Client Involvement in Quality Improvement Toolkit: Final Project Report

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Executive Summary

The Client Involvement in Quality Improvement Toolkit (CIQIT) was developed to enhance client engagement in quality improvement efforts within Ryan White HIV/AIDS Program-funded agencies. This comprehensive toolkit was developed through the collaborative efforts of the Center for Human Services Research at the University at Albany, the Center for Quality Improvement & Innovation (CQII), Health Research Inc., CQII consultants, people with lived experience, and agencies participating in pilot and validation studies.

CIQIT Overview and Project Scope

The CIQIT was created to address a critical gap in measuring client involvement in quality improvement activities at the agency level. The toolkit's primary components are:

- **Standard Rating Tool (SRT):** The centerpiece of the CIQIT, the SRT is a newly created instrument assessing client involvement across five domains: Leadership, Quality Management Committee, Quality Improvement Efforts, Performance Measurement, and Quality Management Plan. Each domain's items are organized by sub-themes that capture distinct quality improvement activities.
- **Optional Enhancement Tools:** The Enhancement Tools include staff and client surveys and a document review tool, which provide deeper insights into specific aspects of client engagement.

The staff survey scales were selected from existing, validated surveys to serve as benchmarks for establishing convergent validity for the new SRT themes. Specifically, these validated surveys were adapted for use by members of the Quality Management Committee and Consumer Advisory Committee. As there were no existing surveys relevant to the perspectives of agencies' general staff (non-quality improvement focused staff) and clients, new surveys were created for these groups.

The project activities began in April 2023 and concluded in June 2024, moving from literature review and synthesis to pilot and validation studies, and ending with the development of a manual and action planning resources.

Key Findings and Revisions

The pilot and validation studies, the focus of this report, involved diverse agencies, including state and city-level health departments and community-based organizations. Key findings and subsequent toolkit revisions are summarized below:

1. **Pilot Study**:
    - Feedback from the pilot study led to specific revisions in the CIQIT manual and tools, enhancing clarity, usability, and relevance across agency roles and functions. These changes were made for the validation study.

2. **SRT Design and Validation:**
    - Internal consistency analyses confirmed high reliability of the SRT domains, with Cronbach's α values indicating good to excellent internal consistency.
    - The final SRT combines frequency and quality dimensions into a single scale for clarity and ease of use.
3. **Convergent Validity:**
    - Three of fourteen themes – Input & Feedback, Support and Participation on a Quality Improvement Project, and Performance Data – demonstrated strong convergent validity with staff survey scales, confirming their relevance and alignment with established measures of client engagement.
    - Further refinement may be needed for other themes to enhance their specificity and operational focus, but such refinements should be based on additional data to ensure permanent changes are evidence-based and benefit from larger samples, translating into greater confidence and generalizability.
4. **Staff Survey Revisions:**
    - The purpose of using the staff surveys in the toolkit is to inform ratings on the SRT. Scales with limited conceptual alignment with the SRT are not useful or relevant in achieving this aim; thus, conceptual alignment was the primary criterion upon which staff surveys were assessed.
    - Ten of twenty scales totaling 47 items were retained based on conceptual alignment with the SRT and based on other critical criteria: adequate internal consistency, appropriate levels of convergent validity, and differences between staff and agency ratings.
    - The refined staff survey now effectively complements the SRT by capturing diverse staff perspectives on client engagement.
5. **Applicability Across Agency Types:**
    - Preliminary findings suggest broad applicability of the SRT to various funded agencies, including those in administrative roles. However, continued evaluation is needed to confirm this across larger, more diverse samples.
6. **General Staff Survey and Client Survey:**
    - Due to design constraints, hypothesized relationships between general staff/client surveys and existing validated surveys were not established, preventing convergent validity analyses. Additionally, the small number of completed surveys and lack of matching responses from the same agencies further hindered these analyses. Future work should focus on establishing these relationships and collecting more comprehensive data to enable convergent validity analyses.

Conclusion and Future Directions

The CIQIT is a robust and user-friendly toolkit designed to empower Ryan White HIV/AIDS Program-funded agencies to systematically assess and enhance client involvement in their quality improvement processes. It provides a comprehensive approach, combining structured evaluation with actionable insights and planning resources.

Next Steps:

- **Ongoing Refinement:** Continued data collection and analysis will further refine the toolkit, particularly the SRT themes requiring enhanced specificity, the general staff and client surveys, and the document review tool[1].
- **Dissemination and Training:** Efforts will focus on broader dissemination, providing training sessions, and developing online resources to support toolkit implementation.
- **Broader Application:** Generalizing the toolkit beyond the HIV care sector will extend its benefits to other areas of healthcare.

[1] The tool is not included in the analyses or results of this report because it was finished after the validation study.

Introduction

The Center for Quality Improvement & Innovation (CQII) at the New York State Department of Health AIDS Institute commissioned the Center for Human Services Research (CHSR) at the University at Albany to develop and validate a self-evaluation instrument for Ryan White HIV/AIDS Program-funded agencies (i.e., agencies serving individuals with HIV). This instrument was intended to measure client involvement in quality improvement efforts and inform the development of action planning processes to increase client involvement. Health Research Inc., CQII consultants, people with lived experience, and Ryan White HIV/AIDS Program-funded sites that participated in pilot and validation studies all collaborated in this effort, which was funded by the Health Resources and Services Administration.

Project activities began in April 2023 and concluded on June 30, 2024. The work comprised several phases, the first of which was a synthesis of work accomplished by Tom Concannon and colleagues at Rand. Concannon et al. produced a framework, literature base, and universe of instruments that captured the theoretical and empirical foundation which CHSR utilized to develop the toolkit. CHSR, with support from the project's collaborators, determined the instrument's basic features, such as structure and scoring, and the extent to which existing scales identified by RAND would be incorporated. This work is described in a report issued to CQII in June 2023.

The current report describes the second phase of work, including the pilot and validation studies, toolkit revisions in response to the pilot and validation data, and development of a manual, action planning resources, and a recorded PowerPoint presentation which provide instructions for creating and implementing the toolkit and action plan. Together, these resources comprise the "Client Involvement in Quality Improvement Toolkit" (CIQIT).

Brief Description of the Toolkit

The CIQIT is a set of tools and action planning resources designed to assist Ryan White HIV/AIDS Program-funded agencies in evaluating and enhancing client involvement in their quality improvement efforts. The toolkit is not a singular instrument but a comprehensive suite comprising multiple components:

- **Standard Rating Tool (SRT)**: The centerpiece of the CIQIT, the SRT is a newly created instrument assessing client involvement across five domains: Leadership, Quality Management Committee, Quality Improvement Efforts, Performance Measurement, and Quality Management Plan. Each domain's items are organized by multiple themes that capture distinct quality improvement activities.
- **Optional Enhancement Tools**: These tools include supplemental surveys, whether previously validated or newly developed, and a document review instrument, enabling agencies to choose to conduct more in-depth exploration of specific areas of interest. The enhancement tools encompass the following:
  - **Staff Survey**: Designed to be distributed among agency staff, this survey gathers a range of internal perspectives on quality improvement activities. It

complements the SRT by providing additional insights into internal operations through diverse staff perspectives.
- **Client Survey**: Aimed at clients receiving services, this survey gathers direct feedback on their involvement in and perceived impact of quality improvement efforts. Available in Spanish and English, it helps agencies assess how effectively they engage clients in improving service quality.
- **Document Review Instruments**: This tool analyzes meeting records including attendance and meeting minutes to evaluate client participation in the Consumer Advisory Committee and Quality Management Committee. It provides a concrete assessment of client engagement in decision-making processes. The tool is not included in the analyses or results of this report because it was finished after the validation study. This tool would benefit from validation as data are collected through its use.
- **Action Planning Component**: This component assists agencies in formulating concrete plans to enhance client involvement in quality improvement. It provides a structured approach to develop actionable steps based on the results of ratings on the SRT.

These instruments are conveniently stored in Microsoft OneDrive, ensuring they are easily accessible and user-friendly (see Appendix A); and the Staff Survey and Client Survey are hosted on Microsoft Forms, providing a secure and convenient method for distribution. A comprehensive manual accompanies these tools, providing detailed guidance for agencies on data collection, interpreting results, and developing action plans based on insights gleaned.

The toolkit's primary purpose is to serve as a self-evaluation resource. Agencies are encouraged to use it to assess how effectively they engage clients in quality improvement processes. Features like autoscoring simplify data analysis, allowing for a more straightforward interpretation of results. The Action Planning component assists agencies in formulating and implementing concrete plans to enhance client involvement in quality improvement.

Below are descriptions of some key terms:

- **Agency** refers broadly to any entity receiving Ryan White Program funding, regardless of its size, function, sub/recipient status or the specific part of the Ryan White Program under which it is funded (see Appendix B for more descriptions of terms such as recipient status, funding parts, and agency function).
- **Client** was deliberately chosen over alternatives like 'patient' and ‘consumer’ to emphasize individuals' active role in managing their health care in partnership with service providers.

- **Consumer Advisory Committees**[2] are groups of individuals with HIV who provide feedback and advice on the services and programs of agencies, ensuring that client perspectives are incorporated into decision-making processes.
- **Quality Management Committees** oversee and guide quality improvement efforts within agencies, ensuring compliance with regulations and fostering continuous improvement. They vary in size and include some mix of staff, healthcare providers, and clients who collaboratively set goals and implement Quality Management Plans.
- The **Quality Management Plan** is a document outlining an agency's goals, strategies, and processes for improving the quality of care and services provided to individuals with HIV.

Conceptual Framework and Design of the Toolkit

The development of the CIQIT drew upon established models and concepts that underscored the significance of client engagement in quality improvement processes at the agency level. The Flexible Engagement Model developed by the Henry Ford Health System demonstrated a tailored approach that integrated client voices across organizational tiers, emphasizing adaptability and extensive engagement of "patient advisors" (Olden et al., 2022). Further, Carman et al.'s Patient Engagement Framework categorized engagement levels from consultation to partnership, providing a structured paradigm for assessing the depth of client involvement crucial for effective quality improvement (Carman et al., 2023). These frameworks provided essential theoretical underpinnings and advocated for calibrated client engagement that aligned with individual needs and organizational capacity. However, they did not offer specific metrics for evaluating client involvement in quality improvement activities at the clinical or agency level.

