The PQA on Emergency Preparedness amidst the COVID-19 Crisis

Joel C. Amante, Ph.D.
25 June 2020
The Philippine Quality Award Program
What is the largest source of COVID-19 deaths in the U.S.?
Those Aged 60+ are Most At Risk...
% of deceased (Italy & UK)

Study of 3,372 death cases in UK & 21,551 deaths in Italy
Sources: Italian Portal of Epidemiology for Public Health, UK Office of National Statistics
Over 50,000 of 116,000 deaths in the US as of June 16, 2020 and still growing

About 17x the number of 9-11 deaths

About 45x the total number of COVID-19 deaths in the Philippines

Some attribute it to a lack of emergency preparedness
2016 Malcolm Baldrige
National Quality Award Application

Dedicated to Hope, Healing and Recovery
Agenda

Part 1 | Using the PQA Framework
Part 2 | Emergency Preparedness
Part 3 | Next Steps
Part 1
Using the PQA Framework
The Journey to Organizational Excellence

PQA Levels of Recognition

- **LEVEL 1 Recognition for COMMITMENT**
- **LEVEL 2 Recognition for PROFICIENCY**
- **LEVEL 3 Recognition for MASTERY**
- **LEVEL 4 PHILIPPINE QUALITY AWARD**

Global Image

- Excellent
- Average
- Early

**876 – 1000**: World Class Leader

**776 – 875**: Benchmark Leader

**676 – 775**: Industry Leader

**576 – 675**: Emerging Industry Leader

**476 – 575**: Good Performance

**376 – 475**: Early Improvements

**276 – 375**: Early Results

**0 – 275**: Early Development
Category 3
Customers/Citizens

As the Leader, I will

Category 2
Strategy

Our plan of action is

Category 5
Workforce/Human Resource

The people who will do this are

Category 6
Operations

The processes we will use are

Category 4
Measurement, Analysis & Knowledge Mgt.

We will measure and understand our performance by

Category 7
Results

The bottom-line results will be

Linkage of the 7 Categories
PQA FRAMEWORK

CATEGORIES

<table>
<thead>
<tr>
<th>Category</th>
<th>Point Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leadership</td>
<td>120</td>
</tr>
<tr>
<td>2. Strategy</td>
<td>85</td>
</tr>
<tr>
<td>3. Customers</td>
<td>85</td>
</tr>
<tr>
<td>4. Measurement, Analysis &amp; Knowledge Management</td>
<td>90</td>
</tr>
<tr>
<td>5. Workforce</td>
<td>85</td>
</tr>
<tr>
<td>6. Operations</td>
<td>85</td>
</tr>
<tr>
<td>7. Results</td>
<td>450</td>
</tr>
</tbody>
</table>

TOTAL 1,000
<table>
<thead>
<tr>
<th>CATEGORY &amp; ITEMS</th>
<th>Point Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Operations</td>
<td>85</td>
</tr>
<tr>
<td>6.1 Work Processes</td>
<td>45</td>
</tr>
<tr>
<td>6.2 Operational Effectiveness</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM &amp; AREAS TO ADDRESS</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2 Operational Effectiveness</td>
<td>40</td>
</tr>
<tr>
<td>a. Process Efficiency and Effectiveness</td>
<td></td>
</tr>
<tr>
<td>b. Operational Effectiveness</td>
<td></td>
</tr>
<tr>
<td>c. Safety and Emergency Preparedness</td>
<td></td>
</tr>
<tr>
<td>(1) Safety</td>
<td></td>
</tr>
<tr>
<td>(2) Emergency Preparedness</td>
<td></td>
</tr>
</tbody>
</table>
6.2c(2) Emergency Preparedness

How do you ensure that your organization is prepared for disasters or emergencies?

How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?

How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?

