar initiatives, and how successful those activities were. Groups newer to QI work may have more difficulties obtaining leadership support for "unproven" activities, or less experience with QI procedures, and so may need either more or different support than Partners at organizations with a strong history of QI work.
In this current Collaborative, more experienced Partners were often among the first presenters in their groups, hopefully providing a model for other Partners to follow. But it may also be prudent to think specifically about the time point at which a case presentation would be most useful: some Partners reported giving their presentations after they'd already started implementing their projects, making it more difficult to "pivot" in response to feedback, and thus also making those potential feedback sources less useful. Partners might thus need further coaching on how to ask for feedback on their "next steps," no matter what part of the QI process they are in.

Clarification should also be provided around what it means to undertake a formal QI project, and what the expectations are during such a process. Several interviewees reported that they were "using data" as their QI project but were not able to speak to any specific activities undertaken or work started. However, several of these organizations were identified by CQII as having developed "change ideas," and had performed many activities related to improving services for clients, including collecting, analyzing, and sharing data; training staff; conducting focus groups; and holding meetings. This work may eventually result in implementation of a specific QI project with a PDSA framework and iterative adjustments but has not yet reached that stage. In

the meantime, this language may be confusing to participants, as these Partners were not able to speak to any activities undertaken in their interviews. Collaborative Leadership should streamline their language to help participants best understand what is expected of them over the course of their participation, and how to describe it along the way.

Finally, several Part A-funded interviewees noted that they were not able to be particularly involved in QI projects and Collaborative implementation: they described their role as more supporting other organizations under them. Similarly, a high proportion of government-based agencies (e.g., city, county, or state public health departments) had not submitted viral suppression data, likely because they themselves do not collect it or monitor it directly: participation of these organizations in the Collaborative may be beneficial towards keeping HIV/AIDS treatment and suppression efforts moving forward, but these groups may not be able to implement QI projects on a per-client level, given their role. The CQII should consider whether Partner's funding Parts or organization types will necessarily influence their ability to fully participate in the Collaborative, and whether alternative paths for involvement should be provided for certain agencies based on these factors.

SUMMARY & CONCLUSIONS.

This report presents findings from an intermediate evaluation of the impact of the end+disparities ECHO Collaborative on participating Community Partner's QI knowledge, project implementation, and effect on HIV/AIDS viral suppression rates for both Community Partners' chosen disparity subpopulations and entire caseload. Both quantitative (survey) and qualitative (interviews, open-ended survey items) methods were used, to allow contrast and corroboration across sources and findings.

Most participants felt positively about their experience in the Collaborative, agreeing that the Affinity and Regional Group sessions were helpful and useful. They also reported significant benefits from their participation, including increases in QI capacity, improved opportunities for sharing and networking, and improved clinical quality management.

Most importantly, over 50% of survey respondents reported that the viral suppression rates for their disparity subpopulation had improved over the course of the Collaborative (38% reported improvements for their entire population). This outcome represents the major goal of the Collaborative: the QI skills built are hoped to be in service of improvements in viral suppression rates for Community Partner's clients. The average improvement was reported to be around 4%. Several interviewees noted that they had also seen individual-level viral suppression successes, with longtime clients either achieving suppression or coming closer to the target. Notably, though, many Community Partners were not able to see average improvements due to shifts in their client cohorts: as new, unsuppressed clients were added to their caseload, overall rates often remained static, but these client-level successes point to improvements based on the QI efforts implemented.

Improvements in networking and peer relationships was also a broader Collaborative goal. At this point, most participants reported at least some increases in their interaction with other agencies, indicating improvements in communication and collaboration. Four-fifths of respondents also noted that the Collaborative had strengthened their Regional Group: as such, even in cases where Regional Groups pre-dated the Collaborative, these relationships were likely reinforced by the structure and expectations that came with Collaborative participation. Affinity Groups, though, were mostly comprised of new groups of attendees, and so may have taken some time for trusting relationships to form; even so, participants reported that these sessions were helpful (86-93% agreement) and comfortable (74%). Interviewees felt that their Affinity Groups were particularly useful for learning about QI and getting technical assistance.

