



COMMUNICATING HEALTH MESSAGES

A FRAMEWORK TO INCREASE THE EFFECTIVENESS OF HEALTH COMMUNICATION GLOBALLY

Report of the WISH Communicating Complex
Health Messages Forum 2015

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World Innovation Summit for Health

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FOREWORD

The gap between the health we have and the health we could have is not primarily a failure of knowledge. It is a failure to share that knowledge effectively, and to translate it into action, which means that we fail to realize the potential of our collective intelligence. As a result, lives are cut short where cures are known; suffering persists where relief is possible; and ill health holds back individuals, families and societies from achieving their potential.

Whether we want to maintain and improve health, contain immediate public health crises or respond appropriately to ill health, the messages we send and receive are critical to creating better health for us all. While effective communication alone is no panacea for our many intractable health challenges, knowledge and skills in communicating effectively are essential prerequisites for those who wish to bridge the gap between what we know, what we say, and what we do in health policy and health delivery.

Communicating such messages effectively is not an easy task. While the health challenges we face are great, we have more tools and more knowledge at our fingertips than ever before. The early 21st century has already seen technology fundamentally transform the nature of communication, and that pace of change will continue to accelerate. Policymakers and those who would harness the power of communication need to be equally swift and innovative in their response.

This paper sets out a framework to support that response. There is no easy answer, but the robust and evidence-based process for message development that we describe can support policymakers and health influencers in designing and delivering simple messages in a complex world. At the heart of our recommendations sits the desire to put the individual at the center of health and health communication. Our aim is to make communication more personally relevant, meaningful and insightful – and, therefore, more impactful in achieving our shared goals for better health. After all, while all health is complex, the communication about health should not be.



A black and white handwritten signature of Professor the Lord Darzi of Denham.

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EXECUTIVE SUMMARY

Aging populations, the rise in 'lifestyle' diseases, and the continued burden of infectious diseases pose immense challenges to our health and wealth. Simply providing more health services to treat disease is no longer a viable or sustainable option. In the absence of extensive and politically improbable market intervention, policymakers, non-governmental organizations (NGOs), and health professionals are left with few options other than to try to influence individuals to make smarter choices. Although a range of strategies are required to achieve this, the importance of effective communication cannot be underestimated.

Effective communication means conveying messages in a way that improves our ability to maintain our own health, to understand the threats we face and how to reduce them, and to respond appropriately when treatment is required.

Health communication is "the scientific development, strategic dissemination, and critical evaluation of relevant, accurate, accessible, and understandable health information communicated to and from intended audiences to advance the health of the public."¹ As such, effective health communication has an essential role in promoting healthy choices and creating better understanding of health policy issues.² Good communication is also crucial to helping individuals, health professionals, healthcare providers, governments and policymakers recognize that the maintenance of good health is a shared responsibility in which all parties have a role. While there is a long history of government attention to and regulation of health services and products, health communication has been relatively neglected.

Health communicators must take many factors into account when charting a course. Health matters are often inherently complex and individuals need to keep pace with a fast-changing and sometimes seemingly contradictory scientific evidence base. Technology is altering how people receive, share, and debate information, fundamentally changing the dynamics between messenger and recipients; the internet and rise of social media are accelerating the speed and spread of contested information. At the same time, trust in traditional sources of information is declining, and those who convey health messages must navigate their way through an increasingly fragmented media, often in a heavily politicized context.

The good news is that we know what it takes to deliver effective messages using a structured and planned approach. The choices communicators make when deciding who should deliver health messages, or how the messages they want to communicate are targeted to audiences and tailored to individuals, make a demonstrable difference to the impact those messages will have.

To help guide communicators' choices, this paper provides a framework for effective communication and suggests three policy-related enablers to improve health communication and its associated effects. The framework we describe in this document offers health communicators a practical and generalizable process for answering the critical questions any communication must address: What is this message trying

to accomplish? Why should this message be said? What should be said? How should it be said? Where should it be said? To whom should it be said? Who should say it? How many times should it be said? The framework has three phases: Assess, Do and Describe (ADD), taking communication from its inception to its evaluation.