Concannon and Timmins (2023), in collaboration with CQII, aimed to address the measurement gap by identifying measures of client involvement in quality improvement, but since no such measures existed, they instead identified measures from the related yet distinct area of client involvement in research. Their work began with a literature review to identify core concepts and principles related to client involvement in quality improvement, which informed discussions with CQII and consultants to further define and prioritize future measures.

The Rand team, in close collaboration with an advisory group comprised of people with HIV, then conducted a scoping review to determine the extent to which measures of these concepts and principles existed and identified measures of client involvement in research. They assessed each of these tools for reliability, validity, and relevance to the context of HIV care and assessed which specific concepts these measures captured.

[2] Although the term "client" is used throughout this report to refer to individuals receiving HIV services, the term "consumer" is used specifically in relation to the "Consumer Advisory Committee." This is because "Consumer Advisory Committee" is the standard name used for these groups that include clients/consumers in an advisory capacity.

CHSR and CQII, together with input from individuals with lived experience, determined that the identified measures were not well-aligned with the Ryan White HIV/AIDS Program-funded context due to language focused on client involvement in research rather than quality improvement, and the need for described activities to be anchored in the structures and processes specific to Ryan White HIV/AIDS Program-funded quality improvement work. Further, CQII envisioned an instrument that could be self-administered within an agency and that would be structured and scored, allowing for a straightforward interpretation of concrete, actionable results, and that would offer aspirational benchmark actions for agency improvement. The existing measures did not provide these options and lacked common benchmarks.

For these reasons, it was decided that the existing measures (with language modified to fit the Ryan White HIV/AIDS Program-funded quality improvement context) would provide an empirical reference point for creating a wholly new instrument that reflected the structure, realities, and action-oriented needs of Ryan White HIV/AIDS Program-funded agencies conducting quality improvement activities.

This process led the SRT to be designed in the following ways:

- Providers, stakeholders, and people with HIV are asked to rate activities that reflect optimal client involvement, incorporating the adaptability and flexibility described in the Flexible Engagement Model and Patient Engagement Framework (e.g., "Leaders in our agency *appropriately* recognize clients for their contributions to quality improvement efforts"; "The Quality Management Committee in our agency onboards clients through *tailored* preparation and integration to enable participation on the QM committee").
- It is designed to be completed by a team of staff and client raters, mirroring processes familiar to Ryan White HIV/AIDS Program-funded agencies who are required to conduct organizational assessment activities in a similar manner.
- It is organized around existing Ryan White HIV/AIDS Program-funded structures and processes, including leadership, the Quality Management Committee, agency-wide staff efforts to facilitate client engagement in quality improvement (i.e., including and beyond the work of any specific committee), performance measurement, and the Quality Management Plan. This tool organization allows for straightforward interpretation of results and clear identification of target areas for improvement. These five structures and processes comprise the five domains of the SRT.

Additionally, lightly modified versions of the existing measures in the staff survey provide additional insight for the team rating the SRT[3].

[3] Inclusion of these existing measures also serves as an empirical reference point for the validation study described in this report. Specifically, convergent validity analysis based on data collected for the validation study was used to determine the extent to which the new SRT captured concepts and principles identified in Rand's work as essential to client involvement in quality improvement (see Convergent Validity Analysis, pp. 26).

Thus, the CIQIT represents a significant advancement in measuring client involvement in agency-level quality improvement by filling the measurement gap with comprehensive measurement tools based on a theoretical framework.

Current Progress and Scope of Report

The CIQIT is the culmination of collaborative efforts involving multiple stakeholders, including individuals with lived HIV experience. It evolved iteratively, shaped by extensive feedback and data gathered during pilot and validation studies, which are the focus of this report. This process was critical in refining the toolkit's components and ensuring their relevance and effectiveness in facilitating quality improvement activities within Ryan White HIV/AIDS Program-funded-funded agencies. The toolkit is now available for broader dissemination and implementation.

Pilot Study

The goal of the pilot study was to refine the CIQIT. This work involved selecting appropriate pilot sites who were asked to complete the SRT and assess feasibility of completing the Enhancement tools and provide feedback through surveys and focus groups. CHSR then analyzed the feedback to assess the toolkit's feasibility, applicability, and areas needing adjustments.

Recruitment and Training

Participating agencies for the pilot study were drawn from the Impact NOW collaborative, which consists of 23 agencies active in learning and testing innovative quality improvement strategies. These agencies were considered suitable for the pilot study due to their engagement in quality improvement initiatives led by CQII. A one-hour training session was provided to these agencies, covering the toolkit's tools, pilot activities, and feedback methods.

Participating Agencies

The pilot study included a diverse group of five agencies, including:

- two county-level health departments and one state-level health department in the Southern U.S. focused on broad public health management,
- one city-level health department in the Mid-Atlantic region addressing urban public health challenges, and
- one community-based organization in Georgia offering localized clinical services.

Pilot Process

The study was structured into three phases:

1. **Review to Prepare**: To understand the CIQIT implementation process, agencies began by familiarizing themselves with the SRT, optional Enhancement tools, and the overall self-assessment process.
2. **Assessment of Enhancement Tools**: Agencies verified access to email addresses and assessed the likelihood of survey participation by staff and clients

without collecting emails or distributing surveys for these Enhancement tools[4]. They also confirmed access to necessary documents like the Quality Management Plan and meeting notes and assessed the feasibility of using these documents in a document review.

3. **Feedback and Evaluation**: Participants completed a feedback form detailing their experiences with the self-assessment steps, explicitly focusing on access issues, survey distribution potential, and document review feasibility. Agencies also participated in a feedback session (a one-hour discussions with two members of the CHSR evaluation team) relating their findings and providing insights on the process.

In addition to agency feedback, CQII consultants—including those with lived HIV experience—reviewed the tools and manual, providing targeted feedback crucial for refining the toolkit's content and functionality.

Key Findings and Toolkit Revisions

This section summarizes the feedback and subsequent revisions made to the CIQIT manual and tools based on feedback sessions. Notably, only two pilot agencies completed the feedback form; as such, form data are excluded from this report.

Feedback on the Manual

Clarity and Usability

Participants requested more explicit definitions of key terms used throughout the manual (e.g., "standard vs. enhanced," "leadership," "empower," or "quality improvement projects") to ensure all users could understand and apply the guidance effectively regardless of their role. As one participant said:

> *Part of the challenge I had [was] just the nomenclature in terms of standard and enhanced. When you use [these terms], it means … you could do the standard, and you can up your game by doing the enhanced. But in looking at [the manual], I think the enhanced gives much information to the whole process.*

They also indicated a need for more detailed instructions on process steps, especially regarding how to complete the SRT effectively in a team-based setting.

Role-Specific Guidance

Feedback highlighted the necessity for role-specific instructions that could cater to the diverse functions within agencies, such as differences between administrative and clinical roles and a more precise definition of a "steward" (i.e., the individual or individuals who facilitates the agency's self-assessment process). One participant explained:

[4] Completing the Enhancement tools requires a multi-week process of sending surveys and collecting information from staff and patients. This phase was not carried out during the pilot study to avoid overburdening the participating agencies.

> *The biggest thing that we found is the [cover sheet for the SRT where agencies] list out the participants involved. It [...] confused us. And really what held us up was steward. What is the steward? Because in my mind I'm like, everyone's a steward.*

Additionally, it was suggested that the manual include examples or scenarios that illustrate common situations that agencies might encounter, making the theoretical advice more practical and relatable.

Manual Readability

Suggestions were made to enhance the manual's layout and design, making it more engaging and easier to navigate. Suggestions included using more visuals and bullet points to break down complex information. One participant saw an opportunity to simplify:

> *Have you considered having all the displayed survey content as addendums to the manual?*

Feedback on Tools

Scoring System

Participants found the scoring options sometimes restrictive and suggested including more nuanced options, such as "in progress," to acknowledge ongoing efforts. They also found the “too often” option on the Frequency dimension to rarely be applicable. As one participant explained:

> *I was trying to understand that, you know, with the frequency [of] too often, I guess. Maybe that's, you know, excessive... And you know I'm just like looking at meetings. Do we meet too often, or whatever[,] do we, you know, get too much feedback from [...] certain groups, or what have you?*

Additionally, there was confusion over the definitions of terms like "Superficial" vs. "Meaningful" involvement, indicating a need for more precise scoring criteria.

Question Relevance for Different Agency Types

Agencies without direct client care noted that some questions did not apply to their operations, suggesting the need for alternative questions or a "not applicable" option. One suggested:

> *You might want to change some of the questions for the recipients, because I think we took extra time because we were just going in circles like, ‘How does this apply to us?’ And like how, you know, trying to be fair and like, ‘do we do this?’ But then also like, is this our responsibility?*

Additionally, agencies in administrative roles questioned if they should respond on behalf of the practices of the agencies they support, indicating a need for clearer guidelines or tailored questions for these respondents. These administrative agencies

also wondered whose responsibility it was to send out client surveys: their own, the agencies providing direct care, or both agencies. This was a significant concern, as without clarifying who would handle this task, it could create coordination problems and produce burdensome and duplicative data.

Requests were also made to rephrase certain items to be more inclusive of different agency types and structures (e.g., those with small Quality Management Committees).

Staff Survey Length and Redundancy

Participants found the staff survey to be too lengthy, with some items or entire scales perceived as redundant. This feedback highlighted the need to streamline the survey by removing or consolidating overlapping items to improve completion rates and ensure the relevance of questions.

Specific Revisions

Based on the feedback, the following specific revisions were made to enhance the manual and, critically, the tools for the validation study:

Manual

- Revised to include clearer definitions of terms like "leadership" and “steward.”
- Revised to provide more step-by-step guidance on using the SRT effectively in a team-based setting.
- Updated to include considerations for who the agency should think about when answering questions – i.e., themselves, and not the agencies they support or the agencies who support them; and a consideration about the use of "N/A" in cases where an activity to engage clients in quality improvement is viewed as not applicable to the agency.
- Design and formatting were enhanced to make it more engaging and easier to navigate, such as using more visuals and bullet points.
- A clearer explanation and definition distinguishing the "standard" and "enhanced" versions were provided, clarifying what each entail and how they differ in depth/comprehensiveness of guidance and tools.
- Clarified that agencies providing direct care are responsible for sending out client surveys.
- Tools were moved out of the instructions section and into separate documents, Microsoft OneDrive, and Microsoft Forms.

