TALKING POINTS

The following talking points and examples can be used flexibly: as a source of themes for longer written pieces, as short explanations in interviews, or as set-ups to help frame conversations about specific policy or program proposals. Each models the recommended framing strategies (metaphors, values, and examples) that have emerged from FrameWorks' work on how to fill in cognitive holes about public health informatics and shift thinking away from unproductive assumptions about the field and what it does. Each includes notes that describe the framing strategy involved, and these talking points illustrate how framing can be applied flexibly.

These sample talking points are intended to be illustrative and do not need to be used word for word, but when adapting them for use, public health professionals should take care to retain the main concept of each frame element.

Use the *Public Health Information Translation* metaphor and the
Ingenuity value to explain why investment in informatics benefits
the public health field.

- *[Use the value of Ingenuity.]* To manage public health effectively, we need to innovate how we share data, making sure that data are complete and informative across the field of public health.

- *[Introduce the metaphor of Public Health Information Translation.]* Smart public health decisions must be based on solid data that get to the right people at the right time in a form they can use—and for that, we need a strong informatics workforce to translate data among stakeholders.

- *[Emphasize the idea of translating among languages.]* Think of it like translation: translating between languages so that everyone can understand one another requires identifying what people need to know and why, developing dictionaries that coordinate the meanings of words across languages, and training a skilled, experienced workforce.

- *[Connect this idea to public health informatics.]* Public health informatics is similar: in order to get the right information to the right people at the right time, so that we can respond quickly to public health issues, we need to invest in informatics programs and well-trained informaticians who can translate the different types and sources of data for professionals working in diverse fields and settings.

- *[End by re-emphasizing the value of Ingenuity to remind the audience why informatics matters.]* By quickly and accurately translating data into usable information, public health informatics becomes an engine of ingenuity in the field, developing new ways to improve public health practice and outcomes.

Use the *Public Health Information Translation* metaphor and the *Responsible Management* value and an example (such as flu severity) to explain how informatics makes it possible for public health to effectively fulfill its mission to protect population health.

- *[Use the value of Responsible Management.]* Successfully promoting public health requires us to manage our resources responsibly, especially the data that health officials rely on to make sound decisions.

- *[Introduce the Public Health Information Translation metaphor.]* Public health data come in many forms, not unlike languages: the content may be the same, but without translators, conveying the content from one group to another is difficult.

- *[Connect this idea to public health informatics.]* Informaticians perform that translation work: the systems they create function like dictionaries that allow public health practitioners to interpret data and information they receive in the language of another field. The ease of translation—how well those dictionaries are written—has important implications for our population health.

- *[Introduce an example, such as a chronic issue like the flu, or a current public health challenge.]* Consider flu outbreaks, for example. As a seasonal disease, the flu may spread rapidly, so public health professionals must be able to interpret information quickly and accurately across sectors and locales in order to make sound decisions about how to limit the severity of an outbreak.

- *[Clearly connect the example to public health informatics—and keep using the metaphor.]* Public health relies on informaticians identifying important stakeholders (for example, epidemiologists and clinicians working in communities) and creating systems to enable the smooth and speedy translation of information between groups of public health professionals.

- *[Summarize the point. Keep using the metaphor, and remind the audience why public health informatics matters.]* Informaticians' translation work is necessary to handle public health emergencies like flu outbreaks, as well as more routine work. As the public health data and information collected and shared expand in volume and type, it's increasingly important that we support informaticians' efforts to keep all sectors in conversation with each other, across fields and disciplines.

Use the **Public Health Knowledge Architects** metaphor to explain the importance of building systems with people and contexts of use in mind.

- *[Introduce the Public Health Knowledge Architects metaphor.]* Informaticians are the architects of public health knowledge.

- *[Emphasize the links between architects' work and informaticians' work.]* In much the same way an architect designs and builds structures that meet the needs of the people who will use them, informaticians design and build the technological structures—the data-sharing systems—that make public health decisions and policy possible, timely, and effective.

- *[Emphasize the idea of designing buildings.]* Architects need to understand the "big picture" context in which a building is being constructed to ensure the building will fit into its surroundings, meet local codes, and be optimally functional.

- *[Connect this idea to public health informatics.]* It's the same with informatics, but what's under construction are data systems and information-sharing processes. Like well-trained architects, informaticians work closely with public health professionals to understand local contexts and needs and to build systems that blend form and function effectively.

- *[Close with the metaphor.]* Informaticians aid public health professionals' work from blueprint to implementation.

Use the *Public Health Data Logistics* metaphor and an example (such as Ebola risk assessment) to explain the importance of timely, accurate data sharing.

- ***[Set up the challenge.]*** To assess health risks accurately and create effective policies to protect communities from those risks, public health professionals need access to reliable, secure, real-time data.

- ***[Quickly introduce informatics and the Public Health Data Logistics metaphor.]*** That's where informatics comes in: similar to the logistics industry, which coordinates the shipping and receiving of packages globally, informaticians create, implement, and maintain the complex systems necessary to make sure data "packages" arrive safely and quickly to those who need them to respond to emerging public health situations.

- ***[Introduce an example.]*** Ebola risk assessment is a good example of how the information logistics performed by informaticians keep public health moving. By building systems that standardize the way public health data are collected, organized, packaged, shipped, and received, informaticians make it easier for public health professionals to get exactly the information they need when they need it.

