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**IMPROVING STRATEGIC PLANNING FOR FEDERAL PUBLIC
HEALTH AGENCIES THROUGH COLLABORATIVE
STRATEGIC MANAGEMENT**

by

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March 2013

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**IMPROVING STRATEGIC PLANNING FOR FEDERAL PUBLIC HEALTH
AGENCIES THROUGH COLLABORATIVE STRATEGIC MANAGEMENT**

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ABSTRACT

Collaborative strategic management of public health emergency and homeland security issues can address gaps in roles and responsibilities and foster better coordinated planning at the federal level. Recent changes in the alignment of the national planning standards for public health emergency preparedness have created an opportunity to rethink the collaborative approach to strategic planning. This thesis considers the role that collaborative strategic management and collaborative frameworks may play in strengthening strategic planning at the federal level through a policy options analysis. Considerations for implementation and recommendations moving forward are provided for both existing collaborations and new collaborations.

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LIST OF ACRONYMS AND ABBREVIATIONS

ASPR	Assistant Secretary for Preparedness and Response
BSC	Balanced Scorecard
CDC	Centers for Disease Control
CPG	Comprehensive Preparedness Guide
DHHS	Department of Health and Human Services
DHS	Department of Homeland Security
EOP	Emergency Operations Plan
ESF-8	Emergency Support Function-8
FEMA	Federal Emergency Management Agency
GAO	Government Accountability Office
GPRA	Government Performance and Results Act
IPS	Integrated Planning System
MOU	Memorandum of Understanding
PPD-8	Presidential Policy Directive-8

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EXECUTIVE SUMMARY

Changes in national planning standards for improved alignment of public health and healthcare capabilities recognize the need for collaborative strategic planning; however, current national planning standards do not include a framework agencies can use to achieve ongoing collaborative planning. At the federal level, the focus on whole community planning and the inclusion of public, private, and nonprofit entities in healthcare coalitions to help strengthen public health emergency preparedness, has heightened the need for a collaborative planning framework that supports ongoing collaborative planning. This thesis considers the role that collaborative strategic management and various strategic planning frameworks may play in achieving whole community planning at the federal public health level.

This thesis considers what type of collaborative strategic management framework is best suited to assist federal agencies with defining their roles and responsibilities in order to achieve the aligned public health and healthcare capabilities outlined by the CDC and ASPR. While the focus of the thesis is on improved strategic planning at the federal level, the ideas, findings, and conclusions can be applied to strategic planning at the state, local and tribal level as well. In order to answer the research question, three possible collaborative strategic management policy options are examined and evaluated based on select criteria.

The three collaborative strategic management policy options considered in the thesis are (1) a plan-centric outcomes based approach; (2) a process-centric outcomes based approach; and (3) a hybrid approach that combines elements of both the plan-centric and process-centric approaches. The plan-centric outcomes based approach is focused on the formulation of a strategic plan to address one specific issue and requires a strong lead agency to direct the effort, and it is the current strategic planning approach endorsed by the federal government. Developing interagency processes for achieving collaborative planning goals is

the focus of the process-centric outcomes based approach. This approach favors decision-making and communication processes over the development of a strategic plan. The hybrid approach combines development of a strategic plan and strategic processes for meeting collaborative goals simultaneously. This approach requires a larger time commitment by participating agencies, but seeks to achieve both a concrete plan and improved understanding of roles and responsibilities by collaborative group members.

Each policy option is evaluated against four criteria: (1) ability to meet federal strategic planning requirements; (2) political acceptability; (3) effectiveness; and (4) effect on externalities. In evaluating each policy option against its ability to meet federal strategic planning requirements, each policy option is assessed for its ability to meet the goals under *PPD-8* and for its ability to meet the shared public health/healthcare capabilities developed by the CDC and ASPR. Specifically, the requirements to achieve whole community planning and complement state and local planning under *PPD-8* and the requirements to support development of healthcare coalitions and foster community relationships under the public health/healthcare capabilities are assessed. The political acceptability of each policy option to Congress and federal agencies is also considered given the existing congressional oversight mechanisms for homeland security and public health emergency preparedness issues. Each policy option is assessed for its anticipated effectiveness based on two sub-criteria: (1) the ability of agencies to be able to continue to manage themselves in a strategic manner on an on-going basis through the development of a strategic plan, strategy content, and implementation; and (2) the ability to meet the requirements of the *National Planning System*, specifically the development of an interagency strategic plan and individual agency strategic plans. Finally, each policy option is assessed for down-stream, cascading effects on state and local level public health agencies and healthcare infrastructure.

The policy options are rated against each other in a comparative analysis and given an overall ranking of GOOD, BETTER, or BEST. Based on the

rankings, the hybrid approach is determined to be the best of the three policy options.

Challenges related to implementation of collaborative strategic management frameworks generally, and strategy implementation under the three policy approaches, are discussed. The plan-centric approach is found to work best when problems are well defined and the environment and partners are predictable. Because the public health emergency preparedness and homeland security environments are both unpredictable, the plan-centric collaborative strategic management approach is found to be ill suited to address the needs of public health emergency preparedness at the federal level. The process-centric collaborative strategic management approach is found to focus on strategy as an emergent process and runs the risk of creating fragmented and intuitive strategy that does not become formalized. The hybrid collaborative strategic management approach allows preferred conditions to be maintained and modified in order to fit changes in the environment through the use of a learning loop; however, success is dependent on shared consensus among partner organizations.

The thesis finds that a progressive approach to implementing collaborative strategic management frameworks at the federal level may be productive. The current approach to collaborative strategic management at the federal level is the plan-centric approach. Moving towards a process-centric approach represents an incremental change that would lead to improved interaction and coordination among federal agencies. Once processes for collaboration are better established, collaborative groups can then move towards the hybrid approach and seek to incorporate feedback, institutionalize good strategies, and weed out bad strategies. A progressive approach is likely to be palatable at both the congressional and individual agency level because it allows for incremental change and maintaining existing foundational planning work while moving towards improved collaborative strategic management in the future.

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I. INTRODUCTION

Two executive-level changes in national preparedness efforts are underway that directly affect public health preparedness. The first is a federal memorandum of understanding (MOU) to improve interagency grant coordination¹ and the second is the development of a National Preparedness System under *Presidential Policy Directive 8: National Preparedness (PPD-8)*.² Additionally, within the past two years, the Centers for Disease Control (CDC) and the Office of the Assistant Secretary for Preparedness and Response (ASPR) have developed public health and healthcare-specific capabilities to establish a consistent national approach to public health preparedness.³ These three changes in the federal preparedness planning landscape have created an opportunity for the federal public health agencies to rethink how preparedness planning will move forward and how strategic planning could be improved in order to achieve the public health and healthcare preparedness capabilities.

Responding to public health threats requires the collaboration of public health agencies, the healthcare system, and emergency management bodies. A vast number of entities fall into these three categories. Emergency preparedness planning efforts also include input from stakeholders in each of these three categories. In response efforts, entities organize using the principles and frameworks of the National Incident Management System and the Incident Command System, but no comparable framework exists for multiagency strategic

¹Trust for America's Health, *Ready Or Not? Protecting the Public's Health from Diseases, Disasters, and Bioterrorism* (Princeton, NJ: Robert Wood Johnson Foundation, 2011). http://healthyamericans.org/assets/files/TFAH2011ReadyorNot_09.pdf. [hereinafter TFAH]

²Department of Homeland Security, *National Preparedness System* (Washington, DC: Department of Homeland Security, 2011). http://www.fema.gov/pdf/prepared/nps_description.pdf.

³Centers for Disease Control, *Public Health Preparedness Capabilities: National Standards for State and Local Planning* (Atlanta, GA: Centers for Disease Control, 2011). http://www.cdc.gov/phpr/capabilities/DSLRC_capabilities_July.pdf. [hereinafter *Public Health Preparedness Capabilities*]; Office of the Assistant Secretary for Preparedness and Response, *Healthcare Preparedness Capabilities. National Guidance for Healthcare System Preparedness*, Washington, DC: Office of the Assistant Secretary for Preparedness and Response, 2012. <http://www.phe.gov/Preparedness/planning/hpp/reports/Documents/capabilities.pdf>. [hereinafter *Healthcare Preparedness Capabilities*].

planning. This thesis examines potential policy options related to collaborative strategic management frameworks that could improve federal interagency coordination.

At the federal level it has been noted that there is a lack of clarification regarding roles and responsibilities in public health emergencies, particularly with respect to preparing for pandemics,⁴ and a number of policymakers, analysts and other experts have criticized federal efforts at strategic planning, especially in the area of bioterrorism.⁵ As the federal government moves towards improved interagency coordination, whole community planning, and achievement of the CDC's public health and ASPR's healthcare capabilities, it will be necessary to better define roles and responsibilities and chain of command for decision-making.⁶ This is necessary for improving planning at the federal level and assisting the planning, response, and recovery efforts by state and local government and private healthcare entities. Collaborative strategic management implemented at the federal level can achieve these needs.

A. PROBLEM STATEMENT

Over the past two years the CDC and ASPR have created national planning standards for public health emergency preparedness that seek to align the public health and healthcare emergency capabilities. The CDC's *Public Health Emergency Preparedness Capabilities* establish strategic planning priorities for state and local health departments and ASPR's *Healthcare Preparedness Capabilities* set forth strategic planning priorities for the healthcare sector. There are fifteen *Public Health Emergency Preparedness Capabilities* as

⁴Government Accountability Office, "Strengthening Preparedness for Large Scale Public Health Emergencies," accessed January 14, 2013. <http://www.gao.gov/highrisk/risks/national-challenges-public-health/>.

⁵U.S. Library of Congress, Congressional Research Service, *Federal Efforts to Address the Threat of Bioterrorism: Selected Issues and Options for Congress*, eds. F. Gottron & D.A. Shea, CRS Report R41123 (Washington, DC: Office of Congressional Information and Publishing, February 8, 2011).

⁶See generally Department of Homeland Security, *National Preparedness Goal* (Washington, DC: Department of Homeland Security, 2011). <http://www.fema.gov/pdf/prepared/npg.pdf>; *Public Health Preparedness Capabilities*; and *Healthcare Preparedness Capabilities*.

outlined by the CDC. Eight shared capabilities with the healthcare sector form the basis for healthcare coalition preparedness, a proposed concept for collaborative planning around the public health and healthcare capabilities. Healthcare coalitions are expected to include public health agencies and healthcare infrastructure membership. The development and alignment of the public health and healthcare sector planning capabilities by the CDC and ASPR has helped to standardize national planning for public health emergencies. Both sets of capabilities recognize the need for collaborative strategic planning; however, the CDC and ASPR capabilities do not propose a framework for achieving ongoing collaborative planning.

The additional seven *Public Health Preparedness Capabilities* complement the shared capabilities, and include emergency public information and warning, mass care, medical countermeasure dispensing, medical materiel management and distribution, non-pharmaceutical interventions, public health laboratory testing, and public health surveillance and epidemiological investigation.⁷ While the planning responsibility for these capabilities is reserved to public health agencies, their implementation requires great coordination among public health, emergency management, and healthcare entities. For example, emergency public information and warning includes activating an emergency public information warning system and issuing public alerts, warnings, and notifications.⁸ Such systems and the distribution of alerts and notifications require input and action from healthcare infrastructure, as well as, public health and emergency management entities. As part of the emergency public information and warning system, healthcare infrastructure must be included as a collaborative partner when plans and protocols are developed by governmental entities. The same is true of the remaining *Public Health Preparedness Capabilities*. Healthcare infrastructure partners are critical partners in working towards achieving public health preparedness.

⁷ *Public Health Preparedness Capabilities*, 4.

⁸ *ibid.*, 11.

This thesis considers the role that collaborative strategic management and collaborative frameworks may play in developing collaborative planning related to the aligned public health and healthcare capabilities. A number of factors affect collaboration among organizations, including factors related to the environment surrounding entities and factors related to the organization of entities. The structural components of collaborative frameworks and overall framework design directly affect implementation, and collaborative structure affects outcomes and success. By examining various strategic management frameworks, this thesis considers which type of collaborative strategic management framework is best suited for achieving the CDC's *Public Health Preparedness Capabilities* and ASPR's *Healthcare Preparedness Capabilities*.

B. RESEARCH QUESTION

This thesis seeks to address the following question:

- What type of collaborative strategic management framework is best suited to assist federal agencies with better defining their roles and responsibilities and achieving the CDC's *Public Health Preparedness Capabilities* and ASPR's *Healthcare Preparedness Capabilities*?

While the research question focuses on improving federal coordination in order to achieve the *Public Health Preparedness Capabilities* and the *Healthcare Preparedness Capabilities*, a multidimensional result is anticipated. The first dimension is the improved coordination and planning at the federal level and the second dimension is the achievement of the *Public Health Preparedness Capabilities* and the *Healthcare Preparedness Capabilities* at the state, local and tribal levels of government. Depending on the policy option implemented, these results may be achieved concurrently or successively.

C. DEFINITION OF TERMS

Because this thesis draws on multiple bodies of literature (strategic planning, strategic management, and public health) and because even within

bodies of literature authors use multiple terms to refer to the same concept, a short glossary of terms is presented here.

1. Collaborative Strategic Management

The term “collaborative strategic management” refers to the process involved in the formation of partnerships or alliances across organizations that represent collective, joint activity for the purpose of formulating a collaborative strategic plan and implementing tactics.⁹ Strategic planning and implementation occur at both the collaborative and organizational levels.¹⁰

2. Federal Agency/Federal Level

Throughout the thesis, the terms federal agencies and federal level are used interchangeably. The focus of the thesis is on federal agencies involved in planning for public health emergencies. Typically, this includes those agencies that are part of the Department of Health and Human Services (DHHS) and the Department of Homeland Security (DHS). However, other federal agencies are also involved in planning for public health emergencies, including the U.S. Department of Agriculture and the Environmental Protection Agency. The degree of involvement in public health emergency planning varies depending on the role of the agency in preparedness and response. Agencies that have not traditionally been brought to the table previously may be included at one point or another depending on the type of collaborative planning framework that is employed.

3. Healthcare Preparedness Capability

In January 2012, ASPR released *Healthcare Preparedness Capabilities*, outlining healthcare-specific capabilities under Emergency Support Function-8

⁹A. Clarke and M. Fuller, “Collaborative Strategic Management: Strategy Formulation and Implementation by Multi-Organizational Cross-Sector Social Partnerships,” *Journal of Business Ethics* 94, Suppl 1 (2010): 85–101.

¹⁰*Ibid.*

(ESF-8).¹¹ The *Healthcare Preparedness Capabilities* are based on the preparedness methodologies of the Federal Emergency Management Agency (FEMA) regarding whole of community planning and in accordance with *PPD – 8*. ASPR suggests that healthcare systems, healthcare coalitions, and healthcare organizations use these capabilities for emergency preparedness planning.¹²

4. Public Health Preparedness Capability

The CDC has implemented a systematic process for defining a set of public health preparedness capabilities to assist state and local health departments with their strategic planning. The resulting document, *Public Health Preparedness Capabilities: National Standards for State and Local Planning* creates national standards for public health preparedness capability-based planning. The “standards are designed to accelerate state and local preparedness planning and provide guidance and recommendations for preparedness planning in order to assure safer, more resilient, and better prepared communities.”¹³

5. Strategic Management

Strategic management is the process of managing an organization in a strategic manner on a continuing basis through the development of a strategic plan, strategy content and implementation.¹⁴ Strategic management is intended to enhance all managerial decisions and actions that affect the long-term performance of an organization. Strategic planning is a component of strategic management.

¹¹*Healthcare Preparedness Capabilities*, vii.

¹²*Ibid.*, vii–xvi.

¹³*Public Health Preparedness Capabilities*, 2.

¹⁴T. H. Poister, D. W. Pitts, and L. Hamilton Edwards, “Strategic Management Research in the Public Sector: A Review, Synthesis, and Future Directions,” *American Review of Public Administration* 40.5 (2010): 522–545.

6. Strategic Planning

Strategic planning is concerned with formulating strategy in order to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it.¹⁵ Strategic planning is an element of strategic management.

7. Whole Community Planning

Whole community planning seeks to engage individuals, families, communities, private and nonprofit sectors, faith-based organizations, and all levels of government in emergency preparedness and response planning efforts. A whole community planning approach encompasses three key concepts.¹⁶ The first concept is to understand and meet the true needs of the entire affected community.¹⁷ The second concept is to engage all aspects of the community (public, private, and civic) in both defining needs and devising ways to meet them.¹⁸ The final concept is strengthening the assets, institutions, and social processes that work well in communities on a daily basis to improve resilience and emergency management outcomes.¹⁹

D. SIGNIFICANCE OF RESEARCH

The thesis proposes that an interagency collaborative strategic management framework should be developed in order to address gaps in roles and responsibilities at the federal level and to foster better coordinated planning at the federal level for public health preparedness. The goal of such a framework is to increase interagency collaboration and strengthen planning, not necessarily

¹⁵J. Bryson, *Strategic Planning for Public and Nonprofit Organizations: A Guide to Strengthening and Sustaining Organizational Achievement*, 3rd ed. (San Francisco: Jossey-Bass, 2004).

¹⁶Federal Emergency Management Agency, *Comprehensive Preparedness Guide (CPG) 101, Version 2.0* (Washington, DC: Federal Emergency Management Agency, 2010, 4–4). http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf.

¹⁷*Ibid.*

¹⁸*Ibid.*

¹⁹*Ibid.*

develop a formal plan, although a formal plan may be produced. Collaborative strategic management frameworks allow agencies to collaborate and plan for increased public health preparedness both within the individual agencies and as a collaborative entity. It is important that the framework allow for planning achievements to be transmitted to state, local, and private organizations in order to further strengthen public health preparedness planning at all levels of government and within the healthcare sector.

While this thesis focuses on public health preparedness, the concept of collaborative strategic management frameworks has broader implications for homeland security. Collaborative strategic management frameworks can provide a mechanism for federal agencies to come together before an incident to discuss roles and responsibilities, chain of command, and the inter-organizational structure of a multi-agency response, as well as, plan benchmarks related to tactical operations. A collaborative strategic management framework implemented prior to incidents will not only improve planning efforts, but will also improve management and execution of plans during incidents, improving the overall effectiveness of governmental response during homeland security incidents.

