PANDEMIC: THE SECOND WAVE - HOW PREPARED ARE WE?

Geary W. Sikich

Logical Management Systems, Corp., United States of America¹

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Abstract

You've survived the first wave of an influenza pandemic; now what? How do you know that the first wave has ended and how will you know when the second wave begins? Are you prepared for the second wave? What will the socio-economic situation look like? Will your business still be in business? Can your government still govern? Are you prepared to understand the ramifications of primary markets for goods and services in a state of constant disruption?

A pandemic influenza is utterly different from ordinary flu, which kills between 1 million and 2 million people worldwide in a typical year. In the worst previous catastrophic pandemic, in 1918, more than 20 million died from the Spanish Flu. That's more than the number of people who died from the Black Death in the Middle Ages, and more people killed in 24 weeks than AIDS killed in 24 years.

What should public and private sector planners expect when dealing with each other after the first wave and before the second wave of a pandemic crisis?

Introduction/Overview:

Pandemics have occurred throughout history. From the Bubonic Plague (which occurred three times and took over 300,000,000 lives) to Smallpox (which in the 20th century alone took nearly 300,000,000 lives) the threat of a pandemic is ever present.

Bubonic Plague: Black Death	Asia, Europe, Africa	1300s-1720s;
Bubonic Plague: Plague of Justinian	Asia, Europe, Africa	540-590
Bubonic Plague: Third Pandemic	Worldwide	1850s-1950s

Will history repeat itself with the current threat posed by the H5N1 (Avian Influenza) virus? The probability of a major pandemic occurring in the near future is very real according to the World Health Organization (WHO). But, like seeing a black swan, the rarity and randomness of a pandemic makes planning for it difficult. This is partly due to the fact that we do not know the rules – pandemics are not random, they just appear to be. We see them as random because we have drawn invalid conclusions about their occurrence.

¹ Geary W. Sikich – Logical Management Systems, Corp. Suite 116 – 65 West Jackson Blvd., Chicago, IL 60604

^{(219) 922-7718 -} gsikich@logicalmanagement.com or gsikich@aol.com

Scope/Objectives:

The focus of this presentation is designed to address the nature of planning that will have to be undertaken once a pandemic starts. The structure of the problem faced by planners will be complex. Planners will have to develop "Active Analysis" methods in order to maintain accurate and timely information on the situation.

Possible Scenarios:

A pandemic features: Shock Value, Variability, Mortality and Morbidity. Shock Value occurs when transparent vulnerabilities are exposed. Transparent vulnerabilities are so obvious that they are easily overlooked; they are the ones we:

- \Box see when they are pointed out.
- □ recognize when we are aware of them.
- □ often fail to acknowledge leading to potentially significant consequences when the vulnerability is realized.
- Examples of "transparent vulnerabilities" include:
- Lack of depth in skill-sets within an organization leading to the realization of hidden chokepoints that create failure points within the business and/or governmental system.
- □ Planning assumptions that are not validated. Work-at-home, for example, is predicated on the assumption that the infrastructure is there to support work-at-home and often overlooks the fact that everyone is developing a work-at-home strategy.
- □ Human reactions affecting decision-making. Under stressful conditions, humans react differently, which affects decision-making. Current pandemic exercises do not reflect the stress factors that we will see, nor do they adequately identify the issues that will materialize when a pandemic hits.
- □ False positives created by asking the right question and getting an answer that does not reflect the reality that exists. The question of better preparedness is often answered with the statistics regarding how many people were vaccinated during an exercise. Fact: there will be no vaccine that will be effective against the novel strain of influenza that causes the pandemic if there were, we would not have a pandemic. It will take at least six months to develop a vaccine and another eighteen months to produce sufficient quantities to begin distribution. Antivirals are only effective as long as you take them. Stop and you are just as vulnerable to getting sick as if you had not taken them.

WHO and other organizations base current pandemic planning on historical evidence. Using these assumptions as a basis for planning may be helpful but, there is no guarantee that the next pandemic will follow history.

Phase # 1: Shock and Awe – Reactive (60 – 180 days)

A reactive fear based response is the overriding driver. When the pandemic is declared some countries react by closing their borders. This action, while purely defensive, has many implications from an economic perspective. Other countries begin to close their borders exacerbating the situation.

If this pandemic in any way parallels the influenza of 1918 - 1919, it is estimated that approximately 66% (two-thirds) of the deaths will occur in a period of 24 weeks and more than 50% will occur in even less time, roughly the first 90 days. The potentially staggering death toll and the reactive response to the pandemic will lead to slowdowns of already fragile economies.

Traditional services of government, such as, military, police, fire, emergency medical services, administrative and tax functions are soon strained to the point of breaking.

Phase # 2: Dynamic Consistency Problems – Paralysis (180 – 320 days)

Supply chain adjustments are being made due to disruption of transportation systems. The global economy will be faced with answering a significant question: "How to restart an intricate and complex system that has evolved over time such that it can manage the stresses associated with its functioning?"

Phase # 3: Worst Case – Collapse (320 – 600 days)

Surviving the pandemic will require a rethinking of government and business strategies. Large, integrated companies are forced to downsize and localize. Governments, businesses and consumers readjust to the realities of changes in economic models.

Death tolls may again begin to rise as local efforts to stem the continued pandemic and deal with normal medical issues are faced with lack of materials (vaccine, medicines, etc.) due to the impact of the past 320 days of the pandemic.

Phase # 4: Recovery – Every Time History Repeats Itself the Price Goes Up (600 – 800 days)

The pandemic will gradually subside, leaving healthcare systems devastated. The world enters a very slow and potentially torturous recovery mode.

Tainter in his book, "*The Collapse of Complex Societies*," cites four concepts that would lead to an understanding of collapse:

- □ Human societies are problem-solving organizations
- Sociopolitical systems require energy for their maintenance
- □ Increased complexity carries with it increased costs per capita
- □ Investment in sociopolitical complexity as a problem-solving response often reaches a point of declining returns

If we consider the last point made by Tainter, that increasing complexity often reaches a point of declining returns; attempting to maintain the status quo regarding our complex global economy may actually exacerbate the recovery from the pandemic.

Complexity:

Complexity as a result of a pandemic occurs as a result of systems disruptions due to interdependencies within critical infrastructures, global economics, etc. As one area reacts there is a cascade effect that impacts other areas. For example, closure of borders creates impacts on trade worldwide.

It is therefore critical to establish an information gathering and monitoring system that establishes activation triggers that can be applied and communicated worldwide.

Summary/Concluding Remarks:

We need to practice "Critical Thinking" and to learn to incorporate randomness assessments into our planning process. In this way we will rethink probabilities and their impacts and create a strategic framework for contingency planning that recognizes issues of complexity as crucial to the planning effort.

Author Bibliography

Geary W. Sikich is the author of "It Can't Happen Here: All Hazards Crisis Management Planning," "Emergency Management Planning Handbook" available in English and Spanishlanguage versions and, "Integrated Business Continuity: Maintaining Resilience in Uncertain Times," www.Amazon.com and over 175 published articles. He currently is finalizing a managerial book about potential economic consequences of a pandemic titled "Protecting Your Business in a Pandemic: Plans, Tools, and Advice for Maintaining Business Continuity," Greenwood Publishing Group (Praeger Publishing).Mr. Sikich is the founder and a principal with Logical Management Systems, Corp. (www.logicalmanagement.com). He has extensive experience in management consulting in a variety of fields and consults on a regular basis with companies worldwide on continuity and crisis management issues. He has a Bachelor of Science degree in criminology from Indiana State University and Master of Education in counseling and guidance from the University of Texas, El Paso.