

# Exploring Service Quality Gaps in a Neighborhood Health Action Center:

**An Analysis of Employees' Expectations and Perceptions within a U.S. Major Metropolitan Public Health Agency**



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## Executive Summary

This SERVQUAL study aims to identify areas for improvement and measure the service quality gaps perceived by the employees at a Neighborhood Health Action Center (“Center”) as part of a major metropolitan public health agency (“Agency”). The study used a Likert survey questionnaire to measure the expectations and perceptions of the Center’s employees in terms of five dimensions of service quality: Reliability, Responsiveness, Assurance, Empathy, and Tangibility.

The results of the study revealed gaps between the Center’s employees’ and supervisors’ expectations and perceptions of the SERVQUAL dimensions. Supervisors and non-supervisors have different expectations and perceptions of service quality. Additionally, employees who have worked remotely for the last two years and those who have not share varied expectations and perceptions of service quality.

Based on these findings, the capstone study recommends that the Neighborhood Health Action Center continue to promote service quality and commitment to investing in the SERVQUAL dimension of Tangibility. It recommends that the Center strive for greater alignment on the service quality expectations in Assurance and seek for alignment on the service quality perceptions in Responsiveness between supervisors and non-supervisors. In addition, the study recommends that the Center identify the root causes for supervisors’ perceived service quality gap in Reliability, as well as for the differences in service quality expectations and perceptions between employees who have worked remotely for the past two years and those who have not.



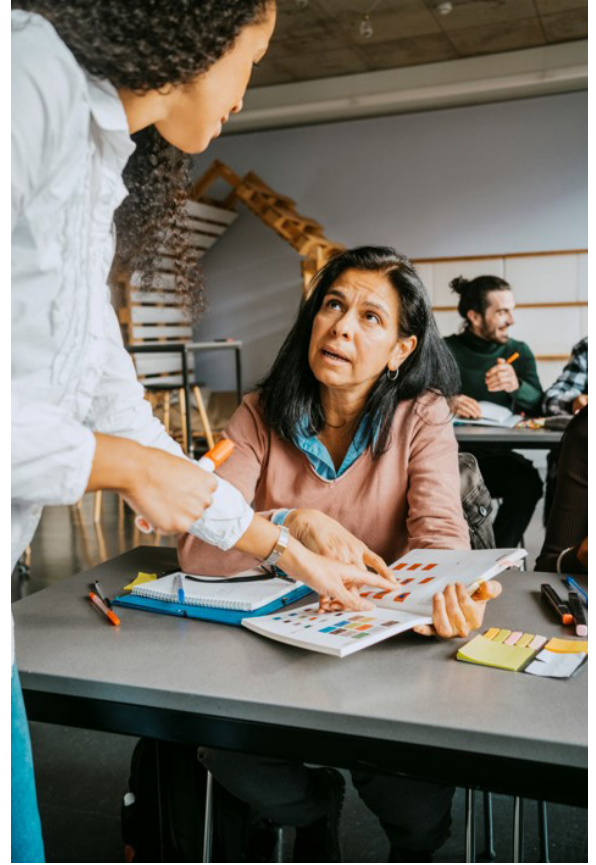


# Introduction

**T**hough the major metropolitan city is one of the most populated cities in the U.S., it is also the most segregated metro region in the U.S., according to the University of California, Berkeley's Othering & Belonging Institute (2022). The Agency operates as one of the world's largest local public health agencies providing preventive health, local health-related licenses and inspections, and surveillance needs to a diverse population. The organization is part of the metropolitan city's government and owns responsibilities for disease control, environmental health, mental hygiene, vital statistics, and epidemiology while also acting in capacities of emergency preparedness and health equity for the people of the City.

The mission of the Agency is protecting and promoting the health of all city residents and its community members. As of 2022, the Agency has at least 77 public-facing customer service programs, such as birth and death certificate ordering, vaccine records ordering, childcare programs, food establishment inspections, and pet licenses. Servicing more than eight million city residents, the Agency plays a critical role in providing public health services. Due to the impact of the COVID-19 pandemic, the total service volume based on the number of completed service requests increased drastically by 44.05% in 2020 and 51.21% in 2021. Additionally, a growing number of public health organizations and the consumer desire for enhanced service quality have contributed to increasing competitiveness and strategic business orientation in the industry.

In order to keep up with the increasing demand for services, the Agency is continuously striving to improve its customer service and grow its service delivery capabilities. In 2022, the organization announced a new set of standards designed to identify customer service principles of respect, trust, empathy, and accountability. The Agency recognizes that providing quality services is essential to fostering community members' loyalty and satisfaction as its "customers." This capstone study aims to guide the Agency in the development of improvement strategies by gathering and assessing additional data on customer satisfaction and service quality.

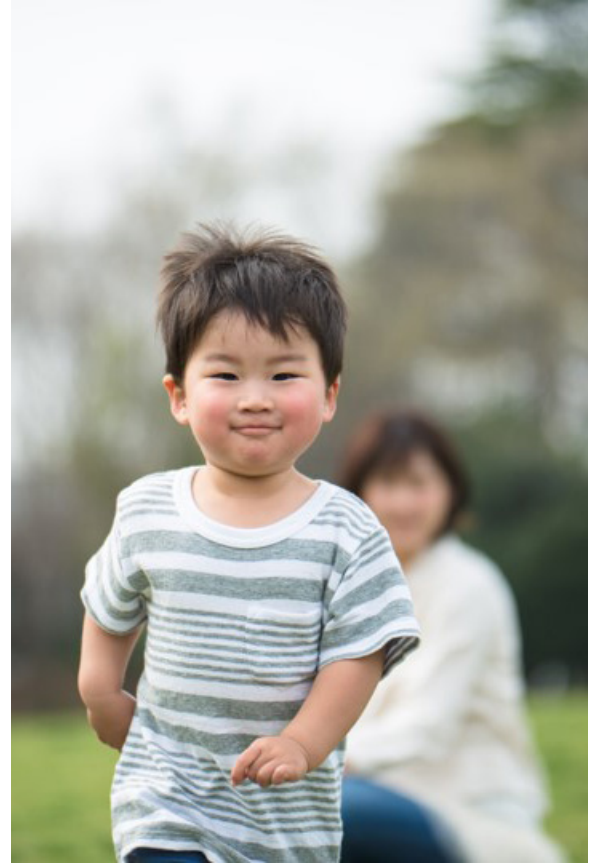


## Organizational Context

The capstone study focuses on the Neighborhood Health Action Center as part of the major metropolitan public health agency. In 2016-2017, the Agency's Center for Health Equity launched Neighborhood Health Action Centers, which use a co-location-based approach to reducing health disparities. According to Dannefer et al. (2020), the co-location-based approach represents a neighborhood strategy that provides multi-disciplinary community health programs and services, using a referral system to enhance collaboration among service providers. Overall, the co-location-based approach has since been recognized as an effective method of addressing inequitable access to community resources that shape health, such as housing quality, healthcare systems, the built environment, and social capital.

The Neighborhood Health Action Center, located in the north and east of the major metropolitan city, serves as a critical resource for health services within the community. It provides virtual, in-person, and hybrid services and activities. Families can access free fitness and wellness programs, as well as pregnancy services that include childbirth education, newborn care classes, parenting classes, infant massage, reproductive health workshops, and referrals. Additionally, free health supplies are available from the Center.

There are stark disparities in pregnancy- and infant-related mortality rates by race and ethnicity in the major metropolitan city, with Black and Hispanic women disproportionately affected. In 2018, Black women had a pregnancy-related mortality rate of 40.9 deaths, while Hispanic women had a pregnancy-related mortality rate of 22.5 deaths per 100,000 live births, both higher than the rate for White and Asian women (Agency, 2021). Similarly, the infant mortality rate for Black and Hispanic infants remained higher than White and Asian infants in 2020. Moreover, the premature birth rate for Black mothers was 13.1%, and the rate for Hispanic mothers was 10.0%. Again, both were higher than the rate for White and Asian women (Agency, 2021). To address the pervasive systemic racism and inequitable access to quality maternal and healthcare faced by marginalized communities, the Center has made pregnancy services a priority.



### Area of Inquiry

A component of public health entities is delivering services to the public in a meaningful way with efficient and effective end-to-end operations. This capstone study builds upon the Agency's customer service principles of Respect, Trust, Empathy, and Accountability and three focus areas of employees, operations, and technology. The primary question the capstone study aims to answer is, "What is the gap between employee expectations and the current perceptions of service quality at the Neighborhood Health Action Center, as part of the Public Health Agency?"

The capstone applies a service quality model called SERVQUAL developed by Parasuraman et al. (1985) within the public health and neighborhood health action center setting. The purpose of applying SERVQUAL is to seek recommendations for the continuous improvement of the service quality provided by the Agency's Neighborhood Health Action Centers. It is crucial to understand how employees form expectations and perceive the current service quality at the Center. While representing a diverse population, the Agency also employs a diverse workforce to operationalize services to the population at these neighborhood health action centers. The Neighborhood Health Action Center this study focuses on employs six unique job roles for its current operations: Community Health Worker, Coordinator, Director, Research and Evaluation, Health Police Officer, and Custodian (or Facilities Manager).





Respectively, the organization recently completed internal initiatives related to customer satisfaction as well as the expectations and perspectives of customer service in the context of an Neighborhood Health Action Center. However, an assumption exists in the broader conversation that customer service improvement through a service quality model in the context of public health is not a commonly researched topic. Therefore, an opportunity remains to explore the current literature where identifying service quality gaps effectively promotes customer satisfaction and community care in the governmental public health setting.

The Agency recognizes that all public-facing services must be supported by its employees, operations, and technology. Therefore, there may be potential to create a continuous improvement plan to address any discrepancies between its new customer service principles and the SERVQUAL results. The SERVQUAL analysis assists in determining gaps where improvement can be considered based on among the model's dimensions.