The focus of the thesis is on the implementation of a collaborative strategic management framework to help improve role clarification and interagency coordination at the federal level; however, the policy options examined could be implemented at the state, local or tribal level as well.

E. THESIS STRUCTURE AND OVERVIEW

Chapter I introduced the current state of federal strategic planning efforts for public health preparedness, the problem statement, the research question this thesis seeks to answer, a short glossary of terms used throughout the thesis, as well as, a brief discussion of the significance of the research. Chapter II reviews the literature on public sector strategy, the federal government's strategy typology, and collaborative strategic management frameworks generally. This thesis uses a policy options analysis as its research methodology, as outlined in

Chapter III. The three policy options that could be implemented at the federal level to improve collaborative strategic management of public health preparedness are described and assessed in Chapters IV—VI. A short comparative analysis of the three policy approaches is presented in Chapter VII, and Chapter VIII then discusses how to best implement collaborative strategic management within the federal public health agencies. Finally, Chapter IX concludes the thesis with recommendations for moving forward with implementation in a progressive manner.

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II. LITERATURE REVIEW

The literature review considers public sector strategy typologies, the federal strategy typology as outlined by the Government Performance and Results Act (GPRA) and homeland security agencies, and collaborative frameworks for strategic management. The review begins by looking at public sector strategy typologies developed over the past twenty-five years. Next, GPRA is discussed as the structure by which the federal government has mandated public sector strategy be achieved by federal agencies. Recent changes in planning guidance related to public health preparedness are also briefly discussed. The final section of the literature review looks at collaborative strategic management and examines frameworks for strategy management, determinants of collaborative strategic management frameworks, the effect of structural components of frameworks on implementation, and the relationships between collaborative frameworks and their outcomes/success.

A. PUBLIC SECTOR STRATEGY TYPOLOGIES

A number of public sector strategy typologies have been developed over the past twenty-five years. Overall, the various typologies look at strategy as an entity and not as practice. Five public sector strategy typologies from the literature are reviewed below.

The first public sector strategy typology compares explicit versus rationalized strategy. Explicit strategy occurs when an organization proactively sets forth guidance and subsequent action, whereas rationalized strategy looks retrospectively at events and constructs an organizational strategy based on internal and external factors.²⁰ According to Miller, there are three basic ways to think about strategy in public organizations.²¹ The first way of thinking uses linear logic, that is, strategy “follows a linear logic in which plans precede

²⁰G. Miller, “Unique Public-Sector Strategies,” *Public Productivity & Management Review* 13.2 (1989): 133–144, 133.

²¹*Ibid.*, 135–136.

action.”²² This is similar to the concept of explicit strategy, and a number of studies in organizations outside of business have considered strategy as a rational decision technique.²³ The second way of thinking about strategy is through nonlinear logic. This is most similar to the ancient meaning of strategy.²⁴ Relying on the reversal of opposites and deception, this view of strategy seeks to find ways to attack when the enemy is unprepared and uses inconvenience to strike and gain advantage.²⁵ The third way of thinking about strategy is to exploit opportunities by taking advantage of change such as elections, economic changes, or issue mutation.²⁶ According to Miller, this third type of strategy, which takes advantage of emerging and unrealized opportunities, is most appropriate for the public sector and is the normative approach in the public sector.²⁷

Within the literature on public sector strategy, Miller’s conclusion regarding the exploitation of opportunities is consistent with other researchers. Eadie and Steinbacher found collective management of an organization’s strategic agenda needs to change as an organization’s problems and opportunities change.²⁸ In their article on transforming public organizations through strategic management and planning, Nutt and Backoff discuss the importance of assessing an organization’s distinctive competencies and looking for ways to apply them.²⁹ Vinzant discusses the importance of “thinking ahead to the changes that are likely to confront” an organization in the future and the importance of encouraging

²²Ibid., 135.

²³See J. Bryson and W. Roering, “Initiation of Strategic Planning by Governments,” *Public Administration Review* 48.6 (1988): 995–1004, 995.

²⁴Miller, “Unique Public-Sector Strategies,” 135.

²⁵Ibid., 136.

²⁶Ibid.

²⁷Ibid.

²⁸D. Eadie. and R. Steinbacher, “Strategic Agenda Management: A Marriage of Organizational Development and Strategic Planning,” *Public Administration Review* 45.3 (1985): 424–430, 425.

²⁹P. Nutt and R. Backoff, “Transforming Public Organizations with Strategic Management and Strategic Leadership,” *Journal of Management* 19.2 (1993): 299–347, 311.

creativity and innovation in order to meet the strategic needs of an organization.³⁰

Nutt and Backoff propose an internal capacity and external responsiveness model that uses the two dimensions of capacity for action and need for responsiveness to create four types of public organization environments and assess how they might use strategy.³¹ Change requires an organization to move towards both increased internal capacity and external responsiveness.³² Organizations that are imbalanced in their ability to meet the needs of their constituents and capacity will find it difficult to change.³³ Eadie and Steinbacher's examination of strategic management planning techniques as applied by the Ohio Bureau of Employment Services also found that an agency's capabilities must be balanced against the desired outcomes expected from the strategic management process.³⁴ In balancing desired outcomes and organizational capability, resources such as management skills, time, and finances must be considered against other development needs of the organization.³⁵ Nutt and Backoff's typology uses six strategy categories and hypothesizes which best connect to various environments.³⁶ The six strategy categories are: understand history, explore the situation, uncover issues, identify strategy, assess feasibility, and implement strategic change.³⁷

Osborne and Plastrik's model sets forth five categories of strategy that organizations can use to help leverage change, the "5 Cs."³⁸ The first is core

³⁰D. Vinzant, "Strategic Management and Public Organizations: Lessons from the Past and Prescriptions for the Future," *International Journal of Public Administration* 19.10 (1996): 1743–1779, 1758.

³¹Nutt and Backoff, "Transforming Public Organizations," 307–312.

³²P. C. Nutt, "Prompting the Transformation of Public Organizations," *Public Performance & Management Review* 27.4 (2004): 9–33.

³³*Ibid.*

³⁴Eadie and Steinbacher, "Strategic Agenda Management," 425.

³⁵*Ibid.*, at 426.

³⁶Nutt and Backoff, "Transforming Public Organizations," 314.

³⁷*Ibid.*

³⁸D. Osborne and P. Plastrik, *Banishing Beauracracy*, Reading, MA: Addison-Wesley, 1997.

strategy that refers to clarifying an organization's purpose and direction. This strategy helps steer the organization in the right direction. The second strategy is the consequences strategy, which helps an organization create incentives for performance. The customer strategy focuses on making an organization accountable to its customers. A fourth control strategy deals with decentralizing decision-making and empowering communities. Finally, the culture strategy looks to changing habitual behaviors and attitudes of public employees.

Kaplan and Norton designed the balanced scorecard (BSC) typology for use in the private sector.³⁹ The BSC approach looks at specific, preidentified categories (customer, financial, internal process, and learning and growth) and focuses attention on issues related to each category. Challenges both within and across each category are aligned and the final product is a "strategy map" that represents the organization's tactics. Because this approach uses preidentified categories, it is more useful for implementing strategy rather than actually developing strategy. Ultimately, it is about choosing measures and targets to meet already identified goals.

Boyne and Walker's public sector strategy typology considers two dimensions of strategy that they refer to as "strategic stance" and "strategic action."⁴⁰ Strategic stance refers to the methods by which an organization seeks to maintain its performance, while strategic action refers to the specific steps that an organization takes in order to achieve its stance.⁴¹ The organization's strategy is thus a combination of its strategic stance and strategic actions. This typology combines the work of Miles and Snow and Porter, focusing on private sector business.⁴²

³⁹R. S. Kaplan and D. P. Norton, *The Balanced Scorecard: Translating Strategy into Action* (Boston, MA: Harvard Business School Press, 1996).

⁴⁰G. A. Boyne and R. M. Walker, "Strategy Content and Public Service Organizations," *Journal of Public Administration Research and Theory* 14.2 (2004): 231–252, 232.

⁴¹Ibid.

⁴²R. E. Miles and C. Snow, *Organizational Strategy, Structure and Process*, New York: McGraw-Hill, 1978; M. E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York: Free Press, 1985).

The literature on public sector strategy typologies reveals that most researchers have considered strategy as an entity and focused less on public organizations' performance. However, many researchers view strategy as a combination of what is intended, what is emergent, and what is ultimately realized.⁴³ By comparison, the federal government has chosen to define strategy in terms of performance. The next section discusses public sector strategy at the federal government level as outlined by GPRA and current national preparedness efforts that affect public health preparedness strategic planning.

B. PUBLIC SECTOR STRATEGY AT THE FEDERAL LEVEL

The 1990s brought administrative reforms to all levels of government, and in 1993, the Government Performance and Results Act (GPRA) was passed, requiring all federal agencies to engage in strategic planning and nudging them towards comprehensive strategic management.⁴⁴ The recent development of homeland security has led to a need for multiagency, multisector strategic planning. Part 1 of this section examines GPRA and discusses why it is inadequate for achieving homeland security goals. Part 2 briefly describes current changes in national preparedness and public health preparedness that have created a need for improved strategic planning and management.

1. Government Performance and Results Act

GPRA requires federal agencies to set goals, measure performance and report on accomplishments. The six requirements for strategic planning are set out in Section 3 of the act and include: a comprehensive mission statement which sets forth the fundamental purpose of the agency; general strategic goals

⁴³See Miller, "Unique Public-Sector Strategies," 133–144; H. Mintzberg, "The Science of Strategy Making," *Industrial Management Review (pre-1986)* 8.2 (1967): 71–81; R. Andrews, G. Boyne, J. Law, and R. Walker, "Strategy Formulation, Strategy Content and Performance: An Empirical Analysis," *Public Management Review* 11.1 (2009): 1–22; and Bryson and Roering, "Initiation of Strategic Planning by Governments," 995–1004.

⁴⁴J. Bryson, F. Berry, and K. Yang, "The State of Public Strategic Management Research: A Selective Literature Review and Set of Future Directions," *American Review of Public Administration* 40.5 (2010): 495–521, 496.

and objectives that are results-related and reflect the tangible accomplishments that justify the existence of the agency's programs; a description of how the goals and objectives are to be achieved, that is, the strategies to be employed and the resources needed to attain the goals and objectives; a description of how the annual performance goals are related to the general goals and objectives of the strategic plan; an identification of those key factors external to the agency and beyond its control that could significantly affect the achievement of the agency's goals and objectives; and a description of the program evaluations used in establishing or revising agency goals and objectives with a schedule for future program evaluation.⁴⁵ When GPRA goals are not met, agencies must provide an explanation and present actions to help achieve unmet goals in their program performance plans.⁴⁶

Overall, performance planning and measurement have become a part of federal agencies' cultures since GPRA's inception.⁴⁷ In 2004 a Government Accountability Office (GAO) report found that despite these improvements, certain weaknesses in GPRA planning persist, such as "lack of detail on how annual performance goals relate to strategic goals and how agencies are coordinating with other entities to address common challenges and achieve common objectives."⁴⁸ GPRA mandates that federal agencies must develop strategic planning, but it does not provide any guidance to agencies regarding how they should design and implement strategic planning.

It is also difficult for agencies to distinguish between the results produced by the federal program itself and results produced by external entities and

⁴⁵*Government Performance and Results Act of 1993*, Public Law 103-62, 107 Stat. 285 (Aug. 3, 1993).

⁴⁶Government Accountability Office, *Results-Oriented Government: GPRA has Established a Solid Foundation for Achieving Greater Results*, GAO-04-594T (Washington, DC: Government Accountability Office, 2004), 5.

⁴⁷*Ibid.*, 7.

⁴⁸*Ibid.*

nonfederal actors.⁴⁹ This is especially true with grant programs, making the relevance of GPRA to federal grant programs questionable from a strategic planning view. Crosscutting issues, including homeland security issues, are difficult to address under GPRA due to mission fragmentation and overlap across federal agencies.⁵⁰ The GAO identified evolving national and homeland security policies as a major force requiring the federal government to rethink its approach to strategy and management in 2004.⁵¹

The GPRA Modernization Act of 2010⁵² seeks to address challenges related to crosscutting issues and barriers to effective federal agency collaboration.⁵³ Under the GPRA Modernization Act, the Office of Management and Budget is required to work with agencies to develop long-term, outcome-oriented goals for a limited number of crosscutting policy areas every four years.⁵⁴ It remains to be seen what effect this change will have on interagency strategic planning.

2. Changes in National Preparedness and Public Health Preparedness Planning Policy

Public health preparedness planning policy has undergone some recent changes at the federal level, creating an opportunity for federal public health agencies to reevaluate interagency strategic planning. These changes include interagency coordination of preparedness funds, the development of *PPD-8*, and the creation of public health and healthcare preparedness capabilities.

⁴⁹Ibid., 8.

⁵⁰Ibid., 9.

⁵¹Ibid., 3.

⁵²*GPRA Modernization Act of 2010*, Public Law 111–352, 124 Stat. 3866 (Jan. 4, 2011).

⁵³Government Accountability Office, *GPRA Modernization Act Provides Opportunities to Help Address Fiscal, Performance, and Management Challenges*, GAO-11–466T (Washington, DC: Government Accountability Office, 2011).

⁵⁴ Ibid.

In 2011, ASPR, CDC, FEMA, the Health Resources and Services Administration, and the Department of Transportation's National Highway Transportation Safety Administration agreed through a MOU to engage in collaborative efforts to improve interagency grant coordination.⁵⁵ Each of these agencies distributes preparedness funds and provides technical assistance in support of national preparedness.⁵⁶ The MOU calls for senior leaders from each agency to participate in a working group to align grant processes and improve preparedness outcomes.⁵⁷ This effort appears to be focused on improved fiscal management of limited federal funding for preparedness.

PPD-8, released in March 2011, charges DHS with building and sustaining preparedness through the development of a *National Preparedness System*.⁵⁸ Planning is a core capability under the *National Preparedness System*, and DHS is seeking to develop a collaborative, whole community approach that will include all levels of government, the private and nonprofit sectors, individuals, and families.⁵⁹ Because DHS is in the early stages of developing the *National Preparedness System*, it remains to be seen if a framework for achieving whole community planning will be proposed. Initial planning documents state that a "flexible planning process that builds on existing plans" is necessary.⁶⁰

Additionally, the CDC and ASPR developed national planning standards for public health emergency preparedness that seek to align the public health emergency capabilities in 2011. The CDC's *Public Health Emergency Preparedness Capabilities* establish strategic planning priorities for state and local health departments and ASPR's *Healthcare Preparedness Capabilities* set

⁵⁵TFAH, 41.

⁵⁶*Ibid.*

⁵⁷*Ibid.*

⁵⁸The White House, *Presidential Policy Directive / PPD-8: National Preparedness* (Washington, DC: The White House, 2011). http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm.

⁵⁹Department of Homeland Security, *National Preparedness System*, 1.

⁶⁰Department of Homeland Security, *National Protection Framework* (Washington, DC: Department of Homeland Security, 2012). <http://www.fema.gov/library/viewRecord.do?id=5448>.

forth strategic planning priorities for the healthcare sector. Eight shared capabilities form the basis for healthcare coalition preparedness, a proposed concept for collaborative planning around the various public health capabilities.⁶¹ The alignment of public health and healthcare sector planning capabilities standardizes national planning for public health preparedness and recognizes the need for collaborative planning; however, the CDC and ASPR capabilities do not propose a framework for achieving collaborative planning. Collaborative strategic management may help achieve this federal planning priority.

C. COLLABORATIVE STRATEGIC MANAGEMENT

The development of public sector strategy for collaborations including public, private and nonprofit organizations is a relatively new but growing area within the literature on public sector strategy. Intersectoral planning has increased greatly in the past twenty-five years as more services and programs are delivered through collaborative arrangements, and collaborative strategic planning and management has become a new area of research and focus in the academic arena.⁶² According to Eadie, strategic planning may be particularly beneficial when an issue is interdepartmental in nature, is heavily influenced by the external environment, and the environment is very complex and changing rapidly.⁶³ This section examines five contemporary models for collaborative intersectoral strategy management, determinants of collaborative strategic management frameworks, the structural components of collaborative frameworks, and the relationship between collaborative framework structures and outcomes/success.

⁶¹ *Healthcare Preparedness Capabilities*, vii.

⁶² Bryson et al., "The State of Public Strategic Management Research," 504.

⁶³ D. Eadie, "Strategic Agenda Management: A Powerful Tool for Government," *National Civic Review* 74.1 (1985): 15–20, 20.

1. Collaborative Strategic Management Models

Gray and McCann developed the most widely referenced collaborative process model.⁶⁴ The Gray-McCann model focuses on three phases: problem setting, direction setting, and structuring. Problem setting concerns the identification of stakeholders who have a claim and role in the issue that joins them.⁶⁵ Direction setting occurs when stakeholders determine a common purpose and goals that drive future activities in order to achieve common goals. Structuring refers to the methods employed in order to support and sustain collective activities.

A second model by Waddell and Brown identifies five phases of collaborative process: identifying preconditions for partnership; convening partners; setting shared directions; implementing action strategies, and institutionalizing/expanding successful intersectoral collaboration.⁶⁶ This process is more comprehensive than that of Gray and McCann because it offers distinct phases for identifying preconditions and implementing strategies. Waddell and Brown's third step is similar to the direction-setting step of Gray and McCann, and the fourth and fifth steps combined are comparable to the structuring phase of Gray and McCann.

Hood *et al.* offer a third model for collaboration that includes four stages: environmental factors, organizational factors, group interaction factors, and collaborative outcomes.⁶⁷ In their model, environmental factors (severity of the problem, complexity of the problem, and resource capability) and organizational factors (perceived interdependence, organizational interests, and commitment of

⁶⁴B. Gray, "Conditions Facilitating Interorganizational Collaboration," *Human Relations* 38.10 (1985): 911–936; J. E. McCann, "Design Guidelines for Social Problem-Solving Interventions," *Journal of Applied Behavioral Science* 19.2 (1983): 177–192.

⁶⁵Gray, "Conditions Facilitating Interorganizational Collaboration," 916.

⁶⁶S. Waddell and L. D. Brown, *Fostering Intersectoral Partnering: A Guide to Promoting Cooperation among Government, Business, and Civil Society Actors*, IDR Reports (Boston, MA: Institute for Development Research, 1997).

