



OUTBREAK COMMUNICATIONS GUIDELINES

EVALUATION AND COACHING

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Evaluation and Coaching

Some recommendations for evaluating outbreak communication

Communication planning and evaluation experts almost unanimously emphasize the importance of:

- developing an over-all communication plan in advance, which embeds evaluation from the start.
- assessing the various publics' evolving knowledge, attitudes, beliefs, practices, information needs and information source preferences.
- developing key messages (including information content and context, or how the content is "framed") that address what the source wants to convey as well as what the public wants to know.¹
- pre-testing messages as much as possible.
- evaluating various publics' responses to messages (including media coverage assessment).
- being prepared to revise the plan quickly based on feedback and emerging knowledge -- about the crisis, and about the public's responses to the crisis and to the information sources.

But how can a small communications staff, working 14-hours or more a day during an outbreak, do all this to evaluate its communication efforts? The main answers: Informally and qualitatively, rather than formally and quantitatively.

Additional answers:

- by starting the evaluation process when setting initial communication goals.
- by making some effort to assess publics, using small "samples of convenience."²

¹ McCallum D. Risk communication: a tool for behaviour change. In: Backer T, David S, Saucy G, eds. *Reviewing the behavioural science knowledge base on technology transfer*. National Institute on Drug Abuse Monograph, 1995, 155:65-89 (<http://165.112.78.61/pdf/monographs/download155.html>, accessed 20 July 2004).

In this article, McCallum repeatedly emphasizes the two-way nature of risk communication, as many risk communication experts do:

"Non experts need access to information and need to gain knowledge, while technical experts and officials need to learn more about non-experts interests, values, and concerns."

"Because of the two-way nature of risk communication, effective messages about risks must contain the information the audience wants included as well as the information the program designer wishes to convey. In addition, the message should clarify information that audiences might otherwise misunderstand and show sensitivity to the emotions, concerns, and values of the audiences."

McCallum is also one of many who recommend that communication planners "Integrate evaluation activities into the program from the beginning," and "use quick, simple, and informal evaluation methods, when appropriate."

² Audience research basics. In: *Prevention communication research database*, Office of Disease Prevention and Health Promotion (ODPHP), Department of Health and Human Services (HHS) (year?) (http://www.health.gov/communication/primer/aud_res_prim.asp, accessed 20 July 2004).

Excerpt:

"Qualitative research can help program planners understand an audience segment of interest and can be useful in creating and validating communications programs. Techniques for gathering information vary greatly and range from in-depth individual interviews or focus groups to mall intercepts, observational studies, and ethnographic techniques, such as participant observation. Often, the study participants are not drawn randomly from a known population group, but are recruited by using telephone directories, databases maintained by various organizations, geographic proximity to the research site, key informants, snowball sampling (persons recommended by others as participants), and even 'samples of convenience' (whoever is available at the time and place of the study)."

- by sometimes making an effort to pre-test messages, again using small "samples of convenience."
- by assessing actual communicated messages -- and subsequent media coverage -- against the planned messages and the outbreak communication guidelines.
- by getting assessment help and feedback from off-site communications staff and even communicators from other agencies -- people in less-stressed communication environments.
- by occasionally using more complex audience reaction tools, such as series of hypothetical news stories (based on real ones from the outbreak) with varied messages -- another possible way off-site "coaches", especially experienced former journalists, can help.
- by using the information gleaned in each phase of evaluation to plan the next phase of communication.

Given WHO's goal of developing outbreak guidelines, plus the realities described by many WHO outbreak responders, the evaluation recommendations below are based on the following assumptions about future outbreaks:

Assumptions about communication during outbreaks

- The communicators will have (evolving) outbreak communication guidelines.
- The guidelines will be recommendations and aspirational goals, not fiats.
- There will probably be no additional funds for evaluation during an acute outbreak. No social scientists are likely to be hired in real time to design and carry out the evaluation.
- Staff will not have resources to assess large "properly-randomized" cohorts.
- Staff will not have tools to perform quantitative analysis of communication and public assessment data.
- Evaluation will thus be qualitative, not quantitative.
- Contrary to some non-expert assumptions, communication evaluation is most crucial at the start ("formative evaluation") and during the course ("process evaluation") of an outbreak.
- Debriefing at the end of the outbreak (not discussed in this document) should use the formative and process evaluations to inform the more comprehensive task of exploring "lessons learned" and planning for future outbreaks.
- Over-arching "outcome" and "impact" communication evaluation (the actual effect of communication on outbreak control) will be very hard to measure, due to confounding variables that cannot be controlled or quantified without enormous resource expenditure -- and often not even then.