Standard Rating Tool

- Added "in progress" and "not applicable" scoring options to accommodate diverse agency progress stages and functions/roles.
- Revised the definition of "leadership" and provided examples for terms like "resources" and "empower" to ensure clarity.
- Modified questions to be more inclusive of agencies without direct client care.

Staff Survey

- Reduced the survey length to improve completion rates and removed redundant or unclear questions.
- Made sections and questions specific to differentiate between service and administrative status of agencies.
- Defined key terms such as "quality improvement" and "quality improvement projects" within the survey to ensure all respondents have a common understanding of these concepts.

Conclusion

The pilot study allowed for refinements to the CIQIT based on feedback from a diverse group of funded agencies. Key areas addressed included clarifying terminology and instructions in the manual and enhancing the assessment tools with more nuanced scoring options, clearer criteria, and modifications to ensure relevance across different agency types and structures.

With these revisions incorporated, the toolkit is now better positioned to accommodate the varied experiences and needs of agencies participating in the broader implementation and validation of the CIQIT. While further refinements may emerge through continued use and feedback, the pilot study was an essential step in strengthening the toolkit's applicability and usability for Ryan White HIV/AIDS Program-funded agencies as they work to enhance client involvement in quality improvement efforts.

Validation Study

The goal of the validation study was to validate the applicability of the CIQIT through a structured process of agency recruitment, tool/survey completion, and comprehensive data analysis. Efforts included assessment of the reliability and validity of the newly developed and existing instruments within diverse agencies, refinement of the tools based on empirical data, and ensuring the tools' relevance across varied administrative and clinical settings.

Process and Agency Characteristics

Recruitment and Selection

CHSR requested contact information for as many agencies as possible to maximize the sampling frame size and obtain enough data to conduct a confirmatory factor analysis. There was no universal and complete list of every funded agency, so CQII furnished lists of individuals who had participated in previous collaboratives, trainings, and forums. Ten such lists were obtained via secure transfer, and names were reconciled across lists to arrive at a complete non-duplicative list of individuals. The final list included 2,849 individuals from 670 agencies (see Table 1).

The SRT was designed to be completed by a team of individuals with insights into client engagement in quality improvement, with the Quality Management Committee,

Consumer Advisory Committee, and other relevant members being likely candidates. However, one individual per agency was selected for the validation study to facilitate participation and increase the sample size, as replicating the intended team-based rating process was considered burdensome. Agency representatives were asked to complete the SRT and the staff survey to conduct the convergent validity analysis (see Convergent Validity Analysis, pp. 26).

Individuals were grouped by agency affiliation to enable a coordinated outreach approach. Contacts were deliberately over-grouped to avoid multiple emails to the same agency. Those whose agency could not be determined due to general names or multiple affiliations were excluded from the target group.

Within each agency group, contacts were ranked to create a hierarchy for outreach, with the primary contact receiving the initial request. Criteria for ranking included role hierarchy and number of contact lists they appeared on, and alphabetical order as a final tiebreaker. Role hierarchy prioritized quality managers, medical directors, program administrators, data managers, clinical providers, case managers, nursing staff, then individuals with lived experiences.

The staff survey targeted a broad range of roles and departments to capture diverse staff perspectives, with the agency representative responsible for disseminating internally. The client survey was intended for clients who had received care from the agencies.

Table 1. Recruitment Summary

Total Agencies Contacted	670
Total Individuals Across Agencies	2,849
Mean Individuals per Agency	4.25
Median Individuals per Agency	2
Mode of Individuals per Agency	1

Survey Distribution Process

The selected agency representatives received an email invitation to complete the SRT online via Qualtrics, an online survey platform. They were also asked to distribute survey links for the staff and client surveys to the appropriate individuals within their organization. As most Ryan White HIV/AIDS Program-funded agencies serve in one of two broad capacities—direct client services or administrative—only agency representatives within agencies that provided direct care or support to clients were asked to send surveys to clients. Client surveys were available in English and Spanish.

Ten days later, reminder emails were sent to agency representatives to encourage completion of the SRT and follow-up with staff and clients for the other surveys. If the primary agency representative did not respond or could not distribute the surveys, the request was escalated to the next contact, up to the fourth, based on the established hierarchy. Agencies were given three weeks to complete the SRT and staff survey and five weeks to complete the client survey.

Sample

Excluding agencies who were unreachable (N=165), 505 agencies successfully received an email with the invitation to complete the surveys. Agencies were considered unreachable due to email bounce back or because the email recipient was no longer with the agency or in a different position within the agency and there was no reachable alternative contact. Table 2 provides a breakdown of agency survey participation, with response rates being calculated out of the 505 agencies successfully contacted.

Table 2. Agency Survey Participation Summary

Participation Category	N (response rate)
Unreachable	165
Successfully Contacted	505
Completed Any Survey	53 (10%)
Agency Representative Completed SRT/Staff Survey	41 (8%)
Completed Only Staff Survey	24 (5%)
Completed Only Client Survey	25 (5%)
Completed All Surveys	11 (2%)

Due to the low number of responses, confirmatory factor analysis, which was a project goal to assess the validity of the tool's conceptual structure, could not be conducted. This limitation precluded validation of the tool's theoretical framework. However, the sample size was sufficient to conduct several other validity and reliability tests, which provided valuable insights into the tool's performance and reliability.

The vast majority of respondents (90.2%) indicated that quality improvement was part of their primary responsibility, which is a positive finding given that these individuals are expected to lead or participate in the CIQIT process and complete the SRT.

When respondents were asked to select only one role within their agency, the largest percentage chose roles directly relevant to the SRT process: 41.5% identified as quality improvement staff. Additionally, 17% of respondents were data managers or research coordinators, and thus were likely essential for managing and analyzing quality improvement-related data, and 15% were healthcare program administrators, and thus likely overseeing programs that include quality improvement components.

Table 3. Number and Percentage of Validation Study Respondents in Various Roles

Role within agency	N	Percent
Quality Improvement staff	17	41.5%
Data manager/Research coordinator	7	17%
Healthcare program administrator	6	15%
Clinical staff	1	2.5%
Social worker/case manager	1	2%
Other	8	19.5%
Missing	1	2%

Note. No respondent selected any of the following roles: Adherence counselor, Administrative support staff, Outreach Worker, Peer educator, or Treatment educator.

The highest percentage of respondents (58.5%) came from agencies that provide direct services and support to clients while 46% were involved in funding, oversight, and coordination. Much smaller percentages worked in agencies focused on research or policy (14.6%) or other supporting roles (5%). Respondents could select more than one agency type. This distribution roughly aligns with the types of agencies within the Ryan White HIV/AIDS Program-funded network and is well-balanced, ensuring perspectives from both direct client access and administrative roles. This balance supports the validation study's goal of understanding how agencies close to clients perceive client involvement compared to those in administrative roles, allowing determination of whether proximity to clients is associated with perceptions of feasibility and relevance of engaging clients in quality improvement processes.

Over half of agencies participating in the validation study received Part B funding (56%), which supports state and territorial healthcare improvements and medication assistance programs. Part A funding was also prominent, with 49% of agencies receiving support for metropolitan and transitional areas heavily impacted by HIV. Notably, Part F funding, which included special initiatives and training programs, was the least common, with only 10% of agencies receiving this type of funding. Additionally, 5% of agencies received other types of funding, highlighting a diverse range of financial support sources within the study.

Table 4. Number and Percentage of Validation Study Agencies Receiving Various Types of Ryan White Funding

Type of RW Funding	N	Percent
Part A	20	49
Part B	23	56
Part C	14	34
Part D	9	22
Part F	4	10
Other	2	5

Note. Percentages sum to more than 100 because respondents could select more than one funding type.

Community health or service organizations constituted the largest group of agencies in the validation study, representing 29% of participants. Health departments also formed a significant portion at 27%, reflecting their critical role in public health management. Hospitals and health clinics accounted for 20% of the agencies, while university or research organizations were the least represented, comprising only 5%.

Table 5. Number and Percentage of Validation Study Agencies' Institution Type

Institution Type	N	Percent
Community Health/Services org	12	29
Health Department	11	27
Hospital/Health clinic	8	19.5
University/Research org	2	5
Other	5	12
Missing	3	7

Thus, the validation study successfully reached a diverse sample of 505 agencies involved in HIV services and quality improvement efforts funded by Ryan White grants. While the sample size was not large enough for confirmatory factor analysis, it was large enough to allow for several validity and reliability tests to be conducted. The sample captured perspectives from agencies providing direct client services as well as those in administrative roles, from recipients of various types of Ryan White funding, and across different institution types.

Results and Toolkit Revisions

The results section is structured objective by objective, with each objective presenting a background, results and interpretations, limitations, and attendant conclusions, including any next steps.

SRT: One Dimension or Two?

Objective. Assess whether the SRT should utilize one or two dimensions for measuring how well agencies involve clients in quality improvement activities.

Background. During the initial stages of instrument development, two potentially distinct dimensions of how successfully agencies were involving clients in quality improvement activities were identified: frequency of the activity and quality of implementation of the activity.

Frequency of an activity (measured dichotomously as "Often enough" versus "Not often enough") and the quality of implementation ("Needs improvement," "Progressing," and "Effective") were thought to offer a granular view on potential pathways for improvement. This scoring system applied to Domains one through four, which focused on engagement processes and activities (i.e., and not to the static, written elements of the quality management plan, which had a unidimensional scoring system). However, as

discussion progressed, concerns arose about the complexity of a two-dimensional scoring system. The decision was made to leave the two-dimensional scoring system and examine response patterns to determine whether such a system offered any additional value.

Results. The analysis was completed through the examination of crosstabs between frequency and quality for each activity; almost all responses occurred in one of four categories:

- "Needs improvement" paired with "Not often enough,"
- "Progressing" paired with "Not often enough,"
- "Progressing" paired with "Often enough," and
- "Effective" paired with "Often enough."

For most respondents, "Needs improvement" and "Not often enough" were viewed as synonymous. The same held true for "Effective" and "Often enough". However, respondents made a distinction between quality and frequency in terms of "Progressing" paired with "Not often enough" versus "Progressing" paired with "Often enough." For most activities, a single respondent selected "Often enough" paired with "Needs improvement"; almost no one selected "Effective" paired with "Not often enough."

