

# HIGH PERFORMANCE

Driving continuous improvement in emergency communications centers.

By Crystal Lawrence

**W**hen considering quality in the emergency communications center (ECC) most of us will immediately think of our quality assurance/quality improvement (QA/QI) programs. While these programs are a great starting point, they only represent a part of the ECC's quality itself. Performance measures for the ECC and its personnel must also be considered to gain a clear understanding of the center's performance. Every moment, every call and every incident counts in the ECC so the quality of work is critical. Attention to detail must be acute, and an error or technology failure can lead to bad outcomes for our citizens and/or field responders.

Let us examine some quality processes you may be familiar with. Total Quality Management (TQM) is a system inspired by W. Edwards Deming, whose work "led to the transformation of management that

has profoundly impacted manufacturing and service organizations worldwide."<sup>1</sup> Benchmarking is another term used to describe comparing an agency's metrics with those of a standard or similar organization.

Some agencies do this annually, and a standard form is salary benchmarking. SWOT analysis is a method of measuring an organization's strengths, weaknesses, opportunities and threats. Other forms of quality management are considered in many project management processes. International Standards Organization (ISO) 9000 describes the fundamental concepts and principles of quality management systems (QMS).<sup>2</sup> As you can see, there are many different concepts and terms for quality management.

We will keep it simple and focus on key performance indicators (KPIs). "KPIs are a set of quantifiable performance measures used by a company or industry to gauge progress toward meeting their strategic and operational goals. KPI development includes benchmarking (identifying baseline



performance or industry best practices), setting targets (the desired level of performance) and tracking progress against that target.”<sup>3</sup> Metrics are sometimes confused with KPIs. Metrics are a measure used to evaluate success, but the KPI ties the metric to specific goals during a certain time period.<sup>4</sup>

The first aspect of KPIs we will look at is organizational. Where do we begin? A good KPI starts with clearly defined strategic measures (a balanced scorecard) and includes specific, measurable, achievable, relevant and time-bound (SMART) goals. KPIs are used to evaluate performance against strategic objectives and can be used to monitor organizations and individuals.<sup>5</sup> Mission and vision statements may also be a starting point for the development of KPIs. An example mission statement for ECCs may include “Provide

superior public safety communications services efficiently and accurately.” Using this example, we can drill down to establish the KPIs that support this statement. What KPIs can be determined that relate to efficiency? Can the agency establish organizational KPIs to ensure services are provided efficiently?

The APCO Public Safety Communications Center Key Performance Indicators standard guides ECCs on their KPI development journey (<https://www.apcointl.org/~documents/standard/11171-2019-kpi-comm-center/>).

### BACKGROUND

Due to the role that KPIs play in an organization’s trajectory, the ECC must carefully develop and execute the KPI process. The drive to use KPI measures in making organizational improvements reflects the ECC’s

priority of serving internal and external stakeholders and, most importantly, the public.

Identifying and developing tools, processes and reports can be daunting. It is essential to look at the KPI process cyclically, focusing on planning and review. The KPI process is fluid, intended to meet varying needs and be continually improved. ECCs should create KPIs that reflect their own distinct goals and resources. What may be considered successful for a well-staffed and well-funded ECC may be unrealistic for a smaller agency with fewer resources.

### EXAMPLES AND USES

If an ECC has an accreditation goal — such as the International Organization for Standardization ratings, the Commission on Accreditation for Law Enforcement Agencies or the Commission on Accreditation of Ambulance Services — the ability to measure 9-1-1 answer times may be important to achieving this requirement or goal. Other uses for answer-time metrics include meeting contract standards, governmental oversight, budgeting or staffing purposes. Downstream impacts of *not* reviewing this measurement may result in a department not achieving accreditation or budgeting too many or too few resources for staffing.

Within ECC operations, 9-1-1 answer-time metrics allow staffing level comparisons between shifts, days, weeks or months and may be used to review public safety telecommunicator (PST) workload or overtime needs. Downstream impacts to *not* reviewing this measurement operationally may be overworked PSTs, poor employee morale, poor customer service or a negative media story.

### PHASES OF DEVELOPMENT

This standard recommends that ECCs include planning, execution, analysis/reporting, and review phases and steps in their KPI development process.

In the planning phase, an ECC establishes the objective for analysis. The objective may be to ensure proper staffing levels, improve customer service or achieve accreditation. The next step is to operationalize the objective and create the KPI, select observable, measurable criteria to represent the goal then create an actionable, measurable statement. For example, “Customer service has been identified in a number of internal and external complaints over X period.”

The next planning step should establish a baseline measure of the current status. An

example of this step could be using current customer satisfaction measures (average complaints per month) to identify poor customer service that does not fit the agency's mission.

The measurement goal(s) of the KPI should also be established during planning to ensure that the measurements used actually gauge progress toward the desired goals. A measurement goal might be improving customer service scores by 10% over the next 12 months; or maintaining a customer service satisfaction level of less than four complaints per month.

Finally, establish logistics — the who, what and how of gathering, compiling and analyzing KPIs. Questions that might need to be answered to establish logistics include: What data is required? Where do we get the data? Who is responsible for collecting, analyzing and reporting? What is the measurement duration? What is the time interval? What must be removed to ensure a clean dataset?