Nevertheless, if the outbreak communicators do fairly simple, informal, qualitative "formative" and "process" evaluation, they will be ahead of perhaps 90 percent of the world's agency communicators, who never do much evaluation at all.

There are many barriers to communication evaluation, including internal agency disagreement about goals, means and definitions; lack of resources; assumptions that it is too difficult; the sense that if it can't be done formally it isn't worth doing; fear of documenting -- and getting in trouble for -- poor work; and others. During outbreaks,

the most common barriers are perceived lack of time and skills.

But most outbreak communicators already report efforts to develop key messages, and to track coverage in the media -- so they have started the evaluation process. They can add additional structure for their message development and media coverage assessment. They, or other staff members, can ask some planned, structured questions of members of the public they run into every day, like bus drivers, shop keepers, security guards, hawkers. Using "samples of convenience" has a long history in communication evaluation.

Given these assumptions, here are some useful communication evaluation tasks.

This first set of before-and-after-communicating tasks does not involve outside public assessment.

Before communicating -- the planning or "formative" stage of evaluation

- Specify communication goals explicitly, in advance of communicating.
- Develop "key messages" regarding what the public should know about the outbreak; what precautions they should take (and not take), and why; what you want them to believe and feel; what you want them to know about your efforts to control the outbreak, and about your competence, commitment, and caring; how you are going to keep them informed; how they can get additional information; and what you think they might want to know in addition to what you want them to know. Revise or add to this list according to your goals.
- Decide how to "frame" key messages using your Outbreak Communication Guidelines regarding such issues as how much to reassure; how early to inform; how to involve the public, acknowledge uncertainty, validate people's emotions and reactions, and "humanize" messages. Revise or add to this list according to your guidelines and goals.
- In developing messages, consider what level of public alarm, concern, worry, and attention you want people to have -- and what level is likely to be realistic.

After communicating -- on a daily basis, when possible

(another possible role for off-site or less-stressed coaches)

- Assess the outbreak communication itself, "scored" against the communicators' specified goals and against the Outbreak Communication Guidelines.
- Try to tape interviews. Evaluate what communicators actually said and wrote.
- Assess how the media conveyed the communication. This is easiest with print sources; try to tape major broadcast sources.
- Assess how closely the media coverage tracks both the informational and the framing goals of the information source. Note the gaps.
- Assess various publics' reactions to communicators' information, and to other aspects of the outbreak, as reported in the media.
- Assess the public's information needs as reported in the media.
- Use this information in planning the next round of communication.

Public assessment and message-testing

This next set of evaluation tasks -- public assessment and message-testing -- involves talking with some members of the public. It is harder, but still informally "do-able," at the start of and throughout the outbreak. Virtually all communication experts strongly recommend at least minimal public assessment and message testing.³

- Do informal public assessment, using "samples of convenience."
- Assess various publics' beliefs, attitudes, knowledge, and reported behavior.^{4 5}
- Assess various publics' perception of the severity of the outbreak; perceived likelihood of becoming sick (self versus others); perceived effectiveness of recommended precautions; perceived availability and ease of using recommended precautions.
- Assess the public's degree of anxiety about the outbreak.
- Assess various publics' desire for various types of information. Assess how closely the public is following the outbreak.
- Assess public "information channel" preferences at various points in the outbreak (what are the various publics' preferred media for receiving information).
- If unable to do this, note that many studies find that in places where television is available, television and newspapers are usually the primary (but not always the most credible) information channels for most publics, even in fairly localized outbreaks. Most crisis studies also show that people prefer multiple sources of information, which is an argument for including the widest possible range of potential information sources in your briefings.
- Assess public confidence in various spokespersons and agencies at the start of and throughout the outbreak.
- Assess public opinion about information sources' honesty, openness, timeliness, caring, accountability, competence, degree of knowledge, comprehensibility. Note: these do not always "travel" together. Highly-trusted sources may still be perceived as "not knowing very much yet." A highly-knowledgeable source may still be perceived as secretive and uncaring.
- Find out who are the "local trusted influentials." (It will be useful to keep them fully briefed, and sometimes to ask them to convey information.)