Conclusion. For analyses, the scoring options were recoded as:

- 0 = "Needs improvement" paired with "Not often enough" or with "Often enough
- 1 = "Progressing" paired with "Not often enough"
- 2 = "Progressing paired with "Often enough"
- 3 = "Effective" paired with "Often enough"

All subsequent analyses were based on this recode. The final version of the SRT includes the following scoring options:

- 0 = "Needs improvement"
- 1 = "Progressing but not often enough"
- 2 = "Progressing and often enough"
- 3 = "Effective"

Internal Consistency of Each SRT Domain and Theme

Objective. Calculate Cronbach's αs for each domain and theme within domain to identify the level of internal consistency. Further, determine whether any item's removal would increase internal consistency at theme and domain level.

Background. To determine the most effective way to organize items in the rating system, five key domains which referenced essential structures and processes within funded agencies were identified. These domains—leadership and staff, committees, use of performance data, and plans—are fundamental to agency operations, particularly for those with established quality improvement structures. Specific themes (e.g., communication, empowerment) were integrated into these domains to create a concrete, actionable framework for evaluating agency performance in client involvement in quality improvement.

To assess the validity of organizing items by these domains, Cronbach's α was utilized to measure internal consistency. This statistic would indicate whether items grouped under primarily concrete agency structures, as opposed to theoretical concepts, are closely related and thus an appropriate method of evaluation.

Further, by examining whether the α values increased with the deletion of specific items, the instrument could be refined by enhancing its internal consistency and possibly shortening it to streamline the process while maintaining effectiveness.

Results. Cronbach's α values for each domain and theme indicated good to excellent internal consistency. Table 6 shows the Cronbach's α values for each domain and theme on the SRT. The closer the α is to 1.00, the higher the internal consistency among the items. The α values are provided for the overall domain as well as the individual themes. For example, the Leadership domain has an overall α of 0.94, while the αs for its constituent themes range from 0.86 for Decision Making to 0.899 for Communication.

There was only one item that would positively impact the α through its deletion. An item on the Performance Measurement domain could be deleted to improve the α, but this would only translate to a 0.05 increase. Since the α for this domain was already high at 0.92, the decision was made to retain the item.

Table 6. Cronbach's α for each Theme and Domain on the SRT

Domain	N	Missing	Cronbach's α	Theme	N	Missing	Cronbach's α
Leadership	27	8	0.94	Communication	33	8	0.899
				Decision Making	33	8	0.860
				Training & Learning	33	8	0.887
				Culture & Recognition	31	10	0.868
Quality Management Committee	33	8	0.96	Committee Involvement	33	8	0.933
				Communication & Transparency	33	8	0.917
Quality Improvement Efforts	33	8	0.96	Input & Feedback	34	7	0.924
				Support and Participation on a QI Project	33	8	0.912
				Recognition & Empowerment	34	7	0.914
Performance Measurement	33	7	0.92	Performance Measures	34	7	0.883
				Performance Data	33	8	0.791
				Monitoring and Learning	35	6	n/a[a]
Quality Management Plan	31	8	0.96	Engagement Strategies	32	9	0.934
				Roles & Communication	32	9	0.903

Note. Missing frequencies include items that received no selection or were marked as "N/A". Listwise deletion was used to calculate Cronbach's αs, resulting in lower Ns for these calculations compared to the overall agency N. (Some respondents did not answer all items within each domain or theme.)

[a] α was not calculated for this theme as consists of a single item.

Limitations. While the Cronbach's αs generally indicate strong internal consistency, the presence of missing data could bias these metrics. This incomplete data may affect the reliability of the calculated αs and, thus, the conclusions drawn from them. Additionally, as each domain's α is computed on a relatively small sample size (around 33 responses), results might not fully generalize to all funded agencies.

Conclusion. Based on the objective of establishing internal consistency, the high Cronbach's α values across the domains support maintaining the current item structure without deletion.

However, next steps should include continuous monitoring and reevaluation as more data become available or agency structures evolve. Any future considerations for item deletion should focus on those that may enhance the α without compromising the breadth and depth of the evaluation criteria.

Convergent Validity Analysis

Objective. Establish convergent validity by correlating agency representative scores on existing, validated staff survey scales with newly constructed themes within SRT domains to verify if the new themes measured concepts similar to those captured by the established instruments. This process aimed to ensure that the newly developed themes

aligned theoretically with validated scales, thereby confirming the appropriateness of the new themes for measuring distinct aspects of an agency's effort to involve clients in quality improvement.

Background. The convergence of scores from the SRT themes and staff survey scales is fundamental to establishing the validity of the SRT. A crosswalk between the two instruments was implemented to formulate a theoretical foundation and generate hypotheses regarding the potential correlations between specific scales and themes. These hypothesized correlations were expected to be higher compared to other correlations with different scales. Such patterns would indicate a precise mapping onto related concepts, providing evidence of the SRT's convergent validity.

Evidence of convergent validity would suggest that the SRT in its current construction effectively measures key concepts related to involving clients in quality improvement efforts, justifying its current design. Conversely, limited evidence of convergent validity would indicate that further revisions to the tool would be needed.

Additionally, conceptually aligned scales and themes were expected to demonstrate moderate to strong correlations. Such results were expected because, despite the SRT being constructed for quality improvement activities and the staff tool being constructed from instruments aimed at research activities, the same underlying principles for engaging clients in these different activities were expected to be relevant in both contexts. Correlations within the expected range would indicate effective mapping onto related concepts without overlapping so much that they appeared to measure the same concept. Therefore, they would provide evidence of the SRT's convergent validity and justify these tools' separate yet complementary use.

Method. The conceptual alignment between the SRT themes and staff survey scales was evaluated through a face validity approach. Specifically, two CHSR project team members conducted a conceptual crosswalk to map each staff survey scale to the corresponding SRT theme(s) based on an appraisal of the theoretical concepts and item content. After conducting a theoretical crosswalk to generate hypotheses about potential correlations between specific SRT themes and staff scales, correlations between the averages of each scale and theme were calculated, and a correlation matrix was created. See Appendix C for the full set of hypothesized correlations and results of correlation analyses. Convergent validity assessment criteria were then applied to the matrix, consisting of the following:

- **Hypothesized Correlations Above 60th Percentile:** Hypothesized correlations were required to rank above the 60th percentile, the rationale being that these correlations were expected to be stronger than correlations between themes and scales that were viewed as having less precise conceptual alignment.
- **All Hypothesized Correlations in the 0.4-0.9 Range:** This range was chosen to highlight significant yet non-redundant correlations between SRT themes and staff scales. The upper limit of 0.9, higher than typical for convergent validity, acknowledged the strong alignment expected due to the SRT themes

being directly constructed with reference to the scales and their underlying concepts.[5]

- **Two-thirds of All Correlations in the 0.4-0.8 Range:** To broaden the assessment beyond the hypothesized correlations, this criterion stipulated that at least two-thirds of all correlations, including those not hypothesized, should fall within a slightly narrower range of 0.4-0.8. This range underscored correlations that were relevant and substantial but distinctly avoided redundancy, ensuring that both direct and indirect relationships between themes and scales were appropriately captured.
- **Reliability of Staff Scales (Cronbach's α):** The reliability of the staff scales involved in the correlation analysis were considered using Cronbach's α, ensuring that the scales used were reliable, thus supporting the validity of any correlations observed. Correlations derived from unreliable scales could mislead the validity assessment, hence the emphasis on this criterion.

Three staff survey scales were cut a priori because they lacked conceptual alignment with any SRT theme: "Leadership" and "Collaboration in Self-Interest".

Results. The following SRT themes met all specified convergent validity criteria, demonstrating strong alignment with the staff survey scales:

- **Input & Feedback:** This theme's correlation with relevant staff scales suggested that it successfully captured the essence of client-centered feedback mechanisms integral to quality improvement.
- **Support and Participation on a Quality Improvement Project:** This theme's fulfillment of validity criteria underscored its effectiveness in capturing the active engagement and support of clients in quality improvement initiatives.
- **Performance Data:** This theme's strong correlations highlighted its ability to effectively measure client engagement in data interpretation and their convenient and optimal access to data.

[5] While not all SRT themes and staff scales had strong conceptual alignment, several themes were built with reference to staff scales. The decision to include correlations up to 0.9 was based on the specific design and theoretical underpinnings of the SRT. This approach ensured that exceptionally strong correlations, while indicative of potential redundancy in other contexts, were considered valid reflections of the conceptual integration between the SRT themes and the staff scales.

Table 7. SRT Themes and Corresponding Hypothesized Staff Scale Correlations

SRT Theme	Hypothesized Staff Scale Correlations and Results
Input & Feedback	Engagement in quality improvement: $r(27\text{-}28) = .73$, $p < .01$
Support and Participation on a QI [a] Project	Procedural requirements: r (13-14) = .62, $p < .05$ Relationships: $r(11) = .68$, $p <. .05$
Performance Measures	Involve clients in dissemination - How often: r(27) = .69, $p < .01$ Involve clients in dissemination - How well: $r(26) = .75$, $p < .01$

[a] quality improvement

It is also worth noting that many strong correlations, even if they were not always between the expected scales and themes, suggested that the SRT measured many concepts captured in the existing, validated measures on the staff survey. This finding suggested that while specific hypothesized relationships may not have been confirmed, the tool effectively captures a related set of attributes or behaviors effectively.

Despite these promising findings, most of the themes did not meet convergent validity criteria (see Table 8), suggesting a need for further refinement. Additionally, it should be noted that the Quality Management Plan domain, primarily focused on document review rather than direct measurement of concepts similar to those in the staff surveys, was not theoretically hypothesized to correlate with staff scales. However, this domain still showed strong correlations, with many of its correlations falling within the 0.4 to 0.8 range, suggesting it captured essential concepts related to client involvement in quality improvement. This observation highlighted the domain's relevance and potential effectiveness in gauging essential aspects of quality improvement, even though it was not part of the initially hypothesized framework for convergent validity.