Moving on to the execution phase, KPI developers should measure data to identify the current conditions and continue to collect data at specified time intervals. They should compare results of periodic data to KPI goals and develop strategies to improve performance.

The analysis/reporting phase involves validating the data's accuracy including inaccurate data and its potential negative consequences. In addition, assess lack of confidence or trust in the process. Reports on the data should be prepared that address its relevance to the initially established objective including its use for decision-making or improvements.

In the review phase, developers should engage in a review process that identifies the need to improve either the KPI or the operational goal and make necessary changes.

### KPIs FOR INDIVIDUALS

The second type of KPIs are for individuals (personnel) in the ECC where it is important to ensure that we stick to "key" or important indicators, which may not include all functions of the PST. The development of personnel KPIs follows the same phases listed above for organizational KPIs. The APCO ANS Key Performance Indicators for Public Safety Communications Personnel include several agency responsibilities that assist the individual in achieving acceptable performance measures.<sup>6</sup> The following list is not inclusive of all responsibilities listed in the standard:

- The agency shall have readily available and accessible to the PST all the necessary policies, guidelines, protocols or other written directives to perform all job functions successfully.
- The agency shall regularly create, review and update, as appropriate, the guidelines, protocols or written directives that provide direction to the PST to successfully perform all job functions.
- The agency shall provide training and set performance expectations for the PST in applying guidelines, protocols and written directives related to all necessary job functions.
- The agency shall establish a mechanism for regularly reviewing and evaluating the

PST's job performance based on acceptable incident management practices or standards.

- The agency shall provide the PST with a regular performance review, documenting and addressing unacceptable performance through remediation or other appropriate means in a timely manner.

Organizational leaders will make many decisions while developing KPIs for their agency and personnel and when evaluating existing KPIs. One decision-making pitfall is analysis paralysis. Fear of failure, overthinking, multiple options and a lack of confidence can lead to an inability to decide or act. A 2023 survey by Oracle and Seth Stephens-Davidowitz found that "85% of business leaders have suffered from decision distress (by) regretting, feeling guilty about, or questioning a decision they made in the past year."<sup>7</sup> In "How To Get Unstuck: Tips for Moving Past Analysis Paralysis," Kat Boogaard cites this statistic illustrating stressed out leaders and provides tips to overcome analysis paralysis:

1. **Make big decisions first.** Some experts believe we only have a certain amount of energy to make decisions.
2. **Understand potential impacts.** What is the worst-case scenario if you make an unwise decision?
3. **Set a firm deadline, but do not wait until the last minute.** As you creep closer to the deadline, the urgency can decrease the quality of your decision.
4. **Limit your choices.** This can mean limiting the options you explore, the number of people you involve in the discussion or both.

### KPI RESOURCES, REFERENCES

APCO International is an Accredited Standards Developer (ASD) by the American National Standards Institute (ANSI). APCO has produced operational, training and technical standards for public safety communications and maintains several American National Standards (ANS) that may assist ECCs in defining KPIs.

Key Performance Indicators for Public Safety Communications Personnel (<https://www.apcointl.org/~documents/standard/11181-2020-kpi-personnel/>) outlines performance indicators for PSTs and guides establishing KPIs in the ECC.

Public Safety Communications Center Key Performance Indicators (<https://www.apcointl.org/~documents/standard/11171-2019-kpi-comm-center/>) identify

mission-critical, conditional, call-taking and dispatching, technical systems functionality, quality assurance and administrative function KPIs. This standard focuses on evaluation at the organizational level and is not intended for individual performance.

The Public Safety Communications Incident Handling Process ([apcointl.org/~documents/standard/11132-2024-psc-incident-handling-process](https://www.apcointl.org/~documents/standard/11132-2024-psc-incident-handling-process)) standard includes performance metrics for call processing and incident handling, including required and recommended time limits based on an APCO-sponsored study by George Mason University. Additionally, this standard defines data points as when time begins and ends.

Additional APCO/NENA ANS that are related to KPIs and ECC readiness include the Standard for Establishment of a Quality Assurance and Quality Improvement Program for Public Safety Answering Points (<https://www.apcointl.org/~documents/standard/11071-2015-aqi?layout=default>), which defines the minimum components of a QA/QI program within an ECC and recommends effective procedures for implementing the components of the program.

The APCO/NENA Emergency Communications Center (ECC) Service Capability Criteria Rating Scale ([apcointl.org/~documents/standard/11023-2020-ecc-service-capability-criteria-rating-scale](https://www.apcointl.org/~documents/standard/11023-2020-ecc-service-capability-criteria-rating-scale)) is an assessment tool for ECCs to determine their current technological position and risk readiness.