- Methods used
- Appropriateness, effectiveness
- Repeatable, based on data, systematic
- Consistently applied in all appropriate areas
- Cycles of evaluation & improvement
- Encourage innovation
- Sharing improvements & innovations
- Aligned with organizational needs
- Complementary across processes to support organization-wide goals
Steps toward Mature Processes
An Aid for Assessing and Scoring Process Items

Reacting to Problems (0-25%)

Early Systematic Approaches (30-45%)

Aligned Approaches (50-65%)

Integrated Approaches (70-100%)
PQA FRAMEWORK

CATEGORIES

1. Leadership .......................... 120
2. Strategy .......................... 85
3. Customers .......................... 85
4. Measurement, Analysis & Knowledge Management .......................... 90
5. Workforce .......................... 85
6. Operations .......................... 85
7. Results .......................... 450

TOTAL .......................... 1,000
# PQA Scoring System

## CATEGORY & ITEMS

<table>
<thead>
<tr>
<th>CATEGORY &amp; ITEMS</th>
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<tbody>
<tr>
<td>7. Results</td>
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</tr>
<tr>
<td>7.1 Product &amp; Process Results</td>
<td>120</td>
</tr>
<tr>
<td>7.2 Customer-Focused Results</td>
<td>80</td>
</tr>
<tr>
<td>7.3 Workforce-Focused Results</td>
<td>80</td>
</tr>
<tr>
<td>7.4 Leadership &amp; Governance Results</td>
<td>80</td>
</tr>
<tr>
<td>7.5 Budgetary, Financial &amp; Market Results</td>
<td>90</td>
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</tbody>
</table>

## ITEM & AREAS TO ADDRESS

<table>
<thead>
<tr>
<th>ITEM &amp; AREAS TO ADDRESS</th>
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<tbody>
<tr>
<td>7.1 Product &amp; Process Results</td>
<td>120</td>
</tr>
<tr>
<td>a. Customer-Focused Product &amp; Service Results</td>
<td></td>
</tr>
<tr>
<td>b. Work Process Effectiveness Results</td>
<td></td>
</tr>
<tr>
<td>(1) Process Effectiveness &amp; Efficiency</td>
<td></td>
</tr>
<tr>
<td>(2) Emergency Preparedness</td>
<td></td>
</tr>
<tr>
<td>c. Supply-Chain Management Results</td>
<td></td>
</tr>
</tbody>
</table>
What are your emergency preparedness results?

What are your current levels and trends in key measures or indicators of the effectiveness of your organization's preparedness for disasters or emergencies?

How do these results differ by location or process type, as appropriate?

- Current performance on a meaningful measurement scale
- Rate of performance improvement
- Sustainability
- Appropriate organizations
- Industry or Sectoral Leaders
- Benchmarks
- Results address important performance requirements
- Results are harmonized across processes and work units to support goals
2018 Baldrige Recipient

7.1-46 Emergency Preparedness
Fire and Emergency Management Drills Conducted

Trend
Level vs Goal
Comparison

2017 Q2
2017 Q3
2017 Q4
2018 Q1
2018 Q2
2018 Q3
2018 Q4

FY13
FY14
FY15
FY16
FY17
FY18
FY19

0
5
10
15

Fire Drills
NFPA - Life Safety Code Book
Emergency Management Drills
TJC Requirement
MGMC Goal

Good
**Organizational Profile**

- What's Important & Why?
  - Organizational Environment
  - Organizational Situation

**Processes Categories 1-6**

- How? (ADLI)
  - Approach
  - Deployment
  - Learning
  - Integration

**Results Category 7**

- Did you do it? (LeTCI)
  - Levels
  - Trends
  - Comparisons
  - Integration
What’s Important & Why?

Organizational Profile

Organizational Environment
• Product/Service offerings
• Mandate, Mission, Vision, and Values
• Human resource profile
• Assets
• Regulatory requirements
• Organizational structure
• Citizens/customers and stakeholders
• Suppliers and partners

Organizational Situation
• Comparative position
• Comparative changes
• Comparative data
• Strategic context
• Performance improvement system

Item 6.2 Operational Effectiveness
6.2c(2) Emergency Preparedness

How? (ADLI)
• How do you ensure that your organization is prepared for disasters or emergencies?
• How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?
• How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?

Item 7.1 Product / Service and Process Results
7.1b(2) Emergency Preparedness Results

Did you do it? (LeTCI)
• What are your emergency preparedness results?
• What are your current levels and trends in key measures or indicators of the effectiveness of your organization’s preparedness for disasters or emergencies?
• How do these results differ by location or process type, as appropriate?
6.2c(2): Emergency Preparedness

- How do you ensure that your organization is prepared for disasters or emergencies?
- How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?
- How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?

Linked requirements to 6.2c(2) in other Categories

**Category 1: Leadership**
- Communication with and engaging the entire workforce and key customers
- Regulatory compliance processes, measures, and goals
- Achievement of the organization’s mission?