Table 8. Results of Convergent Validity Analysis

Domain	Theme	Hypothesized Correlations Above 60th Percentile Criterion		All Hypothesized Correlations in 0.4-0.8 Range Criterion		2/3 of All Correlations in .4-.8 Range Criterion		Convergent Validity Criteria Met
		Rank (Percentile)	Criterion Met?	% in Range	Criterion Met?	% in Range	Criterion Met?	
Leadership	Communication	6 (69%), 8 (56%), 17 (0%)	No	100%	Yes	82%	Yes	No
	Decision Making	1 (100%), 12 (31%), 13 (25%), 15 (12%), 17 (0%)	No	80%	No	71%	Yes	No
	Training & Learning	5 (75%), 17 (0%)	No	50%	No	59%	No	No
	Culture & Recognition	4 (81%), 11 (38%), 16 (6%), 17 (0%)	No	50%	No	65%	No	No
Quality Management Committee	Committee Involvement	1 (100%), 7 (62%), 10 (44%)	No	100%	Yes	76%	Yes	No
	Communication & Transparency	4 (81%), 12 (31%)	No	100%	Yes	71%	Yes	No
Quality Improvement Efforts	Input & Feedback	2 (94%)	Yes	100%	Yes	88%	Yes	Yes
	Support and Participation on a QI Project	5 (75%), 7 (62%)	Yes	100%	Yes	82%	Yes	Yes
	Recognition & Empowerment	6 (69%), 7 (62%), 9 (50%), 12 (31%)	No	100%	Yes	82%	Yes	No
Performance Measurement	Performance Measures	6 (69%), 9 (50%)	No	100%	Yes	65%	No	No
	Performance Data	3 (88%), 4 (81%)	Yes	100%	Yes	76%	Yes	Yes
	Monitoring and Learning	8 (56%), 11 (38%)	No	100%	Yes	53%	No	No
Quality Management Plan	Engagement Strategies	NA	NA	NA	NA	53%	No	No
	Roles & Communication	NA	NA	NA	NA	76%	Yes	No

Limitations

- **Low Reliability of Some Staff Scales:** A significant limitation encountered in this study was the low Cronbach's α values for several staff scales, including Decision-making, Feel Valued, Legitimacy, and Personal Capacity Building. These scales exhibited αs of 0.63, 0.56, 0.45, and 0.32, respectively, which are considered moderate to poor reliability. Scales with low reliability have high measurement error, which could obscure true relationships and make it difficult to establish strong, reliable correlations. This issue likely placed certain SRT themes at a disadvantage, as correlations involving these unreliable scales might not accurately reflect the true strength of the relationships.
- **Variability in Sample Sizes:** The study may have also been affected by variability in sample sizes due to different staff scales being relevant to different groups within participating agencies. This variation could impact the stability and generalizability of correlation estimates, potentially introducing bias or variability that was not indicative of the genuine relationships between concepts.

Conclusion. In assessing the convergent validity of the SRT, results indicate that the themes Input & Feedback, Support and Participation on a Quality Improvement Project, and Performance Data met all specified convergent validity criteria. These themes strongly aligned with corresponding staff survey scales, effectively capturing the essence of agencies' performance in engaging clients through feedback mechanisms, in quality improvement projects, and in data interpretation and utilization.

However, most themes within the SRT did not meet the convergent validity criteria. This discrepancy highlighted a potential need for further refinement to enhance the specificity and operational focus of the SRT themes, particularly those that did not demonstrate strong validity. Given the limitations of the current analysis, more reliable data are needed before permanent revisions to the SRT are made. Therefore, ongoing data collection and analysis will be crucial to validate and potentially revise the SRT to ensure it accurately measures key concepts related to client involvement in quality improvement efforts.

It is noteworthy that the themes that met the convergent validity criteria appear to be characterized by their focus on specific, tangible activities directly involving client engagement, including feedback, participating in quality improvement projects, and effectively using performance data. These activities are more specific and operational in focus, allowing for more consistent and uniform respondent interpretations, which align closely with similar concepts measured by staff scales. By contrast, several other themes that did not meet convergent validity criteria appear to encompass broader or more abstract concepts, such as leadership support, culture, or general engagement strategies, which may lead to more diffuse interpretations and weaker correlations. This pattern suggested that themes more narrowly focused on specific, measurable activities align better with similar measurements from staff scales, supporting more substantial convergent validity.

Some next steps include:

- **Expand Data Collection:** Continued data collection is essential to address the overall small sample size and variability in sample sizes across different staff scales. This will provide more robust data for item-level refinement and enhance the reliability of validity assessments.
- **Reexamine and Update Hypotheses:** With the removal of several staff scales (see Enhance Staff Survey Efficiency and Relevance section above), the hypotheses related to the convergent validity of SRT themes need reevaluation. Updating these hypotheses will ensure they accurately reflect the current measurement framework and theoretical underpinnings.
- **Increase Concreteness of Themes:** The study findings suggest that themes with a narrower set of specific, measurable activities achieved stronger convergent validity. Therefore, focusing the items and enhancing the specificity of more abstract themes could improve their measurement accuracy and validity.

Staff Survey Efficiency and Relevance

Objective. Ensure the staff survey's efficiency and relevance by removing scales that do not reliably measure relevant concepts or that contribute redundant or irrelevant data to the overall assessment process.

Background. The staff survey complements the SRT by providing additional perspectives from staff across the organization. Several criteria were carefully considered to evaluate which scales to retain or exclude to ensure the survey effectively serves this purpose. These criteria balanced conceptual alignment with the SRT while capturing unique viewpoints that enrich the assessment process.

- **Conceptual Alignment**: The content of the staff survey had to align conceptually with the themes of the SRT. This alignment ensures that the information collected through the staff survey directly relates to and can inform the SRT ratings.
- **Internal Consistency**: The items within each scale should be perceived as related to the same underlying concept by both agency representatives (who represent the team that would use staff scale averages to inform SRT ratings) and staff (who would complete the staff survey). Maintaining internal consistency is crucial because results would become unreliable if the items do not cohere conceptually, undermining the utility of scale averages for informing SRT ratings.
- **Convergent yet Non-redundant Utility**: To assess the convergent validity and redundancy of staff scales in relation to SRT themes, both correlations and differences in ratings need to be examined. Significant correlations between staff scales and SRT themes would indicate that staff scales capture relevant concepts aligned with the SRT, providing complementary insights. However, excessively high correlations might suggest redundancy. To further assess utility, mean differences or effect sizes between staff and agency representative ratings on the same scales should be considered. Large mean differences, even with high correlations, would justify retaining the scale, as they would indicate that staff

perceptions provide unique, valuable insights not captured by agency representatives, enriching the overall assessment.

By applying these criteria holistically, the staff survey could be refined to align with the SRT's themes while complementing it with unique staff insights. This approach enhances the assessment process by combining multiple perspectives, enriching the understanding of the domains under evaluation, and ensuring that the data collected serves a practical purpose in informing SRT ratings.

Method. The same process for mapping staff survey scales to SRT themes used in convergent validity analysis was used for survey scale reduction analyses. Scales aligning with multiple SRT themes viewed as having heightened value for informing the rating process. See Appendix C for a complete set of crosswalks for each of the SRT domains.

Hypotheses for convergent validity analyses were based on less precise conceptual alignment than those used for staff scale reduction. A higher level of conceptual alignment was required for scale reduction to limit mental effort among SRT raters when using staff scale averages to rate SRT themes. This approach to generating hypotheses for scale reduction analysis resulted in fewer hypothesized relationships than those used for convergent validity analysis.

Cronbach's α was computed for each staff survey scale to assess internal consistency reliability separately for agency representatives and staff respondents. Scales achieving a Cronbach's α of 0.70 or higher for both groups were deemed acceptable and retained for further evaluation, in line with established guidelines for applied social science research.

Correlations were examined to assess the convergent validity between staff survey scales and SRT themes. As determined by the conceptual crosswalk, correlation coefficients were calculated between each staff scale and its conceptually aligned SRT theme(s). Scales demonstrating correlations between 0.39 and 0.80 were classified as having an appropriate level of convergent validity and were retained. Scales with correlations below 0.40 were deemed to have insufficient validity and were excluded.

An additional criterion was applied for scales exceeding a correlation of 0.80 with an SRT theme to assess the comparative relevance of staff perspectives. Specifically, Cohen's *d* effect size was calculated to quantify the mean difference between agency representative and staff ratings on the given scale. Scales with at least a small-to-moderate effect size ($d \geq 0.3$) were retained, as this difference indicated significant variability in how the two groups perceived the underlying concept, justifying the retention of the staff scale to capture diverse perspectives.

In cases where a scale narrowly missed a threshold on one criterion but aligned with multiple SRT themes, its perceived value—meaning its potential to offer broader insights by conceptually aligning with various SRT themes—would be considered as a factor in retention decisions.

By integrating these analytical approaches, the staff survey was refined to encompass scales demonstrating conceptual alignment with the SRT, exhibiting adequate internal consistency, and offering unique value through convergent yet non-redundant insights. This process aimed to create a staff survey that complements and enriches the SRT assessment process by providing reliable and distinct perspectives across the organization.

Results. The evaluation process for retaining or excluding staff survey scales involved assessing conceptual alignment with the SRT themes, internal consistency reliability (Cronbach's $\alpha \geq 0.70$ for both agency representatives and staff), convergent validity (correlation with SRT themes $\geq .40$ and $< .80$), and comparative relevance via effect sizes (Cohen's $d \geq .30$ when correlations exceeded 0.79).

A total of 20 staff survey scales were evaluated. Ten scales were excluded due to reasons such as lacking conceptual alignment with any SRT theme (i.e., Personal Capacity Building, Agency Capacity Building, Skilled Leadership, Contributions, Benefits, Team Environment and Interactions, Collaboration in Self-Interest, Legitimacy), poor internal consistency indicated by unacceptable Cronbach's α values for one or both respondent groups (e.g., Decision-Making, Feel Valued), and/or insufficient convergent validity with correlations below the 0.40 threshold (e.g., Feel Valued).

The remaining ten scales[6] met the criteria for retention (in the order they appear in the survey):

1. Opportunities for Participation (4 items),
2. Procedural Requirements (7 items),
3. Engagement in Quality Improvement (8 items),
4. Involve Clients in Dissemination - How Often (4 items),
5. Involve Clients in Dissemination - How Well (4 items),
6. Leadership (11 items),
7. Shared Stakes (3 items),
8. Sufficient Resources (2 items),
9. Relationships (2 items), and
10. Membership (2 items).

These scales demonstrated satisfactory internal consistency reliability (Cronbach's $\alpha \geq 0.70$) for both agency representatives and staff, except for Engagement in Quality Improvement where the staff α was questionable but viewed as acceptable due to its alignment with multiple SRT themes. The retained scales also had correlations within the acceptable range of 0.40 to 0.80 with corresponding SRT themes, and, in cases where correlations exceeded 0.80, an effect size of at least small to moderate or multiple conceptual correspondences with SRT themes, justifying retention to capture diverse perspectives.