⁶⁷J. N. Hood, J. M. Logsdon, and J. K. Thompson, "Collaboration for Social Problem-Solving: A Process Model," *Business and Society* 32.1 (1993): 1–17.

management) lead to group interaction factors.⁶⁸ The result is collaborative action. This model addresses collaboration only, not collaborative strategy and does not consider implementation at all.

A fourth model developed by Seitdani and Crane focuses on partnerships between business and nonprofit organizations.⁶⁹ They propose a three-step process that includes partnership selection, partnership design, and partnership institutionalization.⁷⁰ Each stage has a number of sub-stages that delineate the micro-processes that must take place in order to build a collaborative relationship. For example, in the partnership design phase the sub-processes of setting up partnership objectives and drafting memorandums of understanding take place.⁷¹

None of the models discussed above consider individual organizational implementation separate from the overall collaboration's implementation. A fifth model proposed by Clarke and Fuller seeks to consider both levels of implementation by expanding outcomes and incorporating feedback loops.⁷² Clarke and Fuller's model consists of five steps: assessing the context/forming the partnership; formulation of a strategic plan; implementation of the plan by the individual organization and implementation of the plan by the collaboration; and realized outcomes of both the individual organization and collaboration as a whole. Realized outcomes can include outcomes related to the plan, the process, the partners, outside stakeholders, persons, and the environment.⁷³ External factors affecting formulation and implementation of strategy in organizations are accounted for through a series of feedback loops. Clarke and Fuller's model is

⁶⁸Ibid., 5.

⁶⁹M. M. Seitdani and A. Crane, "Implementing CSR through Partnerships: Understanding the Selection, Design and Institutionalisation of Nonprofit-Business Partnerships," *Journal of Business Ethics* 85.2 (2009): 413–429.

⁷⁰Ibid., 416–422.

⁷¹Ibid., 418.

⁷²Clarke and Fuller, "Collaborative Strategic Management," 88.

⁷³Ibid., 90—91.

more dynamic than the other four models. The five collaborative strategic management models and their various phases are shown in Table 1.

Table 1. Phases of Collaborative Strategic Management Models

Gray-McCann	Waddell & Brown	Hood <i>et al.</i>	Seitdani & Crane	Clarke & Fuller
Problem-setting	Identify preconditions	Environmental Factors	Partnership selection	Assessing the context/forming the partnership
Direction-setting	Convene actors and define problems	Organizational Factors	Partnership design	Formulation of a strategic plan
Structuring	Set shared directions	Group Interaction Factors	Partnership institutionalization	Implementation of the plan by the individual organization
	Implement joint action strategies	Collaborative Outcomes		Implementation of the plan by the collaboration
	Expand and institutionalize success			Realized outcomes of both the individual organization and the collaboration as a whole

The literature on collaborative strategic management models focuses on the management of collaborative groups, but does not address how to collaborate or how various organizations should move toward an integrated approach. Practitioner-oriented guidance for engaging in strategic planning and management is also lacking. In considering what type of model might be best suited for developing interagency collaboration, further examination of determinants of collaboration and the structural components of collaborative frameworks may be informative. The next section looks at the development of

collaborative strategic management frameworks, including the determinants of collaborative strategic management frameworks, the various structural components of collaborative frameworks, and the relationship between framework structure and implementation outcomes.

2. Developing Collaborative Strategic Management Frameworks

This section looks at two areas that affect the development of collaborative strategic management frameworks and the relationship of structure to outcomes. The various determinants of collaborative strategic management frameworks are briefly outlined. Then, the three structural components of collaborative strategic management frameworks, partners, forms, and processes, are examined. The section concludes by exploring the relationship between collaborative strategic management framework structures and outcomes.

a. Determinants of Collaborative Strategic Management Frameworks

Various environmental and organizational forces affect the context in which a collaborative relationship begins, and some forces work against collaboration while others draw partners together.⁷⁴ This section briefly discusses various factors that affect how collaborative frameworks are formed.

Hood *et al.* break environmental factors into two components: the nature of the problem itself and institutional characteristics that encroach on the problem.⁷⁵ Problem characteristics include severity, complexity and resource availability.⁷⁶ Collaboration is more likely to occur when a problem is of high severity and of high complexity with low resource availability. Institutional characteristics that affect collaboration include stability, flexibility and conflict.⁷⁷

⁷⁴S. A. Waddock, "Understanding Social Partnerships an Evolutionary Model of Partnership Organizations," *Administration and Society* 21.1 (1989): 78–100, 81.

⁷⁵Hood et al., "Collaboration for Social Problem-Solving," 4.

⁷⁶*Ibid.*, 5.

⁷⁷*Ibid.*

Organizations that exhibit high stability, high flexibility, and low conflict enter into collaborative frameworks more easily.

Organizational factors that have a determining affect on collaborative strategic management frameworks include perceived interdependence, organizational interests, and commitment of top management.⁷⁸ Organizations are less likely to enter into collaborative efforts if it is perceived that problems can be solved by individual organizations. Likewise, organizations must believe that their fundamental interests are at stake in order to join a collaborative effort. These interests may relate to efficiency, stability or legitimacy.⁷⁹ Organizations are more likely to support collaborative efforts when there is a high perceived interdependence, high interests of the organization at stake, and commitment from top management.

Waddock identifies seven environmental factors that affect the design and development of collaborative strategic management frameworks: legal requirements, existing networks, third party organizations, common vision, crisis, and visionary leadership.⁸⁰ Both existing networks and third party organizations can help spawn new collaborative groups to address problems that cross organizations. Waddock's common vision and crisis categories are similar to Hood *et al.*'s organizational factors. Waddock's visionary leadership category is also similar to Hood *et al.*'s organizational factors, but it also includes champions for collaboration that may or may not be top management. Huxham identifies a list of necessary conditions in order for successful collaboration to occur that mirrors the work of Hood *et al.* and Waddock.⁸¹ A summary of the various determinants discussed in the literature is shown in Table 2.

⁷⁸Ibid.

⁷⁹Ibid., 6.

⁸⁰Waddock, "Understanding Social Partnerships," 81.

⁸¹C. Huxham, "Pursuing Collaborative Advantage," *The Journal of the Operational Research Society* 44.6 (1993): 599–611.

Table 2. Determinants of Collaborative Strategic Management Frameworks

Determinant Type	Hood <i>et al.</i>	Waddock	Huxham
Environmental Determinants	Problem Characteristics such as severity, complexity, and resource availability	Mandates/Legal requirements	Shared sense of mission/strategy
	Institutional Characteristics such as stability, flexibility, and conflict	Existing networks	Shared set of values
		3 rd party organizations/brokers	Shared ability to manage change
		Common vision/understanding	Shared power among those involved
		Crisis	Shared decisions about how to manage the collaboration
		Visionary leadership	Shared resources
Organizational Determinants	Perceived interdependence		Acknowledgement of the complexity of the issue
	Organizational interests		Mutual trust
	Commitment of top management		Geographic proximity

Not all of the determinants discussed above are necessary in order for collaboration to occur, but at least one of them must be present. The ability of these factors to pull and keep organizations in a collaborative group is tenuous at best, and it is unclear from the literature exactly how much they may influence the ultimate success of collaborations. Nevertheless, these determinants of collaboration must be considered when developing and implementing collaborative strategic management frameworks. Next, the structural components of collaborative frameworks are discussed.

b. Structural Components of Collaborative Strategic Management Frameworks

Building off Gray and Hood *et al.*, collaborative frameworks are organized around three structural components—partners, forms, and processes.⁸² Each of these structural components affects the ability of the collaborative group to achieve strategic goals.

The literature on collaborative frameworks focuses on three aspects of partners: key partners, partner engagement, and partner roles. The inclusion of key partners is important in order for collaborative groups to achieve their goals, and the selection of partners affects whether implementation is successful.⁸³ In considering the range of partners to include, consideration of the different values and agencies relevant to the problems is necessary, while keeping in mind that achieving actionable outcomes often requires a small number of partners.⁸⁴

The outcomes of collaborative frameworks can vary considerably depending on the level of partner engagement, and engagement increases when partners believe that their involvement will increase the effectiveness of problem solving.⁸⁵ Previous collaborative or networking experience also increases partner engagement.⁸⁶ Additionally, role definitions greatly affect collaborative framework outcomes. Formal agreements that define roles and expectations may be necessary if the duration of a collaborative group is ongoing and exceeds the term of one representative.⁸⁷ Roles are also likely to evolve and change over

⁸²Gray, “Conditions Facilitating Interorganizational Collaboration,” 911–936; Hood et al., “Collaboration for Social Problem-Solving,” 1–17.

⁸³Huxham, “Pursuing Collaborative Advantage,” 608.

⁸⁴*Ibid.*

⁸⁵See Huxham, “Pursuing Collaborative Advantage,” 599–611; P. S. Ring and A. H. Van De Ven, “Developmental Processes of Cooperative Interorganizational Relationships,” *Academy of Management Review* 19.1 (1994): 90–118.

⁸⁶Huxham, “Pursuing Collaborative Advantage,” 605.

⁸⁷Ring and Van de Ven, “Developmental Processes of Cooperative Interorganizational Relationships,” 104.

time.⁸⁸ The role of the lead agency is important, and whoever “initiates collaborative problem solving has a critical impact on its success or failure.”⁸⁹

The orchestrating mechanism or form of a collaborative framework refers to the coordinating activity of the agencies involved. The literature on collaborative frameworks generally recognizes two forms: the full partnership form and the individual partner form. The full partnership form is the specific interagency framework used to coordinate the ongoing involvement of all the partners.⁹⁰ It is often, but not always, a formalized structure. As noted above, in determining structure the assignment of a lead agency is a critical factor because if one partner takes primary responsibility for implementation it can discourage other partners from becoming or remaining engaged.⁹¹

The individual partner form recognizes that the relationship between the collaborative group and the individual agency is not a hierarchical relationship and that each agency retains autonomy. Collaborative goals are sometimes achieved by implementation within an agency, such as when funds are allocated to a specific agency to purchase equipment. According to Huxham, reliance upon the individual partner form is most appropriate when there is less detail in the collaborative strategic plan.⁹² Huxham also argues that a full partnership form does not exist in isolation because the individual partner form is always involved in implementation of the collaborative strategy.⁹³

The literature on collaborative frameworks identifies three key processes related to implementing strategy: decision-making, communication and information, and monitoring and evaluation. Decision-making can either be centralized or decentralized depending on the structure of a collaborative

⁸⁸Waddell and Brown, *Fostering Intersectoral Partnering*, 18.

⁸⁹Gray, “Conditions Facilitating Interorganizational Collaboration,” 923.

⁹⁰Hood et al., “Collaboration for Social Problem-Solving,” 6.

⁹¹Waddell and Brown, *Fostering Intersectoral Partnering*, 23.

⁹²Huxham, “Pursuing Collaborative Advantage,” 609.

⁹³*Ibid.*, 607.

framework. When the power to make decisions lies with one entity within the collaboration, decision-making is centralized, but when decision-making power is spread across the entities within a collaborative framework, the structure is decentralized.⁹⁴ Ring and Van de Ven argue that decentralized decision-making can lead to improved implementation of strategies.⁹⁵

Linkages between collaborative strategic plans and the strategic plans of the individual agencies participating in a collaborative framework are important. Communication and information processes can help coordinate the implementation of the collaborative group's strategies and individual agency strategies. As with decision-making, communication can be concentrated in one entity and centralized, or dispersed through different individual agencies. Positive communication can improve trust, build relationships, and improve situational awareness leading to successful collaboration.⁹⁶

Monitoring and evaluation refers to the processes by which a collaborative group evaluates progress. For collaborations that involve a full partnership form, monitoring ensures that actions are taken to achieve the strategic plan.⁹⁷ Monitoring and evaluation provide a means for reporting progress and triggering corrective actions as needed. The needs of the collaborative group and individual partners are supported by monitoring and evaluation. As mentioned above, keeping partners engaged in a collaborative framework can be challenging, but corrective actions can potentially include the exit and entry of partners needed for continued relevance.⁹⁸

⁹⁴See H. Mintzberg, *The Structuring of Organizations: A Synthesis of the Research* (Englewood Cliffs, NJ: Prentice-Hall, 1979).

⁹⁵Ring and Van de Ven, "Developmental Processes of Cooperative Interorganizational Relationships," 104–105.

⁹⁶Huxham, "Pursuing Collaborative Advantage," 605.

⁹⁷C. Huxham and D. Macdonald, "Introducing Collaborative Advantage: Achieving Inter-Organizational Effectiveness through Meta-Strategy," *Management Decision* 30.3 (1992): 50–56.

⁹⁸See e.g., Waddell & Brown, *Fostering Intersectoral Partnering*, 10–12; Hood et al., "Collaboration for Social Problem-Solving," 6.

The structure of collaborative frameworks also directly affects the types of outcomes achieved and measures of success as discussed in the next section.

c. Relationship Between Collaborative Framework Structures and Outcomes/Success

Most studies of collaborative strategy making focus on the process of collaboration and the stages of forming a collaborative group, not outcomes of collaborative groups.⁹⁹ This section of the literature review explores the types of outcomes or successes that may result from collaborative strategy making. Outcomes discussed in the literature are categorized as either tangible outcomes or action outcomes. Tangible outcomes include the solution to a concrete problem, enduring links and relationships among organizations, and personal outcomes for individuals engaged in collaborative groups. Action outcomes are simply the acts taken by the collaborative group as part of the implementation of strategy. Because this thesis considers policy options based on plan-centric outcomes, process-centric outcomes, and a hybrid plan/process approach, this section briefly discusses plan outcomes, process outcomes and emergent milestones.

Plan outcomes are those that address the identified problems and are measured through the achievement of collaborative goals as outlined in a plan. Success is often measured as the overall success of the project and what organizations involved in the collaboration learned from the project.¹⁰⁰ Other authors have referenced the importance of strategy setting that seeks to achieve the solution to a concrete problem in order to attract partner agencies.¹⁰¹

⁹⁹See e.g., Gray, "Conditions Facilitating Interorganizational Collaboration," 911–936; McCann, "Design Guidelines for Social Problem-Solving Interventions," 177–192; and Waddell and Brown, *Fostering Intersectoral Partnering*, 1–26.

¹⁰⁰J. Bryson and P. Bromiley, "Critical Factors Affecting the Planning and Implementation of Major Projects," *Strategic Management Journal* (1986–1998) 14.5 (1993): 319–337, 321.

¹⁰¹See e.g., J. M. Logsdon, "Interests and Interdependence in the Formation of Social Problem-Solving Collaborations," *Journal of Applied Behavioral Science* 27.1 (1991): 23–37.

Huxham *et al.* also use the term substantive outcome to refer to the achievement of goals outlined in a strategic plan.¹⁰²

Alterations, adaptations, and changes to the collaboration's design, formation, and implementation are process outcomes.¹⁰³ Process outcomes can include enhanced linkages and understanding among partner agencies, strategic efforts such as pooling resources, and the development of a collaborative process. Huxham *et al.* have identified co-aligned agendas, negotiation making, established mechanisms for participation, and standardized templates for collaborative actions as process based outcomes.¹⁰⁴

Emergent milestones are unplanned outcomes, expressed as either substantive or process achievements.¹⁰⁵ They often overlap with both plan based and process based outcomes to a certain extent.¹⁰⁶ Emergent milestone outcomes are interim, unplanned outcomes that often contribute to the on-going collaborative process and recognition of emergent milestones can help sustain collaborations.¹⁰⁷ Examples of emergent milestones include accomplished process improvements, notable past decisions/actions, completed written or event outputs like conferences, and demonstrable physical or organizational artifacts such as the purchase of tangible equipment or supplies.¹⁰⁸

D. SUMMARY

Public sector strategy typologies have classically considered strategy as an entity and not as practice or performance of the organization. In contrast to the focus of academic research on public sector strategy development, the

¹⁰²C. Huxham, P. Hibbert, and P. Hearne, "Claiming Collaborative Success: Signifiers and Caveats." Paper presented at the Academy of Management - Annual Conference, Anaheim, California, August 8–13, 2008, 12.

¹⁰³Clarke and Fuller, "Collaborative Strategic Management," 90.

¹⁰⁴Huxham et al., "Claiming Collaborative Success," table 4.

¹⁰⁵*Ibid.*, 16.

¹⁰⁶*Ibid.*

¹⁰⁷*Ibid.*

¹⁰⁸*Ibid.*, table 5.

federal government's focus on strategic planning through GPRA focuses on performance. The relevance of GPRA to federal grant programs overall and those grant programs that deal in crosscutting issues, such as homeland security, is uncertain. The newly developed *National Preparedness System* under PPD-8, the *Public Health Preparedness Capabilities*, and the *Healthcare Preparedness Capabilities* establish national planning priorities that promote collaboration, but do not provide a framework for collaborative planning.

Collaborative strategic management models may be adapted in order to provide federal agencies with a framework for developing and improving interagency collaboration that is based on strategy and strategic concepts. However, existing models focus on intersectoral partnerships and not relationships among federal agencies, and they do not address how entities should collaborate in an integrated way. A number of factors affect whether or not organizations will seek to collaborate with others. These determinants of collaboration affect the development of collaborative strategic management frameworks. Close examination of the various structural components of collaborative frameworks and their effect on implementation is also informative, and each collaborative framework structure has various types of outcomes and successes that are associated with it. This thesis will examine three potential policy options for implementing collaborative strategic management at the federal level.

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III. METHODOLOGY

A collaborative strategic management framework for interagency public health preparedness can help achieve the established *Public Health Preparedness Capabilities* and *Healthcare Preparedness Capabilities*. This thesis considers three possible collaborative strategic management policy options and evaluates them based on selected policy criteria and the shared *Public Health Preparedness Capabilities* and *Healthcare Preparedness Capabilities*. The three policy options are outlined below.

A. POLICY OPTIONS

The three possible policy solutions for developing a collaborative strategic management framework for interagency public health preparedness considered in this thesis are a plan-centric approach, a process-centric approach, and a hybrid approach that combines process and planning. Each is briefly described here.

1. Plan-Centric Outcomes Based Approach

The plan-centric collaborative strategic management framework focuses on the formulation of a strategic plan. Situational considerations, such as the legal framework and regulations affecting partner agencies, can also be a focal point of this type of model. Expected outcomes of a plan-centric model include the solution of a concrete problem, substantive plans and protocols, or progress reports on plan outcomes.