**Category 2: Strategy**
- Rapid execution of modified action plans
- Ensuring availability of financial and other resources to support the plans

**Category 3: Customers/Citizens**
- Enabling customers to seek information and support
- Management of customer complaints

**Category 4: Measurement, Analysis & Knowledge Mgt.**
- Ensuring availability and security of hardware and software systems and data and information during emergencies

**Category 5: Workforce/Human Resource**
- Ensuring workplace health, security, and accessibility for the workforce
- Ensuring continuity, prevention of workforce reductions, and minimizing the impact of such reductions, if they become necessary

**Category 6: Operations**
- Management of the suppliers and the supply chain
- Incorporation of new technology and the potential need for agility in products and processes

Systems Perspective of the PQA

6.2c(2): Emergency Preparedness

- How do you ensure that your organization is prepared for disasters or emergencies?
- How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?
- How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?
In ordinary times, one of the pervasive problems in organizations is the lack of coordination and collaboration. In emergencies, this problem is exacerbated. That’s where the PQA Framework can help with its systems perspective.
Part 2
Emergency Preparedness
Yolanda Super Typhoon
3 November 2013 – 11 November 2013
Damage: $2.98 billion (2013 USD)
Total fatalities: 6,340
Star City, Pasay City
02 October 2019
Cause: Electrical Fire
Property Damage: ~P1 Billion
Davao del Sur Earthquake
15 December 2019
Magnitude 6.9
Over 210 people injured w/ 13 fatalities
Taal Volcano
12-19 January 2020
Impact: 39 dead (only 1 direct, 38 indirect)
From 1 person to...

9,353,735
Coronavirus Cases

479,805
Deaths

... in 6 months.

Source: www.worldometers.info  (as of 24 June 2020)
Continuity of Operations Plan – Essential (COP-E)

- Pandemic, PSWS#5 Typhoon, 8.0 Earthquake, Massive Bio or Chemical Event

Continuity of Operations Plan (CoOP)

- PSWS#3 Typhoon, Earthquake, Flood, Localized Terrorist Attack

Basic Contingency Plans

- Localized Power Outage, Plant Fire, IT Failure

*Adapted from: “Pandemic Influenza”, US Dept of Homeland Security
6.2c(2): Emergency Preparedness

- How do you ensure that your organization is prepared for disasters or emergencies?
- How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?
- How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?
## 6.2c(2): Emergency Preparedness

### How do you ensure that your organization is prepared for disasters or emergencies?

- How do you ensure that your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?
- How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?

<table>
<thead>
<tr>
<th>Approach</th>
<th>Deployment</th>
<th>Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Business Continuity Management System&lt;br&gt; • Risk Assessment&lt;br&gt; • Business Impact Analysis&lt;br&gt; • Business Continuity Plan&lt;br&gt; • Annual testing for each disaster and emergency that may involve a tabletop exercise, a structured walk-through, or a disaster simulation testing&lt;br&gt; • Mandatory training for all employees&lt;br&gt; • Alternate power provision</td>
<td>• Implemented in all sites and all functions, as appropriate&lt;br&gt; • Conducted emergency drills and measured results in all sites for the past three years (see Figure 7.1-20)&lt;br&gt; • Emergency preparedness training included in onboarding process for all new employees</td>
<td>• Added plans for pandemics and complied with new pandemic-related regulatory requirements in 2020&lt;br&gt; • Subscribed to a cloud-based emergency management software in 2019&lt;br&gt; • Contracted external experts in 2018 to assess and revise emergency preparedness processes with gaps&lt;br&gt; • Results of emergency preparedness used as input in strategic planning and annual business planning under Category 2</td>
</tr>
</tbody>
</table>
### Emergency Preparedness

**Prevention**

- Develop a monitoring process & do external scanning for early warning signals through weekly website reviews of WHO.int, DOH.gov.ph, DOLE.gov.ph, and local government unit portal
- Temperature checks for all entering employees & compliance with personal protection standards
- Employee rotations for office and work-at-home arrangements
- Hourly sanitation and disinfection of frequently touched surfaces
- Contactless entry & other facilities improvements to reduce spread

**Continuity of Operations**

- 

**Recovery**

- 

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6.2c(2): How do you ensure that your organization is prepared for disasters or emergencies?

- How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?

- How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?
A Restaurant:

BEFORE...

AFTER...

