



# Using benchmarking measurement to improve performance over time

**Naomi Kuznets, PhD**  
*Senior Director and General Manager,  
Institute for Quality Improvement*

AAAHC Institute for Quality Improvement  
5250 Old Orchard Road, Suite 250, Skokie, Illinois 60077  
Phone: 847.853.6060 Fax: 847.853.6118 Website: [www.aaahc.org/institute](http://www.aaahc.org/institute)

## Summary

AAAHC quality improvement (QI) Standards require participation in external benchmarking activities. Participation in benchmarking, however, is not the final intent of the Standards. Rather, **the ultimate goal is the use of data derived from benchmarking to initiate and sustain performance improvement over time.**

Benchmarking compares an organization's key performance measures with those of similar organizations, or against nationally-recognized best practices, targets, or goals. Some organizations that participate in benchmarking studies fail to integrate the knowledge they gain from this comparison into a QI program.

We have found that organizations that participate in benchmarking studies **and** use the “10 Elements” defined by AAAHC in their QI programs, most often:

- Fully meet AAAHC Standards for a quality improvement program.
- Measurably improve performance in the area studied.

“Quality is never an accident; it is always the result of intelligent effort.”

– John Ruskin

John Ruskin (1819-1900) was the leading English art critic of the Victorian era. He was also an art patron, draughtsman, watercolorist, prominent social thinker and philanthropist who wrote on a variety of subjects.

## Background

Some organizations participate in benchmarking studies and yet still struggle to meet AAAHC Standards for QI programs.

The goal of this paper is to clarify the relationship between benchmarking activities and a complete quality improvement study, beginning with a review of Standard 5.I.D.<sup>1</sup>

*5.I.D The organization participates in external benchmarking activities that compare key performance measures with other similar organizations, or with recognized best practices of national or professional targets or goals.*

- 1. The organization's benchmarking activities include, but are not limited to:*
  - a. The use of selected performance measures that are appropriate for improving the processes or outcomes of care relevant to the patients served.*
  - b. Systematically collecting and analyzing data related to the selected performance measures.*
  - c. Using benchmarks that are based on valid and reliable local, state, national or published data.*
  - d. Measuring changes in the organization's performance on the selected performance measures.*

Successful participation (i.e. supplying enough cases or visits to be included) in a benchmarking study, helps an organization meet the requirements of 5.I.D.1. a, b, c, and d, above.

However, participating in the study does not necessarily address the remaining requirements of Standard 5.I.D:

- e. Demonstrating sustained performance improvement over time.*
- 2. Results of benchmarking activities must be incorporated into other quality improvement activities of the organization.*
- 3. Results of benchmarking activities must be reported to the organization's governing body and throughout the organization, as appropriate.*

These additional aspects require action: use of the benchmarking data and reported evidence of resulting performance improvement. In other words, it is not enough to participate in measurement and comparison. Your organization must do something with the information to improve performance over time.

## You've got the findings. Now what?

The AAAHC Institute for Quality Improvement uses 10 Elements that function as action steps in building a complete QI study. The following case study illustrates the relationship between benchmarking and these steps. It also demonstrates the potential value of repeat participation in a particular study.

The following case study, "Patient Wait Times at XYZ Clinic," uses the 10 Elements as an organizing tool, beginning with the element name and corresponding AAAHC Standard identifier, then describing the steps taken. An Institute benchmarking study was used twice in conjunction with the elements in this example.

"The goal is to transform data into information and information into insight."

– Carly Fiorina

Carly Fiorina (b.1954) was considered one of the most powerful women in business during her tenure as chief executive officer at Lucent and Hewlett-Packard.

<sup>1</sup>Standard identifiers refers to the 2013 *Accreditation Handbook* releases.

## Case study

### Patient Wait Times at XYZ Clinic

#### Introduction

In the case of XYZ Clinic, the impetus for their QI study began with a patient satisfaction survey; a tool to address Standards 3.G, 4.E.12, and 16.F. This is a further example of the integrated approach AAAHC looks for with regard to an organization's overall quality improvement program.

They identified a potential problem and made it the purpose of their study, even though there was doubt about whether there truly was an issue.

They used the 10 Elements to organize their study report thereby assuring that they were meeting all the requirements and making it easy for a surveyor to understand their process.

To identify an achievable goal, XYZ Clinic chose to participate in a benchmarking study through the AAAHC Institute for Quality Improvement. The results of the study included a report that not only described where the clinic fell relative to peer organizations but also addressed how best performers had achieved their own excellent results. This provided a list of possible corrective actions to implement. The clinic selected the most feasible of these for their round of re-measurement and went back to the list for further ideas when data showed that additional improvement toward their goal was possible.

Communicating results throughout the organization supported a culture of teamwork and continuous improvement.

#### Element 1: Purpose (AAAHC Standard 5.I.C.1)

**The known or suspected problem:** Long patient wait times (check-in time to the time the patient is seen or the procedure is started) at XYZ Clinic.