The Agency has existing evidence partially relevant to the capstone study, including customer survey data from 2015 and annual public reports provided to its City Hall, which embody the Agency's key customer service performance metrics. The metrics include rated customer experience, the number of completed requests for interpretation, the number of letters responded to within 14 days, the number of e-mails responded to within 14 days, and the number of calls answered within 30 seconds from 2022.

The stakeholders for the capstone study include but are not limited to, the Agency's Public Service Operations Team, Office of External Affairs, Strategic Operations & Performance Management Team, Audit Services Team, Division of Information Technology, and clinical teams in the Center. The capstone study team has collaborated with the Agency's data privacy team and Institutional Review Board (IRB) team to ensure all data use complies with the Health Insurance Portability and Accountability Act (HIPAA) standards.

An assumption in this capstone study is that by understanding the Center employee's expectations and perceptions of service quality, then we can derive improvement strategies to guide employees' needs to improve customer satisfaction. The Agency's Customer Service Excellence manual of 2011 is designed to guide the organization's institutional practices and is actively referenced. As a result, biases may exist in the Agency's current service quality, which may create systematic blind spots in the existing data.

## Literature Review

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SERVQUAL is a proven model that measures how well the service quality level delivered matches expectations. Parasuraman et al. (1985) proposed that the characteristics of



services contribute to service quality and defined the gap between customers' expectations and perceptions as service quality. Customers' expectations are their desires and needs, while their perceptions are how they evaluate the service they receive. Based on in-depth customer interviews, Parasuraman et al. developed the service quality model, SERVQUAL, with an instrument that measures service quality in five dimensions: Tangibility, Reliability, Responsiveness, Assurance, and Empathy (Table 1).

According to Parasuraman et al. (1985), Tangibility refers to the physical evidence of services, such as the facilities, tools or equipment, and the employees' appearance. Reliability refers to the consistency of performance and dependability, as well as making sure the service is done right the first time and promises are honored. Responsiveness refers to the readiness of employees to provide service, which includes timeliness in setting up appointments, resolving the customer's issues, or providing service. Assurance is the knowledge and courtesy of employees and their ability to create an atmosphere of trust and confidence. Empathy refers to providing caring and individual attention given to customers.

**TABLE 1**

Five Service Quality Dimensions (Parasaruman et al., 1988)

Dimension	Description
<b>Reliability</b>	Ability to perform the promised service dependably and accurately
<b>Assurance</b>	Knowledge and courtesy of employees and their ability to convey trust and confidence
<b>Tangibility</b>	Physical facilities, equipment, and employees' appearance
<b>Empathy</b>	Caring, individualized attention the firm provides its customer
<b>Responsiveness</b>	Willingness to help customers and to provide prompt service

Separate literature provides ample evidence about how each SERVQUAL dimension is relevant to the quality of care. For instance, Valentine et al. (2003) discuss responsiveness driven by influencing factors such as service choices and clarity of communication is more associated with the interpersonal dimensions of quality of care. Chang et al. (2013) used a cross-sectional design to discover that patients' assurance and trust positively impact their satisfaction and perception of service quality, especially for interpersonal-based healthcare services. Perramon et al. (2022) conducted an empirical study to identify the correlation between service quality and tangible environmental management practices, such as routine cleaning. Hojat et al. (2013) discussed how empathic responses to the patients' experience, pain, and concerns lead to improved patient outcomes, including care quality. Carroll and Rudolph (2006) examined organizational structures in healthcare to conclude that high-

reliability healthcare organizations are capable of operating with more independence and responsiveness in a changing environment. As a result, by encompassing Responsiveness, Assurance, Tangibility, Empathy, and Reliability, the SERVQUAL dimensions expect to support patient care and care quality.

Measuring service quality by way of SERVQUAL comes from a standard questionnaire with a Likert scale. The questionnaire provides statements regarding expectations and perceptions among the five service quality dimensions. Once a study collects data, it compares the responses for the perceptions of service delivery and the expectations of the service quality to derive the perceived gap of service quality. Parasuraman et al. (1988) states that, when expected service equates to perceived service, the perceived quality is acceptable. Lee and Yom (2007) explain that when the perception of service is higher than expectations, SERVQUAL considers this to be indicative of more-than-acceptable quality, but the opposite implies unacceptable quality.

SERVQUAL has been widely applied in research in various industries, such as healthcare, pharmaceuticals, retail, telecommunications, and hospitality. The literature indicates that SERVQUAL has been widely accepted (Bottle, 1996). Despite the fact that scholars continuously utilize and assess the SERVQUAL model, a study which reviewed various service quality models found that “none of the models are perfectly applicable in different cultural settings and different sectors” (Aggarwal & Jain, 2015). However, numerous benefits to using SERVQUAL remain (Cronin & Taylor, 1992; Syapsan, 2019). Souca (2011) believes SERVQUAL has shown its validity and reliability in measuring service quality and determining customer satisfaction. Many studies have also consistently revealed the gap between expectations and perceptions, with the former being higher than the latter (Duffy et al., 2001; Lim and Tang, 2000).

Studies in the healthcare field not only look at how satisfied or dissatisfied patients are with the services they are given compared to what they expected, but also investigate the expectations and perceptions of healthcare professionals regarding the quality of service. For instance, Duffy et al.'s (2001) comparison of the expectations of residents, family, and administrators in nursing homes revealed that residents had much lower expectations than families or administrators when it came to service quality. In this capstone study, we focus on the expectations and perceptions of the employees at the Center regarding service quality, knowing that the employees' expectations may be different than the community members.

## **Conceptual Framework**

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The Agency believes that if the organization succeeds in raising service standards with higher expectations and fulfilling those expectations with quality service, it will lead to greater

satisfaction for its community members. Furthermore, the satisfaction may lead to more returning community members, enabling it to serve an ever-growing population in the city.

Therefore, four initial fundamental concepts relevant to the capstone study's conceptual framework include customer service, service quality, customer satisfaction, and customer loyalty. According to Meyer and Gremler (2015), customer service is offered in support of the core purchased product for free. Service quality, defined by Lewis and Booms (1983), is a measure of how well the service delivered to customers is consistent with their expectations. Customer satisfaction, as described by (Guido, 2015), is the customer's psychological state post consumption of the product or service, representing the evaluation of the user experience. Customer loyalty represents a customer's deeply held commitment to a product or service, predicting that the customer will likely buy or patronize the same product or service consistently in the future.

Another core concept associated with this capstone study is that service quality brings organizations competitive advantages, including increased customer satisfaction, increased customer loyalty, cost-effective customer conversion, reduced employee turnover, and increased financial performance (Gounaris et al., 2003). Other studies indicate that the goal of measuring customer satisfaction is to increase customer loyalty (Sivadas & Baker-Prewitt, 2000). Public service organizations must deliver services that meet customer needs because competition in the field has been increasing (Purcarea et al., 2013; Cronin & Taylor, 1992).





The study also utilizes the adult developmental theory in the context of the Center employees learning the customer service standards developed by the Agency. Allen (2008) suggests that there are clinical implications of adult developmental theory as well as leadership opportunities provided within the context of the Agency's organizational learning. Specifically, the adult development theory contributes to the conceptual framework of the new customer service experience standards, offering insights into the context within the organization and translations of that understanding into the service quality efforts conducted at the center.

Meanwhile, the appreciative inquiry model focuses on identifying and building on the strengths for developing an organization (Cooperrider & Whitney, 2005). The SERVQUAL model aligns with the principles of appreciative inquiry by focusing on the Center's service quality expectations (e.g., what employees would like to see more of in the future) rather than negative complaints. Appreciative inquiry is an effective method for improving organizational performance, compared to the traditional problem-focused research methods that are limited in their ability to uncover the potential of organizations (Schall et al., 2004).

Improving service quality is an intricate endeavor. As the Agency defined, its customer service efforts involve a multitude of factors, such as employees, operations, and technology. Moreover, a myriad of external and internal elements such as changing customer expectations and internal resource limitations can affect service quality. The variability of services, which are typically individualized and delivered in real-time, makes service standardization difficult to achieve. The intangible nature of services also makes it difficult to objectively measure quality, as perceptions of quality can fluctuate from one employee to another. Furthermore, improving service quality necessitates coordination and collaboration across multiple departments and functions within an organization, which can be challenging to accomplish. Additionally, it may call for changes in organizational culture and employee behavior, which take time and effort to implement effectively, especially without a strategic approach. As this capstone study discusses emerging data trends and makes recommendations, our considerations are mainly derived from the following two additional leadership frameworks.

Bryk et al. (2013) outline the core principles of improvement science that are essential for successfully implementing improvement initiatives in organizations. These principles focus on setting measurable goals, conducting iterative cycles of inquiry, building a culture of continuous improvement, engaging all stakeholders, and using data to drive initiatives. These principles reflect the disciplined approach of improvement science for identifying opportunities and creating a supportive culture of continuous improvement. Continuous improvement in service quality at the Agency requires an ongoing process of identifying, analyzing, and addressing gaps using the SERVQUAL model. This systematic approach ensures the Agency's community members receive high-quality service that meets their needs.

Bolman and Deal (2017) introduced a four-frame leadership and organizational behavior model, which views organizations and leadership styles through the structural, human resource, political, and symbolic lenses. The structural lens focuses on the organization's formal structure, emphasizing efficiency, clarity, and control. The human resource lens emphasizes the importance of organizational members' needs and prioritizes collaboration, participation, and empowerment. The political lens concentrates on power, conflict, and competition, focusing on negotiations, coalitions, and influence. Lastly, the symbolic lens emphasizes the importance of culture and values that emphasize the organization's vision, inspiration, and storytelling. According to Bolman and Deal, effective leadership requires the ability to understand and employ all four lenses. They further emphasize the importance of adapting leadership styles to the context and challenges of the organization and encourage leaders to be flexible and adaptive in their approach. Taking action and developing improvement plans after identifying service quality gaps at the Agency is critical to ensure that the organization can close the gaps and reach its desired service quality.



## Project Question

This capstone study answers the primary question—“What is the gap between employee expectations and the current perceptions of service quality at the Neighborhood Health Action Center, as part of the Major Metropolitan Public Health Agency?”