[6] Abbreviated; see Appendix D for original names.

Several scales aligned with multiple SRT themes, which heightened their value for informing SRT ratings. These included Engagement in Quality Improvement, Involve Clients in Dissemination - How Often and How Well, Leadership, and Relationships.

Interestingly, the agency representatives provided consistently lower ratings of client engagement in quality improvement efforts compared to the staff ratings (as indicated by negative Cohen's *d* values). These lower ratings may reflect agency representatives' deeper familiarity with quality improvement initiatives that emphasize client involvement, such as those promoted by the Ryan White Program. With this context, agency representatives likely hold higher expectations for optimal client engagement practices against which they critically evaluate their organizations.

Table 9. Psychometric Properties and Final Decision for CIQIT Staff Scales.

Staff Survey Scale [a]	Number of SRT Theme Alignments	Agency Rep Cronbach's α	Staff Cronbach's α	Size of Correlation with SRT Theme(s)	Effect Size (*d*)	Effect Size Interpretation [c]	Cut/Keep
Leadership	4	0.93	0.946	.551**; .636**; .581**; .630**	-0.69	Moderate-Large	Keep
Engagement in quality improvement	4	0.82	0.685	.611**; .809**; .687**; .730**	-0.10	Small	Keep
Involve clients in dissemination - How often	3	0.91	0.91	.687**; .729**; .648**	-0.79	Moderate-Large	Keep
Involve clients in dissemination - How well	3	0.95	0.93	.746**; .736**; .583**	-0.47	Small-Moderate	Keep
Relationships	2	0.79	0.737	.490; .681*	-1.06	Large	Keep
Procedural requirements	1	0.94	0.92	0.623*	0.00	Small	Keep
Sufficient resources	1	0.7	0.723	0.453	-0.18	Small	Keep
Opportunities for participation	1	0.96	0.877	0.883**	-0.31	Small-Moderate	Keep
Shared stakes	1	0.86	0.613	0.763**	-0.85	Large	Keep
Membership	1	0.81	0.627	0.634*	-0.41	Small-Moderate	Keep
Decision-making	1	0.63	0.45	0.582	-0.14	Small	Cut
Feel valued	1	0.56	0.645	0.191	0.12	Small	Cut
Collaboration in self-interest	0	NA [b]	NA [b]	NA	-0.27	Small	Cut
Legitimacy	0	0.45	0.881	NA	0.15	Small	Cut
Personal capacity building	0	0.32	0.496	NA	-0.16	Small	Cut
Agency capacity building	0	0.67	0.419	NA	-0.13	Small	Cut
Skilled leadership	0	NA [b]	NA [b]	NA	-0.19	Small	Cut
Contributions	0	0.9	0.867	NA	-0.28	Small	Cut
Benefits	0	0.99	0.813	NA	-0.16	Small	Cut
Team environment and interactions	0	0.89	0.689	NA	-0.05	Small	Cut

*p<.05; ** p<.01.

[a] Scale names were adapted for CIQIT. For original scale names, see Appendix D.

[b] These scales were comprised of a single item; therefore, Cronbach's α could not be calculated.

[c] Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed., pp. 284-287). Hillsdale, NJ: Lawrence Erlbaum Associates.

Limitations. A significant limitation of this analysis was the inability to conduct correlations between agency representative scores and individual staff scores on the staff survey due to a low number of matched responses across these groups. Another was that separate group responses on the SRT could not be correlated because staff did not complete the SRT. These limitations prevented a deeper statistical exploration of the relationships between these scores and complicated the validation of the SRT using staff data.

Conclusion. This assessment process yielded a refined set of 10 staff survey scales, comprised of 47 items, demonstrating conceptual relevance, internal consistency, convergent validity, and the ability to provide unique perspectives complementary to the SRT. By retaining scales that align with SRT themes while capturing staff viewpoints distinct from agency representatives, the staff survey can enrich assessments by integrating diverse organizational standpoints. This approach to scale revision ensures that the resulting staff survey is a valuable tool for informing SRT ratings.

Some next steps include:

- Item Analysis and Scale Refinement: As larger staff survey samples become available, perform detailed item analysis and additional psychometric evaluation. This will allow for further refinement of scales, potential item trimming or additions, and continued optimization of the survey's measurement properties.
- Matched Agency-Level Analysis: When sufficient matched data between agency representatives and staff from the same agencies are obtained, conduct agency-level analyses to explore within-agency variations and discrepancies. This could inform adjustments to specific survey items or scales to better capture distinct perspectives within organizations.

Need for Tailoring of Instruments

Objective. Assess the applicability of specific domains and scales to identify whether items are relevant to agencies operating in administrative or clinical capacities, to ensure the surveys accurately reflect agency functions and avoid irrelevant data collection.

Background. The feedback received from pilot participants who were members of agencies serving administrative or other non-direct care functions (i.e., those that received and distributed federal funding to clinics providing direct services, conducting research, or providing training and technical assistance) raised questions about the relevance of certain items describing staff's direct engagement of clients in quality improvement. The items particularly impacted by an agency's administrative status included those asking about direct engagement of clients by general staff (Domain 3: Quality Improvement Efforts) and three scales on the staff survey that dealt more with direct client engagement. Consequently, "Not applicable" (NA) options were included on all SRT items and the three staff scales to assess whether agencies in administrative functions or roles responded more frequently with NA to specific types of items.

Results. None of the 41 participating agencies, irrespective of their function—be it administrative or direct service—frequently selected NA across all five domains. This suggested that the activities described in the SRT apply to most funded agencies. The distribution of NA selections per agency ranged from a minimum of 1 to a maximum of 6, with a mean and median of 2.96 and 3, respectively, with the most common value being 3.

However, as shown in Table 10, while administrative agencies did not select "Not applicable" more frequently on any one item, the sum of NA selections across items that received at least five NA selections was greater among administrative agencies than among other agencies. This pattern indicated that while certain activities captured in the SRT were applicable across the board, administrative roles might find fewer activities directly relevant, or engage with them differently. In total, administrative agencies marked "Not applicable" 38 times across all such items, compared to 24 times by agencies providing direct HIV services and care, 15 times by agencies conducting HIV-related research or policy development, and 15 times by agencies classified under "Other."

Table 10. Frequency of NA Responses by Agency Role across SRT Items with NA Frequencies of Five or Greater

Domain	Item	Provides direct HIV/AIDS services and care	Funding, oversight, or coordinating services	Conducting HIV-related research or policy development	Other
Leadership	9. Provide resources such as training and compensation for clients to engage in QI	4	3	1	1
	10. Support client participation in QI learning opportunities	1	2	1	1
	11. Give clients authority to lead QI efforts	2	2	1	1
	12. Celebrate client contributions in QI recognition events	3	3	1	1
	13. Appropriately recognize clients for their contributions to QI efforts	3	2	1	1
Quality Management Committee	9. Provides clients with meeting summaries	1	3	1	1
Quality Improvement Efforts	6. Clarify the roles and responsibilities that clients have as QI project members	1	2	1	1
	9. Participate in opportunities to celebrate QI collaborations between clients and providers	1	2	1	1
Quality Management Plan	3. Demonstrates how the diverse perspectives of clients are represented	1	2	1	1
	4. Details strategies of clients to be engaged in QI efforts	1	3	1	1
	5. Outlines a process for updating the QM plan based on client feedback and input	2	3	1	1
	6. Defines specific goals and objectives for client involvement in QI activities	1	3	1	1
	7. Identifies resources for clients to engage in QI	1	2	1	1
	8. Describes client participation in QI learning opportunities	1	3	1	1
	9. Articulates approaches to share QI decision-making with clients	1	3	1	1
	Sum	24	38	15	15

Note. QI = quality improvement In the Performance Measurement Domain, no item recorded a frequency of NA selections reaching or exceeding five occurrences. Although there four types of agency roles, the total NA selections at the item level could exceed four because agencies could select more than one agency role.

Staff responses (i.e., not agency representative responses) on the three staff scales expected to show higher frequencies of NA selections[7] showed a low frequency of NA selections (with a maximum of 1, 5, and 0 NA selections across the three scales' items). However, infrequent NA selections could be because only two of 42 staff respondents that completed this section of the survey indicated that their agency primarily served in an administrative capacity. This limited representation of administrative role perspectives could potentially skew perceptions about the applicability of direct client engagement activities.

Limitations. The findings are limited by an underrepresentation of agencies with primarily administrative roles, particularly among staff respondents on the staff survey scales, potentially skewing perceptions of the applicability of client engagement activities in such settings.

Conclusion. The findings of this analysis suggest that the activities described in the SRT are widely applicable to most funded agencies, with a notable absence of frequent NA selections across agency roles. However, the higher sum of NA responses among administrative agencies on items for which NA was selected by at least five agencies[8] suggests administrative agencies may view some client engagement activities as less relevant to them compared to agencies in direct clinical care. The lack of representation of individuals working for primarily administrative agencies on the staff survey limits interpretation of the low NA frequencies on staff scales. For now, NA options should remain on relevant items.

Moving forward, next steps should consider continuing to monitor NA frequencies and comparing their use across different agency functions. Future data collection efforts should aim for a larger sample of more balanced representation of agency roles to enhance the generalizability of results.

General Staff Survey and Client Survey

Due to design and implementation constraints, several limitations affected the ability to perform convergent validity analyses with the survey for general staff (i.e., a newly created set of items on the staff survey designed for staff not focused on quality improvement, such as service providers) and the client survey.

Convergent validity analyses were not possible because, by design, the validated surveys for committee members and the general staff survey were completed by different people within each agency. Similarly, clients were not asked to complete both the client survey and the validated surveys, as the latter were not relevant to them.

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[7] The scales, including the Engagement in Community Health Centers from the Engaging Patients as Partners in Practice Improvement instrument, Involve All Partners in the Dissemination Process from the Community Engagement and Participation in Research (PECaD) Survey, and the Partnership Leadership Scale from the Partnership Self-Assessment Tool, were intended for members of the Quality Management Committee.

[8] Agencies could be counted more than once if they selected more than one role.

Additionally, the completion of both the SRT and the general staff and client surveys by the same person was almost non-existent, also by design. While considerations were given to asking staff to complete multiple surveys to allow for convergent validity analyses and assessment of the conceptual correspondence between general staff and client surveys with the SRT, reducing staff burden and simulating the intended use of these tools were prioritized.