**Its importance to our organization:** The QI Committee (QulC) noted a number of complaints about wait times in patient satisfaction survey feedback. Please see the QulC minutes<sup>2</sup> of December 8, 2011.

#### Element 2: Performance Goal (AAAHC Standard 5.I.C.2)

**The goal:** Our performance goal was to have wait times that are the same or lower than the shortest three wait time benchmarks of similar organizations.

**Our rationale:** We believe that our wait times are not very long and the few complaints we have received were because of anomalies—differing expectations (a few patients found the wait times to be longer than they expected). We can participate in and find benchmark information on this issue in an AAAHC Institute benchmarking study.

#### Element 3: Description of the Data needed to find whether issues exist; the frequency, severity, sources (reasons) (AAAHC Standard 5.I.C.3)

1. As part of the AAAHC Institute study we collected data on actual patient check-in time and when the patient was seen or the procedure was started. This information was used to calculate average length of wait time.

<sup>2</sup>Attachments referenced in this Study Report are not included.

“It ain’t what you don’t know that gets you into trouble. It’s what you know for sure that just ain’t so.”

– Mark Twain

Samuel Langhorne Clemens (1835 –1910), better known by his pen name Mark Twain, was an American author and humorist. He is most noted for his novel, *The Adventures of Tom Sawyer* (1876) and its sequel, *Adventures of Huckleberry Finn* (1885).

2. We were instructed to gather data from an approximately equal number of cases/visits per provider.
3. The AAAHC Institute study report provided information regarding the processes/procedures the wait time “best performers” use, so that we could see what possible solutions exist if we have relatively long wait times compared with other organizations in the study.
4. The AAAHC Institute also provides information about each organization’s arrival instructions and average wait time—arrival instructions may be a reason for an organization’s relatively long average wait time.

#### **Element 4: Evidence of Data Collection** (AAAHC Standard 5.I.C.4)

**Data Collectors:** The nurse collected each provider’s visit/procedure times.

**Source of the Data:** Visit/procedure times and on-time starts were entered in logs by nurses.

**Sample:** We collected time logs for all visits/procedures during the study period.

**Sample description:** We use a sample of approximately 35 visits/procedures per provider. These were varied by time of day, day of week or month, holiday, and exam/procedure room.

**Length of Data Collection:** We collected data for 6 months for the January-June 2012 AAAHC Institute benchmarking study.

**Data Collection Forms:** Attached, please find the AAAHC Institute for Quality Improvement’s Procedure/Visit Specific Form, which includes places to enter the procedure/visit times.

#### **Element 5: Analyzing Data** (AAAHC Standard 5.I.C.5)

1. **Existence/frequency/severity of issue:** We are the organization with Study ID 7408. Our wait time is about 50 minutes, on average. While this is better than the median (53 minutes) and the average (54 minutes), it is not as good as the top 3 performers (7410 – 16 minutes; 7423 - 19 minutes; 7418 & 7412 – 28 minutes).

It appears that an issue does exist because we are almost 40 minutes off the best average time. With the number of cases that we submitted, we can see that one or two very high wait times is not the problem—the problem is occurring frequently enough to be of concern. Although we are not approaching 100 minutes, as 7402 and 7405 are, there is still quite a bit of room for improvement.

“Data do not speak for themselves - they need context, and they need skeptical evaluation.”

– Allen Wilcox

Allen Wilcox, MD, PhD, is an epidemiologist whose research has explored topics from fertility and early pregnancy loss to fetal growth and birth defects.



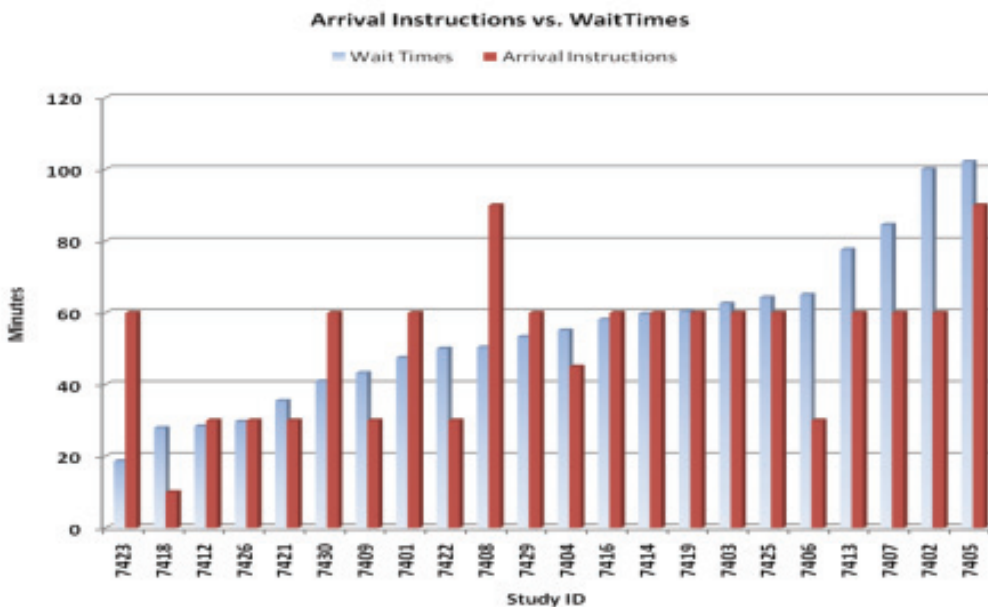
“It is the mark of a truly intelligent person to be moved by statistics.”