Test key messages, preferably framed in various ways using Outbreak Communication Guidelines.⁶ Among the things to assess:

³ Public segmentation note: Ideally, publics are "segmented" into groups with different information needs, such as immunocompromised patients, pregnant women, children, and the elderly; other segmentation takes into account proximity to the risk, work-place exposure, education and literacy levels, ethnic and language groups, socio-economic status, etc. But "audience segmentation" assessment is likely to be beyond the scope of most informal evaluation. At least consider the different publics' needs for your messages.

⁴ Many of these public assessment and message testing recommendations are based on elements common to several health belief models. For brief descriptions of some of these models, see:

Freimuth V, Linnan HW, Potter P. Communicating the threat of emerging infections to the public. *Journal of Emerging Infectious Diseases*, 2000 (<http://www.cdc.gov/ncidod/eid/vol6no4/freimuth.htm>, accessed 8 August 2004).

⁵ Quah SR, Lee H-P. Crisis prevention and management during SARS outbreak, Singapore. *Journal of Emerging Infectious Diseases*, 2004 (<http://www.cdc.gov/ncidod/EID/vol10no2/03-0418.htm>, accessed June 30 2004).

The appendix of this article contains a useful and detailed outbreak questionnaire, which may serve as a model for assessing audience knowledge, attitudes, beliefs, and practices in other outbreaks.

⁶ Fischhoff B, et al. Evaluating the success of terror risk communications. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, 2003, 1:255-258. (http://www.biosecurityjournal.com/PDFs/v1n403/p255_s.pdf, accessed August 23, 2004).

- Whether your subjects understand what you intended them to understand.
- What they think about the precautions you recommend.
- Whether they learned what they themselves wanted to know.
- How they react to your "framing" of the message.
- How they assess the credibility, openness, and caring of the messenger.
- Whether they think the experts are competent and knowledgeable.
- Assess public reaction to actual and hypothetical news stories, varying the messages and the framing of the messages.

Note: This isn't always about whether the audience "likes" each message. For instance, the public may prefer a reassuring "day one" story over one with a lot of acknowledged uncertainty -- but the prior-acknowledgement story may aid credibility and prevent more anger later, when a "day three" story contains emerging bad news.

Tailoring the messages for specific "publics"

These informal evaluation recommendations should be tailored as much as possible to specific cultures and situations, and if possible, to specific segments of the public. When developing public assessment protocols and informal questionnaires, communication planners may find it useful to scan more formal health communication evaluation tools from various cultures.

The Johns Hopkins Bloomberg School of Public Health Center for Communications Programs Research and Evaluation website provides links to health communication evaluation projects, mostly in the Third World. Many of the links provide actual tools, such as questionnaires, surveys, and coding books, as well as email contacts for each project's evaluation expert. This excellent resource explicitly invites users to download and adapt the tools for their own use. A partial list of countries is included, along with links to the site, in the footnote.⁷

Although most world-wide formal health communication projects seem to concern family planning and sexually-transmitted diseases, they are a useful introduction to the type of formal communication evaluation that can be done in many different cultures, and the type of questions to ask. As these continuing efforts to stem the tide of human nature suggest, there is no "gold standard" or "magic bullet" for communication success. There is only the will to keep trying, and to build on previous experience and research. This reality is not likely to surprise outbreak responders, who are similarly working to stem the tide of emerging infectious diseases.

⁷ Johns Hopkins Bloomberg School of Public Health Center for Communications Programs Research and Evaluation Website (<http://www.jhuccp.org/research/tools.shtml>, accessed 20 July 2004).

This website has health communication evaluation studies from countries such as: Cameroon, Guinea, Uganda, Ethiopia, the Philippines, Rwanda, Nigeria, Nepal, Jordan, Indonesia, India, Georgia, Egypt, Yemen, Burkina Faso, Ukraine, Bangladesh, Romania, Nicaragua, and Zambia. The introduction to the list of project links states:

"The Research & Evaluation team employs a variety of approaches for collecting data to inform program activities and evaluate their effectiveness. These approaches range from large population-based surveys to smaller focused activities that collect in-depth information on a specific topic. Gathered here are some of the research tools developed and used by the R&E team, with information on relevant topics, countries of study, and R&E officer you may contact for more information. Feel free to download these tools to help you in your own research activities."