The role of the ADD framework is illustrated through a selection of case studies on topics relevant to policymakers and communicators worldwide. Each case demonstrates the framework's principles in action, showing that it is scalable, generalizable and applicable for communicating a range of health issues in diverse settings.

Adoption and use of the ADD framework is this report's key recommendation. We also outline three enablers, which will facilitate improvement in the efficacy of health communication. They require governments, healthcare providers and NGOs to ensure health communication has the essential resources, the necessary priority and the compelling messengers it needs to be a success.

Policy recommendation:

Adopt an evidence-based, generalizable framework for effective communication: we propose the ADD framework.

Enablers:

- 1.** Make funding of communication conditional on designing it using the evidence base.
- 2.** Health organizations to have a Chief Communication Officer at board level.
- 3.** Build capacity through communication skills training and education.

NAVIGATING THROUGH COMPLEXITY: THE HEALTH COMMUNICATION CONTEXT

The current state of health communication can be described in one word – complex. This pervasive complexity burdens health policy and individuals with confusion, discord, disbelief, and acrimony that is leading to harmful, unhealthy outcomes that threaten broad, even global consequences.

This complexity is driven by multiple, interacting factors. Health communication may occur at the intrapersonal, interpersonal, group, organizational or societal levels. It may occur in the home, school, workplace, street, supermarket, town square, religious house, health clinic or hospital. It is context-specific, multifaceted, dynamic, and involves multiple actors, motivated by varied purposes, using different theoretical approaches in a world of ever-evolving information communication technologies. Such complexity results in reduced knowledge transfer, understanding, and usability of communication.³

In this section we seek briefly to analyze and illustrate this complexity, so we can develop a robust response and framework for effective communication that meets the challenges policymakers and other decision-makers are facing.

Health is a complex science

Some health messages are relatively simple, even if achieving the goal remains challenging. For example, public health messages around the dangers of smoking are relatively straightforward – the clear messages are: don't start smoking; and if you do smoke, stop.

However, health matters are often technical and inherently complex. The underlying scientific process is difficult to understand, and the public is confronted by uncertainty, seemingly contradictory research results, and ever-changing health recommendations.^{4,5} Often there is no definitive answer in the science. As our knowledge and understanding of diseases and their causes changes with developments in science, technology and the environment, messages need to keep pace. Such variability clutters the development of clear and consistent messages about health. The confusion felt by many about advice around the optimal amount of physical activity, or what constitutes 'safe' levels of alcohol, salt or carbohydrate consumption, are good examples of this.

Also, many aspects of health and medicine are highly technical in nature. Fields such as nutrition, genetics, genomics, synthetic biology and nanotechnology are critical to the future of medicine, but are highly specialized sciences that may seem inaccessible to the non-specialist. Even in the case of informed, educated, and health literate individuals, the sheer volume of (sometimes contradictory) information challenges the ability to effectively process and apply health information.⁶ Therefore, public knowledge and understanding about health issues is generally low.⁷

Technological innovation is driving rapid change

Information and communication technologies have facilitated a profound transformation in roles and expectations for healthcare providers, patients, consumers, and policymakers – and will continue to do so in the future. These technologies include health websites, online support groups, telehealth programs, electronic health records, social media, mobile and implantable devices. Spurred in part by the extensive growth of social and new media, there are vastly more opportunities for people to rapidly distribute, share, debate and challenge information on a global scale.⁸

These developments have many positive effects for health communicators, such as the distribution of messages at a scale and speed that would have been unthinkable in the past. The internet allows for more segmented, targeted, and tailored approaches, using web analytics and direct-to-consumer marketing techniques.

The rise of these new forms of technology has, however, increased complexity in many ways:

- Technology allows the dissemination and diffusion of clinical communication without checks and balances, peer review and fact checking, spreading reasons to mistrust faster than ever before.⁹
- Not all sources provide accurate information¹⁰ although there is variability across different health areas.¹¹
- The internet has enabled a profound shift in the power dynamics between people and services. Websites such as PatientsLikeMe enable individuals to generate and publish their own content, and facilitate peer-to-peer interaction.
- The distribution and freedom of online commentary has led to increased public fragmentation in terms of health beliefs and behaviors.¹²

Such technology does not change everything about communication, but it is enabling faster and broader communication that moves beyond the town square and out into the wider world at the click of a button.