How it can be avoided

1. Open windows even if it makes people feel uncomfortably warm or cold
2. Avoid background music so people don’t have to raise their voices and expel more droplets as they speak
3. Avoid the recirculation of air
4. Always use air filters
5. Reduce the size of indoor gatherings
6. Increase the distance between people
7. Whenever possible, hold the event outdoors

english.elpais.com
How do you ensure that your organization is prepared for disasters or emergencies?

How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?

How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?

<table>
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<th>Prevention</th>
<th>Continuity of Operations</th>
<th>Recovery</th>
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<td>• Develop a monitoring process &amp; do external scanning for early warning signals through weekly website reviews of WHO.int, DOH.gov.ph, DOLE.gov.ph, and local government unit portal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Temperature checks for all entering employees &amp; compliance with personal protection standards</td>
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<tr>
<td>• Employee rotations for office and work-at-home arrangements</td>
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<td></td>
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<tr>
<td>• Hourly sanitation and disinfection of frequently touched surfaces</td>
<td></td>
<td></td>
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<tr>
<td>• Contactless entry &amp; other facilities improvements to reduce spread</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Upon availability, mandatory vaccination for all employees; promote workplace health</td>
<td></td>
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</tr>
</tbody>
</table>
Effect of Existing Conditions on Mortality

Especially Those with Existing Conditions
% of deceased with serious ailments

- Cardiovascular disease: 10.5%
- Diabetes: 7.3%
- Chronic respiratory disease: 6.3%
- Abnormally high blood pressure: 6%
- Cancer: 5.6%
- No existing conditions: 0.9%

InformationIsBeautiful.net
Study of 44,672 confirmed cases in Mainland China
Sources: China Center for Disease Control & Prevention, Statista
6.2c(2): Emergency Preparedness

How do you ensure that your organization is prepared for disasters or emergencies?

How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?

How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?

<table>
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<th>Prevention</th>
<th>Continuity of Operations</th>
<th>Recovery</th>
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<tbody>
<tr>
<td>• Develop a monitoring process &amp; do external scanning for early warning signals through weekly website reviews of WHO.int, DOH.gov.ph, DOLE.gov.ph, and local government unit portal</td>
<td>• Implement Business Continuity Plan or Continuity of Operations Plan – Essential (COP-E) including the Emergency Operations Center and the Emergency Response Team</td>
<td>• Timing controlled by viral progression, government mandates, and customer &amp; end-market demand</td>
</tr>
<tr>
<td>• Temperature checks for all entering employees &amp; compliance with personal protection standards</td>
<td>• Dedicated transportation</td>
<td>• Sustain essential functions</td>
</tr>
<tr>
<td>• Employee rotations for office and work-at-home arrangements</td>
<td>• Supply chain and delivery networks</td>
<td>• Measure, monitor, and adjust recovery actions</td>
</tr>
<tr>
<td>• Hourly sanitation and disinfection of frequently touched surfaces</td>
<td>• Implement open, consistent two-way information flow with all stakeholders</td>
<td>• Assess response impacts</td>
</tr>
<tr>
<td>• Contactless entry &amp; other facilities improvements to reduce spread</td>
<td>• Continuously monitor and rapidly adjust actions as necessary</td>
<td>• Digitize to virtual operations, as appropriate</td>
</tr>
<tr>
<td>• Upon availability, mandatory vaccination for all employees; promote workplace health</td>
<td></td>
<td>• Coordinate government support to organization &amp; employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prepare for next pandemic</td>
</tr>
</tbody>
</table>
6.2c(2): Emergency Preparedness

- How do you ensure that your organization is prepared for disasters or emergencies?
- How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?
- How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?

Supply Chain:

- Suppliers & Partners
- Your Organization
- Customers/Citizens

- Emergency Communications Plan
- Service Level Agreements (Emergency Situations)
- Joint Drills/Simulations
- Alternate Sourcing, if necessary
How do you ensure that your organization is prepared for disasters or emergencies?

How does your disaster and emergency preparedness system consider prevention, continuity of operations, and recovery?

How does your disaster and emergency preparedness system take your reliance on suppliers and partners into account?

Put all responses to the three questions in narrative form, and include in the application report under 6.2c(2) Emergency Preparedness.
What are your emergency preparedness results?

What are your current levels and trends in key measures or indicators of the effectiveness of your organization’s preparedness for disasters or emergencies?

How do these results differ by location or process type, as appropriate?