– George Bernard Shaw

George Bernard Shaw (1856 –1950) was an Irish playwright and a co-founder of the London School of Economics. Issues that engaged Shaw’s attention included education, marriage, religion, government, health care, and class privilege.

**2. Possible source(s)/association(s):** We examined the processes/procedures that the best performers use to see whether there were any opportunities to use these to try to improve our own wait times.

- While we make pre-visit/procedure calls the day before the visit/procedure, we usually just confirm the appointment and don’t use this as an opportunity for patients to ask procedure-related questions. Study ID 7410 indicates that they do both.
- Study ID 7418 uses dedicated pre-visit or procedure staff.
- When we look at our arrival instructions, we see that while all the other organizations (except 7405) are instructing patients to arrive 60 minutes (or less) before the scheduled visit/procedure start, we are using 90 minutes for our arrival instructions.



**Element 6: Comparing Current Performance versus goal** (AAAH Standard 5.I.C.6)

Our average wait time was 50 minutes; the top three benchmark times were 16, 19, and 28 minutes.

### Element 7: Implementing Corrective Action (AAAHC Standard 5.I.C.7)

Based on the identified possible source(s) of our relatively long wait times, we decided that:

1. We will begin to use the pre-procedure calls not only to confirm with the patient, but also to answer any questions the patient might have, following the practices of best performer Study ID 7410.
2. Although this may help, we do not have the resources to have dedicated pre-visit or procedure staff, as Study ID 7418 does.
3. We will reduce our arrival instructions to 60 minutes before the scheduled visit/procedure start.

### Element 8: Re-Measuring (AAAHC Standard 5.I.C.8)

**Designated re-measurement time:** We re-measured in the July-December 2012 AAAHC Institute benchmarking study.

**Results versus performance goal:** Our average wait time decreased to 39 minutes. This still did not meet the benchmarks set in the January-June 2012 AAAHC Institute benchmarking study.

### Element 9: Implementing Additional Corrective Action and Re-Measuring (AAAHC Standard 5.I.C.9)

**Designated re-measurement time:** Over the January-June 2013 AAAHC Institute benchmarking study data collection time, we added two new corrective actions.

**Additional Corrective Actions:** We had noticed that there were additional differences between our organizational practices and those of the top three performers. These included:

1. Verifying insurance before the day of the visit/procedure. This was not something we did very consistently.
2. Carefully scheduling visit/procedure times to meet the information collected on providers' average time with the patient in the visit or procedure. We had been scheduling based on providers' "guesstimates" of their average visit/procedure times.

Accordingly, we:

1. Made it part of the scheduling processes/procedures to collect patient insurance information.
2. Collected data to more closely meet providers' average visit/procedure time. We based the spacing of the patients in each provider's schedule accordingly.

**Results versus performance goal:** Our average wait time decreased to 28 minutes. This just met the benchmarks set in the January-June 2012 AAAHC Institute benchmarking study.

“If you think that statistics has nothing to say about what you do or how you could do it better, then you are either wrong or in need of a more interesting job.”

– Stephen Senn

Stephen Senn, PhD, is a statistician and consultant to the pharmaceutical industry. His research interests include design, analysis and interpretation of clinical trials, and reporting and analyzing safety data.

## Element 10: Communicating Findings (AAAHC Standard 5.I.C.10)

**Governing Body:** The results of the study were reported to the governing body. For documentation, please see the Governing Body Minutes for September 1, 2013.

**Need to Know:** The QulC also shared the results of the study with our providers, one-on-one. For documentation, please see personnel file notes for Provider X, September 16, 2013, and for Y and Z in each of their files, September 20, 2013. We met with the nurses, schedulers, and receptionists to discuss the results of the QI activity and the importance of collecting pertinent patient insurance data and answering questions prior to patient arrival, as well as scheduling according to providers' actual patient times. For documentation, see the attached meeting agenda and materials for the September 22, 2013, QulC/staff meeting.

“In the middle of a difficulty lies opportunity.”

– Albert Einstein

Albert Einstein (1879 –1955) was a German-born theoretical physicist who developed the general theory of relativity. For this achievement, Einstein is often regarded as the most influential physicist of the 20th century.

## About the Institute

The AAAHC Institute for Quality Improvement was established in 1999 to help health care organizations identify, measure, and achieve QI goals. The Institute does this by:

- Conducting performance measurement benchmarking studies with over 70 studies completed to date.
- Creating tools and resources that organizations can use to conduct their own studies.

For questions or comments, please contact Michelle Chappell at 847.324.7747 or [mchappell@aaahc.org](mailto:mchappell@aaahc.org).