Interestingly, most survey respondents reported that these efforts were considered to be sustainable (over 90% reported that their agency was likely to continue QI efforts after the end of the Collaborative; about three-quarters would be willing to participate in a peer-lead Affinity Group session). However, interviewees also reported declining Group participation and engagement at this point. As such, individual organizations may be able to sustain their QI work, but the peer-to-peer connections built within the Collaborative structure may either splinter (into more individual-level connections) or dwindle without the Collaborative's oversight.

Notably, this data was collected after about one year of Collaborative implementation, out of a planned 18 months. As such, many Partners may have only started learning about QI processes and procedures and have not yet selected a project for implementation (i.e., 25% reported that they have not yet determined a change idea or goal; 36% have not yet started at least one PDSA cycle; 52% have not yet seen any improvements), but may do so over the remaining time. This “delay” in implementation of lessons learned from the Collaborative is to be expected: there may be significant start-up time before new ideas can be put into place, particularly if there are no existing structures or systems within an organization in place off which these ideas can build. Several interviewed Community Partners reported great strides in QI project implementation, but many also reported a history of QI work within their organizations. Participants who appear to be making more progress may thus be those whose agencies already have knowledge of QI or available infrastructure for this work. Other “slower”-seeming Partners may still need more time to build these components before visible “work” can be done, but this gap does not reflect a lack of effort or activities. As such, this report can speak to current successes among some Partners, and at least the work undertaken by others, even if full results are not yet in evidence at this intermediate point.

APPENDICES.

A1. Key Informant Interview Introductory Script and Protocol.

end+disparities ECHO Collaborative Intermediate Implementation Evaluation: Introductory Script

To be read to all Key Informants prior to the interview

Thank you for taking the time to speak with us today. My name is _______, and I am a member of the ECHO Collaborative early implementation evaluation team with the Center for Human Services Research at the University at Albany. I am here with my colleague(s) _______ who will be assisting me today. As you know from your faculty leaders, we have been asked to interview ECHO Collaborative partners to discuss the implementation of quality improvement (QI) activities, organizational participation, and inter-agency networking.

Before we get into our questions, I'd like to go over a few guidelines for our discussion:

- Our interview consists of a series of open-ended questions. We're looking for you to share your knowledge, feelings, and understanding based on your experience with the Collaborative.
- Please keep in mind that that there are no right or wrong answers. [If multiple people on call] We understand that each of you may have different perspectives. We are seeking your candid feedback on the initiative so far.
- Your participation will help us gain insight into the early implementation process, including any early successes and challenges. What we learn from this series of interviews will be included in a report submitted to the Collaborative's administrators at the AIDS Institute. To protect your privacy, all responses are grouped together (aggregated) and de-identified. Your personal responses will not be linked to you or your specific organization and will instead be reported by Affinity group, Regional group, or another broad category.
- Our discussion will be recorded. As a backup to the tape, __________ is taking notes. The recording will help us accurately capture meaningful (unattributed) quotes for our report and will be destroyed once our data analysis is complete.
- We've built in some time (through our last question) to capture any of your final thoughts or anything we may have missed, so feel free to share at that time.
- Any questions before we get started? Feel free to ask any questions, or ask for clarification, during the interview as well.

---

end+disparities ECHO Collaborative Intermediate Implementation Evaluation:
Key Informant Interview Protocol

INTRODUCTION.

[Participant Name], would you like to introduce yourself and briefly describe your role in the Collaborative?

Great, thank you.

QI PROJECT IMPLEMENTATION & EARLY RESULTS.

Let's start by talking about your organization's QI project(s). Can you tell me about your project(s) and activities so far?