Multi-agency strategic plans for public health emergency preparedness do not currently exist. For example, numerous federal agencies are tasked with various bioterrorism planning and response areas, but no strategic plan exists

that frames the issues or prioritizes interagency efforts.¹⁰⁹ A plan-centric collaborative framework could help address this gap. Key to the success of this type of framework is the identification of a lead agency to direct the effort.

2. Process-Centric Outcomes Based Approach

The process-centric collaborative strategic management framework focuses on developing the processes that partners will engage in to achieve collaborative goals. This model focuses on process over an overall strategic planning document and seeks to address issues related to decision-making, communication and information, and monitoring and evaluating planning and collaboration among partners. Process-centric frameworks help strengthen links between agencies and lead to shared understanding of roles and responsibilities.

A number of identified gaps within public health emergency preparedness could be addressed through a process-centric strategic planning approach, including role and responsibility clarification and sharing role and responsibility information with state and local government agencies. In order to be successful, this type of framework requires partner agencies to move towards decentralized authority in order to facilitate decision-making. Implementation of strategic goals is likely to improve when partner agencies have the discretion to employ both formal and informal procedures while participating in collaborative strategic planning.

3. Hybrid Approach

The hybrid approach seeks to combine elements from both the process-centric and plan-centric models. This approach focuses on both the development of plans to address concrete problems and the development of strategic processes for meeting collaborative goals. A substantive document, as well as,

¹⁰⁹A. Mauroni, "Progress of "Biodefense Strategy for the 21st Century":—A Five-Year Evaluation," in *Project on National Security Reform, CASE STUDIES WORKING GROUP REPORT VOLUME II.*, Ed. R. Weitz, 151–238, Carlisle Barracks, PA: Strategic Studies Institute, 2012. <http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1100>.

improved decision-making and communication and information flow are the goals of this approach.

The hybrid approach seeks the best of both worlds, but requires a larger commitment of time and effort by the involved agencies than the other policy options. However, this approach provides external partners with both a planning document and increased understanding of the roles and responsibilities of partner agencies and operational response processes.

B. SELECT POLICY OPTIONS CRITERIA FOR JUDGING SUCCESS

Each of the policy options discussed above will be evaluated against the following criteria:

1. Ability to Meet Federal Strategic Planning Requirements

The ability to meet federal strategic planning requirements is an important area for consideration in evaluating the three policy options. Each of the policy options requires political buy-in from a number of federal agencies engaged in the various components of public health emergency preparedness and must meet current federal planning requirements. This thesis will focus on the existing requirements set forth by *PPD-8*, the *Public Health Preparedness Capabilities*, and the *Healthcare Preparedness Capabilities*.

a. Assessment Against PPD-8

The purpose of *PPD-8* is to strengthen the security and resilience of the United States through systematic preparation for the threats that pose the greatest risk to the security of the Nation, including acts of terrorism, cyber attacks, pandemics, and catastrophic natural disasters.¹¹⁰ Overall, *PPD-8* emphasizes an all-hazards approach to national preparedness and encourages cooperation among federal, state, and local authorities. It calls for the

¹¹⁰The White House, "Presidential Policy Directive/PPD-8: National Preparedness," 1.

development of a *National Preparedness Goal* and a *National Preparedness System*, further discussed below.

(1) National Preparedness Goal. The *National Preparedness Goal* is the cornerstone of *PPD-8*, and it sets forth five mission areas for preparedness: prevention, protection, mitigation, response and recovery. Planning is a core capability, defined as the process of “engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.”¹¹¹ Each mission area has defined planning targets as depicted in Table 3.

¹¹¹Department of Homeland Security, *National Preparedness Goal*, 6.

Table 3. Planning under the National Preparedness Goal (From Department of Homeland Security, *National Preparedness Goal*)

Mission Area	Targets
Prevention	Identify critical objectives based on the planning requirement, provide a complete and integrated picture of the sequence and scope of the tasks to achieve the objectives, and ensure the objectives are implementable within the time frame contemplated within the plan using available resources for prevention-related plans.
	Develop and execute appropriate courses of action in coordination with Federal, state, local, and private sector entities in order to prevent an imminent terrorist attack within the United States.
Protection	Develop protection plans that identify critical objectives based on planning requirements, provide a complete and integrated picture of the sequence and scope of the tasks to achieve the planning objectives, and implement planning requirements within the time frame contemplated within the plan using available resources for protection-related plans.
	Implement, exercise, and maintain plans to ensure continuity of operations.
Mitigation	Develop approved hazard mitigation plans that address all relevant threats/hazards in accordance with the results of their risk assessment within all states and territories.
Response	Develop operational plans at the Federal level, and in the states and territories that adequately identify critical objectives based on the planning requirement, provide a complete and integrated picture of the sequence and scope of the tasks to achieve the objectives, and are implementable within the time frame contemplated in the plan using available resources.
Recovery	Convene the core of an inclusive planning team (identified pre-disaster), which will oversee disaster recovery planning.
	Complete an initial recovery plan that provides an overall strategy and timeline, addresses all core capabilities, and integrates socioeconomic, demographic, accessibility, and risk assessment considerations, which will be implemented in accordance with the timeline contained in the plan.

(2) National Preparedness System. The *National Preparedness System* under *PPD-8* sets forth an integrated approach for achieving the *National Preparedness Goal* in a consistent and measureable way. The *National Preparedness System* seeks to enable a collaborative, whole community approach to national preparedness that engages individuals, families, communities, private and nonprofit sectors, faith-based organizations and all levels of government.¹¹² Planning under the *National Preparedness System* promotes inclusion of the whole community. It recognizes that federal efforts must complement planning at the state and local levels of government, which are

¹¹²Department of Homeland Security, *National Preparedness System*, 1.

apt to focus on more likely risks. The shared planning efforts at each level of government will form a *National Planning System*.¹¹³

Currently, the *National Planning System* concept is in a nascent stage and in the near future frameworks will be developed for each mission area, supported by a federal interagency operational plan that provides a detailed concept of operations, a description of critical tasks and responsibilities, detailed resources, and personnel and sourcing requirements.¹¹⁴ Each federal executive department or agency will then develop and maintain their own operational plans to deliver capabilities under each framework.

Each of the policy options will be assessed for its ability to meet the goals under *PPD-8*. Specifically, each policy option will be assessed against the requirement for achieving whole community planning and planning that will complement state and local planning. Additionally, the ability of each policy option to contribute to an interagency operational plan will be considered.

b. Assessment Against the CDC's Public Health Preparedness Capabilities and ASPR's Healthcare Preparedness Capabilities

Each policy option is also evaluated for its ability to help meet the shared CDC's *Public Health Preparedness Capabilities* and ASPR's *Healthcare Preparedness Capabilities*. A crosswalk of the public health preparedness capabilities and the healthcare preparedness capabilities denoting the eight shared capabilities is shown in Table 4.

¹¹³*Ibid.*, 4.

¹¹⁴*Ibid.*

Table 4. Crosswalk of the CDC’s Public Health Preparedness Capabilities and ASPR’s Healthcare Preparedness Capabilities

Public Health Preparedness Capabilities	Healthcare Preparedness Capabilities
Community Preparedness/Healthcare System Preparedness	
Community Recovery/Healthcare System Recovery	
Emergency Operations Coordination	
Emergency Public Information and Warning	
Fatality Management	
Information Sharing	
Mass Care	
Medical Countermeasure Dispensing	
Medical Materiel Management and Distribution	
Medical Surge	
Non-pharmaceutical Interventions	
Public Health Laboratory Testing	
Public Health Surveillance and Epidemiological Investigation	
Responder Safety and Health	
Volunteer Management	

Each policy option will be evaluated for its potential ability to improve strategic planning and management for the eight shared public health and healthcare capabilities. The shared capabilities are broken into both public health and healthcare functions that represent the critical elements necessary for achieving the capabilities. The appendix lists all of the functions associated with the shared capabilities. This thesis focuses on collaborative interagency planning while the shared capabilities focus on multiagency representation and coordination between and among public health and healthcare entities. Each of the three policy options will be evaluated for its ability to help achieve the collaborative, interagency functions of the shared capabilities by assessing their ability to support the development of healthcare coalitions and to foster community partnerships to support health preparedness under Capability 1.

2. Political Acceptability

The suitability of the policy option to Congress and federal agencies is the second criterion for evaluation. The various policy options create political consequences for the federal public health agencies and other federal agencies engaged in public health preparedness. Each policy option's effect on Congress and the federal public health and homeland security agencies is explored to determine likelihood of success.

3. Effectiveness

The effectiveness of each of the policy options is an essential criterion for evaluation and is assessed based on two sub-criteria. First, each policy option is evaluated for the anticipated ability of agencies to be able to continue to manage themselves in a strategic manner on an on-going basis (through the development of a strategic plan, strategy content, and implementation).¹¹⁵ Second, each policy option is evaluated for whether it will meet the requirements of the *National Planning System*, specifically the development of an interagency strategic plan and individual agency plans.

4. Externalities

Finally, the policy options are assessed for their effect on externalities, and the potential for a cascading effect throughout all levels of public health. Each of the options will have second order effects on other organizations engaged in public health emergency preparedness, particularly state and local level public health agencies. The policy options' ability to affect strategic planning at the state and local health department level, as well as, at the healthcare infrastructure level is assessed.

¹¹⁵See Poister et al., "Strategic Management Research in the Public Sector," 525.

IV. PLAN-CENTRIC OUTCOMES BASED APPROACH

This chapter describes the first policy option for improved collaborative strategic management at the federal level. First, a brief overview of the plan-centric approach is given, and then each step in the model is described. Second, the plan-centric policy option is assessed against the policy options criteria as outlined in the methodology.

A. OVERVIEW OF THE MODEL

1. Background

The plan-centric model focuses on developing a collaborative strategic plan, and while individual planners can use the process discussed here, it is intended to be used by a collaborative planning team.¹¹⁶ The goal of the plan-centric model is to develop general strategic goals and objectives and a description of how the goals and objectives will be achieved. This is the current model employed within emergency preparedness.

A possible focal point of the plan-centric approach is to consider the legal framework and regulations affecting partner agencies and developing a plan for integrated action around the existing framework. Key to the success of this approach is the identification of a lead partner organization to direct the collaborative group's efforts. Expected outcomes of the plan-centric approach include the solution of a concrete problem, substantive plans and protocols, or progress reports on plan outcomes.

2. Overview and Description

This thesis uses the planning process developed by FEMA and adopted by the *Healthcare Preparedness Capabilities* as its model for the plan-centric approach. The model focuses on five-steps for forming a collaborative group and

¹¹⁶Federal Emergency Management Agency, *Comprehensive Preparedness Guide (CPG) 101, Version 2.0.*, 4-1.

developing a plan. The purpose of the collaborative group is to create a planning document, although situational considerations such as legal authorities and regulations may also be a focal point. The plan-centric approach is depicted in Figure 1.

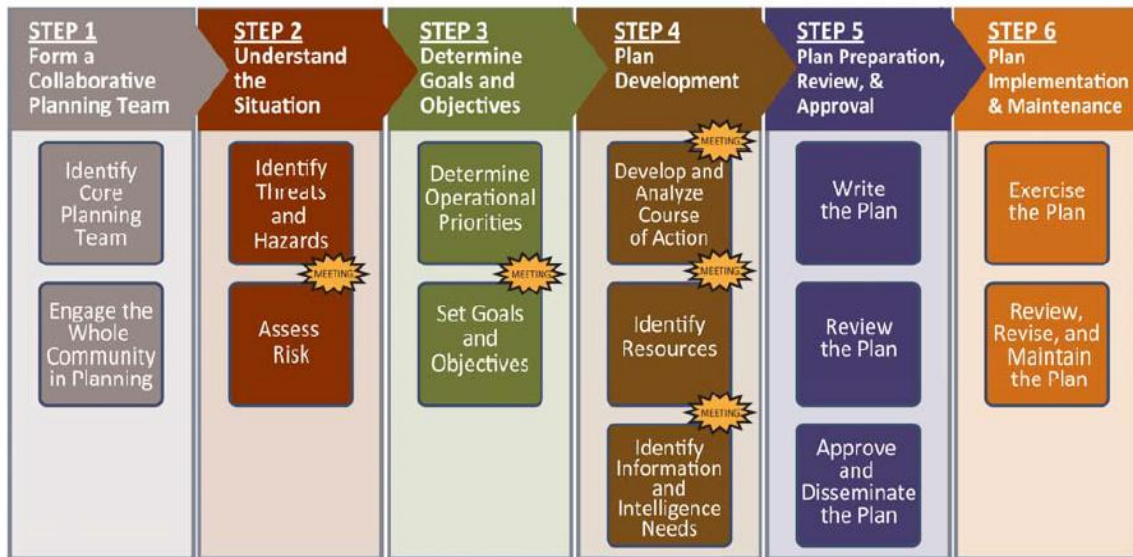


Figure 1. Plan-Centric Based Model (From Federal Emergency Management Agency, *Comprehensive Preparedness Guide (CPG) 101, Version 2.0*)

a. Planning under this model

This section outlines and describes the five steps for forming a collaborative team and developing a plan under the plan-centric approach. Outcomes and implementation under this type of strategic management framework are also discussed.

(1) Forming a Collaborative Planning Team. The first step under the plan-centric approach is to form a collaborative planning team. A team approach helps partner organizations understand each other’s roles and responsibilities. The planning team should establish a planning routine to help ensure partner organization buy-in and instill decision-making processes before

an incident.¹¹⁷ Initially, a core team should be established and then expanded as needed.

(2) Understanding the Situation. The second step in the plan-centric models is to identify threats and hazards to better understand the planning environment. During this phase the planning team collects and refers to existing data and assesses risk/conducts a risk analysis.¹¹⁸ The collaborative planning team determines goals and objectives based on the outcomes of the risk analysis. This step is often scenario driven.

(3) Determine Goals and Objectives. Next, the planning team determines operational priorities and crafts goals and objectives that support accomplishing both the plan mission and operational priorities. The team also indicates the desired result or end-state that the goals and objectives are designed to yield.¹¹⁹ This approach enables unity of effort and consistency of purpose among the multiple entities and activities involved in executing the collaborative plan.¹²⁰

(4) Plan development. During the plan development phase, the planning team establishes and analyzes courses of action. The planning team generates, compares, and then selects a number of courses of action to be included in the collaborative plan.¹²¹ Identification of resource, intelligence, and information needs occurs during the plan development stage.¹²²

(5) Plan Preparation, Review and Approval. The planning team writes the plan by turning the courses of action into an emergency operations plan (EOP). Next, the EOP is reviewed against legal and regulatory frameworks and to ensure adequacy, completeness, feasibility, acceptability, and

¹¹⁷Ibid., 4-2.

¹¹⁸Ibid., 4-7 – 4-9.

¹¹⁹Ibid., 4-10.

¹²⁰Ibid., C-2.

¹²¹Ibid., 4-14.

¹²²Ibid., 4-16.

compliance.¹²³ The plan is approved and promulgated after being vetted by individual partner organizations.¹²⁴

(6) Plan Implementation and Maintenance. Once the plan has been disseminated, training and exercise occurs.¹²⁵ Feedback is incorporated and the plan revised on a regular basis. Events such as major incidents or exercises, change in elected officials, or a change in the risk profile or demographics of a jurisdiction necessitate plan revision.¹²⁶ The planning cycle resumes at Step 2 with the addition of feedback and other new intelligence.¹²⁷

b. Outcomes under this Model

Outcomes under the plan-centric model are generally action outcomes that address the identified problems and the achievement of the collaborative goals defined in the strategic plan. Additional outcomes include the perception of strategic planning effectiveness and satisfaction with the planning process.¹²⁸

c. Implementation under this Model

Implementation under this model occurs at the individual organization level. Once the plan has been approved and promulgated, each organization involved in the planning process must train their personnel so that they are able to perform the tasks identified in the plan. Exercises and real world events provide an opportunity for the collaborative group to evaluate the effectiveness of the plan and make changes as necessary.

¹²³*Ibid.*, 4-17.

¹²⁴*Ibid.*, 4-25.

¹²⁵*Ibid.*

¹²⁶*Ibid.*, 4-26.

¹²⁷*Ibid.*

¹²⁸Poister et al., "Strategic Management Research in the Public Sector," 535.

B. ASSESSMENT OF THE PLAN-CENTRIC OUTCOMES BASED APPROACH

This section assesses the plan-centric policy approach against the policy options criteria.

1. Ability to Meet Federal Strategic Planning Requirements

The plan-centric approach is the current model in homeland security for state and local government as promulgated by FEMA, and the CDC and ASPR have adopted it. Previous federal attempts at developing interagency planning guidelines included the Integrated Planning System (IPS) under the now defunct *Homeland Security Presidential Directive-8*.¹²⁹ The IPS was the first attempt at implementing a process for developing federal interagency plans. FEMA's *Comprehensive Preparedness Guide (CPG) 101, Version 2.0* meets the IPS requirement for an all-hazards planning guide that federal, state, local and tribal levels of government can use.¹³⁰ Federal agencies can use the CPG, and DHS has encouraged federal agencies to use the IPS.¹³¹ It is unclear if any agencies at the federal level have used the CPG model to engage in strategic planning.

a. Assessment Against PPD-8

The plan-centric model is likely to achieve limited success in meeting the requirement for whole community planning under *PPD-8*. Whole community planning requires the engagement of partners outside of government entities and consideration of the "true needs" of a community. The creation of a collaborative planning team under the plan-centric model provides an opportunity for partners outside of government to come to the table. However, the plan-centric model does not address the need for various public, private, and community organizations to determine processes for working together to address

¹²⁹Department of Homeland Security, *The Integrated Planning System*, Washington, DC: Department of Homeland Security, 2009, iii. <http://www.hlswatch.com/wp-content/uploads/2009/01/dhs-integrated-planning-system-january-2009.pdf>.

¹³⁰*Ibid.*, iv.

¹³¹*Ibid.*, 1–2.

public health emergency preparedness on an ongoing basis. As the collaborative planning team works towards development of a strategic plan, it is expected that the need for collaborative processes will be identified and that some processes may be developed. Furthermore, successful whole community planning is not expected to be satisfying to nonpublic partners without a means for developing and strengthening processes among partner organizations.