The enabling objectives of the study also include:

- To compare all employees’ expectations and perceptions of service quality
- To compare the supervisors’ expectations and perceptions of service quality
- To compare the supervisors’ and non-supervisors’ expectations of service quality
- To compare the supervisors’ and non-supervisors’ perceptions of service quality

To compare expectations and perceptions of service quality between those who have worked in person for the last two years with those who have not





# Project Design

## Data Collection

To successfully answer the primary capstone study question, the study collected data on service quality expectations and perceptions using the SERVQUAL survey instrument with employees. This instrument embodies two sections: One to capture employee expectations and the other to capture employee perceptions (Appendix A).

This capstone study utilized the SurveyMonkey online platform to collect data with Likert-scale survey questions. First, the Center employees rated a list of service quality expectation statements for each of the five service quality dimensions. Then, they responded to the perception statements, and a gap score for each statement is be calculated (i.e., the perception score deducted from the expectation score). An average gap score for each dimension was then obtained by summing the gap scores for each statement in the dimension and dividing this sum by the number of statements. Finally, the average dimension SERVQUAL scores were transferred from the SERVQUAL survey instrument, and the scores were calculated based on the five enabling objectives of this study.

The purpose of including additional demographic questions is to identify any differences between supervisors and non-supervisors in terms of their expectations and perceptions of service quality. The demographic questions include job classification, in-person, and remote work experience. The job classification based on job title and the supervisory status is particularly important for recognizing the service structure within the Center and its impact on service quality delivery (Appendix A).

To promote voluntary survey participation and completion, the survey promoted psychological safety in a confidential and anonymous manner (Appendix B). All participants were given one week to complete the survey.

In order to analyze the quantitative survey data collected based on the SERVQUAL Likert-scale survey questions, the capstone study team exported the data from SurveyMonkey to Microsoft Excel format and organized the data by checking for missing values and outliers. Then, we calculated descriptive statistics, such as means and medians statistical software and calculated the reliability coefficient to ensure the internal consistency or reliability of the Likert-scale survey questions. Then, we calculated mean and standard deviation to describe the distribution of Likert-scale survey data to show a detailed picture of the data. T-tests were completed to calculate t-values for dimension questions, compare expectation and perception scores, and determine if significant differences exist in the responses among and between the different demographic groups.

### A Non-Weighted Approach

The Agency used the SERVQUAL model to measure service quality for the first time; therefore, this capstone study applied a non-weighted approach. This means all participant responses corresponding to their service quality dimensions were treated equally in the analysis, rather than different responses being given different weights or values based on their relative importance or the different dimensions or statements. This approach allows us to understand the overall pattern of the participant responses.

Participants' rating scores from the expectation and the perception sections contribute to an overall score for service quality. This overall score helps to identify areas where the Agency excels in terms of service quality, as well as areas that need improvement.

### Mean and Standard Deviation

Mean values support the identification of the central tendency of Likert-scale survey responses around a given expectation and perception. Standard deviation is particularly useful in the data analysis if the participant responses to the Likert-scale survey questions are not evenly distributed, as standard deviation shows how much the responses vary from the mean. Standard deviation determined the level of agreement or disagreement among those who complete the survey and the variation or consistency in their responses. Comparing the responses of different demographic groups may also indicate whether one participant group (e.g., a supervisor with direct reports) is more dispersed than those of another group (e.g., independent contributors who do not supervise any employees). Furthermore, the standard deviation may identify if the SERVQUAL survey instrument does not measure what it is intended to measure or if the employees inconsistently interpreted the questions.

### Reliability Coefficient

Cronbach's alpha ( $\alpha$ ) is a statistical measure of the internal consistency or reliability of a set of Likert-scale survey questions (Cronbach, 1951). It can assess the consistency of participant responses in quantitative studies to determine the overall reliability of the data collection instrument. To apply Cronbach's alpha in the capstone project, we entered the collected data and then calculate the alpha coefficient based on the number of questions in the questionnaire and responses to the Likert-scale survey questions. A higher alpha coefficient indicates that the responses are more consistent and reliable, while a lower alpha coefficient indicates that the responses are less consistent and reliable. We examined the survey's overall reliability and decided whether to include certain questions in the data analysis.

### T-tests

A paired t-test determines the difference between two data sets (e.g., the expectation and perception mean scores among the same participant group). Specifically, the t-test shows if there is a statistically significant difference between the data sets and serves as a test of variability and reliability. Identification of significant results is noted at  $p < 0.05$ . An unpaired t-test for unequal variance is used to determine if there is a significant difference between the means of two groups when the variances of the groups are not assumed to be equal. This test is used to compare the sample means of expectations or sample means of perceptions at  $p < 0.05$ .

### Additional Risk Mitigation

While Likert-scale survey questions can be useful for measuring opinions, they may not always capture the full range of responses that participants may have. According to Babbi (2017), a known risk is that the Likert-scale survey questions are designed to measure opinions on a specific topic while potentially missing other significant issues. Meanwhile, Bhattacharya (2017) also discussed that such questions may not capture all of the factors that influence these opinions. As a result, the results of the analysis based on the Likert-scale survey questions may be limited in scope and may not provide a complete picture of the participants' opinions. To mitigate the risk, we added open-field responses for participants to provide valuable insights and additional context responses if desired. Such responses are considered qualitative data. By allowing open-field responses, we give participants the opportunity to provide more detailed and nuanced responses to the Likert-scale survey questions.

### Coding

Although participants' qualitative responses to the open-field questions were optional, coding the responses involved assigning a code or category to each response to facilitate the interpretation of the data. For instance, thematic coding helped to identify common themes that emerge from the open responses by assigning a code to each response that falls within a particular theme. Categorical coding may involve pre-defining a set of categories and assigning a code to each response that falls within one of the categories (Bhattacharya, 2017).



# Findings

## Reliability

Analyses show good reliability on the overall SERVQUAL scale. Overall, Cronbach's  $\alpha$  was 0.85. Specific to expectations, Cronbach's  $\alpha$  was 0.87 overall and the five subscales were: 0.35 for Tangibility; 0.65 for Reliability; 0.49 for Responsiveness; 0.67 for Assurance; and 0.73 for Empathy. For perceptions, Cronbach's  $\alpha$  was 0.89 overall and the five subscales were: 0.47 for Tangibility; 0.74 for Reliability; 0.84 for Responsiveness; 0.66 for Assurance; and 0.73 for Empathy. The coefficient  $\alpha$  for Tangibility was relatively lower than the other subscales of SERVQUAL scale. According to Duffy et al. (2001), the Tangibility subscale has historically produced the lowest coefficient alpha.

In the intent to review scale, the overall Cronbach's  $\alpha$  for the supervisors was 0.83 and 0.86 for the non-supervisors. The Cronbach's  $\alpha$  on the expectation and perception scales for supervisors and non-supervisors was 0.91 and 0.87, respectively. The Cronbach's  $\alpha$  for remote work within the last two years was 0.87 for the expectation scale and 0.90 for the perception scale.

## Description of the Sample

The data collected at the Center is consistent with the data collection plan. 34 participants were invited to take part in the Likert-scale survey hosted through SurveyMonkey as the data collection tool. A total of 23 participants responded to the survey, yielding a response rate of 68%.

Five of the 23 responses were incomplete. The quantitative data analysis included four of the five incomplete responses due to non-responses in either the expectations or perceptions components of the survey. The data analysis included one of the five incomplete responses because it contained completed perception and expectation ratings with one incomplete demographic question related to the job title. As a result, there are 19 complete sets of responses to the Likert-scale survey questions in the quantitative data analysis.

Table 2 demonstrates the breakdown of the overall survey response rate and counts based on the job title from the demographic questions (Appendix A).

**TABLE 2**

Overall Staff Response

Job Title	Response Rate	Response Count
Community Health Worker	13%	3
Coordinator	30%	7
Director	13%	3
Research & Evaluation	22%	5
Health Police Officer	0%	0
Custodian/ Facility Mgr	0%	0
Prefer Not to Say	17%	4
No Response	4%	1
Total	100%	23

22 (96%) of the respondents provided complete response data to the demographic questions, providing HIPPA compliant information about their office titles, supervisor status, and remote work experience from the past two years.

Table 3 demonstrates the survey response rate and counts based on the supervisory status from the demographic questions (Appendix A). A supervisory status response rate of 100% was reflected in the data. Six (32%) respondents self-identified as supervising employees, whereas nine (47%) self-identified as not supervising any employees. Four (21%) preferred not to indicate their supervisory status.

**TABLE 3**

Demographic Question Regarding Supervisory Status

“Do you supervise any staff?”	Response Rate	Response Count
Yes	32%	6
No	47%	9
Prefer Not to Say	21%	4



Table 4 shows that all respondents responded to the question asking if they had worked remote in the past two years. Ten (53%) respondents self-identified as having conducted remote work in the past two years, whereas Seven (37%) indicated they had not worked remote in the past two years. Two (11%) respondents preferred not to answer if they had conducted remote work in the past two years.

**TABLE 4**

Demographic Question Regarding Previous Remote Work Experience

<b>"In the past two years, have you provided remote services?"</b>	<b>Response Rate</b>	<b>Response Count</b>
Yes	53%	10
No	37%	7
Prefer Not to Say	11%	2

### **1. The Overall Gaps Between the Employees' Expectations and Perceptions of Service Quality**

Results from the t-test (Table 5) show significant differences in the gaps between expectations and perceptions for all the five dimensions of service quality. The sample mean scores of the 19 respondents' expectations are consistently higher for all five dimensions than the sample mean scores of perceptions.

The widest dimensional gaps are found in Tangibility, followed by Reliability, Assurance, Empathy, and Responsiveness.

The highest-rated expectation is Assurance, followed by Reliability, Empathy, and Tangibility, with Responsiveness being the lowest-rated expectation. On the other hand, the highest-rated perception is Assurance, followed by Responsiveness, Reliability, and Empathy, while the lowest-rated perception is for Tangibility.