How did you come up with the idea for this project(s)?
Probes:

- Did you get ideas from a *needs assessment*?
- Did you get ideas from your *Affinity group faculty* leader?
  - During group session, or in individual coaching/TA time?
- Did you get ideas from *peers in your Affinity group*?
- Did you get ideas from your *Affinity group "spokesperson"*?
- Did you get ideas from peers in your *Regional group*?
- Did you get ideas from the *Learning Sessions*?
- Did you get ideas from *other people at your organization*?

Did you receive feedback on this idea? If so, who gave you feedback or helped you develop it?
Probes:

- Did your *Affinity group faculty leader* help you develop this idea?
  - During group session, or in individual coaching/TA time?
- Did *peers in your Affinity group* help you develop this idea?
- Did your Affinity group "*spokesperson"* help you develop this idea?
- Did your *Regional group* peers help you develop this idea?
- Did the *Learning Sessions* help you develop this idea?
- Did you get feedback from *other people at your organization*?

How did this feedback impact your project plan?

What stage of implementation are you in?
Everything is ongoing.
Could you please describe some of the steps you've taken in starting this new project?

Have you faced any challenges as you implemented this project? If so, what have been some of the barriers to implementation?

Have you seen any early successes from these activities? If so, can you please describe them?
Probes:

- Have you seen changes in your viral suppression rates?

For your full caseload? For your disparity group?

Would you be willing to provide that aggregate-level data or analysis showing that early success?

If organization has not yet selected project:
Have you done a needs assessment since the Collaborative? If so, what did you learn about your organization's needs from that activity?

What have been the barriers to selecting a first project?
What steps, if any, did you take to address these barriers?

Do you anticipate challenges with project implementation? If so, what are they?

ORGANIZATIONAL PARTICIPATION.
Can you tell me about participation in the Collaborative at your organization? How much of your organization is participating?
Probes:
Is your *whole organization* participating? 13 people/25 roughly half is participating.
Is a *small group* within your organization participating?
Are *only a few people* within your organization participating?

Has your organization been supportive of your participation? If so, in what ways?
Probes:
Has your organization provided you *extra money* for QI projects?
Has your organization hired any *new staff* to work on QI projects?

How has the Collaborative impacted your organization's staff?

Probes:
Have you seen any changes in staff's *work activities*?
Have you seen any changes in staff's *attitudes*?
Have you seen any changes in the *organizational culture*?

Since the Collaborative started, has your organization engaged consumers in developing any QI activities? Would like to do this moving forward.
Probes:
If yes, in what ways?
If no, why not?

In the Collaborative, you're participating in the [X] Affinity Group. Was this population one you were focused on before the Collaborative, or is it a new area of focus for your organization? MSM was already a focused
Probe:
If new, what were the groups you were previously considering?

Before you started participating in the Collaborative, were you working on projects to address disparities in viral suppression rates? If yes, how has participating in the Collaborative impacted how your work on these projects?

NETWORKING.
One new part of the Collaborative might be talking with other HIV/AIDS agencies in your region and with similar disparity focuses.

Has your interaction with other agencies changed since you joined the Collaborative?
No change. Had a quality advisory group already. Same content same frequency
Probes:

Has the *frequency* of communication with other agencies changed? If so, how?
Has the *content* you talk about with other agencies changed? If so, how?
Has your *collaboration* with other agencies changed? If so, how?

From your perspective, have there been any benefits to learning in a group versus as an individual organization?
Probe:

If yes, what are they?
If no, why not?

Have you seen any benefits from interacting with these other agencies?
Probe:

If yes, what are they?
If no, why not

Have there been any challenges in interacting with these other agencies?
Probe:

If yes, what are they?

Does interaction differ between the Affinity and Regional group agencies you talk with?
Probes:

Is the *frequency* of communication different between the two groups? If so, how?
Do you learn about *different things* (*content*) from one versus the other? If so, how?

FINAL THOUGHTS.
Is there anything else about your experience in the Collaborative that you'd like to share with us at this time?

A2. All-Partner Survey.

Please see attached document.