The plan-centric approach will not complement state and local planning very much unless state and/or local partners are part of the collaborative planning team, which is unlikely. Planning at the federal level is based on the *National Planning Scenarios*, fifteen scenarios developed by The Homeland Security Council in 2004.¹³² State and local planning, on the other hand, is based on the specific risks and hazards identified within a limited jurisdictional area. The *National Planning Scenarios* contain several scenarios related to public health and healthcare preparedness, including pandemic influenza, aerosolized anthrax, food contamination, nerve agents, and blister agents.¹³³ Some of these scenarios are planned for at the state and local level, but to varying degrees depending on the jurisdiction's risk and threat assessment and grant specific requirements. Moreover, there is an assumption at the federal level that any bioterrorist incident will be catastrophic and overwhelming to state and local governments, requiring the immediate need for federal intervention.¹³⁴

The plan-centric approach does lead to the development of an interagency operational plan that individual agencies can use as the basis for developing their own operational plans. The development of a strategic plan is the main outcome of this approach. Identified problems during the second step of this approach (Understand the Situation) will be addressed in the plan, but there

¹³²*Ibid.*, iv.

¹³³The Homeland Security Council, *Planning Scenarios, Executive Summaries, Created for use in National, Federal, State and Local Homeland Security Preparedness Activities*, Washington, DC: The Homeland Security Council, 2004.

¹³⁴Mauroni, "Progress of "Biodefense Strategy for the 21st Century," 154.

is no mechanism for addressing emergent challenges that may be identified later during plan development.

b. *Assessment Against the Public Health Preparedness Capabilities and Healthcare Preparedness Capabilities*

The plan-centric approach is the suggested approach for the development of healthcare coalitions at the state, local, and tribal level. healthcare coalitions are tasked with enhancing public health emergency preparedness functions, including identifying and prioritizing essential healthcare assets and services, determining gaps in healthcare preparedness and identifying resources for mitigation of these gaps, and engaging with community organizations to foster public health, medical, and mental/behavioral health social networks.¹³⁵ Before a healthcare coalition can begin to develop a strategic plan, they must determine how to achieve these functions collaboratively. The plan-centric model does not provide a mechanism for developing the necessary functions to engage in strategic planning at the healthcare coalition level.

The development of a collaborative planning team under this approach will bring together healthcare coalition partners who may not have engaged with one another before, but again the plan-centric approach does not provide mechanisms for fostering community partnerships to support health preparedness other than through the development of a strategic plan. The plan-centric approach does not provide for the creation and implementation of strategies for ongoing engagement with community partners who may be able to provide services to mitigate identified public health threats or incidents.¹³⁶

2. Political Acceptability

Federal agencies have been required to set goals and measure performance under GPRA for almost twenty years. Since 9/11, Congress has required federal strategic planning activities for public health emergency

¹³⁵*Healthcare Preparedness Capabilities*, 5–7.

¹³⁶*Public Health Preparedness Capabilities*, 19.

preparedness through provisions of the Homeland Security Act of 2002,¹³⁷ the Pandemic and All-Hazards Preparedness Act,¹³⁸ and other legislation, yet policymakers, analysts, and others continue to criticize federal efforts at strategic planning.¹³⁹

Congressional oversight of homeland security and public health emergency preparedness crosses the jurisdiction of many congressional committees, and congressional oversight is often issue-based.¹⁴⁰ Some critics have suggested that fewer committees might help focus and optimize oversight by centralizing the issues.¹⁴¹ Others believe that Congressional policymakers are better positioned to identify synergies and duplications of effort more easily than decision-makers in individual agencies.¹⁴² At this time, it appears that Congress will maintain its decentralized approach to monitoring homeland security and public health emergency preparedness activities.

The plan-centric approach is very issue-based as the outcome of this approach is a strategic plan that will address a specific area of public health emergency preparedness. This approach relies on a strong lead agency, providing Congress with a lead agency to testify on behalf of the collaborative group. At the same time, other agencies that are part of the collaborative planning team may also provide status updates to Congress. Political acceptability by Congress for this approach is expected to be high.

Because the plan-centric model is based on the CPG which meets the standards set forth in the IPS, DHS and the agencies under it are presumed to have no objections to its use for federal collaborative strategic management related to public health emergency preparedness. Likewise, the CDC and ASPR

¹³⁷*Homeland Security Act of 2002*, Public Law 107–296, 116 Stat. 2135 (Nov. 25, 2002).

¹³⁸*Pandemic and all-Hazards Preparedness Act*, Public Law 109–417, 120 Stat. 2831 (Dec. 19, 2006).

¹³⁹Gottron and Shea, *Federal Efforts to Address the Threat of Bioterrorism*, 5.

¹⁴⁰*Ibid.*, Summary.

¹⁴¹*Ibid.*, 6.

¹⁴²*Ibid.*

adopted the CPG approach to strategic planning through their guidance to state and local governments, as well as, the healthcare sector. There is no reason to believe that they would object to its use at the federal level.

3. Effectiveness

Success under the plan-centric model is dependent on the identification of a lead agency to direct the effort. It could be difficult to determine who the lead agency should be given that the roles and responsibilities of the principals in DHHS and DHS have shifted numerous times over the past few years.¹⁴³ Currently,

the Secretary of Homeland Security coordinates all federal emergency and disaster response activities; the DHS CMO coordinates both preparedness and response activities for public health and medical care, but only within DHS; and the Secretary of DHHS, through the ASPR, leads all federal public health and medical response activities, under the overall leadership of the Secretary of Homeland Security.¹⁴⁴

The determination of a sole lead agency would be challenging under the current congressional schema.

Adopting a plan-centric approach may lead to a strategic plan that is watered down and too general to be meaningful. The inclusion of all agencies currently recognized as having a role in public health emergency planning could potentially lead to a large and unmanageable collaborative planning team. Furthermore, by the time a robust collaborative planning team is able to develop a strategic plan, it is probable that the plan will already be outdated because the public health emergency preparedness environment is constantly evolving.

The plan-centric approach will provide federal agencies with the ability to manage their individual agencies and the interagency collaborative group in a strategic manner on a limited basis. The plan-centric approach provides for

¹⁴³U.S. Library of Congress, Congressional Research Service, *Public Health and Medical Emergency Management: Issues in the 112th Congress*, Ed. S. Lister, CSR Report R41646, Washington, DC: Office of Congressional Information and Publishing, February 18, 2011, 3.

¹⁴⁴*Ibid.*

feedback to be incorporated back into Step 2 of the strategic planning process and the planning cycle restarted.¹⁴⁵ However, the focus of the plan-centric approach is on the development of the plan and not on the relationships among the individual partner agencies or the changes in the environment that affect overall strategy content. Development of strategy content is included in Step 3 under this model and is quantitative as it is based on risk and threat assessments. Implementation is considered in terms of training and exercise under Step 6 and is based on achieving the strategy content of the plan.

The outcome of this approach is the development of an interagency strategic plan, a requirement under the *National Planning System*. It is unclear how operational an interagency plan developed under this approach might be. The plan-centric approach calls for setting operational priorities and goals and objectives.¹⁴⁶ The collaborative planning team could incorporate the strict requirements under the *National Planning System* into the strategic plan developed under this approach although it may be difficult to incorporate a high level of specificity as to resource and personnel needs. It is possible that individual partner agencies could use the interagency strategic plan to inform their individual agency strategic plans, but again whether or not the level of specificity required under the *National Planning System* could be achieved remains to be seen.

4. Externalities

The plan-centric approach provides limited opportunities for strategy development to include partners outside of the collaborative planning team. State and local health departments are not expected to be included as part of the collaborative planning team at the federal level. Therefore, the opportunity for cascading effects at the state and local level is limited to those effects that may occur through the direct sharing of federal plans or parts of plans to state and

¹⁴⁵Federal Emergency Management Agency, *Comprehensive Preparedness Guide (CPG) 101, Version 2.0.*, 4–26.

¹⁴⁶*Ibid.*, 4-12.

local health departments. Based on the highly sensitive nature of federal level strategic plans for homeland security and public health emergencies, the direct sharing of federal plans either at the state or local level is extremely unlikely. Any cascading effect will likely occur through informal channels and thus be unreliable.

Furthermore, while state and local health departments are required to develop some plans that address public health scenarios outlined in the *National Planning Scenarios*, state and local public health emergency planning encompasses many other areas based on state and local threat and risk assessments. As previously stated, the plan-centric approach does not facilitate complementary planning at the state and local level.

With the alignment of the Public Health Emergency Preparedness and Hospital Preparedness Program grants at the federal level, healthcare infrastructure emergency planning has moved from facility-based planning to more of a whole community planning approach through the requirement for healthcare coalitions.¹⁴⁷ It is unlikely that the federal level collaborative planning team will include a private healthcare entity, so the only mechanism for sharing federal plans would be through state or local government or through ASPR directly.

¹⁴⁷U.S. Department of Health and Human Services, *From Hospitals to Healthcare Coalitions: Transforming Health Preparedness and Response in Our Communities*, Washington, DC: U.S. Department of Health and Human Services, 2011, 134.

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V. PROCESS-CENTRIC OUTCOMES BASED APPROACH

This chapter describes the second policy option for improved collaborative strategic management at the federal level. First, a brief overview of the process-centric approach is given, and then the processes and outcomes under the model are described along with implementation. Second, the process-centric policy option is assessed against the policy options criteria outlined in the methodology.

A. OVERVIEW OF THE MODEL

1. Background

The process-centric model for strategic planning focuses on the processes partner organizations will engage in to achieve collaborative goals and the relationships among the collaborating entities. As discussed throughout the literature, decision-making, communication and information pathways, and monitoring and evaluating processes are the main processes that collaborative groups will establish and develop over the course of the collaboration.¹⁴⁸

Through collaboration and integration of processes, collaborative groups can identify and avoid repetition of partially overlapping activities, build upon each partner organization's contributions, and eliminate unnecessary repetition of tasks.¹⁴⁹ Additionally, collaborative process allows partner organizations to ensure activities they feel are important are not overlooked.¹⁵⁰ Omission of critical actions can occur when an activity is not identified as important or when an activity is the responsibility of more than one organization and each assumes

¹⁴⁸See e.g., Mintzberg, *The Structuring of Organizations*, 1–512; Huxham, "Pursuing Collaborative Advantage," 599–611; and Hood et al., "Collaboration for Social Problem-Solving," 1–17.

¹⁴⁹Huxham, "Pursuing Collaborative Advantage," 603.

¹⁵⁰*Ibid.*

the other is covering it.¹⁵¹ Collaborative processes can also ensure that organizations move towards a common goal and effectively use resources.

Setbacks to the development of successful collaborative process can occur if/when individual partner organizations feel threatened by a loss of control, flexibility and/or glory.¹⁵² Collaborative processes can be imposed or can emerge from the activities of the collaborative group.¹⁵³ Additionally, external forces, such as funding, often shape and drive the processes of collaborations.¹⁵⁴ The process-centric based policy approach is described in the next section.

2. Overview and Description of Process-Centric Based Policy Approach

This thesis uses an adapted model from Ring and Van de Ven for its process-centric based approach. Ring and Van de Ven's model focuses on four developmental and evolutionary processes for collaborations referred to as negotiations, commitments, executions, and assessments.¹⁵⁵ The negotiations, commitments, and executions stages are stages that represent decision-making processes. These three decision-making processes overlap in reality, but they are separated for the purpose of describing and analyzing this model. The assessments stage provides an opportunity for monitoring and evaluating after each of the decision-making stages. Throughout the collaborative cycle, communication and information processes are evident. The process-centric model is depicted in Figure 2.

¹⁵¹Ibid.

¹⁵²Ibid., 604.

¹⁵³C. Huxham and S. Vangen, "Leadership in the Shaping and Implementation of Collaboration Agendas: How Things Happen in a (Not quite) Joined-Up World," *Academy of Management Journal* 43.6 (2000): 1159–1175, 1171.

¹⁵⁴Ibid., 1167.

¹⁵⁵Ring and Van De Ven, "Developmental Processes of Cooperative Interorganizational Relationships," 97–98.

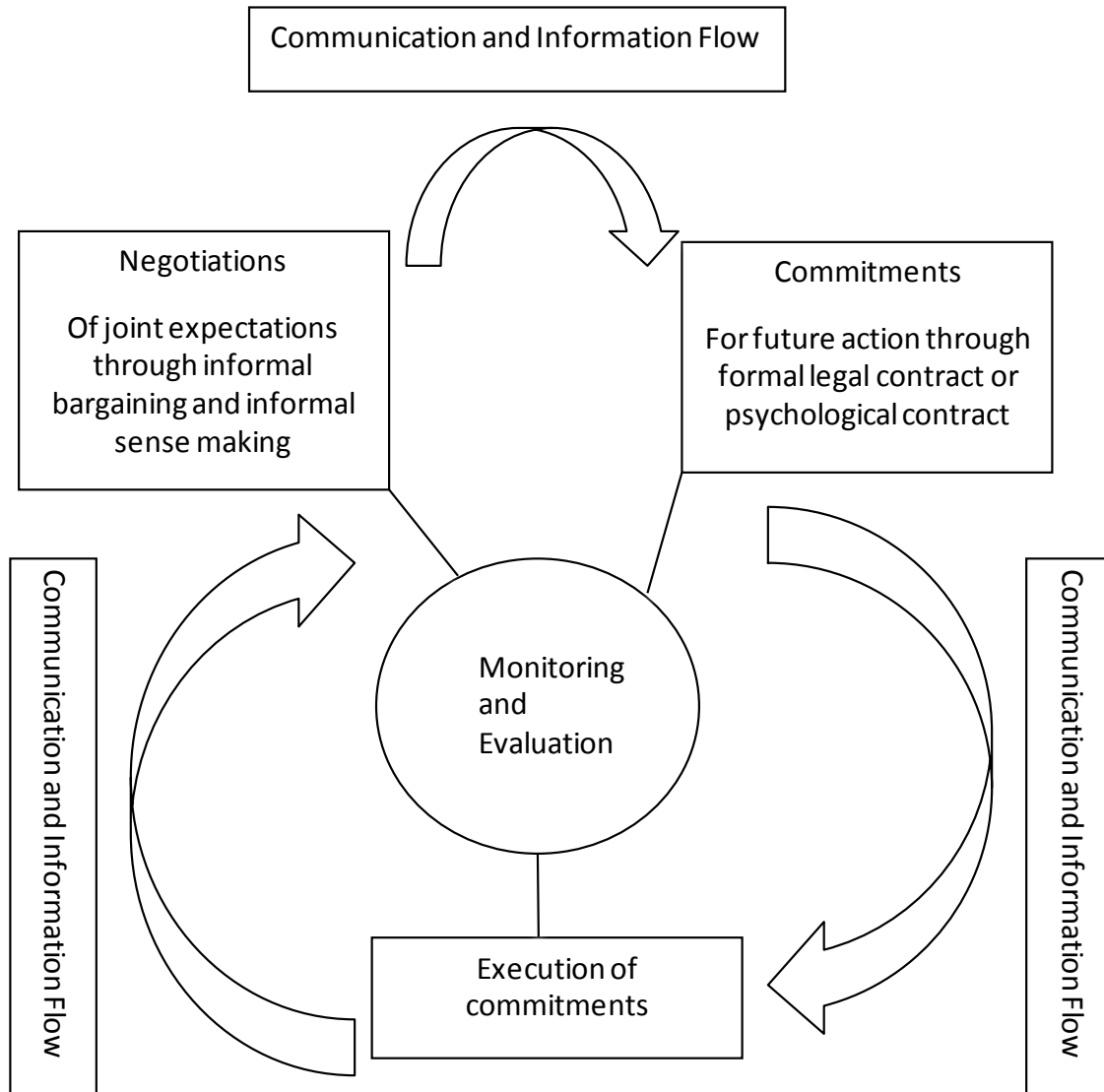


Figure 2. Process-Centric Based Approach Framework (After Ring and Van de Ven, 1994)

a. Decision-Making Processes

During the negotiations stage the individual partner organizations develop expectations and focus on bargaining and choice behavior of the individual partners. The negotiations process involves the social-psychological process of sense making that leads to negotiations. This stage is when the individual partner organizations assess uncertainty, trust issues, and the nature of each partner organization's role.

Partner organizations come to an agreement about how the collaborative group will be governed during the commitment stage. The structure of the collaboration is defined during this phase, and the norms by which individual partner organizations will interact with one another are established. During this stage, it is important to create systems that ensure meaningful participation by all parties.¹⁵⁶ The governance structure may be formalized legally or it may remain informal.

Once the rules of action have been established, the collaboration enters the execution phase, at which point partner organizations carry out their commitments to the collaborative group. The collaboration may renegotiate and update commitments following the execution of agreed upon commitments by cycling through the model again. A renegotiations phase allows the collaborative group to rethink the terms of the collaborative relationship and decide whether additional problem solving is necessary. The cyclical nature of the decision-making processes also allows for balancing of formal and informal processes that commit partner organizations in critical decisions.

The underlying mechanisms for decision-making are the allocation of authority, the allocation of resources, and corrective actions. Authority within the collaboration can be decentralized or centralized with decentralization leading to better innovation.¹⁵⁷ Resource sharing to take advantage of each partner's strengths increases achievement of the collaboration's strategic goals. Implementation of collaborative goals greatly increases when individual partner organizations have the authority to commit to and execute the collaborative strategic plan.¹⁵⁸

¹⁵⁶Waddell and Brown, *Fostering Intersectoral Partnering*, 16.

¹⁵⁷Mintzberg, *The Structuring of Organizations*, 1–512.