**TABLE 5**

Overall Employees' Expectations and Perceptions of Service Quality

Description of Items	Expectation Scores		Perception Scores		Gap Scores (P-E)		t-value
	Mean	SD	Mean	SD	Mean	SD	
Tangibility	6.21	1.20	4.75	1.62	-1.46	0.41	6.33*
Up-to-date equipment and technology	6.79	0.42	3.47	1.84	-3.32	1.42	7.54*
Include positive and inclusive symbols, images, and artwork	6.47	1.12	4.79	1.69	-1.68	0.56	4.40*
Adhere to the dress code	5.21	1.32	5.47	0.84	0.26	-0.47	0.92
Materials used are positive and inclusive	6.37	1.16	5.26	1.19	-1.11	0.03	3.51*
Reliability	6.52	0.81	5.51	1.38	-1.01	0.56	6.70*
Do something by a certain time	6.74	0.45	5.11	1.70	-1.63	1.24	4.33*
Show a sincere interest in solving problems	6.79	0.42	5.89	1.45	-0.89	1.03	2.55*
Perform the service right the first time	5.95	1.22	5.21	1.27	-0.74	0.05	2.16*
Provide the service at the time they promise to do so	6.37	0.90	5.32	1.42	-1.05	0.52	2.62*
Provide accurate information	6.74	0.45	6.00	0.75	-0.74	0.29	4.91*
Responsiveness	6.11	1.20	5.51	1.43	-0.59	0.23	2.81*
Tell exactly when services will be performed	6.42	0.84	5.47	1.17	-0.95	0.33	2.96*
Give prompt service	6.11	1.15	5.42	1.50	-0.68	0.35	1.46
Always willing to help	6.79	0.54	6.05	1.47	-0.74	0.94	2.01
Never too busy to respond to requests	5.11	1.41	5.11	1.49	0.00	0.08	0
Assurance	6.54	0.87	5.66	1.26	-0.88	0.39	5.33*
Instills confidence	6.53	0.96	5.58	1.02	-0.95	0.05	3.14*
Feels safe during their visit	6.68	0.75	5.58	1.54	-1.11	0.79	3.02*

Consistently courteous	6.74	0.45	6.00	1.33	-0.74	0.88	2.28*
Possess Knowledge to answer statements	6.21	1.13	5.47	1.12	-0.74	-0.01	2.11*
Empathy	6.54	0.87	5.66	1.26	-0.88	0.39	5.33*
Gives individual attention	6.37	0.83	5.79	1.40	-0.58	0.57	1.5
Convenient operating hours	6.11	1.15	4.11	1.94	-2.00	0.79	3.77*
Gives personal attention	6.11	1.33	5.68	1.42	-0.42	0.09	0.98
Have best interest at heart	6.42	1.07	6.26	0.73	-0.16	-0.34	0.56
Understand specific needs	6.53	0.70	5.68	1.42	-0.84	0.72	2.38*
Overall (Combined Scores)	6.34	1.03	5.40	1.49	-0.94	0.45	11.10*

## 2. Supervisors’ and Non-supervisors’ Expectations of Service Quality

Results from the t-test (Table 6, Table 7, and Table 8) show significant differences in expectations between six self-identified supervisors and nine self-identified non-supervisors for Assurance. The mean scores of supervisors’ expectations are consistently lower for all dimensions than the mean scores of non-supervisors.

The highest-rated expectation for supervisors is Reliability, followed by Assurance and Empathy. On the other hand, the highest-rated expectation of non-supervisors is Assurance, followed by Reliability, and Empathy. The lowest-rated expectation among both supervisors and non-supervisors is Responsiveness.

**TABLE 6**

Six Supervisors’ Ratings

Description of Items	Mean Expectation Scores		Mean Perception Scores		Gap Scores (P-E)		t-value
	Mean	SD	Mean	SD	Mean	SD	
Tangibility	6.04	1.33	4.54	1.74	-1.50	0.41	3.13*
Up-to-date equipment and technology	6.50	0.55	3.33	1.75	-3.17	1.20	3.80*
Include positive and inclusive symbols, images and artwork	6.83	0.41	4.50	2.07	-2.33	1.67	2.76*

Adhere to the dress code	4.33	1.63	5.50	0.84	1.17	-0.80	-1.94
Materials used are positive and inclusive	6.50	0.55	4.83	1.72	-1.67	1.17	2.98*
Reliability	6.37	1.07	5.80	1.10	-0.57	0.03	3.31*
Do something by a certain time	6.83	0.41	5.50	1.22	-1.33	0.82	0.00*
Show a sincere interest in solving problems	6.83	0.41	6.50	0.55	-0.33	0.14	1
Perform the service right the first time	5.00	1.26	4.83	1.33	-0.17	0.06	0.54
Provide the service at the time they promise to do so	6.50	1.22	6.17	0.75	-0.33	-0.47	0.59
Provide accurate information	6.67	0.52	6.00	0.89	-0.67	0.38	3.16*
Responsiveness	5.88	1.30	6.04	0.69	0.17	-0.61	-0.69
Tell exactly when services will be performed	6.50	0.55	6.33	0.52	-0.17	-0.03	1
Give prompt service	5.67	1.51	6.17	0.41	0.50	-1.10	-0.88
Always willing to help	6.50	0.84	6.33	0.52	-0.17	-0.32	0.41
Never too busy to respond to requests	4.83	1.47	5.33	0.82	0.50	-0.66	-0.74
Assurance	6.17	1.31	5.63	1.06	-0.54	-0.25	1.67
Instills confidence	5.83	1.47	5.83	0.75	0.00	-0.72	0
Feels safe during their visit	6.50	1.22	5.00	1.67	-1.50	0.45	1.77
Consistently courteous	6.67	0.52	6.17	0.41	-0.50	-0.11	2.23
Possess Knowledge to answer statements	5.67	1.75	5.50	0.84	-0.17	-0.91	0.21
Empathy	6.17	1.23	5.73	1.28	-0.43	0.05	1.58
Gives individual attention	6.33	1.21	6.33	0.52	0.00	-0.69	0
Convenient operating hours	5.50	1.38	3.83	1.17	-1.67	-0.21	2.5
Gives personal attention	5.67	1.75	6.00	1.10	0.33	-0.66	-0.39
Have best interest at heart	6.83	0.41	6.33	0.82	-0.50	0.41	1.16
Understand specific needs	6.50	0.84	6.17	0.75	-0.33	-0.08	0.79
Overall (Combined Scores)	6.13	1.23	5.56	1.30	-0.56	0.06	4.04*





**TABLE 7**

Nine Non-supervisors' Ratings

Description of Items	Mean Expectation Scores		Mean Perception Scores		Gap Scores (P-E)		t-value
	Mean	SD	Mean	SD	Mean	SD	
Tangibility	6.33	0.96	5.00	1.53	-1.33	0.57	4.43*
Up-to-date equipment and technology	6.89	0.33	3.89	2.15	-3.00	1.81	4.24*
Include positive and inclusive symbols, images and artwork	6.56	1.01	5.11	1.54	-1.44	0.52	2.6*
Adhere to the dress code	5.33	1.00	5.11	0.78	-0.22	-0.22	0.61
Materials used are positive and inclusive	6.56	0.53	5.89	0.60	-0.67	0.07	2.30*
Reliability	6.67	0.71	5.38	1.64	-1.29	0.93	4.79*
Do something by a certain time	6.78	0.44	5.11	1.96	-1.67	1.52	2.58*
Show a sincere interest in solving problems	6.89	0.33	5.56	2.01	-1.33	1.67	2.00
Perform the service right the first time	6.44	1.13	5.44	1.42	-1.00	0.29	1.50
Provide the service at the time they promise to do so	6.33	0.87	4.67	1.73	-1.67	0.87	2.29
Provide accurate information	6.89	0.33	6.11	0.78	-0.78	0.45	2.8*
Responsiveness	6.25	1.20	5.08	1.79	-1.17	0.59	3.06*
Tell exactly when services will be performed	6.67	0.71	5.11	1.27	-1.56	0.56	2.93*
Give prompt service	6.33	1.12	4.78	1.99	-1.56	0.87	1.94
Always willing to help	6.89	0.33	5.67	2.06	-1.22	1.73	1.74
Never too busy to respond to requests	5.11	1.54	4.78	1.92	-0.33	0.39	0.33
Assurance	6.81	0.47	5.69	1.55	-1.11	1.08	4.31*
Instills confidence	7.00	0.00	5.56	1.24	-1.44	1.24	3.50*
Feels safe during their visit	6.78	0.44	5.89	1.62	-0.89	1.17	1.65

Consistently courteous	6.89	0.33	5.89	1.96	-1.00	1.63	1.50
Possess Knowledge to answer statements	6.56	0.73	5.44	1.51	-1.11	0.78	2.29
Empathy	6.49	0.97	5.33	2.02	-1.16	1.05	3.76*
Gives individual attention	6.56	0.53	5.22	1.86	-1.33	1.33	1.94
Convenient operating hours	6.56	0.73	4.00	2.55	-2.56	1.82	2.66*
Gives personal attention	6.33	1.32	5.33	1.87	-1.00	0.55	1.46
Have best interest at heart	6.11	1.45	6.22	0.83	0.11	-0.62	-0.22
Understand specific needs	6.89	0.33	5.67	1.41	-1.22	1.08	2.62*
Overall (Combined Scores)	6.51	0.90	5.29	1.68	-1.22	0.78	8.95*

**TABLE 8**

Mean Difference Between Expectations for Non-Supervisors and Supervisors

Description of Items	Mean Expectation (Non-Supervisors, n=9)		Mean Expectation (Supervisors, n=6)		t-value
	Mean	SD	Mean	SD	
Tangibility	6.33	0.96	6.04	1.33	0.92
Up-to-date equipment and technology	6.89	0.33	6.50	0.55	1.56
Include positive and inclusive symbols, images and artwork	6.56	1.01	6.83	0.41	-0.74
Adhere to the dress code	5.33	1.00	4.33	1.63	1.34
Materials used are positive and inclusive	6.56	0.53	6.50	0.55	0.20
Reliability	6.67	0.71	6.37	1.07	1.36
Do something by a certain time	6.78	0.44	6.83	0.41	-0.25
Show a sincere interest in solving problems	6.89	0.33	6.83	0.41	0.28
Perform the service right the first time	6.44	1.13	5.00	1.26	2.25*
Provide the service at the time they promise to do so	6.33	0.87	6.50	1.22	-0.29

