

FAQs:

STAYING ON FRAME IN REAL TIME

The majority of questions that public health professionals working on an issue hear from the public and policymakers can be predicted if they have a good grasp of people's dominant assumptions about that issue.

And if you can predict, you can prepare.

Public health professionals can prepare by anticipating the main questions that are likely to arise, considering what challenges they might face in responding to those questions, and then choosing ways of speaking and writing that can build a more productive way of thinking about the issue.

The sample question-and-answer sequences here help to model effective answers to frequently asked questions about public health informatics. The examples come from the kinds of questions commonly raised by public health practitioners, potential funders, and policymakers. The reframed sample answers are not intended as "correct answers" to questions that might come up, but rather as illustrations of how to apply FrameWorks' evidence-based recommendations to talk more effectively about public health informatics. While public health professionals are welcome to use the answers exactly as written, FrameWorks' intention is for public health professionals—and anyone wanting to communicate more effectively about public health informatics to diverse audiences—to use the analysis of "false start" and "reframed" answers to build up the ability to apply these recommendations fluently in a variety of different situations.

Q: What exactly is public health informatics?



THE FALSE START ANSWER

Public health informatics is the intersection of information science, computer science and public health.

It deals with the resources, devices and methods required to optimize the acquisition, storage, retrieval and use of information in public health.

Public health informatics tools include not only computers but also clinical guidelines, formal medical terminologies, and information and communication systems. These tools are used in many areas practice, including nursing, clinical care, dentistry, pharmacy, public health and (bio)medical research.

Public health informatics has been defined as the systematic application of information and computer science and technology to public health practice, research and learning.



THE REFRAMED ANSWER

As our population's health needs and risks change over time, the public health field must find innovative ways to protect and promote public health. How well we collect and share information and data affects our success in setting sound public health policy.

Public health data come in many forms or “languages” across subfields—from nursing and medical care to vital statistics to public health policy and research. Informatics is a professional field dedicated to creating complex technical systems and practices that make those data shareable and usable for everyone. Like translators who communicate in multiple languages to convey meaning from one group of speakers to another, informaticians translate data in order to help various public health sectors work effectively with each other. Their interpretive work, systems design, and methods innovation ensure that the ways we acquire, store, retrieve, and use data to create information respond optimally to changing public health conditions.

THE FALSE START ANALYSIS

- By not opening with a tested value, this reply misses an opportunity to engage listeners by reminding them why the issue matters.
- This answer substitutes long lists of terms for explanation, leaving readers to connect the dots on their own.
- Nothing here suggests the existence of informaticians: the highly trained experts without whom informatics would not exist.

THE REFRAMED ANALYSIS

- This reframed reply opens with the recommended value of Ingenuity, helping to steer the conversation towards solutions.
- The *Public Health Information Translation* metaphor offers readers a memorable, or “sticky,” way to easily understand informatics: why it matters and how it works.
- The metaphor also provides a chance to introduce the expert workforce behind the work, highlighting the crucial role it plays in helping the public health field to be effective.

Q: We all know that data are important to public health decisions, so why is it so difficult to create the integrated systems we need?



THE FALSE START ANSWER

Until recently, there was little economic incentive for health plans and providers to pay attention to the implications of population health. As a result, these organizations and companies have historically not worked closely with public health officials. This separation of interests and practices led to information and data “silos.”

The situation is changing, as more health providers turn their attention to upstream or preventive practices that can improve the overall health of the populations and communities they serve. But the integration of systems that should follow this growing cooperation among health providers, public health officials, different localities, and related stakeholders is far behind. Resources for new technologies are limited and the workforce lacks the capacity. It will take considerable time, money, and skill to make the changes we need to make.



THE REFRAMED ANSWER

Sharing information across public health fields more efficiently requires both a wise use of resources and some innovative thinking about how to remodel existing systems to improve their functionality across sectors. That’s more complicated than it sounds and requires a well-trained workforce of informaticians—a workforce of knowledge architects—to oversee these integrative processes from start to finish.

Like a well-designed building, high-quality data systems meet the needs of end-users operating in different contexts: public health officials, for example, use data differently from health providers, but architecturally sound systems allow both to use data from the same source. Building and remodeling such systems is a field of its own, informatics, and like architecture, its processes happen in stages: from analyzing end-users’ needs, to detailed blueprints, to careful oversight of the construction. And as with architecture, getting it right takes time but saves problems down the road.

THE FALSE START ANALYSIS

- This reply spends a majority of its communications “real estate” on the historic origins of the problem instead of focusing on what can be done.
- Informatics is largely invisible in this response—the word is never used. Take time to fill in people’s cognitive holes about informatics, what it does, how it works, and who is responsible for it.
- Cues like “far behind,” “limited,” and “lacks” can depress people’s optimism that the problem can be solved. Make the affirmative case, instead, to steer people towards solutions-oriented thinking.

THE REFRAMED ANALYSIS

- An appeal to the values of *Responsible Management* and *Ingenuity* sets the “big picture” context: the idea that the problem requires more than a quick fix.
- By applying the *Public Health Knowledge Architects* metaphor, this reframed reply illustrates the complexity of integrating systems and the expertise needed to create high-quality systems.
- This reply addresses questions of resources and time without cuing fatalistic ways of thinking.

Q: I think that effective policy, more than complicated systems, is the thing we need to focus on when addressing health threats like the Zika virus.



THE FALSE START ANSWER

Yes, sound policy is critical to promoting population health and addressing emerging public health concerns like the Zika virus. At the same time, it is dangerous to ignore the importance of data- and information-sharing to good public health.

Without the efficient and secure transfer of data among public health fields, populations are at greater risk of exposure to viruses like Zika. Data systems are not complex for complexity's sake but because the large-scale collection, storage, retrieval, analysis, and application of data to public health concerns demand systems that are able to respond accurately to the ever-changing landscape of population health risks.

Prioritizing policy over cutting-edge data-sharing systems is not the answer. We need both to respond to public health emergencies effectively.



THE REFRAMED ANSWER

Actually, policy and information systems go hand in hand, like shipping and receiving. Just as the largely invisible but complicated logistics of shipping and receiving packages all over the world are what make ordering packages appear easy to the customer, the complex internal mechanisms of the systems that informaticians design are necessary to make the sharing and use of data by public health professionals across subfields as simple as possible. These “data packages”—when packaged securely, delivered on time, and easily opened and used—make it possible for public health professionals to access the information they need to collaborate and make informed policy decisions.

By ensuring that our public health systems are cutting-edge, informaticians enable public health policy to be cutting-edge, too, so our nation is ready for whatever new situations may emerge.

THE FALSE START ANALYSIS

- Without deeper explanation of the relationship between data systems and public policy, this reply misses the opportunity to fill in people's cognitive holes about informatics' role in effective policy making and reinforces the assumption that these are discrete subjects.
- Rhetoric that sounds defensive or moralizing (e.g., “it is dangerous to ignore”) can activate people's fatalism and lead them to disengage.

THE REFRAMED ANALYSIS

- Strategic framing helps communicators to answer a question without bolstering the unhelpful or incorrect assumptions underlying it. Here, the response pivots to a discussion of why systems are complex, rather than affirming the assumption that complexity is a problem.
- Framing strategically also means knowing what not to say. By using the *Public Health Data Logistics* metaphor to illustrate the relationship of informatics to the development of sound public policy, this reply avoids communications traps like argumentative rhetoric.