¹⁵⁸Ring and Van de Ven, "Developmental Processes of Cooperative Interorganizational Relationships," 104.

b. Monitoring and Evaluation Processes

Monitoring and evaluation provide an opportunity to report progress and to trigger corrective actions if deemed necessary. These mechanisms help ensure that collaborative goals are achieved. During this assessment stage, collaborative partners determine how efficiently the collaborative group has worked together. Issues related to equity of action can be examined during the assessment stage.

c. Communication and Information Flow Processes

Communication and information processes are critical to coordinating among partner organizations and within the collaborative group. Within the process-centric model, communication needs to be both centralized within the collaborative group and decentralized into the individual partner organizations. Unidirectional (one partner learns from the other) and bidirectional (mutual learning) modes of information flow are expected outcomes of the process-centric approach. Communication and information processes both within the collaborative entity and between individual partner organizations and the collaborative entity can aid in coordination, especially between the collaborative strategic plan and the individual partner organizations' plans.¹⁵⁹

Building communication skills and norms that support participation is important.¹⁶⁰ Through the development of communication norms, the collaborative group can explore differences and assumptions among the partner organizations before analyzing problems and constructing strategies.¹⁶¹ Sharing perspectives while developing processes can help make constructive use of individual partner organization differences.¹⁶²

¹⁵⁹Huxham and Vangen, "Leadership in the Shaping and Implementation of Collaboration Agendas," 1167.

¹⁶⁰Waddell and Brown, *Fostering Intersectoral Partnering*, 16.

¹⁶¹*Ibid.*

¹⁶²*Ibid.*, 15.

d. Process-Centric Outcomes

Process-centric model outcomes include interpersonal relationships and action plans, but they often do not produce concrete outcomes until several years after the process has begun.¹⁶³ Partner organizations must get to know each other and build trust before concrete tasks can be achieved. The negotiations stage sets the groundwork for shared vision and strategy, two outcomes of this process-centric model. Shared processes and procedures are also outcomes under this approach, and they help lay the groundwork for further collaborative work.

The resultant outcomes under the collaborative process model may not be congruent with the original goals of the collaboration. Collaborative goals are likely to change as the collaborative group's understanding improves with better information and analysis.¹⁶⁴ Hood *et al.* established four dimensions for evaluating outcomes of collaborative process: effectiveness, sustainability, agenda expansion, and personal outcomes.¹⁶⁵ Effectiveness is often measured by determining whether the collaboration has addressed the real problem.¹⁶⁶ Whether the collaboration is able to effectively manage the composition of and participation within the collaborative group is referred to as the sustainability dimension.¹⁶⁷ Agenda expansion is the ability of the collaboration to maintain the continuity of the collaborative group and the flexibility to address other aspects of a problem or even embark on a new endeavor.¹⁶⁸ The personal satisfaction of individual members and other benefits that individual members derive from participating in the collaborative group are referred to as personal outcomes.¹⁶⁹

¹⁶³*Ibid.*, 6.

¹⁶⁴Hood et al., "Collaboration for Social Problem-Solving," 10.

¹⁶⁵*Ibid.*, 10–11.

¹⁶⁶*Ibid.*

¹⁶⁷*Ibid.*

¹⁶⁸*Ibid.*

¹⁶⁹*Ibid.*

e. Implementation

Partner organizations will have already completed substantial joint activity by the time they come to the point of implementation of a strategic plan under this model. Decisions related to collaborative structure and communication flow will have already been addressed, and a shared strategy for problem solving will have been established.

During implementation, areas of disagreement highlighted early on in the collaborative process may return to the forefront. As these areas of disagreement and differences return, operational realities will set in.¹⁷⁰ Implementation may also require the efforts of parties who were not present for the discussions that established the collaborative group's processes initially. As individual partner organizations begin to work towards the collaborative goals, inevitably there will be a need to change policies, reallocate resources, or organize new ones.¹⁷¹ Relationships will shift as implementation unfolds, resulting in changing power and control issues. Successful collaboration requires that individual partner organizations continue to monitor and evaluate the collaborative group's processes in order to address implementation challenges.

B. ASSESSMENT OF THE PROCESS-CENTRIC OUTCOMES BASED APPROACH

This section assesses the process-centric collaborative model against the selected policy options criteria.

1. Ability to Meet Federal Strategic Planning Requirements

The GAO has identified a number of gaps within public health emergency preparedness that a process-centric collaborative strategic management framework could address, including role and responsibility clarification and information sharing related to federal agency roles/responsibilities with state and

¹⁷⁰Waddell and Brown, *Fostering Intersectoral Partnering*, 17.

¹⁷¹*Ibid.*

local government agencies.¹⁷² In order to be successful, this approach requires partner agencies to move towards decentralized authority in order to facilitate decision-making. Implementation of strategic goals is likely to improve when partner agencies have the discretion to employ both formal and informal procedures while participating in collaborative strategic planning.

a. Assessment Against PPD-8

The process-centric based approach is very likely to meet the standards for whole community planning. Whole community planning seeks to understand and meet the true needs of the entire community and to strengthen the assets, institutions, and social processes that work well in communities on a daily basis in order to improve resilience and emergency management outcomes. The process-centric approach provides an opportunity for individual partner organizations to identify existing systems and response mechanisms and to assess their strengths and weaknesses under the negotiations stage. During the commitment stage partner organizations determine how the collaborative group will operate, providing an opportunity for the collaborative group to consider how their collaborative actions can strengthen and improve the current assets, institutions, and social processes at the federal level.

Improved interagency relationships are the main outcome of the process-centric model. Sharing improved decision-making and communication processes with state and local level government will help inform planning efforts at all government levels. Focusing on the processes that federal agencies will engage in as public health emergency preparedness planning moves forward will complement state and local planning well. While federal level planning may focus on specific areas of bioterrorism that state and local level governments are less focused on, knowing the processes by which decisions and response actions will

¹⁷²Government Accountability Office, "Strengthening Preparedness for Large Scale Public Health Emergencies." <http://www.gao.gov/highrisk/risks/national-challenges-public-health/>.

be made is likely to be more beneficial to state and local governments than specific federal interagency plans based on the *National Planning Scenarios*.

Because the process-centric approach focuses more on interagency relationships and process, it is unlikely that interagency plans will be developed for several years. The process-centric approach requires time for partner organizations to get to know each other and build trust; however, shared processes and procedures developed under this approach can provide the groundwork for further collaboration and development of an interagency plan.

b. Assessment Against the Public Health Preparedness Capabilities and the Healthcare Preparedness Capabilities

The process-centric approach is well suited to support healthcare coalition development. Again, healthcare coalitions are tasked with enhancing public health emergency preparedness functions including, identifying and prioritizing essential healthcare assets and services, determining gaps in the healthcare preparedness and identifying resources for mitigation of these gaps, and engaging with community organizations to foster public health, medical, and mental/behavioral health social networks.¹⁷³ Through the development of collaborative decision-making processes, partner organizations will be able to work towards achieving the functions under this capability and then work towards development of a strategic plan.

Community partnerships that support public health preparedness are more likely to be fostered by the process-centric approach than the plan-centric approach. The creation and implementation of strategies for ongoing engagement with community partners is more likely to occur through the development of processes related to how partner agencies collaborate. This approach is more flexible than the plan-centric approach because it allows the collaborative group to develop processes that leverage each individual partner

¹⁷³*Healthcare Preparedness Capabilities*, 5–7.

organization's strengths and share perspectives in order to leverage individual partner organizations differences. By exploring assumptions and differences, the collaborative group will be better able to develop strategies to mitigate identified public health threats or incidents.

2. Political Acceptability

The process-centric approach is less likely than the plan-centric approach to lead to a completed strategic plan within a set time because it focuses on the development of interagency relationships and processes for interaction. While a strategic plan may not be forthcoming for some time, other deliverables such as procedures for interaction among agencies can be expected. Congress may not be amenable to the slow nature of the process-centric approach, and may find it difficult to accept processes as outcomes given that the congressional oversight mechanism is issue-based. The process-centric approach is more decentralized than the plan-centric approach, and therefore more in line with congressional oversight of homeland security and public health emergency preparedness. Still, the lack of a concrete deliverable keeps political acceptability for Congress low.

Federal agencies may also find it difficult to accept the process-centric approach because of the lack of formality in producing a strategic plan. At the same time, the process-centric approach mirrors the table-top exercise in some ways so federal agencies are familiar with gathering together to talk through how they would interact and respond to public health emergencies. Adopting the process-centric approach would mean adapting the table-top model to focus on planning as opposed to response. While this may be a "new" approach, it should be acceptable to the federal agencies engaged in public health emergency preparedness. However, federal agencies will be less inclined to adopt this model if congressional support is unavailable. Congressional support may be possible given that the GAO has recommended that DHS and HHS conduct training and exercises to ensure that federal leadership roles are clearly defined

and understood,¹⁷⁴ and this model supports the development of a clearer understanding of federal agencies' roles in public health emergencies.

3. Effectiveness

One of the main strengths of the process-centric approach is that it helps improve links between agencies and leads to shared understanding of roles and responsibility among the collaborative group. The development of a strategic plan will occur, but it may take years to develop as the individual partner organizations learn to work together effectively. The process-centric approach is more likely to enable both the collaborative group and the individual partner agencies to manage public health emergency planning in a strategic manner on an ongoing basis because it allows for the collaborative group to renegotiate following the execution of agreed upon commitments and cycle through the model again. The monitoring and evaluation processes also allow corrective actions to be implemented more easily than the plan-centric approach when necessary.

Through the development of the collaborative group's processes, partner organizations determine strategy content and work towards a strategic plan. Implementation of the strategic plan is more likely to be successful under the process-centric approach because by the time the collaborative group is ready to implement a strategic plan they will have worked together as a joint entity for a while. Successful implementation may require processes to be modified and additional partners added, but the strong foundational basis built by the collaborative group will allow the group to navigate through challenges and operational realities.

As mentioned above, the development of an interagency plan is one long-term outcome of this plan as required under the *National Planning System*. At this time, the proposed *National Planning System* seeks to develop interagency plans that individual agencies will use as the basis for individual agency plans to support the interagency plan. Implementing the process-centric model will

¹⁷⁴Lister, *Public Health and Medical Emergency Management*, 3.

eventually lead to the fulfillment of the *National Planning System* as currently in place, but it may not achieve interagency and agency plans in a timely manner. However, because the process-centric approach focuses on interagency relationships and interactions, it seems likely that interagency and agency plans produced using this approach would be more likely to be realistic and achievable.

4. Externalities

The process-centric approach is well suited to meet the needs of whole community planning given its focus on the interrelationships among entities. Because the near-term focus is on the development of processes for interaction and decision-making, the initial outcomes of this approach are much less sensitive than federal level strategic plans. Therefore, it is much more likely that such outcomes will be shared at the state and local health department level. Improved knowledge at the state and local level of federal agency roles and responsibilities and processes for interaction will help inform state and local health department planning assumptions and objectives for all public health emergencies, not just those identified in the *National Planning Scenarios*.

The expectation is the same at the healthcare coalition level. ASPR and state and local health departments will be in a position to share outcomes gleaned from a process-centric approach at the federal level with healthcare infrastructure comprising state and/or local healthcare coalitions. The shared outcomes related to how federal agencies will interact during public health emergencies will directly inform healthcare coalition planning efforts and ultimately lead to improved intergovernmental and private sector plans for responding to various public health emergency scenarios.

VI. HYBRID APPROACH

This chapter describes the last policy option for improved collaborative strategic management at the federal level. First, a brief overview of the hybrid approach is given, and then each of the steps in the model is described. Second, the hybrid policy option is assessed against the policy options criteria outlined in the methodology.

A. OVERVIEW OF THE MODEL

1. Background

The hybrid model combines components of both the process-centric and plan-centric models. It also expands on these models by providing a mechanism for emergent strategy to be incorporated by both the collaborative group and the individual partner organizations. Allowing emergent strategy to be incorporated into the system provides an opportunity for continuous collaborative planning improvements.

This model incorporates implementation at a dual level by expanding outcomes of interest and incorporating feedback loops.¹⁷⁵ It focuses on the collaborative strategic plan and the processes that allow the collaboration to exist and operate. The hybrid approach provides a mechanism for incorporating feedback at both the individual partner organization and collaborative group levels, particularly the incorporation of organizational learning outcomes. It is comprehensive and better allows for integrated collaborative strategic plan formation and implementation processes.

2. Overview and Description

This thesis uses the collaborative strategic management model proposed by Clarke and Fuller as its hybrid approach model. The Clarke and Fuller model proposes an approach based on the identification of a strategic plan, as well as,

¹⁷⁵Clarke and Fuller, "Collaborative Strategic Management," 88.

processes for implementation that focus on the individual organization and the collaboration as a whole. This model builds off the process-centric model. Figure 3 depicts the hybrid approach, and then each component is briefly described.

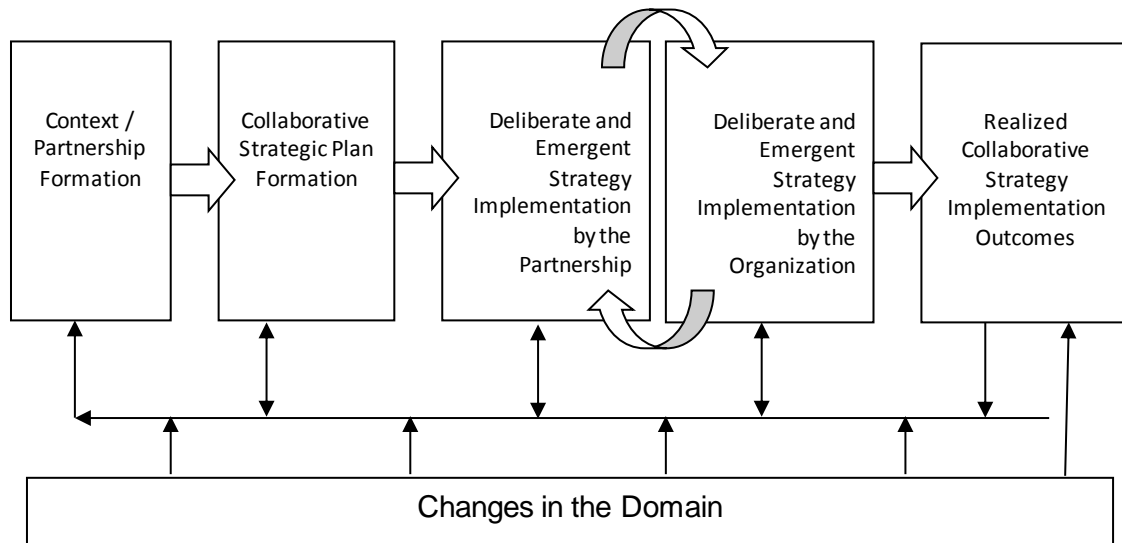


Figure 3. Hybrid Model (After Clarke & Fuller (2010))

a. Partnership Formation

The first phase of the model is determining the context and formation of the collaborative group. The context includes the environmental and organizational factors related to the problems being considered by the collaborative group. Collaborative entity engagement and the designation of a lead organization partner, if deemed necessary to meet the goals of the collaboration, takes place during this phase. During this phase, processes related to the orchestration of the collaborative group are determined.

b. Collaborative Strategic Plan Formation

The second phase is the formulation of a collaborative strategic plan. During this phase, the partner organizations work together and develop a common vision or strategy for combating the problem at hand. The collaborative

vision, mission, and/or values are translated into collaborative objectives.¹⁷⁶ Generally, contentious or controversial areas are not included in the collaborative document.¹⁷⁷

c. *Deliberate and Emergent Strategy Implementation*

The next two phases involve the implementation of the collaborative strategic plan. They incorporate the deliberate and emergent actions that occur at both the collaborative group level and at the individual partner organization level due to plan implementation. These phases occur simultaneously.

At the collaborative group level, implementation actions relate to the broad objectives of the collaborative strategic plan and are pan-organizational.¹⁷⁸ The objectives may involve collaboration with either participating or non-participating organizations and may focus on environment specific areas such as the economic, legal or political, or regulatory matters.¹⁷⁹

Implementation at the individual partner organization level is more narrow and organization specific. Actions here are specific to the capability of the individual partner organization and ongoing monitoring and evaluation take place here. Corrective actions within individual partner organizations are made as necessary to reach the goals of the collaborative group.

d. *Realized Collaborative Strategy Implementation Outcomes*

The last phase of the hybrid model is the achievement of collaborative strategy implementation outcomes at both the collaborative level and the individual partner organization level. Because this model is fluid, any number of outcomes is possible depending on how the collaborative group

¹⁷⁶Clarke and Fuller, "Collaborative Strategic Management," 88.

¹⁷⁷Huxham and Macdonald, "Introducing Collaborative Advantage" 52.

¹⁷⁸Clarke and Fuller, "Collaborative Strategic Management," 90.

¹⁷⁹Ibid.

proceeds. Plan-centric and process-centric outcomes are both possible, including strategy-setting and concrete solutions to problems or enhanced linkages and understanding among partner agencies and the development of a collaborative process. Additionally, outcomes related to changes in organizational behavior or individual partner organizations are possible.¹⁸⁰ Change in the inter-organizational relationships between the collaborative group and non-participating organizations is another potential outcome of applying this model.¹⁸¹

Emergent milestones are possible under the hybrid model as outcomes. Emergent outcomes are unplanned and develop as a result of engaging in the collaborative process. They are expressed as substantive or process achievements, and occur at both the collaborative level and the individual partner organization level.

e. *Feedback Loops*

The hybrid model incorporates feedback loops throughout each step. The feedback loops allow for continuous readjustment to the collaborative process, a necessary feature especially when dealing with complex problems and environments. For example, each phase of the collaboration is affected by changes within the domain of the problem, which are outside of the control of the individual partner organizations or the collaborative group as a whole. Additionally, not all organizations involved in the problem domain are likely to be part of the collaborative group, so the feedback loops allow for making changes in the overall collaborative strategy as needed.¹⁸² The model also allows for corrective actions, overlapping activities, and cyclical decision-making through the series of feedback loops attached to the “Changes in the Domain” box.

¹⁸⁰Ibid. at 90–91.

¹⁸¹Ibid.

¹⁸²Ibid. at 91.

B. ASSESSMENT OF THE HYBRID APPROACH

This section assesses the hybrid approach against the selected policy options criteria.

1. Ability to Meet Federal Strategic Planning Requirements

The hybrid approach combines elements from both the plan-centric and process-centric models by focusing both on the development of a strategic plan and the inclusion of strategic processes for meeting collaborative goals. This approach requires a larger time commitment from agencies, but it also provides external partners with a planning document and improved understanding of roles and responsibilities, as well as, operational response processes.

a. Assessment Against PPD-8

Like the process-centric approach, the hybrid model includes a mechanism that supports whole community planning. The dual implementation phases provide an opportunity for the needs, strengths, and weaknesses of the whole community to be addressed both by the collaborative group and by the individual partner organizations. As community needs change, the changes can be incorporated into the collaborative group's strategy formation and implementation via the model's feedback loops.