<table>
<thead>
<tr>
<th>7.1 Product/Service &amp; Process Results</th>
<th>Key Measures or Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1b(2) Emergency Preparedness Results</td>
<td>- No. of Emergency Drills Conducted</td>
</tr>
<tr>
<td></td>
<td>- Evacuation Times during Drills</td>
</tr>
<tr>
<td></td>
<td>- % of Staff Trained in Emergency Preparedness for Pandemics</td>
</tr>
<tr>
<td></td>
<td>- Findings of Audit on the Business Continuity Management System (BCMS) - Pandemics</td>
</tr>
</tbody>
</table>
Figure 7.1-20 % of Frontline, Non-Medical Staff Trained on Emergency Preparedness for Pandemics

- Target = 100%
- Best Competitor in Site 2
- Overall Two Branches

% of Staff Trained

- 2016
- 2017
- 2018
- 2019

Overall Two Branches

Good
Part 3
Next Steps
ONLY WHEN THE TIDE GOES OUT DO YOU DISCOVER WHO’S BEEN SWIMMING NAKED.

Warren Buffet
American Billionaire Investor
Are you swimming naked when it comes to emergency preparedness?

March 6, 2020 Gartner Survey: Just 12% of more than 1,500 respondents believe their businesses are highly prepared for the impact of coronavirus.
<table>
<thead>
<tr>
<th>QUESTION</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1: Does your organization have an approach for disaster &amp; emergency preparedness for pandemics?</td>
<td>✘</td>
<td>✔</td>
</tr>
<tr>
<td>#2: Does your disaster and emergency preparedness system consider prevention?</td>
<td>✘</td>
<td>✔</td>
</tr>
<tr>
<td>#3: Does your disaster and emergency preparedness system consider continuity of operations?</td>
<td>✘</td>
<td>✔</td>
</tr>
<tr>
<td>#4: Does your disaster and emergency preparedness (DEP) system consider recovery?</td>
<td>✘</td>
<td>✔</td>
</tr>
<tr>
<td>#5: Does your DEP system take your reliance on suppliers and partners into account?</td>
<td>✘</td>
<td>✔</td>
</tr>
<tr>
<td>#6: Have you deployed &amp; tested your DEP system, and measured your DEP results in all areas?</td>
<td>✘</td>
<td>✔</td>
</tr>
<tr>
<td>#7: Have you made improvements in your DEP system to reduce impacts &amp; increase effectiveness?</td>
<td>✘</td>
<td>✔</td>
</tr>
<tr>
<td>#8: Have you set targets for your DEP results &amp; compared yours to comparable organizations?</td>
<td>✘</td>
<td>✔</td>
</tr>
<tr>
<td>#9: Do you have emergency preparedness results for at least 3 measurement cycles (trend data)?</td>
<td>✘</td>
<td>✔</td>
</tr>
<tr>
<td>#10: Are your DEP results segmented by location, or by process, as appropriate?</td>
<td>✘</td>
<td>✔</td>
</tr>
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</table>

Total Number of “Yes”: ______ out of 10
Starting from the top, address the questions that you answered “No”.

Those are your opportunities for improvement.

Begin by improving your processes and results, and then...
In the beginning, responding to the criteria was about improving our results and our processes, but we quickly realized we were changing our culture, building and supporting one that thrives on innovative thinking and intelligent risk taking.

We had learned that our patients and residents had become accustomed to that dreaded two-letter word, ‘no.’ Our aim was to turn that around. Our aim is the culture of ‘yes.’
Next Steps *(free resources)*

1. Learn more about the PQA: Download the Criteria at pqa.dti.gov.ph/resources.php

2. Look at examples of how to respond to the PQA Criteria questions: Download application reports at nist.gov/baldrige/awards-recipient

3. View read-only but free ISO standards on business continuity management system & other related standards at: iso.org/covid19
FREE ISO STANDARDS (read-only format)

ISO 22301:2019
Business Continuity Management Systems – Requirements

ISO 31000:2018
Risk Management – Guidelines

ISO 22395:2018
Community Resilience – Guidelines for Supporting Vulnerable Persons in an Emergency

ISO 22316:2017
Organizational Resilience – Principles and Attributes

ISO 22320:2018
Emergency Management – Guidelines for Incident Management

iso.org/covid19
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Will You Be Ready for the Next Pandemic?

It’s Never Too Late To Get Ready...