Provide accurate information	6.89	0.33	6.67	0.52	0.93
Responsiveness	6.25	1.20	5.88	1.30	1.13
Tell exactly when services will be performed	6.67	0.71	6.50	0.55	0.51
Give prompt service	6.33	1.12	5.67	1.51	0.93
Always willing to help	6.89	0.33	6.50	0.84	1.08
Never too busy to respond to requests	5.11	1.54	4.83	1.47	0.35
Assurance	6.81	0.47	6.17	1.31	2.29*
Instills confidence	7.00	0.00	5.83	1.47	1.94
Feels safe during their visit	6.78	0.44	6.50	1.22	0.53
Consistently courteous	6.89	0.90	6.67	1.23	0.93
Possess Knowledge to answer statements	6.56	0.73	5.67	1.75	1.18
Empathy	6.49	0.97	6.17	1.23	1.20
Gives individual attention	6.56	0.53	6.33	1.21	0.42
Convenient operating hours	6.56	0.73	5.50	1.38	1.72
Gives personal attention	6.33	1.32	5.67	1.75	0.79
Have best interest at heart	6.11	1.45	6.83	0.41	-1.41
Understand specific needs	6.89	0.33	6.50	0.84	1.08
Overall (Combined Scores)	6.51	0.81	6.13	1.52	3.02*

### 3. Supervisors’ and Non-supervisors’ Perceptions of Service Quality

Results from the t-test (Table 6, Table 7, and Table 9) show significant differences in perceptions between six self-identified supervisors and nine self-identified non-supervisors for Responsiveness. The mean scores of supervisors’ perceptions are consistently higher for Reliability, Responsiveness, and Empathy than the mean scores of non-supervisors.

The highest-rated perception for supervisors is Responsiveness, followed by Reliability, and Empathy. On the other hand, the highest-rated perception of non-supervisors is Assurance, followed by Reliability and Empathy. The lowest-rated perception of supervisors and non-supervisors is Tangibility.

**TABLE 9**

Mean Difference Between Perceptions for Non-Supervisors and Supervisors

Description of Items	Mean Perceptions (Non-Supervisors, n=9)		Mean Perceptions (Supervisors, n=6)		t-value
	Mean	SD	Mean	SD	
Tangibility	5.00	1.53	4.54	1.74	1.05
Up-to-date equipment and technology	3.89	2.15	3.33	1.75	0.55
Include positive and inclusive symbols, images and artwork	5.11	1.54	4.50	2.07	1.05
Adhere to the dress code	5.11	0.78	5.50	0.84	-0.91
Materials used are positive and inclusive	5.89	0.60	4.83	1.72	1.44
Reliability	5.38	1.64	5.80	1.10	-1.34
Do something by a certain time	5.11	1.96	5.50	1.22	-0.47
Show a sincere interest in solving problems	5.56	2.01	6.50	0.55	-1.34
Perform the service right the first time	5.44	1.42	4.83	1.33	0.85
Provide the service at the time they promise to do so	4.67	1.73	6.17	0.75	-2.29*
Provide accurate information	6.11	0.78	6.00	0.89	0.25
Responsiveness	5.08	1.79	6.04	0.69	-2.89*
Tell exactly when services will be performed	5.11	1.27	6.33	0.52	-2.58*
Give prompt service	4.78	1.99	6.17	0.41	-2.03
Always willing to help	5.67	2.06	6.33	0.52	-0.93
Never too busy to respond to requests	4.78	1.92	5.33	0.82	-0.77
Assurance	5.69	1.55	5.63	1.06	0.21
Instills confidence	5.56	1.24	5.83	0.75	-0.54
Feels safe during their visit	5.89	1.62	5.00	1.67	1.02



Consistently courteous	5.89	1.96	6.17	0.41	-0.41
Possess Knowledge to answer statements	5.44	1.51	5.50	0.84	-0.09
Empathy	5.29	1.87	5.73	1.28	-1.22
Gives individual attention	5.22	1.86	6.33	0.52	-1.70
Convenient operating hours	4.00	2.55	3.83	1.17	0.17
Gives personal attention	5.33	1.87	6.00	1.10	-0.87
Have best interest at heart	6.22	0.83	6.33	0.82	-0.26
Understand specific needs	5.67	1.41	6.17	0.75	-0.89
Overall (Combined scores)	5.29	1.68	5.56	1.30	-1.66

**4. The Gaps Between Supervisors’ Expectations and Perception of Service Quality**

Results from the t-test (Table 6) show significant differences in the service quality gaps between expectations and perceptions for Tangibility and Reliability, indicating room for improvement.

According to the mean scores, the widest dimensional gaps based on the mean scores of service quality gaps are given by the six supervisors to Tangibility, followed by Reliability, Assurance, Empathy, and Responsiveness, which is consistent with the overall ratings of the 19 respondents. However, results from the t-test do not show significant differences in the service quality gaps between expectations and perceptions for Assurance, Empathy, and Responsiveness. The dimensional mean score for Responsiveness indicates the respondents’ perception is higher than expectation.

**5. Differences in Expectations and Perceptions of Service Quality Between Those Who Have Worked Remotely Over the Last Two Years and Those Who Have Not**

Results from the t-test (Table 10) show significant differences in expectations of service quality in Reliability, Responsiveness, Assurance, and Empathy for the ten self-identified employees who worked remotely within the last two years compared to the Seven self-identified employees who have not worked remotely within the past two years.

Similarly, results from the t-test (Table 11) show significant differences in perceptions of the service quality gap in Reliability, Responsiveness, Assurance, and Empathy for the ten self-identified employees who worked remotely within the last two years compared to the seven self-identified employees who have not worked remotely within the past two years.

The Empathy dimension exhibits the greatest disparity in mean scores for the expectation and perception scales as rated by employees who have versus those who have not worked remotely. Results indicate that non-remote workers perceived a higher service quality gap in Empathy than remote workers.

**TABLE 10**

Mean Difference Between Expectations for Those Who Have Worked Remotely for the Past Two Years and Those Who Have Not

Description of Items	Mean Expectation (Never Remotes, n=10)		Mean Expectation (Remote w/in 2 Years, n=7)		t-value
	Mean	SD	Mean	SD	
Tangibility	6.18	1.22	6.46	0.84	-1.16
Up-to-date equipment and technology	6.80	0.42	6.86	0.38	-0.29
Include positive and inclusive symbols, images and artwork	6.40	0.97	7.00	0.00	-1.96
Adhere to the dress code	4.90	1.60	5.43	0.98	-0.85
Materials used are positive and inclusive	6.60	0.52	6.57	0.53	0.11
Reliability	6.32	0.96	6.89	0.40	-3.73*
Do something by a certain time	6.60	0.52	7.00	0.00	-2.44*
Show a sincere interest in solving problems	6.70	0.48	7.00	0.00	-1.96
Perform the service right the first time	5.60	1.43	6.57	0.79	-1.80
Provide the service at the time they promise to do so	6.00	1.05	6.86	0.38	-2.36*
Provide accurate information	6.70	0.48	7.00	0.00	-1.96
Responsiveness	5.95	1.15	6.57	1.14	-2.20*
Tell exactly when services will be performed	6.40	0.70	6.86	0.38	-1.74
Give prompt service	5.60	1.26	7.00	0.00	-3.5*
Always willing to help	6.80	0.42	7.00	0.00	-1.50

Never too busy to respond to requests	5.00	1.15	5.43	1.90	-0.53
Assurance	6.33	1.07	6.89	0.42	-3.04*
Instills confidence	6.30	1.25	7.00	0.00	-1.77
Feels safe during their visit	6.50	0.97	6.86	0.38	-1.05
Consistently courteous	6.60	0.52	7.00	0.00	-2.44*
Possess Knowledge to answer statements	5.90	1.37	6.71	0.76	-1.57
Empathy	6.04	1.23	6.80	0.47	-3.97*
Gives individual attention	6.20	1.03	6.71	0.49	-1.37
Convenient operating hours	5.80	1.23	6.86	0.38	-2.55*
Gives personal attention	5.70	1.70	6.71	0.49	-1.78
Have best interest at heart	6.20	1.32	6.71	0.76	-1.02
Understand specific needs	6.30	0.82	7.00	0.00	-2.68*
Overall (Combined Scores)	6.16	1.12	6.73	0.70	-6.00*

**TABLE 11**

Mean Difference Between Perceptions for Those Who Have Worked Remotely for the Past Two Years and Those Who Have Not

Description of Items	Mean Perception (Never Remotes, n=10)		Mean Perception (Remote w/in 2 Years, n=7)		t-value
	Mean	SD	Mean	SD	
Tangibility	4.83	1.65	4.93	1.51	-0.27
Up-to-date equipment and technology	3.40	1.58	3.86	2.27	-0.46
Include positive and inclusive symbols, images and artwork	5.10	1.73	5.00	1.41	0.13
Adhere to the dress code	5.50	0.97	5.43	0.79	0.17
Materials used are positive and inclusive	5.30	1.49	5.43	0.79	-0.23
Reliability	5.64	1.27	5.23	1.65	1.24*
Do something by a certain time	4.90	1.73	5.14	1.95	-0.26