More about public assessment

Scores of risk communication planning articles comment on the relative infrequency of public assessment, even at its most basic level. Risk communication handbook authors Regina Lundgren and Andrea McMakin write:

"Whom are we communicating with? Although answering this question is a must in communicating risk (or any information, for that matter), many risk communication efforts are still conducted with a total lack of information about the audience."⁸

Giese et al. write:

"Most current models of risk communication and most risk-related public information programs tend to be 'message-focused'....The key, the approach argues, is on discovering the 'right' message intervention to convince people to change risk perceptions, risk-related behaviours or increase their willingness to pay for risk reduction.

"However, this approach typically overlooks audience heterogeneity....A number of risk communication researchers counsel that, to develop a truly useful understanding of the role and effects of risk communication in the daily lives of audience members, researchers and practitioners must pay more attention to the communication and information-evaluative behaviours of audiences as seekers and users of information about risks....[O]ne specific type, source, or format of risk information is not likely to meet the needs of a diverse audience...."⁹

Audience analyses for communication planning and evaluation often assess the following:

- Audience demographics: Age, gender, ethnicity, socio-economic levels, education and literacy, language, at-risk groups (i.e. immune-compromised; elderly; children; pregnant women; specific occupations).
- Awareness of the risk: Have people heard about it yet? What do they know?
- Beliefs about the cause and overall seriousness of the risk: How imminent do people think it is? How dangerous? How bad do they think it can get? How afraid, complacent, fatalistic are they? Who do they blame?
- Beliefs about personal susceptibility: How personally relevant or important is the risk? More personal relevance is associated with greater perceived risk, and greater precaution-taking -- both recommended and unrecommended.
- Beliefs about the effectiveness of recommended precautions and unrecommended precautions: Do people think the recommendations work if used properly?

⁸ Lundgren R, McMakin A. *Risk communication: a handbook for communicating environmental, safety, and health risks*, 3rd ed. Columbus, Batelle Press, 2004.

⁹ Giese J, Griffin R, Clark D. Survey of attitudes and willingness to pay for flood control and water body restoration, technical report no. 5, Institute for Urban Environmental Risk Management, Marquette University, Milwaukee, USA, 2001, (<http://www.marquette.edu/environment/TR5.htm>, accessed 21 July 2004).

- Belief in one's ability to use the recommended precautions: Do people think the precautions are available to them? Do they believe they can effectively utilize the precautions?
- Beliefs about peer-groups' attitude and behavior about the risk: Are friends, family, and local "influentials" perceived to be taking precautions? Over-or-under-reacting? Paying a lot of attention? Disavowing the danger?
- Trust in the various institutions managing the risk: Trust in local, familiar, and "similar to self" institutions is often greater than trust in unfamiliar, dissimilar outside agencies.
 - In crises, people often check outside information against what their local health care workers and emergency responders have to say.
 - In some cultures, people may have to be asked about this indirectly, due to political realities, or even due to social norms.
 - One way to work around this is to ask questions about paired groups in a way that doesn't imply criticism: "Do you prefer to get your information from, the Health Department or the hospital chief?" "Whose explanations are clearer....?" "Would you be more likely to accept home quarantine imposed by A or B?"
- Trust in official communicators: Outside agencies often find it useful to ally with and "co-communicate" with trusted local influential leaders.
 - Learning who these people are before or at the start of a crisis is part of public assessment in the "formative," or early planning, stage of evaluation.
 - During the crisis, monitoring the evolving reputations of external and local information sources, and the changing information needs of the public, is part of "process" evaluation, and permits mid-course corrections.
- Use of, and confidence in, various "channels of information" regarding the risk: How do various publics prefer to get information at various phases of a crisis?
 - This includes mass media channels like television, radio, newspapers, internet; written, graphic, or oral material; social networks, especially family and friends, but also schools, religious organizations, and even work places; individual contact like telephone hotlines; group contact like public meetings.
 - Most research on large western crises shows: a heavy reliance on television, at least initially; and the desire for multiple sources of information, including local sources.
- Emotional response to the risk: This can include characteristics such as anxiety, fear, and anger; apathy, denial, avoidance, and even bravado and risk-seeking excitement.
 - The degree of anxiety and fear tend to get the most attention in many public assessments.

