GRANT APPLICATION, BEFORE AND AFTER

The excerpt below is borrowed from a grant application and describes the proposed project. This excerpt has been revised to model how communicators might apply the strategic framing recommendations to talk more effectively with audiences about informatics and informaticians. Keep in mind that even informed members of the public—such as funders, policy makers, and public health professionals—can access the default cultural models that define public understanding and discourse on social issues. The framing cues in a message are what steer recipients to more or less productive ways of interpreting the information in that message. In the before-and-after example below, the original is annotated to identify opportunities to reframe, and the reframed version is annotated to explain what's been changed and why.

Excerpt from the original:

1 Governmental public health in the US faces a broad range of population health improvement and protection challenges, at a time of **dwindling** **2** budgets, shrinking workforce, and aging information technologies. Addressing these challenges will require improved workforce capacity most significantly in the areas of effective management, sharing and use of information.

3 In 2012, the Institute of Medicine (IOM) defined core capabilities for public health, leading with Information Management and Surveillance. The IOM recognized that **data and information are the** **4** **life blood** of the public health system. Public health officials require timely, accurate and reliable information to monitor community health status and intervene as necessary. Public health programs rely on a steady stream of information from healthcare and other sources for surveillance, regulatory, service delivery and other purposes.

The ways in which information is collected, stored, managed, protected, exchanged, analyzed, visualized and reported are changing rapidly as both healthcare and public health advance into the digital era. The increased data flow around the healthcare ecosystem means public health must be prepared to receive, process and analyze more data, and this may require new tools and skills: **more data** **5** does not necessarily mean better data. New techniques and aptitudes will be required to deal with both higher volumes and more variable quality.

As an example, the healthcare system is accelerating its adoption of electronic health records (EHRs) and other health information technology (HIT), guided and supported by provisions of the Health Information Technology for Economic and Clinical Health (HITECH) Act, including its EHR Incentive Programs ("Meaningful Use"). **As the healthcare system and EHR marketplace respond to the policy and technical requirements of Meaningful Use, public health needs to modernize its processes and technologies in order to keep up and be a credible partner in the exchange and use of both individual and population-based health information. With aging information technologies and limited infrastructures, most governmental health departments will struggle to keep pace with private healthcare investments in clinical data repositories, analytics and reporting tools, and with information exchange capabilities.** **6**

Recognizing these challenges, CDC created three informatics fellowships with the goal of developing opportunities for practicum-based informatics training for professionals entering the workforce and for public health practitioners currently in state and local public health agencies.

1

The introduction jumps immediately into describing a problem without first establishing the "big picture" context of what's at stake in supporting governmental public health. Opening with an appeal to a recommended Value instead helps to set the stage for the information to follow, priming readers to focus on the collective, or public, importance of the issue.

2

This series of descriptors—"dwindling," "shrinking," and "aging"—is crisis-oriented, which will likely activate the widely shared sense of fatalism most Americans hold about our ability to solve entrenched social problems. These negative words are also likely to cue up the strong skepticism about the government's competence and efficiency that dominates people's reasoning about government and its role in public life. Activating these models can constrict people's ability to think productively about solutions.

3

The purpose of the second and third paragraphs is to explain the need for accurate and timely information in public health settings. The explanatory power of these sentences could be strengthened by building an Explanatory Chain to demonstrate more explicitly the mechanisms at work in the system: i.e., showing what causes what, and with what effects.

4

This Metaphor may have unintended consequences for people's understanding, and does not explain the importance of data and information.

5

This pithy clause presents a good opportunity to frame effectively by using more explanation. It could be followed with a sentence that clarifies why more data, without the right processing mechanisms, can create more or new problems for those who receive it. Though strategic framing emphasizes solutions, it is also true that a problem needs to be clearly defined in order for readers to follow the logic of the proposed solutions.

6

This section presents great framing opportunities: for example, "modernize" is a positive cue pointing towards feasible solutions; it can be expanded upon with the Logistics Explanatory Metaphor to highlight the importance of such updates. On the other hand, words like "aging," "limited," and "struggle" in the subsequent sentence should be used with care or reframed to make the affirmative (not crisis-driven) case for modernization.

Reframed using recommended framing strategies:

1 As our population's health needs and challenges change over time, the public health sector must respond with innovative solutions that promote and protect population health while using our resources wisely. In addition, infrastructural challenges—increasing the workforce and updating information technologies while managing budget restrictions—reinforce the need for resourcefulness. Addressing these challenges will require improved workforce capacity most significantly in the areas of effective management, sharing and use of information. **2**

In 2012, the Institute of Medicine (IOM) defined core capabilities for public health, leading with Information Management and Surveillance. The IOM recognized that data and information are critical components of the **3** public health system that must be optimally available, usable, and shareable for the system to function well. Public health officials require timely, accurate and reliable information to monitor community health status and intervene as necessary, which demands information delivery systems as fully modernized and dependable as the logistical **4** systems of the global shipping industry. Public health programs likewise rely on a steady stream of information from healthcare and other sources for surveillance, regulatory, service delivery and other purposes.

The ways in which information is collected, stored, managed, protected, exchanged, analyzed, visualized and reported are changing rapidly as both healthcare and public health advance into the digital era. This proliferation of activity requires careful coordination by informaticians—experts trained to design systems that manage and translate **5** public health information and data effectively—much as a sturdy building begins with an architect's blueprint and its skillful interpretation. The increased data flow around the healthcare ecosystem means public health must be prepared to receive, process and analyze more data, and this may require both new tools and new skills: more data does not necessarily mean better data. Public health needs more professionals trained to manage these higher **6** volumes of data and their variable quality, as well as to design and use systems that improve data quality.

7 As an example, the healthcare system is accelerating its adoption of electronic health records (EHRs) and other health information technology (HIT), guided and supported by provisions of the Health Information Technology for Economic and Clinical Health (HITECH) Act, including its EHR Incentive Programs ("Meaningful Use"). As the healthcare system and EHR marketplace respond to the policy and technical requirements of Meaningful Use, public health needs to modernize its processes and technologies in order to remain a dependable partner in the exchange and use of both individual and population-based health information. Governmental health departments must prioritize updating their information technologies and improving their infrastructure in order to keep pace with private healthcare investments in clinical data repositories, analytics and reporting tools, and with information exchange capabilities.

Recognizing these challenges, CDC created three informatics fellowships with the goal of developing opportunities for practicum-based informatics training for professionals entering the workforce and for public health practitioners currently in state and local public health agencies.

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1 The reframed version opens with an appeal to the recommended Values of Ingenuity and Responsible Management to establish the "big picture" importance of the issue.

2 Here, the original crisis-oriented cues ("dwindling," "shrinking," "aging") are replaced with a more neutral expression of the problem and wrapped in the Ingenuity Value to foster optimism that solutions are possible.

3 In lieu of an untested Metaphor, this reframed sentence strengthens its effectiveness by explaining explicitly what was only implied by the term "life blood" in the original and uses cues that create the opportunity to apply tested Metaphors to the rest of the excerpt.

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5 FrameWorks' research shows that the people who perform the work of informatics are a largely invisible workforce. To correct the default perception that informatics is about tools rather than technicians, take time to explain who does informatics.

6 The passive voice of the original sentence ("New techniques and aptitudes will be required . . .") left people out of the picture. This reframed version more plainly emphasizes the field of informatics as a field of trained professionals, not just tools.

7 This paragraph has been reframed to remove cues likely to activate the unproductive default models of fatalism and government's incompetence that dominate public thinking about the public sector and its challenges.