Show a sincere interest in solving problems	6.30	0.82	5.29	2.14	1.19*
Perform the service right the first time	5.10	1.37	5.29	1.38	-0.27
Provide the service at the time they promise to do so	5.70	0.95	4.57	1.90	1.44*
Provide accurate information	6.20	0.79	5.86	0.69	0.95*
Responsiveness	5.93	0.97	4.96	1.88	2.48*
Tell exactly when services will be performed	5.70	1.06	5.29	1.38	0.67
Give prompt service	5.80	0.92	4.71	2.14	1.26*
Always willing to help	6.60	0.52	5.29	2.21	1.54*
Never too busy to respond to requests	5.60	1.07	4.57	1.99	1.24*
Assurance	5.90	0.98	5.39	1.59	1.49*
Instills confidence	5.80	1.03	5.29	1.11	0.96*
Feels safe during their visit	5.80	1.40	5.57	1.72	0.29
Consistently courteous	6.30	0.48	5.57	2.15	0.88*
Possess Knowledge to answer statements	5.70	0.82	5.14	1.57	0.85*
Empathy	6.08	1.05	4.83	1.93	3.48*
Gives individual attention	5.20	1.55	2.71	1.80	2.96*
Convenient operating hours	6.00	0.94	5.14	2.04	1.03*
Gives personal attention	6.60	0.52	6.00	0.82	1.71*
Have best interest at heart	6.30	0.82	5.29	1.38	1.73*
Understand specific needs	5.20	1.55	2.71	1.80	2.96*
Overall (Combined Scores)	5.69	1.23	5.06	1.71	3.84*



## 6. Optional Open-Field Responses for Valuable Insights and Additional Context

Qualitative data analysis is a critical way to study social phenomena. One of the primary methods for analyzing qualitative data is through coding, which involves identifying data patterns, themes, and categories. Open-field responses collected via the Likert-scale survey are considered qualitative data (Appendix A). The purpose of the open-field responses is to give participants the opportunity to provide more detailed and nuanced feedback.

After reviewing the open-field responses collected, we began the process of coding the data. Table 12 illustrates the relevant service quality dimension definitions and code sets, respectively.

The first round of deductive coding organized respondents’ comments and categorizes them into SERVQUAL dimension themes. Such codes (Table 12) capture the key themes and concepts in each SERVQUAL dimension, including Tangibility, Reliability, Responsiveness, Assurance, and Empathy.



**TABLE 12**

Qualitative Data Code Sets

Theme / Dimension	Description	Code Sets
Reliability	Ability to perform the promised service dependably and accurately	Completing service as promised, problem solving, accurate information



Assurance	Knowledge and courtesy of employees and their ability to convey trust and confidence	Instill confidence, consistently courteous, knowledge, trust
Tangibility	Physical facilities, equipment, and appearance of personnel	Equipment and technology, physical facilities and appearance, materials and resources
Empathy	Caring, individualized attention the firm provides its customer	Individual and personal attention, convenience to services, best interest at heart, listening to needs, care
Responsiveness	Willingness to help customers and to provide prompt service	Communication, prompt service, willingness to help, time management

The second round of coding clarified the comments in each dimension to the code set language derived from the SERVQUAL questions. For instance, we identified several codes related to Responsiveness, such as prompt service and willingness to help. These codes were designated as repeating and agreeing with other commenters’ open responses.

Finally, we identified several codes to differentiate language between expectations and perceptions (Table 13). For instance, expectation language refers to anticipation or what

“should” occur, whereas perception language refers to the experience or active engagement with a situation.

**TABLE 13**

Codes to differentiate language between expectations and perceptions.

Code	Description	Examples
Expectation	Anticipation or extend to what should be	Will have, will be, should, must have, expect
Perception	Experienced or extent to what is currently believed	I feel, I have, I believe, we see, it looks, it does, it needs

Similar to the part of the quantitative data analysis, Tangibility is the dimension with the most individual comments provided by respondents with four respondents leaving nine comments. The majority of comments were associated with physical facilities and appearance with equipment, technology, materials, and resources each associated with three comments. Two comments by two different respondents reflected similar sentiments regarding equipment and technology indicating agreement.

Reliability and Assurance dimensions each had one coded comment. These comments came from two different respondents. No repetitions or agreements were found with these comments within their respective dimensions.

Responsiveness had the second most comments related to a dimension definition. Similar to Tangibility, we identified the Responsiveness dimension to have comments from five individual respondents. Communication, willingness to help, and prompt service codes were the most prevalent codes among the comments, whereas time management was the least. Responsiveness had two comments from two respondents coded to willingness to help, indicating agreement among employees.

The Empathy dimension was identified to have four comments from three respondents. Individual and personal attention was coded to three of the four comments. Best interest at heart, listening to needs, and care were coded to two of the four comments.

Comments coded to employee expectations represent six of the individual comments among four responses. Staff expressed expectations by associating what they think must occur, should happen, and what will be relating to dimensions of Tangibility, Responsiveness, Assurance, and Empathy. Perception comments, 13 among five responses, expressed what looks, need to be, does or does not have, and feelings toward the dimensions. Perception coded comments were represented among all five-dimension themes. Please reference

Appendix C for detailed qualitative analysis.

## Recommendations

**Recommendation 1: The Center should increase its service quality and commitment to promoting the SERVQUAL dimension of Tangibility—the quality of physical facilities, equipment, personnel, and communications materials.**

Parasuraman et al. (1998) define Tangibility as an essential dimension of the SERVQUAL model because customers often rely on tangible cues to assess the quality of service. For instance, customers visiting a restaurant may determine their satisfaction and experience based on the cleanliness and ambiance of the restaurant. Similarly, a customer visiting a public health facility may evaluate the service quality based on cleanliness, modern aesthetics, and the availability of state-of-the-art equipment and technology.

Ample research highlights the importance of physical facilities and equipment in influencing customer perceptions of service quality (Bitner, 1992; Brady, Cronin, & Brand, 2002; Zeithaml, Bitner, & Gremler, 2018). Specifically, the design and appearance of physical facilities (e.g., cleanliness, layout, and decor) can impact customer perceptions of service quality. Additionally, the quality and reliability of equipment used in service delivery also impacts customer perceptions of service quality.

Physical facilities and equipment may often be costly to upgrade and limited by budget constraints. The Agency may consider improving physical facilities and marketing materials by balancing investments in Tangibility with other aspects of the service experience. Furthermore, changes to physical facilities may be subject to regulatory or community restrictions, especially in healthcare.

Ladhari et al. (2011) and Rosenbaum and Massiah (2011) also suggest that businesses can improve the impression of physical facilities, equipment, and materials by emphasizing on the emotional aspects of the service experience. This includes creating an engaging environment for customers, using visual cues, colors, and lighting, or training employees to present themselves in a friendly way.

Kotler and Keller (2015) and Zeithaml et al. (2018) discuss the importance of physical marketing materials and how they enhance customers' perceptions of service quality. These scholars provide recommendations such as creating a clear and consistent brand identity, using visual elements to provoke positive emotions, and providing eye-catching signages to help customers navigate the physical environment.

Digital marketing materials may also be considered to prompt Tangibility. Akaka and Alden (2010) discuss that digital marketing materials such as websites and social media posts can be considered a type of tangible material. Specifically, digital materials can provide customers with a tangible experience of the brand identity and its offerings. Brady et al. (2012) suggest



that digital interactions with service providers can create a significant impact on customers' perceptions of service quality.

**Recommendation 2: The supervisor and their direct reports at the Center should strive for greater alignment on the service quality expectations in the SERVQUAL dimension of Assurance—that is, the appropriate level of knowledge and courtesy expected to convey trust and confidence to the community members.**

Kim and Cha (2002) identify Assurance as a key indicator of customer satisfaction and loyalty. The authors suggest that service providers should focus on developing the knowledge and expertise of their employees, as well as establishing effective communication channels with customers. Scholars have discussed the challenges for improving Assurance as a service quality gap. For instance, Wang et al. (2003) suggest that employees' ability to convey trust may be influenced by their professional competence and interpersonal communication skills; however, these factors are difficult to measure.

Transformational leaders prioritize the development of employees and build a positive work environment that promotes growth and development. Carter et al. (2014) suggest that transformational leadership values the importance of building trust, inspiring followers, and creating a shared vision for the future. A key element of transformational leadership is leaders' capability to create a safe environment for inspiring and motivating employees when pursuing a common goal.

In the context of aligning the Center's supervisors' and employees' expectations towards Assurance, transformational leaders may apply communication channels to articulate expectations for serving community members with expertise, trust, and confidence. Supervisors as leaders may consider clearly communicating their expectations, which include discussing the Agency's new customer service standards and setting performance metrics for employees' Assurance dimension of SERVQUAL. Providing routine feedback to employees helps ensure employees meet performance expectations.

In addition, the Agency may consider applying the four-frame model developed by Bolman and Deal (2017) as an effective framework for improving the communication of supervisory expectations with employees regarding Assurance—that is, serving community members with expertise, trust, and confidence:

Apply the structural frame to understand the current responsibilities, policies, and procedures available for the Center employees to set measurable goals for serving community members with expertise, trust, and confidence.

Apply the human resource frame to recognize existing opportunities for employee development and motivation to serve community members with expertise, trust, and confidence. This might involve providing employees with professional development opportunities and rewarding

performance gain.

Apply the political frame to recognize relational dynamics when communicating expectations with employees. It may be necessary to build coalitions with stakeholders who have influence within each of the six job classifications. It is critical to be clear about what is expected while being flexible and open to negotiation, anticipating and managing conflicts that may arise.

Apply the symbolic frame to identify ways to utilize the Agency's shared organizational vision, mission, values, and culture when communicating expectations regarding serving community





members with expertise, trust, and confidence.

**Recommendation 3: The supervisor and their direct reports at the Center should strive for alignment on the service quality perceptions in the SERVQUAL dimension of Responsiveness. For instance, what are the tangible metrics or service outcomes that help staff recognize prompt service?**

Kandampully (2007) believes that measuring service Responsiveness helps organizations identify areas where they can improve the customer experience and enhance customer satisfaction and loyalty. Zeithaml et al. (2018) discuss that metrics are equally important for identifying areas of strength and weakness in service delivery, and for monitoring customer satisfaction and loyalty over time.