Developing KPIs is not quick or easy. However, ensuring that your agency is tracking key performance measures will help keep everyone focused on the goals and meet industry, agency, and individual standards. Ultimately, it will provide quality and efficient services to the citizens in need of help and safely assist the field responders that the agency serves. ●

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## REFERENCES

- 1 The W. Edwards Deming Institute. <https://deming.org/learn/about-dr-deming/>
- 2 The International Organization for Standardization. Online Browsing Platform (OBP). [iso.org/obp/ui/en/#iso:std:iso:9000:ed-4:v1:en](https://www.iso.org/obp/ui/en/#iso:std:iso:9000:ed-4:v1:en)
- 3 APCO International. "APCO 1.117.1-2019: Public Safety Communications Center Key Performance Indicators." 2019. <https://www.apcointl.org/~documents/standard/11171-2019-kpi-comm-center/>
- 4 Hennigan, Laura. "What Is a KPI? Definition & Examples." Forbes Advisor. June 15, 2024. [forbes.com/advisor/business/what-is-a-kpi-definition-examples/](https://www.forbes.com/advisor/business/what-is-a-kpi-definition-examples/)
- 5 Kinsey, Stuart. "What Are Key Performance Indicators (KPIs)?" Simplekpi. March 1, 2024. [simplekpi.com/Resources/Key-Performance-Indicators](https://www.simplekpi.com/Resources/Key-Performance-Indicators)
- 6 APCO International. "APCO 1.118.1-2020: Key Performance Indicators for Public Safety Communications Personnel." 2020. [www.apcointl.org/~documents/standard/11181-2020-kpi-personnel/](https://www.apcointl.org/~documents/standard/11181-2020-kpi-personnel/)
- 7 PRNewswire. "Global Study: 70% of Business Leaders Would Prefer a Robot to Make Their Decisions." April 19, 2023. [www.prnewswire.com/news-releases/global-study-70-of-business-leaders-would-prefer-a-robot-to-make-their-decisions-301799591.html](https://www.prnewswire.com/news-releases/global-study-70-of-business-leaders-would-prefer-a-robot-to-make-their-decisions-301799591.html)
- 8 Boogaard, Kat. "How To Get Unstuck: Tips for Moving Past Analysis Paralysis." Atlassian. January 5, 2024. [www.atlassian.com/blog/productivity/analysis-paralysis](https://www.atlassian.com/blog/productivity/analysis-paralysis)

## CDE EXAM #73778

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| <ol style="list-style-type: none"> <li>1. This article identifies _____ specific APCO American National Standards which may assist an ECC in developing KPIs.             <ol style="list-style-type: none"> <li>a. 6</li> <li>b. 1</li> <li>c. 2</li> <li>d. 3</li> </ol> </li> <li>2. TQM stands for:             <ol style="list-style-type: none"> <li>a. Total quality management</li> <li>b. Terminal quality management</li> <li>c. Training quota management</li> <li>d. Technical quality measures</li> </ol> </li> <li>3. _____ can occur when there are too many options.             <ol style="list-style-type: none"> <li>a. Option overload</li> <li>b. Analysis paralysis</li> <li>c. Anatomy analysis</li> <li>d. Analysis incapacity</li> </ol> </li> <li>4. SWOT Analysis stands for:             <ol style="list-style-type: none"> <li>a. Sturdiness, weaknesses, opportunities and threats</li> <li>b. Strengths, weaknesses, opportunities and telematics</li> <li>c. Strengths, weaknesses, occasions and threats</li> <li>d. Strengths, weaknesses, opportunities and threats</li> </ol> </li> </ol> | <ol style="list-style-type: none"> <li>5. The main difference between a "metric" and a "KPI" is:             <ol style="list-style-type: none"> <li>a. A KPI ties the metric to specific goals during a specific time.</li> <li>b. A metric ties the KPI to specific goals during a specific time.</li> <li>c. A KPI does not use metrics.</li> <li>d. Metrics are not part of a realistic KPI.</li> </ol> </li> <li>6. A good KPI begins with:             <ol style="list-style-type: none"> <li>a. Strategic measures</li> <li>b. SMART goals</li> <li>c. Balanced scorecard</li> <li>d. All of the above</li> </ol> </li> <li>7. KPIs can be used to monitor the performance of _____ or _____.             <ol style="list-style-type: none"> <li>a. Organizations and functions</li> <li>b. Agencies and outcomes</li> <li>c. Organizations and individuals</li> <li>d. Mission and vision statements</li> </ol> </li> </ol> | <ol style="list-style-type: none"> <li>8. The APCO ANS Public Safety Communications Center Key Performance Indicators lists the phases of development as the planning phase, execution phase, _____ phase and review phase.             <ol style="list-style-type: none"> <li>a. Analysis</li> <li>b. Implementation</li> <li>c. Testing</li> <li>d. Process</li> </ol> </li> <li>9. Tips to overcome analysis paralysis include:             <ol style="list-style-type: none"> <li>a. Waiting until the last minute to decide.</li> <li>b. Seeking the input of many different people.</li> <li>c. Understanding potential impacts.</li> <li>d. Researching and evaluating all choices individually.</li> </ol> </li> <li>10. A set of quantifiable performance measures used by a company or industry to gauge progress toward strategic goals is known as:             <ol style="list-style-type: none"> <li>a. SWOT</li> <li>b. KPI</li> <li>c. TQM</li> <li>d. ISO</li> </ol> </li> </ol> |
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