Trust in traditional sources of information is declining

The proliferation of unregulated channels comes together with growing public skepticism and mistrust of science, traditional media and government to create fertile territory for rumor and contested health information to spread.^{13, 14, 15} Public trust in institutions has been falling for many decades, and even the most trusted professionals, such as clinicians, are less trusted than they once were. One recent study found that, between 1964 and 2012, the proportion of Americans who declared great confidence in the leaders of the medical profession declined from 73 percent to 34 percent.¹⁶ We also know that trust and confidence in health communication sources such as government, scientists, the media and healthcare providers influences how health communication is acted on or not.¹⁷

Having the right messenger for a communication will affect how it is received. The messenger is one of the most robust influencers on human behavior; people respond to messages from perceived experts and disregard messages from those they dislike or mistrust. One study showed that parents' confidence in information on vaccines was directly related to the source of the information, with 76 percent trusting the advice of their child's pediatrician, compared to only 23 percent trusting the advice of government officials.¹⁸

As a result, the responsibility for delivering complex messages is often allocated to sources such as scientists, researchers and clinicians. In their capacity as experts, they are primary sources of information for many journalists. However, many scientists and clinicians are not necessarily trained or particularly effective in communicating with the public, or in using the media to communicate through. They may also not always be trusted by the audiences they are seeking to influence.

Contested health information

Contested health information involves controversy, mistrust, or rejection of prevailing knowledge, evidence, or health approaches. A defining feature is its resistance to change through activities to counter the inaccurate messages. Frequently, contested health information is based on some form of alleged conspiracy and spreads inaccurate, incorrect, inappropriate information.^{19, 20} Although not a new phenomenon, it has become more relevant since the emergence of the internet, especially social media sources such as Facebook, and other social media platforms.

Education and health literacy remain low

It has long been known that literacy and educational levels are key determinants of health and prosperity. For health communicators, an appreciation of the overall educational level and literacy of their audience is critical. This appreciation should be supplemented by an understanding of the audience's health literacy. Health literacy refers to individuals' capacity to obtain, process, and understand the basic health information and services needed to make appropriate health decisions.²¹ It is about the capacity to make sound health decisions in the context of everyday life – at home, in the community, at the workplace, in the healthcare system, in the marketplace, and in the political arena.²²

Data from around the world demonstrate that health literacy is low, not only for vulnerable groups but for the general population and society as a whole. While long-term solutions to this challenge are likely to lie in improving access to and quality of education, health communicators need to take account of these factors when designing and delivering their messages.

The influence of media on public understanding

The media play a critical role in how people receive messages about health. However, practices are characterized by norms that sometimes hinder the delivery of comprehensive, accurate and relevant messages. The personalization and dramatization of information can distort scientific debate, and contribute to confusion among news consumers.²³ The media often also reduce complex issues to 'sound bites'.²⁴ Health messengers throughout the world also have to contend with a politicized and commercialized media that will select and adapt messages in line with the aims or political views of their owners.

Even the desire for 'balanced' coverage of an issue can distort messages: it may mean that the media incorrectly give equal weight to competing views, although expert opinion is heavily on one side of the debate. This is what happened with the suggestion of the link between the measles, mumps and rubella (MMR) vaccine and autism in the United Kingdom (UK). The 'rogue doctor', Andrew Wakefield, was given extensive media coverage and seen by many as a credible messenger. His now discredited claims that the MMR vaccine could cause autism caused uptake of the vaccine to plummet. Herd immunity was compromised, contributing directly to measles outbreaks such as that in South Wales in 2012/13.²⁵