A potential cause of service quality perception gaps between supervisors and their direct reports may be due to how they evaluate service Responsiveness differently. According to Parasuraman et al. (1998), customer feedback surveys are commonly used to measure service Responsiveness and are conducted through various channels, such as email, phone, or online platforms. The survey questions are typically tailored to assess specific aspects of service Responsiveness, such as average call handle time.



To evaluate service Responsiveness, the Agency and the Neighborhood Health Action Centers can leverage existing metrics, such as the number of letters responded to within 14 days, the number of e-mails responded to within 14 days, and the number of calls answered within 30 seconds. These metrics can be reviewed at all employee meetings on an agreed-upon basis. A process can be created for reviewing instances where targets are not met. Further metrics may be developed to supplement the existing evaluation criteria.

Relational demography and organizational attachment relate to a member's social relationships



within an organization. This includes connections with supervisors and other organizational stakeholders (Tsui, Egan, & O'Reilly, 1992). This concept may be influential in further determining the relationship between supervisors and non-supervisors at the Center, as it can provide insights into how both roles collaborate and influence one another (Schieman & McMullen, 2008) if implementing Recommendation 2 and Recommendation 3.

**Recommendation 4: The Center may identify the root causes for supervisors' perceived service quality gap that exists in the SERVQUAL dimension of Reliability.**

Parasuraman et al. (1988) define Reliability as the service provider's ability to perform the service correctly on the first try, the ability to provide service at the promised time, and the ability to keep records accurately.

Bitner (1995) discusses that improving service accuracy can be challenging because it requires organizations to deliver on their promises consistently over time. This is especially difficult when the service involves multiple touchpoints or if the service provider relies on an external partner to deliver service.

Tannenbaum and Yukl (1992) discuss the limitations of training as the single solution to address employees' performance issues. Training alone may not be effective if an underlying root cause impacts employee performance, such as inadequate procedures and tools. Bryk et al. (2013) define improvement science as a systematic approach to solving complex problems in organizations, which may help identify root causes that influence the Center's supervisors' perceived service quality gap regarding Reliability:

Define the perceived "low Reliability" problem: Understanding the problem may involve gathering and reviewing the existing data available at the Center, such as customer complaints, service failures, and other indicators of insufficient Reliability.

Form a team: Once the problem has been defined, a team of stakeholders may work together to collect data regarding the Reliability issue. The team may include individuals who are knowledgeable about the service being provided to community members and the factors that may have influenced the Reliability.

Collect data: The stakeholder team may collect new data on the factors that may be contributing to low Reliability. This may involve conducting surveys, interviews, or focus groups with customers and employees, analyzing service records, or other methods.

Analyze the data: Once the data has been collected, it should be analyzed to identify the root causes or significant contributors to insufficient Reliability.

Develop and test solutions: Based on the root causes, the stakeholder team should develop and test potential solutions to promote Reliability. This may involve conducting small-scale tests of change, such as a pilot program with a group of employees at the Center.

Scale up and sustain improvements: Once a solution has been identified and tested, it should be scaled to the entire Center. The stakeholder team should monitor the improvements over time.

Kandampully and Suhartanto (2000) argue that one of the key challenges to improving service accuracy is that employees may not have the skills and resources they need to deliver high-quality service consistently. Employees, processes, and technology must all be aligned when implementing changes.

**Recommendation 5: The Center may identify the influencing factors that drive the expectations and perceptions of the employees who have worked remotely for the past two years versus the employees who have not worked remotely in the SERVQUAL dimensions of Reliability, Responsiveness, Assurance, and Empathy.**

The quantitative data analysis reveals that, compared to employees who have not worked remotely for the past two years, those who have worked remotely have consistently higher expectations yet lower perceptions of service quality in the SERVQUAL dimensions of Reliability, Responsiveness, Assurance, and Empathy. Given the limited sample size of this capstone study, further research into the factors driving higher expectations and lower perceptions of the four SERVQUAL dimensions by those who have worked remotely is highly recommended.

The Agency is committed to promoting equity and fairness among its employees. This includes valuing employee equity, which refers to ensuring that all employees are treated fairly and equitably. Loden and Rosener (1991) define factors such as age, race, ethnicity, gender identity, sexual orientation, disability status, and socioeconomic status as diversity-related primary characteristics. At the same time, taking account of age, race, ethnicity, gender identity, sexual orientation, disability status, and socioeconomic differences is only comparable to the “tip of the iceberg” metaphor: just like the iceberg, humans are more complex than we can see at the surface level.

In fact, Khan et al. (2012) suggest that any characteristics and trait associations for a particular social group can link to diversity. Diversity may embody any different social group characteristics of the organizational members (Brewis, 2019). It is possible that employees’ remote or in-person work needs have shaped their expectations and perceptions of service quality differently. The COVID-19 pandemic increased the adoption of employee flexibility practices in organizations. Further research may include an in-depth review of the history and lived experiences of these employees represented at the Neighborhood Health Action Centers, taking into account the diverse perspectives of the employees to gain more meaningful insights (Shore, Cleveland, & Sanchez, 2018).



## Limitations and Considerations for Future Inquiry

One limitation of this capstone study is the small sample size including the sub-participant groups categorized by criterion, such as job title, supervisor status, and remote work experience. Although t-tests recognize whether two sample means significantly differ, low sample sizes limit the ability to generalize our findings for service quality gaps.

The SERVQUAL model survey instrument is an invaluable tool for assessing service quality that captures both the perceptions and expectations of customers. According to Parasuraman et al. (1994), who developed the SERVQUAL model, the SERVQUAL survey instrument should be used with both internal and external stakeholders to gain a comprehensive understanding of service quality. Internal stakeholders, such as employees, provide valuable insights into the organization's service delivery processes and help identify areas for improvement. Meanwhile, the Agency's external stakeholders, such as its community members, health action center partners, and City residents, provide the ultimate evaluation of service quality and can provide valuable feedback on their experiences with the organization.

## Conclusions

The dimensional gaps identified between mean scores for expectations and perceptions were negative for all five dimensions of the SERVQUAL tool, a finding which implies that the 19 respondents at the Center are not fully satisfied with the quality of services. This capstone study successfully identifies specific areas where the need for quality improvement is most vital for the Center.

## References

- Aggarwal, V., & Jain, P. (2015). Service quality models: A review. *BVIMSR's Journal of Management Research*, 7(2), 125-136.
- Akaka, M. A., & Alden, D. L. (2010). Global brand positioning and perceptions in the luxury automotive industry. *Journal of Marketing Management*, 26(7-8), 701-721.
- Allen, S. J., & Wergin, J. F. (2008). Leadership and adult development theories: Overviews and overlaps. *Liberal Education*, 9, 3-19.
- Babbi, E. (2017). *The basics of social research* (7<sup>th</sup> ed.). Cengage.
- Bhattacharya, K. (2017). *Fundamentals of qualitative research: A practical guide*. Routledge.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57-71.
- Bitner, M. J. (1995). Building service relationships: It's all about promises. *Journal of the Academy of Marketing Science*, 23(4), 246-251.
- Bolman, G. Lee., & Deal, T. E. (2017). *Reframing Organizations: Artistry, Choice, and Leadership* (6th ed.). Wiley.
- Buttle, F. (1996). SERVQUAL: Review, critique, research agenda. *European Journal Marketing*, 30(10), 8-32.
- Brady, M. K., Voorhees, C. M., & Brusco, M. J. (2012). Service sweethearting: Its antecedents and customer consequences. *Journal of Marketing Research*, 49(6), 733-748.
- Brady, M. K., Cronin Jr, J. J., & Brand, R. R. (2002). Performance-only measurement of service quality: A replication and extension. *Journal of Business Research*, 55(1), 17-31.
- Brewis, D. N. (2019). Duality and fallibility in practices of the self: The inclusive subject in diversity training. *Organization Studies*, 40(1), 93-114.
- Bryk, A. S., Gomez L. M., Grunow, A., & LeMahieu, P. M. (2013). *Learning to improve: How America's schools can get better at getting better*. Harvard Education Press.
- Carroll, J. S., & Rudolph, J. W. (2006). Design of high reliability organizations in health care. *Quality and Safety in Health Care*, 15(1), 4-9.
- Carter, M., Mossholder, K., Feild, H., & Armenakis, A. (2014). Transformational leadership, interactional justice, and organizational citizenship behavior: The effects of racial and gender dissimilarity between supervisors and subordinates. *Group and Organization Management*, 39(6), 691-719.
- Colarusso, C. A., & Nemiroff, R. A. (1987). Clinical implications of adult developmental theory. *The American journal of psychiatry*, 144(10), 1263-1270.

- Cooperrider, D. L., & Whitney, D. (2005). *Appreciative inquiry: A positive revolution in change*. Berrett-Koehler.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16 (3), 297-334.
- Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality - a reexamination and extension. *Journal of Marketing*, 56(3), 55-68.
- Dannefer, R., Wong, B. C., Padmore, J., Gutierrez, J., Brown-Dudley, L., Freeman, K., Roberts, C., Martins, E., Napier, E., Noyes, P., Seoh, H., Bedell, J., Toner, C., Easterling, R., Lopez, J., Manyindo, N., Maybank, K. A. (2020). The neighborhood as a unit of change for health: Early findings from the east Harlem neighborhood health action center. *Community Health*, 45 (1), 161-169.
- Duffy, J.A., Duffy, M., & Kilbourne, W. E. (2001). A comparative study of resident, family, and administrator expectations for service quality in nursing homes. *Health Care Management Review*, 26(3), 75-83.
- Gounaris, S., Stathakopoulos, V., & Athanassopoulos, A. (2003). Antecedents to perceived service quality: An exploratory study in the banking industry. *International Journal of Bank Marketing*, 21(4) , 168-190.
- Guido, G. (2015). Customer satisfaction. In C. Cooper. (Eds.), *Wiley Encyclopedia of Management*. Wiley.
- Hojat, M., Louis, D., Maio, V., & Gonnella, J. S. (2013). Empathy and health care quality. *American Journal of Medical Quality*, 28(1), 6-7.
- Kandampully, J., Mok, C., & Sparks, B. (2001 ). *Service quality management in hospitality, tourism, and leisure*. Routledge.
- Kandampully, J., & Suhartanto, D. (2000). Customer loyalty in the hotel industry: The role of customer satisfaction and image. *International Journal of Contemporary Hospitality Management*, 12(6), 346-351.
- Kim, W. G., & Cha, Y. (2002). Antecedents and consequences of relationship quality in hotel industry. *International Journal of Hospitality Management*, 21(4), 321-338
- Khan, S. R., Benda, T., & Stagnaro, M. N. (2012). Stereotyping from the perspective of perceivers and targets. *Online Readings in Psychology and Culture*, 5(1). <https://doi.org/10.9707/2307-0919.1043>
- Kotler, P., & Armstrong, G. (2010). *Principles of marketing*. Prentice Hall.
- Kotler, P., & Keller, K. L. (2015). *Marketing management* (15th ed.). Pearson.
- Kotter, J . P . (2012). *Leading Change*. Harvard Business Review Press.
- Ladhari, R., Souiden, N., & Dufour, B. (2011). The role of emotions in utilitarian service settings: The