Future validation work is needed and should establish hypothesized relationships between the validated surveys and the new general staff/client surveys to permit convergent validity analyses. Additionally, selecting agency staff members whose perspectives could be applicable to multiple sets of surveys (e.g., Consumer Advisory Committee members could complete both the client survey and the SRT; general staff who are not on a committee but have an interest in quality improvement could complete both the SRT and the general staff survey) will be crucial for these analyses. However, such analyses should only happen after the SRT has undergone further convergent validity and confirmatory factor analyses to validate its measurement of key concepts and its theoretical structure. Detailed results can be found in Appendix E.

Summary of Results and Revisions

The validation study aimed to assess the reliability and validity of tools from the CIQIT across diverse Ryan White HIV/AIDS Program-funded agencies. Key findings include:

- **SRT Dimensions:** Analysis confirmed that combining quality and frequency dimensions into a single scale would increase clarity and interpretability.
- **SRT Internal Consistency:** Cronbach's α values for each domain and theme indicated good to excellent internal consistency, supporting the current organizational structure of the rating tool.
- **Staff Survey Revisions:** Ten staff survey scales were retained based on their conceptual alignment with the SRT, internal consistency, and unique contribution to the assessment process. Scales that did not meet these criteria were excluded to enhance the survey's efficiency and relevance.
- **SRT Convergent Validity:** The themes Input & Feedback, Support and Participation on a Quality Improvement Project, and Performance Data met all specified convergent validity criteria, confirming their alignment with corresponding staff survey scales. Convergent validity indicated that the tool effectively measures key concepts in client involvement in quality improvement, as evidenced by its correlation with established instruments that reliably measure those concepts. Other themes require further refinement to enhance specificity and operational focus, but more data are needed before permanent changes are made.
- **Applicability Across Agency Types:** The study revealed that the activities outlined in the SRT are broadly applicable to a wide range of funded agencies.

Administrative agencies marked fewer items as NA than expected, indicating a broader relevance of the SRT. However, it's important to note that the sample size was relatively small, and administrative agencies did select a slightly higher number of NA items compared to direct service agencies. While the findings suggest a broad relevance of the SRT, further examination with a larger sample size is warranted to determine whether tailored items specifically for agencies with primarily administrative roles are necessary.

- **General Staff Survey and Client Survey:** Due to the limited matched surveys at the agency level, correlational and convergent validity analyses could not be conducted with these surveys. Detailed results are in Appendix E.

Conclusions

The CIQIT represents a significant advancement in measuring and promoting client engagement in quality improvement activities at the agency level. Developed through a collaborative effort involving multiple stakeholders, the toolkit has undergone rigorous pilot and validation studies to ensure its relevance, reliability, and effectiveness.

Key Achievements

1. **Comprehensive Toolkit:** The CIQIT includes the SRT and optional enhancement tools including staff and client surveys and document review instruments, all hosted on Microsoft Forms for ease of use.
2. **Promising Reliability and Validity:** Validation analyses confirmed the toolkit's internal consistency, indicating high reliability. Although comprehensive convergent validity was not fully achieved, specific themes—including those involving client engagement in feedback mechanisms, quality improvement projects, and performance data usage—demonstrated strong convergent validity.
3. **Broad Applicability:** Preliminary findings suggest that the toolkit is applicable to a wide range of funded agencies, including those with administrative roles. However, higher NA selections among administrative agencies and the small sample size indicate that further evaluation is needed to fully confirm its utility across different organizational contexts.
4. **User-Friendly Manual:** The toolkit also includes a manual that provides clear, step-by-step guidance for data collection, interpretation, and action planning, making it accessible for agencies with varying levels of experience in quality improvement.

Future Directions

1. **Ongoing Refinement:** Continued data collection and analysis will further refine the toolkit, particularly for SRT themes requiring enhanced specificity, the general staff and client surveys, and the document review tool.
2. **Dissemination and Training:** Efforts will focus on disseminating the toolkit via peer-reviewed publication and academic and professional conferences, providing training sessions, and developing web resources to support its implementation.
3. **Broader Application:** Plans to generalize the toolkit beyond the HIV care sector will be pursued, aiming to extend its benefits to other areas of healthcare.

In conclusion, the CIQIT is a robust tool that shows promise in empowering Ryan White HIV/AIDS Program-funded funded agencies to systematically assess and improve client involvement in their quality improvement processes. Its comprehensive nature, combined with user-friendly resources, enables agencies to enhance client engagement in quality improvement efforts, ultimately improving the quality of care provided to individuals living with HIV.
Further data collection and analysis will continue to refine and validate its effectiveness.

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Appendices

Appendix A: CIQIT Tools

Appendix B: Overview of Ryan White Funding Program and Agency Roles

Ryan White Funding Program: Recipient and Subrecipient Status

Recipients:
Recipients are organizations that receive direct funding from the Health Resources and Services Administration (HRSA) to administer Ryan White HIV/AIDS Program services. These organizations are typically state or local health departments, nonprofit organizations, or healthcare facilities that oversee the allocation of funds, program implementation, and monitoring of services provided to individuals living with HIV.

Subrecipients:
Subrecipients are organizations that receive funding indirectly through recipients. These entities often include community-based organizations, clinics, and hospitals that provide direct services to clients. Subrecipients work under the guidance and oversight of the primary recipients to ensure the delivery of comprehensive care and support services.

Function/Role:
Agencies within the Ryan White HIV/AIDS Program can be characterized by their primary function or role. Some agencies are **direct service providers**, offering medical care, support services, and case management directly to individuals living with HIV. Other agencies focus on **administrative support and funding**, managing the distribution of funds, overseeing program implementation, and providing technical assistance to ensure the effective delivery of services. This distinction is key for understanding the different contributions and responsibilities of agencies within the program.

Ryan White Funding Parts:

Part A:
Provides funding to Eligible Metropolitan Areas (EMAs) and Transitional Grant Areas (TGAs) that are most severely affected by the HIV/AIDS epidemic. Funds are used to deliver medical and support services to low-income individuals living with HIV.

Part B:
Funds states and territories to improve the quality, availability, and organization of HIV/AIDS healthcare and support services. This part includes the AIDS Drug Assistance Program (ADAP), which provides medications to low-income individuals with HIV.

Part C:
Supports local community-based clinics and healthcare organizations in delivering

comprehensive primary healthcare and support services to individuals living with HIV, particularly in underserved areas.

Part D:
Focuses on providing family-centered care involving outpatient or ambulatory family-centered primary medical care for women, infants, children, and youth with HIV/AIDS.

Part F:
Includes several components:

- **Special Projects of National Significance (SPNS):** Supports the development of innovative models of care and provides grants for demonstration projects.
- **AIDS Education and Training Centers (AETC):** Provides education and training for healthcare providers treating individuals with HIV.
- **Dental Reimbursement Program:** Offers funds to support oral healthcare services for individuals living with HIV/AIDS.

These funding Parts work in tandem to ensure a comprehensive, coordinated approach to HIV/AIDS care across different populations and geographic regions.

Appendix C: Mapping Hypothesized Relationships and Convergent Validity Analysis

This appendix section provides a series of tables mapping the hypothesized relationships between scales from the staff survey and the various domains of the Standard Rating Tool (SRT). The tables display correlation matrices crosswalking each staff survey scale against the themes within a given SRT domain.

Cells highlighted in bright yellow represent the hypothesized relationships established for analyses aimed at reducing the number of staff scales to improve its efficiency; these conceptual correspondences between scales and SRT themes were also those developed for the SRT rating process, whereby staff scale averages would be used to inform ratings on conceptually aligned themes.

Cells highlighted in a dimmer, paler yellow represent the additional hypothesized relationships established for convergent validity analyses; the staff survey scale and SRT domain theme were judged to have enough conceptual overlap to form a hypothesis about potentially stronger alignment compared to other scales, but not definitive enough alignment to prescribe interpreting those results together for rating the SRT.

Green correlations indicate statistically significant hypothesized correlations, while red correlations indicate non-significant ones.

The Administrative Support Survey and the Client Services Survey of the General Staff Survey, and the Client Survey are not depicted in the correlation matrices due to having too few responses to calculate their correlations with the hypothesized SRT themes. However, conceptual correspondence with SRT themes was established for SRT rating purposes. All items from the Administrative Support Survey align with the Decision-Making theme from the SRT Leadership Domain. Additionally, all items from the Client Services Survey align with the Input & Feedback, Support and Participation on a QI Project, and Recognition & Empowerment themes from the SRT's Quality Improvement Efforts Domain. In the Client Survey, all items align with the Communication (Leadership Domain) and Input & Feedback (Quality Management Committee Domain) themes, with the first four items also aligning with the Decision-Making (Leadership Domain) theme.

Table C1. Crosswalk & correlation matrix between staff scales and SRT Leadership Domain

Staff Survey Scale	N	Communication	Decision Making	Training & Learning	Culture & Recognition
Decision-making	11-14	.638*	0.582†	0.44	0.273
Opportunities for participation	12-15	.642*	.883**	0.378	0.43
Personal capacity building	9-11	0.345	.801**	0.468	0.414
Contributions	12-15	.668*	.779**	0.488	0.496
Benefits	12-15	0.492	.760**	0.244	0.226
Team environment and interactions	12-15	0.446	.801**	0.3	0.349
Feel valued	12-15	0.185	.689*	0.124	0.191
Procedural requirements	12-15	.575*	.815**	0.371	0.333
Engagement in quality improvement	25-27	.611**	.738**	.619**	.672**
Involve clients in dissemination - How often	24-26	.672**	.657**	.595**	.693**
Involve clients in dissemination - How well	23-25	.627**	.670**	.594**	.715**
Leadership	30-31	.551**	.636**	.581**	.630**
Shared stakes	10-12	0.516	.736*	.624*	0.588
Sufficient resources	10-12	0.591	0.453	0.557	0.523
Relationships	10-12	0.464	0.508	0.55	0.559
Membership	10-12	0.507	0.419	0.214	0.43
Legitimacy	10-12	-0.401	-0.259	-0.162	-0.125

Note. †$p<.10$; *$p<.05$; ** $p<.01$.