- ***[Re-emphasize the important role of informatics in addressing the challenge.]*** Informatics makes it possible for the public health sector to determine, for instance, whether a case of a disease like Ebola poses population risks, of what nature and breadth, and what actions to take based on that determination.

METAPHOR EXAMPLES

Public health professionals may find that explaining relevant public health issues through the lens of one of the explanatory metaphors can be especially effective. The following current examples, which have been developed by subject-matter experts in public health informatics, illustrate how public health professionals can make their points more clearly and connect with their audiences more effectively.

Use the *Public Health Information Translation* metaphor to talk about how informatics helps monitor and prevent diseases.

Idea: Public health data can come in many languages, and informatics is a translation discipline. It helps resolve differences in vocabularies that might otherwise inhibit effective communication and limit how well information can be shared and reused.

Example: A public health agency in a major US city wants to improve its estimates of the burden of hepatitis C in a community. The agency would like to get this information through electronic health records, but the data fields—or the "language" of the electronic health records—that health care clinicians and laboratories use are different from the language that public health systems speak. Public health informaticians work with the health care system to understand its "language" and figure out how to translate the electronic health record data so it can "talk to" the local and state public health surveillance systems. Informaticians also bring together groups of people who may be new to working together. In this way, informaticians also need to know how to "speak the language" of different disciplines, including clinical providers, health care administrators, software programmers and other IT professionals, as well as state and local public health practitioners.

By making sure people speaking different data and information languages can understand each other, informaticians help meet the information needs of everyone across public health. By enabling a shared understanding of the meaning of data, health care and public health can work together more effectively to monitor and prevent disease spread.

Use the *Public Health Data Logistics* metaphor to explain how informaticians deliver vaccine data from multiple sources to multiple recipients in a safe and secure way.

Idea: Just like the complex systems we depend on to ship and receive packages on time, wherever we are, informaticians ensure that people get the data they need quickly and efficiently. Informaticians understand that for data to be optimally valuable, they have to be able to be used for multiple purposes. Informaticians analyze the data senders, the recipients, and the possible transport options to help ensure that the data—just like packages—aren't intercepted or damaged, and that the data are delivered securely.

Example: A medical provider enters a child's vaccines in an electronic health record, which can then be sent to a health information exchange (HIE), which is a massive system set up to share important health data electronically. This vaccine data "package" in the HIE can then be retrieved by other providers, and it may also be sent directly from the HIE to the state's immunization information system. When the data package arrives in the state's system, schools can verify that students have their required vaccinations before they start the school year. Informatics ensures that the shipping of the information is done in reliable ways, so that the original package—a child's record of vaccines—arrives to multiple destinations safely, privately, and securely. It is crucial that this information be complete and accurate, so that health care providers can treat patients more effectively, and public health can better analyze the vaccine coverage of an entire community.

Use the *Public Health Knowledge Architecture* metaphor to explain how informaticians design the blueprints for systems to help reduce chronic diseases.

Idea: Informaticians are responsible for designing and building the processes and systems that enable public health professionals to do their jobs. Just like architects plan buildings to be safe and comfortable for the people occupying them, informaticians plan information workflows and systems according to the needs of all users.

Example: Monitoring and reducing chronic diseases in a community requires architecting a stable, efficient infrastructure for collecting and sharing data across many organizations, building protocols that fit easily within the workflows of those organizations, and thoughtfully engineering the functions of information systems to support users' needs. Working as part of a team, informaticians are like architects who can design a blueprint for a system and keep the big picture in mind. They can facilitate the design of protocols to trigger the capture and reporting of data to public health, or provide automated clinical decision support systems for clinicians. Addressing the burden of chronic diseases requires sophisticated infrastructures for sharing and using information. Informaticians can provide the blueprints for building these infrastructures by working with community partners to learn what they need from the structures, and how the structures can work best for them.

ELEVATOR SPEECHES

Often, people are in situations in which they want to communicate an idea, but they only have a few seconds. Public health professionals need well-framed "elevator speeches" for informatics that help them accomplish two crucial, but difficult, goals every time: (1) say why the field matters, and (2) explain it.

Public health professionals can use the following elevator speech to talk about informatics:

Informatics solves public health data problems using state of the art science and technology. Informaticians are experts at figuring out how to interpret different types of data from different sources and translate it for the right stakeholders. This way, everyone in public health can get the data they need, regardless of "language barriers" (so to speak). Ultimately, this makes it possible for us to fulfill our mission of good population health.

Background: This elevator speech uses the *Public Health Information Translation* metaphor and the value of *Ingenuity*. It also clearly names the people who do this work (informaticians) and mentions the overall goal of good population health.

Informaticians can use the following elevator speech for their own work:

Informatics solves public health data problems so that we can use our resources effectively. My informatician colleagues and I run the logistics of public health data. We manage data systems that run like global shipping systems, to transmit data "packages" to the right person, in the right place, at the right time. [For example, when seasonal flu hits….]

Background: This elevator speech uses the *Public Health Data Logistics* metaphor and the value of *Responsible Management*. It also clearly names the people who do this work (informaticians). If the informatician has enough time, he or she could also include a specific example of a current project.