- effects of the tangible versus the intangible. *Journal of Service Research*, 14(3), 333-347.
- Lee, M. A. & Yom, Y. (2007). A comparative study of patients' and nurses' perceptions of the quality of nursing services, satisfaction, and intent to revisit the hospital: A questionnaire survey. *International Journal of Nursing Studies*, 44(4), 545-555.
- Lewis, R. C. & Booms, B. H. (1983). The Marketing Aspects of Service Quality in Emerging Perspectives on Services Marketing. *American Marketing Association*, 99-107.
- Lim, P. C. & Tang, N.K.H. (2000). A study of patients' expectations and satisfaction in Singapore hospitals. *International Journal of Health Care Quality Assurance*, 13 (7), 290.
- Loden, M., & Rosener, J. B. (1991). *Workforce America!: Managing employee diversity as a vital resource*. McGraw-Hill Education.
- Meyer, J., & Gremler, D. D. (2015). Customer service. In C. Cooper (Eds.), *Wiley Encyclopedia of Management*. Wiley.
- The Agency. (2021). *Publication Name 1, 2010-2018*. The Agency.
- The Agency. (2021). *Publication Name 2*. The Agency.
- Other & Belonging Institute. (2022). *City report: City Name*. Long link.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V. A., & Berry, L.L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: Implications for future research. *Journal of Marketing*, 58(1), 111-124.
- Purcarea, V. L., Gheorghe, I. R., & Petrescu, C. M. (2013). The assessment of perceived service quality of public health care services in Romania using the SERVQUAL scale. *Procedia Economics and Finance*, 6(13), 573-585.
- Rosenbaum, M.S., & Massiah, C. (2011). "An expanded servicescape perspective". *Journal of Service Management*, 22(4), 471-490.
- Schall, E., Ospina, S., Godsoe, B., & Dodge, J. (2004). Appreciative narratives as leadership research: matching method to lens. In D. L. Cooperrider & M. Avital (Eds.), *Advances in appreciative inquiry: Constructive discourse and human organization*, 1, 147-170. Elsevier Science.
- Schieman, S., & McMullen, T. (2008). Relational Demography in the workplace and health: An Analysis of gender and the subordinate-superordinate role-set. *Journal of Health and Social Behavior*, 49(3), 286-300.

- Shore, L. M., Cleveland, J. N., & Sanchez, D. (2018). Inclusive workplaces: A review and model. *Human Resource Management Review, 28*(2), 176 – 189.
- Sivadass, E., & Baker-Prewitt, J. L. (2000). An examination of the relationship between service quality, customer satisfaction, and store loyalty. *International Journal of Retail and Distribution Management, 28*, 73-82.
- Souca, L. (2011). SERVQUAL - Thirty years of research on service quality with implications for customer satisfaction. *Marketing from Information to Decision, 4*, 420-429.
- Syapsan, J. (2019). The effect of service quality, innovation towards competitive advantages and sustainable economic growth: Marketing mix strategy as mediating variable. *Benchmarking: An International Journal, 26*(5), 1336-1356.
- Tannenbaum, S. I., & Yukl, G. (1992). Training and development in work organizations. *Annual Review of Psychology, 43*(1), 399-441.
- Tsui, A. S., Egan, T. D., & O'Reilly, C. A. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly, 37*(4), 549 – 579.
- Wang, Y., Wang, Y., Lin, H., & Tzung-Tang, T. (2003). Determinants of user acceptance of Internet banking: an empirical study. *International Journal of Service Industry Management, 14*(5), 501-519
- Valentine, N. B., de Silva, A., Kawabata, K., Darby, C., Murray, C. J. L., & Evans, D.B. (2003). Health system responsiveness: Concepts, domains, and operationalization. In: Murray, C.J.L., Evans, D., Eds. *Health systems performance assessment: Debates, methods, and empiricism*. World Health Organization.
- Villanueva, M. O., Llach, J., & Perramon, J. (2020). Service quality in hospitality and the sustainability effect: Systematic literature review and future research agenda. *Sustainability, 12*(19), 8152.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2018). *Services marketing: Integrating customer focus across the firm*. McGraw-Hill Education.



# Appendix A

## *SERVQUAL Survey Instructions and Questions*

Thank you for participating in this anonymous survey. This survey is designed to understand your expectations and perceptions relating to the service quality at your health action center. The survey will only take 15-20 minutes to complete and is designed for your feedback only. Please refer to the specific instructions below regarding how to complete the survey.

The Expectation section of the survey includes statements showing the extent to which you think an excellent health action center should possess. The Perception section of the survey includes statements showing the extent to which you believe the quality attributes that [the Center](#) currently demonstrates.

Please rate how much you personally agree or disagree with each of the following statements. These statements are about offering health action center services to our communities and neighborhoods, which include, but are not limited to, engagements with community member(s)/partner(s), coordination of activities, program administration, and business of the health action center, etc. Your rating of each following statement is based on a 7-point scale with 1 indicating Strongly Disagree and 7 indicating Strongly Agree.

If you have any statements or concerns about the survey, please contact Yi Breneman at [yi.breneman@vanderbilt.edu](mailto:yi.breneman@vanderbilt.edu), Kent Tyler at [kent.tyler@vanderbilt.edu](mailto:kent.tyler@vanderbilt.edu), and Dr. Matthew Campbell at [matthew.campbell@vanderbilt.edu](mailto:matthew.campbell@vanderbilt.edu).

Thank you for your time and dedication in supporting our project.

	<b>Expectation</b>	<b>Perception</b>
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<b>Tangibility</b>	Excellent Health Action Centers will have up-to-date equipment and technology	The [Name] Health Action Center has up-to-date equipment and technology
	The physical facilities at excellent Health Action Centers will include positive and inclusive symbols, images and artwork .	The [Name] Health Action Center physical features include positive and inclusive symbols, images and artwork .
	Employees at excellent Health Action Centers will adhere to the dress code.	The [Name] Health Action Center employees are adhering to dress code.
	Materials (pamphlets or statements) associated with the service will be positive and inclusive at excellent Health Action Centers.	Materials (such as pamphlets or statements) associated with the service are positive and inclusive at the [Name] Health Action Center.
<b>Reliability</b>	When excellent Health Action Centers promise to do something by a certain time, they do	When the [Name] Health Action Center promises to do something by a certain time, it does so.
	When a customer has a problem, excellent Health Action Centers will show a sincere interest in solving it.	When a customer has a problem, The [Name] Health Action Center shows a sincere interest in solving it.
	Excellent Health Action Centers will perform the service right the first time	The [Name] Health Action Center performs the service right the first time.
	Excellent Health Action Centers will provide the service at the time they promise to do so.	The [Name] Health Action Center provides its service at the time it promises to do so.
	Excellent Health Action Centers will provide accurate information.	The [Name] Health Action Center provides accurate information.

<b>Responsiveness</b>	Employees of excellent Health Action Centers will tell community member(s)/ partner(s) exactly when services will be performed.	Employees in the [Name] Health Action Center tell community member(s)/ partner(s) exactly when the services will be performed.
	Employees of excellent Health Action Centers will give prompt service to community member(s)/partner(s).	Employees in the [Name] Health Action Center give community member(s)/ partner(s) prompt service.
	Employees of excellent Health Action Centers will always be willing to help community member(s)/partner(s)	Employees in the [Name] Health Action Center are always willing to help community member(s)/partner(s).
	Employees of excellent Health Action Centers will never be too busy to respond to community member(s)/partner(s)' requests	Employees in the [Name] Health Action Center are never too busy to respond to customer requests.

<b>Assurance</b>	The behavior of employees in excellent Health Action Centers will instill confidence in community member(s)/ partner(s).	The behavior of employees in the [Name] Health Action Center instills confidence in community member(s)/ partner(s).
	Community member(s)/ partner(s) of excellent Health Action Centers will feel safe during their visit.	Community member(s)/partner(s) feel safe during their visit with the [Name] Health Action Center.
	Employees of excellent Health Action Centers will be consistently courteous with community member(s)/ partner(s).	Employees in the [Name] Health Action Center are consistently courteous with community member(s)/partner(s).
	Employees of excellent Health Action Centers will have the knowledge to answer community member(s)/ partner(s)' statements.	Employees in the [Name] Health Action Center have the knowledge to answer community member(s)/partner(s)' statements.

<b>Empathy</b>	Excellent Health Action Centers will give community member(s)/ partner(s) individual attention.	The [Name] Health Action Center gives community member(s)/partner(s) individual attention
	Excellent Health Action Centers will have operating hours convenient to all their community member(s)/ partner(s).	The [Name] Health Action Center has operating hours convenient to all its community member(s)/partner(s).
	Excellent Health Action Centers will have employees who give community member(s)/ partner(s) personal attention.	The [Name] Health Action Center has employees who give community member(s)/partner(s) personal attention.
	Excellent Health Action Centers will have their community member(s)/partner(s)' best interest at heart.	
	The employees of excellent Health Action Centers will understand the specific needs of their community member(s)/ partner(s).	