Implementation of the hybrid model has the potential to lead to vertical integration with state and local level planning. The incorporation of feedback loops creates fluidity in the model, and a number of outcomes are possible, including the development of emergent strategy and milestones relevant to state and local level planning. As with the process-centric approach, emergent strategy related to how federal agencies interact with each other is especially of interest to state and local level planning. Additionally, this model provides for ongoing modification of strategy content and implementation based on changes to planning assumptions.

The hybrid model will lead to the development of an interagency plan, and the interagency plan can serve as the basis for individual agency operational plans. The development of a collaborative plan is an early step under this approach, and the model provides for both ongoing improvements and changes to the collaborative plan through the feedback loops.

b. Assessment Against the Public Health Preparedness Capabilities and the Healthcare Preparedness Capabilities

The achievement of a strong healthcare coalition is possible under this model. The *Public Health Preparedness Capabilities* and *Healthcare Preparedness Capabilities* documents provide a strong foundational basis for the development of a collaborative strategic plan. As the healthcare coalition moves forward with plan implementation, corrective actions and changes within the planning environment can be incorporated and the overall collaborative plan modified as needed. Under this model, a mechanism exists for individual partner organizations to work with non-participating partners in order to achieve the collaborative group's goals. This may be particularly desirable given the large number of healthcare infrastructure entities that need to be included in public health and healthcare emergency preparedness. Individual partner organizations are easily added and subtracted under this model.

The hybrid model is also well suited to foster community partnerships that support public health and healthcare preparedness for the same reasons that it is well suited to the development of a strong healthcare coalition. The fluidity built in to the model supports modification of strategy development and implementation as needed. Partners can be formally added to the group or can participate more informally through interaction with individual partner organizations that provide feedback to the collaborative group. The ability to include partners on a more informal basis allows for easier participation by non-healthcare organizations such as faith-based and human service organizations that do not necessarily provide direct medical services.

2. Political Acceptability

The hybrid model is expected to be politically acceptable to both Congress and federal agencies because it combines aspects of both the plan-centric and process-centric approaches. This approach will lead to development of interagency and individual agency plans and improved decision-making processes at the federal level. Issue-based collaborative and individual agency plans will be acceptable to Congress. The hybrid approach is more holistic than the other policy options because it allows for both centralization at the collaborative level and decentralization at the individual agency level, which is also attractive to Congress and the congressional committees that oversee and evaluate strategic planning for public health emergency and homeland security issues.

The hybrid approach requires a large commitment of time and effort by the individual agencies engaged in the collaboration. This could potentially be a drawback for the federal agencies; however, strong congressional support for this approach would overcome any reservations held by the federal agencies. Still, implementation of this approach may require a formal change in the federal strategic planning process by Congress.

3. Effectiveness

The hybrid model contains mechanisms for managing organizations in a strategic manner on an ongoing basis due to the feedback loops that provide for continuous readjustment to the collaborative process and strategy development both within the collaborative group and the individual partner organizations. A collaborative plan is developed early on in the process, but strategy content is constantly modified through the implementation actions both by the collaborative group and in the individual partner organizations. This provides an opportunity for the collaborative group to discuss what it wants to achieve while also implementing the collaborative strategic plan. Furthermore, changes in the environment of the problem domain are also considered under the hybrid model

and additional feedback loops allow for strategy content to be modified based on those changes as well. Implementation at both the collaborative level and the individual partner organization level are considered and strategy can be modified once operational realities rise to the surface during implementation. Both deliberate and emergent implementation outcomes are possible under the hybrid approach.

The hybrid approach supports achieving the requirements of the *National Planning System*. The collaborative group develops an interagency strategic plan early on in the process. During the implementation phase, the individual partner organizations work towards achieving the goals of the interagency plan. At this stage, the individual organizations can produce their own individual operational plans to support the interagency strategic plan. As the individual operational plans are developed, both deliberate and emergent strategy can be included.

4. Externalities

Similar to the process-centric approach, the hybrid approach focuses on the interrelationships of individual partner agencies, which will be extremely beneficial to state and local health departments and healthcare coalitions as they further develop their plans for public health emergencies. The hybrid approach's feedback loops provide for continuous quality improvement at the federal level, which should improve planning efforts at all levels of government and within the healthcare sector, as long as, federal improvements/changes are shared continuously with state and local health departments and healthcare coalitions. The hybrid approach allows externalities to benefit from continuous improvements to processes and both the collaborative entity's strategic plan, as well as, the individual partner organizations' plans.

VII. COMPARATIVE ANALYSIS OF THE THREE POLICY APPROACHES

The preceding chapters have examined three collaborative strategic management frameworks that may be applied to public health emergency and homeland security planning and have weighed them against four policy options criteria: ability to meet federal strategic planning requirements, political acceptability, effectiveness, and externalities. This chapter provides a short comparative analysis of the three policy approaches. The succeeding sections provide a tabular summary of the findings. The policy options were weighed against each other and given an overall ranking of GOOD, BETTER, or BEST.

A. ABILITY TO MEET FEDERAL STRATEGIC PLANNING REQUIREMENTS

Each policy option was evaluated for its ability to meet federal strategic planning requirements based on requirements under *PPD-8* and the *Public Health Preparedness Capabilities* and the *Healthcare Preparedness Capabilities*. This section compares the three collaborative strategic management policy options based on the findings.

1. Ability to Meet Federal Strategic Planning Requirements Based on *PPD-8*

The policy options were assessed for their ability to meet the goals under *PPD-8*. Specifically each policy options was assessed for its ability to achieve whole community planning, complement state and local planning, and contribute to an interagency operational plan. The findings based on *PPD-8* are summarized in Table 5.

Table 5. Criterion 1a. Ability to Meet Federal Strategic Planning Requirements Based on *PPD-8*

Policy Approach	Ability to Meet Federal Strategic Planning Requirements			
	<i>PPD-8</i>			Overall
	Whole community planning	Ability to complement state and local level planning	Interagency Plan Developed	
Plan-Centric	Limited	No	Yes	GOOD
Process-Centric	Yes	Yes	Yes, but not immediately	BETTER
Hybrid	Yes	Yes	Yes, ongoing	BEST

Based on ability to achieve the goals of *PPD-8*, the plan-centric approach was ranked good, the process-centric approach was ranked better, and the hybrid approach was ranked best. The plan-centric approach was found to have only a limited ability to address whole community planning and the true needs of collaborative partners. The plan-centric approach also does not complement state and local planning as well as the other two approaches. Both the process-centric and hybrid approaches are better suited to meeting whole community planning because they provide for the development of inter-organizational processes. The hybrid approach was ranked higher than the process-centric approach because it is better suited to achieve the development of an interagency plan.

2. Ability to Meet Federal Strategic Planning Requirements Based on the CDC/ASPR Capabilities

The three policy options were also evaluated for their ability to support the development of healthcare coalitions and to foster community partnerships under Capability 1 of the *Public Health Preparedness Capabilities* and the *Healthcare Preparedness Capabilities*. The findings based on the CDC/ASPR Capabilities are summarized in Table 6.

Table 6. Criterion 1b. Ability to Meet Federal Strategic Planning Requirements Based on the CDC/ASPR Capabilities

Policy Approach	Ability to Meet Federal Strategic Planning Requirements		
	CDC/ASPR Capabilities		
	Supports development of healthcare coalition	Fosters community partnerships to support public health preparedness	Overall
Plan-Centric	Yes	No	GOOD
Process-Centric	Yes	Yes	BETTER
Hybrid	Yes	Yes, partners easily added/subtracted; lots of fluidity	BEST

The plan-centric approach was ranked as good, the process-centric approach was ranked as better, and the hybrid approach was ranked as best based on Criterion 1b. The plan-centric approach was found to be the least likely to foster community partnerships because it does not provide a mechanism for partner organizations to discuss and develop interrelationships except through strategic plan development. The hybrid approach was ranked over the process-centric approach because it allows partners to be easily added and subtracted as needed due to its fluidity.

B. POLITICAL ACCEPTABILITY

Each of the policy options was measured for its political acceptability to Congress and the DHS and DHHS agencies. This section summarizes the findings as shown in Table 7.

Table 7. Criterion 2. Political Acceptability

Policy Approach	Political Acceptability			Overall
	Congress	DHHS agencies	DHS agencies	
Plan-Centric	High	High	High	BEST
Process-Centric	Medium-High	Medium-High	Medium-High	GOOD
Hybrid	High	Medium-High	Medium-High	BETTER

Based on Criterion 2, the plan-centric approach was ranked as best, the process-centric approach was ranked as good, and the hybrid approach was ranked as better. The plan-centric approach was ranked best because it is the current strategic planning approach and political acceptability is known to be high for this approach. The process-centric approach was ranked lowest because Congressional support for this approach is expected to be lower than the other approaches as strategic plan development is not guaranteed and may take a long time to achieve. The hybrid approach was ranked above the process-centric approach because a plan will be one outcome of this approach, and congressional support is expected to be high. Federal agency support is likely to be based in part on congressional support, but both the process-centric and hybrid approaches require a larger time commitment of agencies.

C. EFFECTIVENESS

The third criterion that the policy options were evaluated against was effectiveness. Each policy option was assessed for its ability to allow collaborative groups to continue to manage themselves in a strategic manner on an on-going basis and for their ability to meet the requirements of the *National Planning System*. The summary findings for this criterion are presented in Table 8.

Table 8. Criterion 3. Effectiveness

Policy Approach	Effectiveness		
	Ability to manage in a strategic manner on an on-going basis	Meets <i>National Planning System</i> Requirements	Overall
Plan-Centric	Medium	Medium	GOOD
Process-Centric	High	Low	BETTER
Hybrid	High	High	BEST

Based on Criterion 3, the plan-centric approach was ranked as good, the process-centric approach was ranked as better, and the hybrid approach was ranked as best. The plan-centric approach has a limited ability to allow federal

agencies to manage both their individual agencies and the collaborative group in a strategic manner on an on-going basis because the focus is on plan development and not interrelationships. The plan-centric approach incorporates feedback on a limited basis. Additionally, it is unclear whether the specificity required under the *National Planning System* is achievable.

Under both the process-centric approach and hybrid approach, federal agencies are highly likely to manage public health emergency planning in a strategic manner on an ongoing basis because of set feedback mechanisms that allow for renegotiation of commitments and interactions. The hybrid approach was ranked higher than the process-centric approach because formation of a plan is an expected outcome of the hybrid approach but is not necessarily an outcome under the process-centric approach. Therefore, the hybrid approach is better suited to meet the goals of the *National Planning System* than the process-centric approach.

D. EXTERNALITIES

Externalities was the last criterion that each policy options was assessed against. The ability of the collaborative strategic management framework to provide for second order effects on other levels of government and the private sector was considered. The summary of findings is presented in Table 9.

Table 9. Criterion 4. Externalities

Policy Approach	Externalities		
	State/Local Health Department	Healthcare Infrastructure	Overall
Plan-Centric	Low	Low	GOOD
Process-Centric	High	High	BETTER
Hybrid	High	High	BEST

Based on Criterion 4, the plan-centric approach was ranked as good, the process-centric approach was ranked as better, and the hybrid approach was ranked as best. The plan-centric approach was ranked lowest because it was

determined that second order effects on externalities such as state and local health departments and healthcare infrastructure was low. Due to the sensitive nature of federal strategic plans based on the *National Planning Scenarios*, it is unlikely that the plans would be shared with agencies outside of those on the planning team. It is also unlikely that state and local health departments or healthcare infrastructure would be part of the collaborative planning team. Therefore, it is unlikely that agencies outside of the collaborative planning team would be influenced by this approach formally.

The hybrid approach was ranked over the process-centric approach because the second order effects of the hybrid approach over the process-centric approach are expected to be higher. The hybrid approach provides for updates to individual partner organizations' plans along with the collaborative entity's plan, thereby providing externalities, such as state and local health departments and healthcare infrastructure, to benefit from the feedback mechanisms on a number of levels.

E. SUMMARY ANALYSIS MATRIX

A tabular summary analysis matrix of the three policy options is presented below.

Table 10. Summary Analysis Matrix of the Three Policy Options

Policy Option	Criterion 1a.	Criterion 1b.	Criterion 2	Criterion 3	Criterion 4
Plan-centric	GOOD	GOOD	BEST	GOOD	GOOD
Process-centric	BETTER	BETTER	GOOD	BETTER	BETTER
Hybrid	BEST	BEST	BETTER	BEST	BEST

Based on the rankings, the hybrid approach is the best of the three collaborative strategic management policy options for improving strategic planning among the federal public health agencies. The next chapter discusses challenges related to implementation of collaborative strategic management frameworks.

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VIII. IMPLEMENTATION OF COLLABORATIVE STRATEGIC MANAGEMENT FRAMEWORKS

Without exception, they knew what they had to do; their difficulties lay in how to achieve the necessary changes.¹⁸³

A. COLLABORATIVE STRATEGIC MANAGEMENT FRAMEWORKS AS DISRUPTIVE TECHNOLOGY

Collaborative strategic management frameworks represent innovative, disruptive technology that can be applied to planning within the public health emergency preparedness arena. Collaborative strategic management frameworks are a tool that, if implemented correctly, will improve interagency planning for public health emergencies. In order for such frameworks to be fully adopted and valued, two issues must be overcome at the individual partner organization level.

The first hurdle to overcome is one related to the “pace of progress” in planning for public health emergencies at the federal level. While planning for public health emergencies is a part of many federal agencies’ overall mission and interagency planning is a federal requirement, federal agencies generally plan in relative isolation. Participation in collaborative strategic management requires federal agencies to interact with one another in a fluid environment. Engagement in a collaborative strategic management process may produce results that do not appear useful or necessary in the moment, but that become useful or necessary in the future.¹⁸⁴ Such innovations will be in direct contrast to traditional strategic planning at the federal level. Thus, participation in a collaborative strategic

¹⁸³C.A. Bartlett and S. Ghosal, “Managing Across Borders: New Strategic Requirements,” *Sloan Management Review* 28.2 (1987): 7–17, 12.

¹⁸⁴C.M. Christensen, *The Innovator’s Dilemma: When New Technologies Cause Great Firms to Fail*, 226, West Sussex, England: John Wiley & Sons Ltd, 1997, Kindle edition. According to Christensen, if entities do not realize that they need something, they will not ask for it. In this case, federal agencies may not realize that they need a certain level of interaction that participation in a collaborative strategic management framework will provide.

management process may affect agencies perceived “pace of progress” in developing strategic plans for public health emergencies.

Second, in order for the implementation of collaborative strategic management frameworks to be successful, they must be politically attractive. Political buy-in at the federal agency head level and congressional level is necessary in order to prioritize interagency strategic planning for public health emergencies. Crosscutting issues, such as those related to public health emergencies and homeland security, are difficult to plan for strategically at the federal level because of mission fragmentation and overlap across federal agencies. At the federal level, prioritization of interagency collaboration and coordination with regard to public health emergency preparedness planning continues to be lacking even though public health emergency preparedness and homeland security have created a new market for federal strategic planning. As discussed previously, collaborative strategic management frameworks can help clarify roles and reduce overlap among federal agencies, which should make them politically attractive, but until interagency planning is prioritized by agencies themselves, agencies will be unlikely to dedicate the necessary resources and authority to participate in collaborative strategic management effectively.¹⁸⁵

One approach to overcoming the above outlined hurdles is to think of the adoption of collaborative strategic management as a marketing challenge. The public health emergency preparedness arena is unstable and strategic planning and action must be flexible. Collaborative strategic management frameworks provide such flexibility, and successful marketing of collaborative strategic management frameworks relies on an evolving value network regarding federal level strategic planning.

Furthermore, while each federal agency has specialized capabilities that it can leverage, public health emergencies create the need for a new, integrated approach to address the disruption caused by such emergencies. Collaborative strategic management is a social technology that can help shape the public

¹⁸⁵Christensen, *The Innovator's Dilemma*, 226–227.

health emergency preparedness planning and response environment. Furthermore, collaborative strategic management allows for strategy and strategic planning to evolve as the emergency preparedness environment evolves. The evolutionary aspect of collaborative strategic management is in direct contrast to the current approach to strategic planning at the federal level that is militaristic and focused on formal strategy versus emergent strategy.

Implementation of strategic plans is also a challenge as discussed in the next section.

B. THE IMPLEMENTATION CHALLENGE

Once strategic plans have been developed, the real challenge may lie in implementation. Public agencies in particular vary in how purposeful and effective they are in executing strategy, how they go about implementing initiatives, and the extent to which their strategies are fully implemented.¹⁸⁶ One reason implementation remains such a challenge is that managers and executives try to implement strategies without accounting for all of the factors that need to be considered, including environmental uncertainty, organizational structure, organizational culture, operational planning, and resource allocation.¹⁸⁷

Because the environment in which organizations function is constantly changing, strategic planning must consider how changes in the external environment might affect strategic stance, as well as, implementation of strategy. Additionally, the current organizational structure of partner agencies and potential changes in organizational structure will influence implementation at the collaborative level. Organizational culture will affect the implementation of strategic plans, and the implementation of a strategy may even seek to change an organization's culture. Moreover, implementing strategy requires operational planning for implementation activities and the allocation of resources needed elsewhere in the organization. These are the same environmental and

¹⁸⁶Poister et al., "Strategic Management Research in the Public Sector" 527.

¹⁸⁷F. Okumus, "A Framework to Implement Strategies in Organizations," *Management Decision* 41.9 (2003): 871–882, 875.

organizational factors that affect the type of collaborative relationship that organizations choose to enter into.¹⁸⁸

The overall success of strategic planning depends on the ability of both the collaborative group and individual partner organizations to implement the collaborative strategy.¹⁸⁹ Strategic plans need to be specific and flexible at the same time, especially in unstable environments.¹⁹⁰ If the collaborative group and individual partner organizations are prepared to rework and amend plans incrementally as implementation proceeds, success is more likely.¹⁹¹ Strategy implementation under the three policy options is explored in the next section.

C. STRATEGY IMPLEMENTATION UNDER THE THREE POLICY APPROACHES

This section discusses specific strategy implementation challenges posed by each of the three policy options.