- In the absence of public assessment, many officials tend to overestimate general public fear levels.
- Pre-existing beliefs, experience, knowledge, and opinions about the current risk, or past risks believed to be similar: This is important to assess at the start of a crisis, in the "formative" planning and evaluation stage.
 - It allows previous applicable experience and accurate beliefs to be "harnessed," to help with response to the present situation.
 - And it allows misperceptions and inapplicable previous experiences to be "put on the table" and acknowledged -- a starting point for bridging the gap and moving the public toward understanding the new situation.
- Evolving beliefs, experience, knowledge, and opinions about the current risk: This is important to assess at points during the crisis, in the "process" evaluation stage, to permit mid-course revisions of messages.

More about message testing

Fundamental reasons for testing messages include:

- Instructions you assume are readily understandable may not be clear to the public. "Boil water orders" during water-borne outbreaks is a typical example of this.¹⁰
- Words you think have one meaning may have different meanings to various publics. Words like "airborne," "conservative," "community transmission," "under control," and "tested negative" are typical examples.¹¹
- Characterizations you make casually (and which may sometimes be expressions of your own frustration) may offend publics and decrease your credibility.
 - Examples include words like "hysteria," "irrational," "public over-reaction," which are almost never experienced as empathic or supportive.
- Precautions you think are easy and reassuring may actually seem impossible or futile in many situations, and can produce feelings of helplessness. This can even lead to disdain and ridicule of the information source.¹²

¹⁰ Fischhoff B. Assessing and communicating the risks of terrorism. In: Nelson S, Lita S, eds. *Science and technology in a vulnerable world*. Washington, AAAS, 2002:51-64.

Excerpt:

"We recently conducted a risk analysis for contamination of domestic water supplies by cryptosporidium.... We were asked to develop the perfect "boil water" notice. Through interviews, we found that many people did not know how to boil water effectively. We also found that many people would want to know who produced a notice, before deciding how seriously to take it. Thus, a boil-water notice might need to explain the risk management system that produced it, in addition to instructions about what to do."

¹¹ During the 2003 SARS outbreaks, there was a large "reassurance gap" between the public and officials regarding "lack of community transmission." Officials repeatedly defined the outbreaks as "under control" when there was no known community transmission. Regardless of whether the public believed this was certain or not, they were not always reassured: people think of their local hospitals, and the people who work there, as part of their communities. Public belief assessment and message testing are likely to have revealed this.

¹² Van Eijndhoven JCM et al. Risk communication in the Netherlands: the monitored introduction of the EC "Post-Seveso" directive. *Risk Analysis*, 1994, 1:87-96.

- "Wash your hands" and "cover your mouth and nose when you sneeze" are examples.

Peer Coaching for outbreak communicators

The following notes propose a system of real-time peer evaluation and support for outbreak communicators, an even more informal type of feedback and evaluation than the processes outlined above. This type of approach has been used to help numerous agency spokespersons, government officials, reporters, and university subject matter experts during natural disasters, outbreaks, and man-made crises in the last few years.

Experienced outbreak communicators often mention the lack of real-time feedback during fast-moving events.

And agencies know it is desirable to plan and assess communication -- to articulate communication goals and to evaluate communication efficacy -- but this is not easy in a crisis.

To address the need for feedback, and to help with evaluation, a network of experienced, trained outbreak communicators can be organized as a virtual network to provide support, reminders, and critical real-time feedback to front line spokespersons.

The source agency's outbreak communication guidelines would form the framework for the coach's monitoring and feedback.

Selected network members who are not caught up in the whirlwind atmosphere of the crisis could monitor media coverage of the source (and the outbreak in general); correspond with the source; and contribute notes, questions, and examples to the larger network for discussion and accumulation of "lessons learned."

The coaching can be based on qualitative content analysis: "scoring" source quotes, reporters' interpretations, and various publics' responses according to the outbreak communication guidelines. The spokesperson can also address questions to the coach, and requests for specific feedback or information.

How would the coach do this?