Table C2. Crosswalk & correlation matrix between staff scales and SRT Quality Management Committee Domain

Staff Survey Scale	N	Committee Involvement	Communication & Transparency
Decision-making	12	0.369	0.361
Opportunities for participation	13	.791**	.686**
Personal capacity building	11	0.59	.637*
Contributions	13	.768**	.724**
Benefits	13	.687**	.691**
Team environment and interactions	13	.784**	.655*
Feel valued	13	0.494	0.383
Procedural requirements	13	.768**	.686*
Engagement in quality improvement	27	**.809****	**.687****
Involve clients in dissemination - How often	26	.797**	.624**
Involve clients in dissemination - How well	25	.739**	.680**
Leadership	31	.583**	.403*
Shared stakes	11	**.763****	.829**
Sufficient resources	11	0.155	0.237
Relationships	11	0.576	**0.49**
Membership	11	**.634***	0.427
Legitimacy	11	-0.014	-0.061

Note. *p<.05; ** p<.01.

Table C3. Crosswalk & correlation matrix between staff scales and SRT Quality Improvement Efforts Domain

Staff Survey Scale	N	Input & Feedback	Support and Participation on a QI Project	Recognition & Empowerment
Decision-making	12-13	0.195	0.296	0.46
Opportunities for participation	13-14	.785**	.707**	.772**
Personal capacity building	11	0.443	0.444	**0.58**
Contributions	13-14	.616*	.593*	**.731****
Benefits	13-14	.603*	.576*	**.703****
Team environment and interactions	13-14	.587*	.604*	**.664****
Feel valued	13-14	0.431	0.367	0.35
Procedural requirements	13-14	.602*	**.623***	.743**
Engagement in quality improvement	27-28	**.730****	.748**	.747**
Involve clients in dissemination - How often	26-27	.554**	.641**	.739**
Involve clients in dissemination - How well	25-26	.586**	.696**	.742**
Leadership	31-32	.560**	.695**	.626**
Shared stakes	11	0.433	0.554	.694*
Sufficient resources	11	0.543	0.503	0.269
Relationships	11	.610*	**.681***	.638*
Membership	11	0.429	0.509	0.447
Legitimacy	11	-0.398	-0.135	-0.232

Note. *p<.05; ** p<.01.

Table C4. Crosswalk & correlation matrix between staff scales and SRT Performance Measurement Domain

Staff Survey Scale	N	Performance Measures	Performance Data	Monitoring and Learning
Decision-making	11-13	0.311	0.393	0.165
Opportunities for participation	12-14	.870**	.713**	.850**
Personal capacity building	11	.665*	0.597	.711*
Contributions	12-14	.763**	.658*	.735**
Benefits	12-14	.773**	.591*	.839**
Team environment and interactions	12-14	.729**	.694*	.825**
Feel valued	12-14	.586*	.579*	.636*
Procedural requirements	12-14	.809**	.717**	.880**
Engagement in quality improvement	27-28	.764**	.598*	.714**
Involve clients in dissemination - How often	27	**.687****	**.729****	**.648****
Involve clients in dissemination - How well	26	**.746****	**.736****	**.583****
Leadership	31-33	.598**	.566**	.610**
Shared stakes	10-12	.740**	.752*	0.39
Sufficient resources	10-12	0.159	0.333	-0.46
Relationships	10-12	0.516	.887**	0.317
Membership	10-12	0.386	0.49	0.414
Legitimacy	10-12	0.014	0.04	0.569

Note. *p<.05; ** p<.01.

Table C5. Correlation matrix between staff scales and SRT Quality Management Plan Domain

The Quality Management Plan domain was not hypothesized to have any clear conceptual connection with the staff survey scales, but the correlation matrix is displayed to show the empirical relationships identified.

Staff Survey Scale	N	Engagement Strategies	Roles & Communication
Decision-making	10-11	.654*	0.47
Opportunities for participation	10-11	.911**	.768**
Personal capacity building	11	.779**	.653**
Contributions	10-11	.901**	.738**
Benefits	10-11	.851**	.678*
Team environment and interactions	10-11	.936**	.804**
Feel valued	13	0.788	.611*
Procedural requirements	10-11	.952**	.814**
Engagement in quality improvement	10-11	.763**	.705**
Involve clients in dissemination - How often	10-11	.649**	.682**
Involve clients in dissemination - How well	10-11	.707**	.714**
Leadership	10-11	.719**	.666**
Shared stakes	10-11	.683*	.771**
Sufficient resources	10-11	-0.056	0.169
Relationships	10-11	0.399	.716*
Membership	10-11	0.545	.633*
Legitimacy	10-11	0.332	0.225

Note. *p<.05; ** p<.01.

Appendix D: Mapping of Original Staff Survey Scale Names to CIQIT Scale Names

The staff survey was comprised of scales adapted from existing instruments. This appendix displays the original scale names from those instruments in the second column. The third column provides the abbreviated names adopted used throughout the report. Some original scales were excluded from the CIQIT during the validation process - these are indicated with "Excluded" in the third column.

The respondent groups for each scale are noted in the first column to provide context on which members completed each set of items.

Table D1: Original Staff Survey Scale Names and CIQIT Scale Names

Respondent Group	Original Name	Abbreviation (CIQIT Name)
Consumer Advisory Committee/Board members	Decision-making	Excluded
	Opportunities for participation	Opportunities for participation
	Personal capacity building	Excluded
	Agency capacity building	Excluded
	Skilled leadership	Excluded
	Contributions	Excluded
	Benefits	Excluded
	Team environment and interactions	Excluded
	Feel valued	Excluded
	Procedural requirements	Procedural requirements
Quality Management Committee members	Engagement in community health centers	Engagement in quality improvement
	Involve all partners in dissemination process – Frequency	Involve clients in dissemination - how often
	Involve partners in dissemination process – Quality	Involve clients in dissemination - how well
Members of both committees	Partnership Leadership	Leadership
Members of both committees working on a project together	Members share a stake in both process and outcome	Shared Stakes
	Sufficient funds, staff, materials, and time	Sufficient resources
	Established informal relationships and communication links	Relationships
	Appropriate cross section of members	Membership
	Members see collaboration as in their self-interest	Collaboration in self-interest (Excluded)
	Collaborative group seen as a legitimate leader in the community	Legitimacy (Excluded)

Appendix E: Descriptive Statistics for Responses on General Staff and Client Surveys

Note, responses were too few on other general staff surveys/perspectives to present data: Staff responses on the Administrative Support Survey (N=2); Agency Representative Responses on the Client Services Survey (N=1) and Administrative Support Survey (N=3).

Table E1. Descriptive Statistics for Client Services Section of the Staff Survey for General Staff (N=40)

Item	N	# Missing	Min	Max	Mean	S.D.
1. Have you ever asked a client in your agency to provide feedback or suggestions about the services provided?	40	0	0	1	0.67	0.47
2. If yes, how would you rate your responsiveness to the feedback or suggestions provided by clients?	27 (eligible = 27)	0	2	4	3.41	0.64
3. Do you feel that, in general, the feedback or suggestions provided by clients have been used to improve the quality of care and services?	39	1	1	4	3.21	0.89
4. How comfortable do you feel encouraging clients to share their opinions or concerns about the agency?	40	0	1	5	4.10	1.03
5. If a client had concerns about a policy or procedure, do you believe that addressing those concerns with someone at the agency would lead to potential changes?	39	1	1	3	2.51	0.68
6. Have you ever invited a client to participate in any activities or projects aimed at improving the quality of care and services?	40	0	0	1	0.63	0.49
7. If yes, how would you rate the client's level of involvement in those activities or projects?	25 (eligible = 25)	0	1	3	1.84	0.55
8. How important do you feel it is for clients to be actively engaged in improving the quality of care and services?	40	0	2	5	4.43	0.78

Coding for response options:

Item 1: 0 = No, 1 = Yes

Item 2: 1 = Not at all responsive, 2 = Not very responsive, 3 = Somewhat responsive, 4 = Very responsive

Item 3: 1 = No, not really, 2 = Not sure, 3 = Yes, to some extent, 4 = Yes, definitely

Item 4: 1 = Very uncomfortable, 2 = Uncomfortable, 3 = Neutral, 4 = Comfortable, 5 = Very comfortable

Item 5: 1 = No, I don't think their concerns would be considered or lead to changes, 2 = Yes, but I'm not sure if changes would actually happen, 3 = Yes, I believe their concerns would be taken seriously and changes might occur

Item 6: 0 = No, 1 = Yes

Item 7: 1 = Minimally involved, 2 = Moderately involved, 3 = Actively involved

Item 8: 1 = Not important at all, 2 = Not very important, 3 = Neutral, 4 = Important, 5 = Very important

Table E2. Descriptive Statistics for Client Survey (N=228)

Item	N	# Missing	Min	Max	Mean	S.D.
1. Have you ever been asked by the agency to provide feedback or suggestions about the services you receive?	225	40	0	1	0.48	0.50
2. If yes to #2, how would you rate the agency's responsiveness to your feedback or suggestions?	106 (eligible = 109)	3	1	4	3.51	0.81
3. If yes to #2, do you feel that your feedback or suggestions have been used to improve the quality of care and services?	105 (eligible = 109)	4	1	4	3.12	0.94
4. How comfortable do you feel sharing your opinions or concerns about the agency?	217	48	1	5	4.14	1.04
5. If you had concerns about a policy or procedure, do you believe that raising those concerns with someone at the agency would lead to potential changes?	202	63	1	3	2.43	0.71
6. Have you ever been invited to participate in any activities or projects aimed at improving the quality of care and services?	214	51	0	1	0.39	0.49
7. If yes, how would you rate your level of involvement in those activities or projects?	82 (eligible = 83)	1	1	3	1.98	0.79
8. How important do you feel it is for clients to be actively engaged in improving the quality of care and services?	214	51	2	5	4.58	0.62

Coding for response options:

Item 1: 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, 5 = Very satisfied

Item 2: 0 = No, 1 = Yes

Item 3: 1 = Not at all, 2 = Not very, 3 = Somewhat, 4 = Very

Item 4: 1 = No, 2 = Not sure, 3 = Somewhat, 4 = Yes

Item 5: 1 = Very uncomfortable, 2 = Uncomfortable, 3 = Neutral, 4 = Comfortable, 5 = Very comfortable

Item 6: 1 = No, 2 = Unsure, 3 = Yes

Item 7: 0 = No, 1 = Yes

Item 8: 1 = Minimal, 2 = Moderate, 3 = Significant

Item 9: 1 = Not important, 2 = Not very, 3 = Neutral, 4 = Important, 5 = Very important