1. Plan-Centric Approach

The plan-centric approach is similar to van der Heijden's rationalist paradigm. The rationalist approach works well when problems are well defined and the environment behaves in predictable ways.¹⁹² It separates thought and action, and implementation follows formulation of strategy.¹⁹³ The plan-centric model focuses on planning for problems identified in a threat or risk assessment, often based on probable frequency of occurrence.¹⁹⁴ The current plan-centric approach is militaristic in that it focuses on agency mission as referenced

¹⁸⁸See Chapter II, Section C.2.a. *supra*.

¹⁸⁹Poister et al., "Strategic Management Research in the Public Sector," 537.

¹⁹⁰P. J. Brews and M. R. Hunt, "Learning to Plan and Planning to Learn: Resolving the Planning school/learning School Debate," *Strategic Management Journal* 20.10 (1999): 889–913, 906.

¹⁹¹*Ibid.*

¹⁹²K. van der Heijden, *Scenarios: The Art of Strategic Conversation*, 23, 2nd ed., West Sussex, England: John Wiley & Sons Ltd., 2005, Kindle edition.

¹⁹³*Ibid.*, 21.

¹⁹⁴Federal Emergency Management Agency, *Comprehensive Preparedness Guide (CPG) 101, Version 2.0*, 4-7 – 4-10.

throughout both the *National Preparedness Goal* and FEMA's *Comprehensive Preparedness Guide*. Homeland security is a mission area.¹⁹⁵

The rationalist paradigm derives objectives from the mission first and strategies to support the objectives second.¹⁹⁶ Then, the various strategic options are weighed and the best option selected.¹⁹⁷ This mirrors the plan-centric model and the development of goals and objectives to support the mission in Step 3.¹⁹⁸ The plan-centric model also requires the collaborative planning team to select "preferred" courses of action.¹⁹⁹ But, the rationalist/plan-centric approach is flawed because it assumes that there is a "best" solution or strategy. It also presupposes that all individual partners will arrive at the same conclusion regarding what the best strategy or solution is to a planning dilemma, and implementation follows formulation of the strategic plan.

Rationality and van der Heijden's rationalist approach can only be successful when problems are clear and predictable and all partners behave in a predictable manner.²⁰⁰ The public health emergency preparedness and homeland security environments are full of uncertainty and unpredictability. Therefore, the plan-centric approach is ill suited to address the whole picture in collaborative strategic management of public health emergency preparedness.

2. Process-Centric Approach

The process-centric approach contains elements of van der Heijden's evolutionary paradigm. The evolutionary paradigm believes that strategy is a process of random experimentation and emerges over time. This approach

¹⁹⁵*Ibid.*, Intro-1.

¹⁹⁶van der Heijden, *Scenarios*, 24.

¹⁹⁷*Ibid.*

¹⁹⁸Federal Emergency Management Agency, *Comprehensive Preparedness Guide (CPG) 101, Version 2.0.*, 4-12.

¹⁹⁹*Ibid.*, 4-14.

²⁰⁰van der Heijden, *Scenarios*, 30.

contains elements of complexity theory and believes that overall system behavior is emergent.²⁰¹ There is no forecasting power under this paradigm.

The process-centric approach to collaborative strategic management focuses on agreement and consensus-seeking behavior that emerge and develop over time. Formal, informal, and cultural processes help transform collaborative resources into things of greater value.²⁰² However, the process-centric approach runs the risk of creating a fragmented and intuitive strategy that may not become formalized.²⁰³ Emergent strategy based on past patterns rather than formal strategy is very likely under a process-centric approach.²⁰⁴

3. Hybrid Approach

The hybrid approach is in many ways similar to van der Heijden's processual view of strategic management.²⁰⁵ The processual view seeks to develop a mechanism for dealing with both long and short-term forecasts and looks at what is happening inside the individual partner organizations and the uncertainty of the planning environment.²⁰⁶ It is a middle of the road approach focusing on long-term planning while being prepared for short-term changes in both the planning environment and the organizational environment of the individual partner organizations. The feedback loops in the hybrid approach policy option represent this flexibility. Like van der Heijden's processual theory, the hybrid approach understands the process and tries "to find intervention points where influence can be exercised."²⁰⁷

²⁰¹Ibid., 21.

²⁰²Christensen, *The Innovator's Dilemma*, 163.

²⁰³van der Heijden, *Scenarios*, 32.

²⁰⁴Ibid.

²⁰⁵Ibid., 35.

²⁰⁶Ibid., 36.

²⁰⁷Ibid., 35.

The processual view builds on the concept of continuous development and improvement much like the hybrid approach.²⁰⁸ Because it utilizes a learning loop, the hybrid approach relies much less on forecasting than both the plan-centric and process-centric approaches.²⁰⁹ Through its series of feedback loops, the hybrid approach attempts to make adjustments “such that a predetermined preferred condition can be maintained, but also modifies its preferred condition in line with the fit of the environment.”²¹⁰ Collaborative strategic management frameworks are much more likely to be successful if they “adopt the idea of the learning loop and build up related capabilities for perception, reflection, the development of theories about the environment, and joint action.”²¹¹ Success is also dependent on the individual partner organizations being able to reach some consensus or shared meaning through conversations where “strategic cognitions can be compared, challenged and negotiated.”²¹²

Learning via a learning loop as discussed above, can only work if individual partner organizations participate and share in order to work towards a common plan and action.²¹³ Without consensus, collaborations do not cohere and ultimately the collaborative group falls apart, and collaboration requires starting from shared basic principles.²¹⁴ The next section examines how collaborative strategic management can be implemented at the federal level using a progressive approach.

²⁰⁸*Ibid.*, 38.

²⁰⁹*Ibid.*, 38.

²¹⁰*Ibid.*, 40.

²¹¹*Ibid.*, 41.

²¹²*Ibid.*, 43.

²¹³*Ibid.*, 42.

²¹⁴*Ibid.*, 42–43.

D. A PROGRESSIVE APPROACH TO IMPLEMENTING COLLABORATIVE STRATEGIC MANAGEMENT FRAMEWORKS AT THE FEDERAL LEVEL

It may be helpful to consider the adoption of collaborative strategic management at the federal level progressively. The plan-centric approach is the current approach to collaborative strategic management for public health emergency planning. Moving the federal agencies towards a more process-centric approach to interagency strategic planning and management for public health emergencies is an incremental change that seeks to better define how the federal agencies will interact and coordinate. Once processes for collaboration are better established, the collaborative group could move towards strategic planning and management that incorporates feedback at both the collaborative group level and the individual partner agency level while working towards an interagency strategic plan, thus adopting the hybrid approach to collaborative strategic management.

Collaborative groups need to start with a common understanding of the issues and concerns that the group will address. The rational, plan-centric approach provides individual partner agencies with a means for framing and shaping the strategic planning conversation.²¹⁵ The process-centric's focus on the development of relationships and processes among individual partner organizations allows for strategy to emerge and evolve over time. This allows for weeding out of bad strategies and institutionalizing of good strategies.²¹⁶

The hybrid policy approach further ensures the institutionalization of good strategies through feedback loops between the collaborative group and individual partner organizations. Of the three policy options, it is best suited to allow for the alignment of ideas and mental models that are critical to triggering a strategic planning loop through joint action. The feedback loops provide a mechanism for intended strategy under the collaborative plan and emergent strategy that

²¹⁵*Ibid.*, 43.

²¹⁶*Ibid.*, 44.

evolves out of individual partner organization and collaborative entity implementation to align.

Adopting a progressive approach may be more palatable at both the congressional and federal agency level because it would allow agencies to change the current strategic planning process incrementally as opposed to changing it in a disruptive manner. A progressive approach is also in keeping with traditional planning and strategy development, which allows for incremental change, but not disruptive change. Taking a progressive approach towards strategic planning management would allow federal agencies to hold on to the foundational planning work that they have already achieved through the plan-centric model, while opening the door for improved strategic planning and strategic management moving forward.

Additionally, a progressive approach provides an opportunity for federal agencies to consider the allocation of personnel devoted to interagency strategic planning for public health emergencies. Personnel time that can be devoted to participation in a collaborative strategic management process is limited and federal agencies have many missions and priorities that they are responsible for beyond public health emergency planning. Participation in a poorly defined collaborative strategic management process will not be highly prioritized by federal agency leadership. However, following a progressive implementation approach will allow federal agencies to build trust first by focusing on shared principles and intended strategies using the plan-centric model. Moving next into a process-centric approach will allow the collaborative group to enhance interrelationships and collaborative processes and evolve collaborative strategy as necessary. Finally, moving into the hybrid model, the collaborative group can vet emergent strategy against intended strategy and institutionalize the collaborative learned strategy while incorporating changes within the planning environment.

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IX. CONCLUSION: RECOMMENDATIONS FOR IMPLEMENTING THE COLLABORATIVE STRATEGIC MANAGEMENT FRAMEWORKS IN A PROGRESSIVE MANNER

As discussed throughout this thesis, the current approach to collaborative strategic planning and management is the plan-centric approach. However, partner agencies and organizations already engage in some process-centric type activity when they participate in table-top exercises. Table-top exercises are designed to discuss specific scenarios in order to assess plans, policies and procedures,²¹⁷ but typically the partners spend the time further discussing and establishing interrelationships and processes for interacting with each other. A natural next step in moving towards a hybrid approach to collaborative strategic management is to better leverage the existing plan-centric strategic planning model and the existing table-top exercise model in order to create a hybrid model. This thesis concludes with recommendations for implementing collaborative strategic management in a progressive manner for both existing collaborations and for new collaborations.

A. EXISTING COLLABORATIONS

For existing collaborations where a strategic plan has already been developed, the collaboration can move towards a process-centric approach by meeting for a series of table-top exercise-like meetings to discuss how individual partner organizations will interact with one another, renegotiate commitments, and communicate within the collaboration. The focus of the meetings will not be on response activities, but on interactions among the collaborative partners. The meeting can then be incorporated into both the collaborative group's plan and the individual partner organization's plans.

During the course of the table-top exercise-like meetings, collaborative partners should focus on negotiating what each brings to the collaboration,

²¹⁷Department of Homeland Security, "About HSEEP," accessed January 14, 2013, https://hseep.dhs.gov/pages/1001_About.aspx#TerminologySection1.

including legal authority, resources, and prior planning efforts. This is also the time for the group to determine how the governance of the collaboration can encourage meaningful participation by all partners. Because there is an existing plan, collaborative partners can reassess how efficiently the group has worked together and whether the planning assumptions made earlier need revision. Additionally, existing forms of communication and information flow can be evaluated and improved as needed.

Shared vision and strategy will emerge as the collaborative group discusses and formalizes processes for participation and interaction. Incorporating this shared vision and strategy in the collaborative strategic plan and within individual partner agency plans is a logical and necessary next step. The adoption of the hybrid approach will ensure the emergent collaborative strategy is institutionalized by both the collaboration and the individual partner agencies.

The collaborative group can then move towards a full hybrid approach to collaborative strategic management by developing a mechanism for continuous feedback within the collaborative group and within individual partner organizations. Biannual collaborative meetings during which collaborative partners meet to discuss changes within organizations and changes within the planning environment could provide such a feedback mechanism. Additionally, a biannual meeting would allow organizations not already part of the collaborative group to participate. Because not all organizations that could be involved in the problem domain are likely to be part of the collaborative group, participation in a biannual meeting provides a mechanism for including new partners as needed. Continuous feedback related to corrective actions, overlapping activities, and cyclical decision-making via a biannual collaborative meeting will provide an opportunity for both the collaborative plan and individual partner organization plans to be updated.

B. NEW COLLABORATIONS

New collaborations, including healthcare coalitions, should begin with a table-top exercise-like approach prior to the development of a collaborative strategic plan. Instead of focusing on response measures based on an existing plan, partners should discuss interagency relationships and processes during the table-top exercise-like meetings. The meetings will provide partner organizations with an opportunity to flush out group processes and interactions, such as expectations, governance, and mechanisms for monitoring and evaluating the group. Additional needed partner organizations to include may be identified during this phase. The collaborative group should engage in as many pre-planning meetings as needed to build trust prior to drafting an actual plan. During the drafting of the collaborative plan, the collaborative group should continue to engage in process-centric activities such as decision-making processes, monitoring and evaluation processes, and communication and information flow processes. Continuing to work on the interagency processes for interaction will lead to a strategic plan that is more likely to be realistic and achievable.

The final piece for adopting a hybrid approach is to incorporate a continuous feedback mechanism into the collaboration after the strategic plan is complete. Establishing a requirement for biannual collaborative meetings accomplishes this goal. The biannual collaborative meeting requirement should be negotiated in the initial development stages of the new collaboration. As discussed above, these biannual collaborative meetings will provide partners with an opportunity to discuss and incorporate organizational and environmental changes into both the collaborative plan and individual partner organization plans to be updated as needed. The biannual collaborative meeting also allows for collaborative partners to be added or subtracted as needed.

Movement towards a hybrid approach to collaborative strategic management will ensure that agencies involved in public health emergency and homeland security planning remain nimble and able to focus on long-term planning while being prepared for short-term changes in both the planning

environment and within partner organizations. The overall success of strategic planning within the public health emergency and homeland security environment is dependent on the ability of the collaborative entity and the partner organizations to implement the collaborative strategy. Providing an opportunity for the collaborative group and the individual organizations to rework and amend their plans as the environment changes and implementation proceeds, will increase the likelihood of success.

APPENDIX. FUNCTIONS ASSOCIATED WITH THE EIGHT SHARED PUBLIC HEALTH PREPAREDNESS CAPABILITIES AND HEALTHCARE PREPAREDNESS CAPABILITIES.

Capability 1.: Community Preparedness/Healthcare System Preparedness	
Public Health Preparedness Functions	Healthcare Preparedness Functions
Function 1: Determine risks to the health of the jurisdiction	Function 1: Develop, refine, or sustain healthcare coalitions
Function 2: Build community partnerships to support health preparedness	Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster
Function 3: Engage with community organizations to foster public health, medical, and mental/behavioral health social networks	Function 3: Identify and prioritize essential healthcare assets and services
Function 4: Coordinate training or guidance to ensure community engagement in preparedness efforts	Function 4: Determine gaps in the healthcare preparedness and identify resources for mitigation of these gaps
	Function 5: Coordinate training to assist healthcare responders to develop the necessary skills in order to respond
	Function 6: Improve healthcare response capabilities through coordinated exercise and evaluation
	Function 7: Coordinate with planning for at-risk individuals and those with special medical needs

Capability 2.: Community Recovery/Healthcare System Recovery	
Public Health Preparedness Functions	Healthcare Preparedness Functions
Function 1: Identify and monitor public health, medical, and mental/behavioral health system recovery needs	Function 1: Develop recovery processes for the healthcare delivery system
Function 2: Coordinate community public health, medical, and mental/behavioral health system recovery operations	Function 2: Assist healthcare organizations to implement Continuity of Operations (COOP)
Function 3: Implement corrective actions to mitigate damages from future incidents	

Capability 3.: Emergency Operations Coordination	
Public Health Preparedness Functions	Healthcare Preparedness Functions
Function 1: Conduct preliminary assessment to determine need for public activation	Function 1: Healthcare organization multi-agency representation and coordination with emergency operations
Function 2: Activate public health emergency operations	Function 2: Assess and notify stakeholders of healthcare delivery status
Function 3: Develop incident response strategy	Function 3: Support healthcare response efforts through coordination of resources
Function 4: Manage and sustain the public health response	Function 4: Demobilize and evaluate healthcare operations
Function 5: Demobilize and evaluate public health emergency operations	

Capability 5.: Fatality Management	
Public Health Preparedness Functions	Healthcare Preparedness Functions
Function 1: Determine role for public health in fatality management	Function 1: Coordinate surges of deaths and human remains at healthcare organizations with community fatality management operations
Function 2: Activate public health fatality management operations	Function 2: Coordinate surges of concerned citizens with community agencies responsible for family assistance
Function 3: Assist in the collection and dissemination of antemortem data	Function 3: Mental/behavioral support at the healthcare organization level
Function 4: Participate in survivor mental/behavioral health services	
Function 5: Participate in fatality processing and storage operations	

Capability 6.: Information Sharing	
Public Health Preparedness Functions	Healthcare Preparedness Functions
Function 1: Identify stakeholders to be incorporated into information flow	Function 1: Provide healthcare situational awareness that contributes to the incident common operating picture
Function 2: Identify and develop rules and data elements for sharing	Function 2: Develop, refine, and sustain redundant, interoperable communication systems
Function 3: Exchange information to determine a common operating picture	

Capability 10.: Medical Surge	
Public Health Preparedness Functions	Healthcare Preparedness Functions
Function 1: Assess the nature and scope of the incident	Function 1: The healthcare coalition assists with the coordination of the healthcare organization response during incidents that require medical surge
Function 2: Support activation of medical surge	Function 2: Coordinate integrated healthcare surge operations with pre-hospital Emergency Medical Services (EMS) operations
Function 3: Support jurisdictional medical surge operations	Function 3: Assist healthcare organizations with surge capacity and capability
Function 4: Support demobilization of medical surge operations	Function 4: Develop Crisis Standards of Care guidance
	Function 5: Provide assistance to healthcare organizations regarding evacuation and shelter in place operations

Capability 14.: Responder Safety and Health	
Public Health Preparedness Functions	Healthcare Preparedness Functions
Function 1: Identify responder safety and health risks	Function 1: Assist healthcare organizations with additional pharmaceutical protection for healthcare workers
Function 2: Identify safety and personal protective needs	Function 2: Provide assistance to healthcare organizations with access to additional Personal Protective Equipment (PPE) for healthcare workers during response
Function 3: Coordinate with partners to facilitate risk-specific safety and health training	
Function 4: Monitor responder safety and health actions	

Capability 15.: Volunteer Management	
Public Health Preparedness Functions	Healthcare Preparedness Functions
Function 1: Coordinate volunteers	Function 1: Participate with volunteer planning processes to determine the need for volunteers in healthcare organizations
Function 2: Notify volunteers	Function 2: Volunteer notification for healthcare response needs
Function 3: Organize, assemble, and dispatch volunteers	Function 3: Organization and assignment of volunteers
Function 4: Demobilize volunteers	Function 4: Coordinate the demobilization of volunteers

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