Coaches would start by using their overall impressions, based on experience, to assess the media coverage. Then they would "disarticulate" and test these impressions using more formal coaching checklists. The coach would provide the source with

In this article, the authors mention a 1950's government communication campaign on the risks of nuclear war, including a letter sent to every home titled: "How to react in case of fall-out." The authors write:

"One of these instructions was to take shelter in the cellar or under stairs ... and to await further instructions. People's experiences [with 'traditional' bombs] in the Second World War ... and newspaper reports about the nuclear attack on Hiroshima caused people to judge the instructions as being hypocritical and ridiculous."

Like U.S. citizens' ridicule, half a century later, of the Department of Homeland Security's recommendations to stockpile duct tape as part of anti-terrorism preparation, and like many similarly appropriate recommendations during recent water, bird, insect, animal, and human-borne outbreaks, the 1950's fall-out messages were not initially tested for target audience comprehension, acceptance, pre-existing beliefs, salient mental images, knowledge, and opinion. Current risk communication principles would include assessing these, and then acknowledging them with empathy, and even acknowledging the fact that your recommendations may sound inadequate in the face of such huge problems.

information on "how the communication looks from outside. How it is coming across."

Not all the outbreak communication guidelines would be salient in each episode of coaching, or in each phase of an outbreak. A large part of the coach's task would be "guessing" from the media coverage, and then confirming, what the source's communication goals were; assessing how well these goals were accomplished; assessing whether these were the "right" goals, and if other salient goals from the outbreak guidelines were neglected.

The coach would assess the spokesperson's communication goals and "key messages:"

What does it appear that the spokesperson was intending to convey with regard to information content? Such as facts, numbers, recommended actions.

What about the spokesperson's process content? Such as, "what we are doing to learn more," "when we are likely to have more information," "what might happen next," "why we can't answer that question."

How was the spokesperson communicating attitude-influencing content? Did the spokesperson "model" a normal human response, and show ability to bear a stressful situation? How reassuring was the spokesperson?

What about empathy/compassion content, and responsiveness to the public? Did the spokesperson respectfully acknowledge concerns, scepticism, fears, misperceptions, and previous beliefs? How audience-specific were the messages, given the constraints of the medium or channel of information?

What about transparency and credibility-related content, such as timely vs. delayed information; acknowledging uncertainty; changes in knowledge or recommendations; multiple viewpoints; and acknowledging and apologizing for process and content errors?

In all the categories, the coach could look for "plain" informational quotes that could benefit from "outbreak communication rewrites," and suggest these for future use.

The coach could also assess two other main aspects of the media coverage:

1. The reporter's interpretation or spin on the spokesperson's communication. For example:
 - Does the reporter downplay or hype the degree of alarm in the spokesperson's information?
 - Does the reporter "accuse" the source of downplaying or hyping the situation?
 - Does the reporter "accuse" the source of "admitting" information that the spokesperson was actually asserting? (implying a failed attempt to hide information?)

The coach can look for words like "downplay" and "admit" in news coverage. Experienced journalists and spokespersons can suggest similar types of words to watch for.

Example: "WHO officials admitted yesterday that it might take longer than expected to..." might signal previous failure to acknowledge uncertainty enough.

Example: "Health Agency X downplayed the significance of the new cluster..." suggests the reporter is smelling over-reassurance.

2. Reported responses of other publics to the source's communication. For example:

- Are members of the public quoted as reacting with alarm or reassurance? confidence or scepticism? accusations of source over-reaction or under-reaction?
- Are outside sources quoted as agreeing or disagreeing with the spokesperson's information?

Other comments about coaching:

Obviously, coaches not in the outbreak region are still stretched to the breaking point much of the time, but they might be willing to make this added investment of time knowing that they would get it back when they have their own crises, and for the chance for learning along the way.

- Spokespersons and coaches can "practice" with relatively small crises, and pass on, or get feedback about, what helps and what doesn't help.
- Practitioners can assess whether this model -- and the outbreak communication guidelines -- turn out useful or not, and suggest ways to improve them -- an iterative process.
- It could help build working relationships and increase the likelihood of early, open communication and warnings.
- It could provide lots of mini case-studies.
- It could allow better debriefing re: "lessons learned" after the crisis.
- It could deepen the reservoir of trained, experienced information officers to be drawn on in a crisis.

As with the informal formative and process evaluation recommendations above, there is one important thing coaching and feedback cannot accomplish: directly assessing the impact of communication on control of the actual outbreak. But these recommendations may get outbreak communicators part of the way there.