Politicization of health messaging

Health messages must often be designed and delivered within a heavily politicized context. Health regularly ranks as one of the most important issues that influence populations' views of their government, and health messages are therefore frequently subject to political partisanship and distortion.²⁶ This can be seen clearly in the United States (US) in longstanding debates on highly politicized issues such as abortion, and more recently with the introduction of the Affordable Care Act, where messages around policy issues were dominated by political considerations, with hundreds of millions of dollars spent on advertisements criticizing the new policy.²⁷ The resulting confusion led to a situation where, even in September 2013, a poll suggested that 60 percent of Americans did not understand the changes the law would bring.²⁸ In December 2013, 36 percent of people wrongly believed the law would mean the government would have the power to dictate which doctor they would see.²⁹

Lack of skills in health communication messengers

Health communication is a fast-developing, though relatively young, specialism. Although it has deep roots throughout human history, only during the last 40 years has health communication emerged as a distinct scholarly discipline that sets it apart from communication studies, health education and promotion, behavioral science, journalism, and marketing communication. Curriculums vary greatly and no standardized core set of courses or training competencies exist. Therefore, anyone can call themselves a health communicator or health communication expert despite not having the certifiable necessary skills and know-how to design effective health communication. Credentialed health communication programs are often unavailable to health professionals and scientists who will become the health communicators of tomorrow. Few research papers present the specific process used to develop health messages and, once implemented, messages are not typically shared or archived. This means that there is little discussion about specific attributes of messages. This lack of professionalization, training, and development of the evidence base means that good practice is not easily spread, mistakes are repeated and resources wasted.

THE ADD FRAMEWORK FOR EFFECTIVE HEALTH COMMUNICATION

In response to the challenges set out in the last chapter, the ADD framework for effective health communication has been created. It aims to guide communication design and decisions in order to improve the efficacy of health communication.

The framework lays out process steps and key questions that guide the health communicator in producing coherent, understandable and effective messages. It is scalable to all sizes of problems, budgets, and target populations, and aims to be generalizable to most health issues. It is not proscriptive and can be supplemented with approaches, theories or channels of communication that are not explicitly mentioned.

The framework aims to provide a common foundation that will minimize ambiguity about the potential effects of health communication. It is intended to be particularly beneficial for those who are not trained in the discipline, have limited training or who lack exposure to best practice, but can also help experienced health communicators ensure they have not missed important steps due to over-familiarity.

A significant additional, sustainable benefit of the ADD framework is the development of a knowledge exchange platform and collection of evidence in a common framework report. It calls for the electronic archiving of development and outcome information to build a global evidence base of health communication processes, messages, and outcomes. By sharing this information electronically, similarly situated organizations can have access to real examples and benefit from lessons learned, ensuring health communicators can adopt messages and processes that have been previously developed and tested. Such an archive would enable policymakers, academics and health communication professionals to examine decisions and rationales so we better understand the mechanisms of effective communication. It would also help develop the evidence base with regard to little-understood issues such as the impact of dosing, frequency and duration of communication.³⁰

There are three overarching phases in the ADD framework: Assess, Do, and Describe (see Figure 1).

- 1. Assess** sets the requirements and considerations for the function of the communication. This involves understanding the health issue, the aim of the communication and the role communication can play in improving the situation. This includes how the communication will integrate with wider efforts to improve health and influence health behavior. It requires knowing the evidence base about the issue, the causes of the issue, and how communication has been used successfully and unsuccessfully before. Legal and ethical considerations, including any regulations about communication in the specific context will determine what can and cannot be communicated and what might be the unintended consequences of communication. Finally, it means assessing the

capabilities and capacity of the human resources available. Steps in the Assess area should be completed before entering the Do phase.

- 2. Do** requires conducting a contextual analysis, designing messages, testing and refining, and implementing the communication. The contextual analysis gauges the circumstances in which the communication will be delivered. It includes understanding any political, environmental, or social imperatives affecting the communication, how it may be received, acted on, and how it could be misreported or distorted by others. It incorporates a target audience analysis, including sociodemographic, psychosocial, behavioral characteristics, trusted sources and media channels used, education and health literacy, motives for health, and current knowledge and beliefs. Evidence about the target audience is collected from both secondary sources, such as literature and research reports, and primary ones, such as interviews, focus groups, and surveys, to develop relevant messages that are in line with the objectives set out in the Assess phase. It includes knowing the budget needed or available.

Moving from contextual analysis to message design involves working through the five Ws of message design (see Table 1).

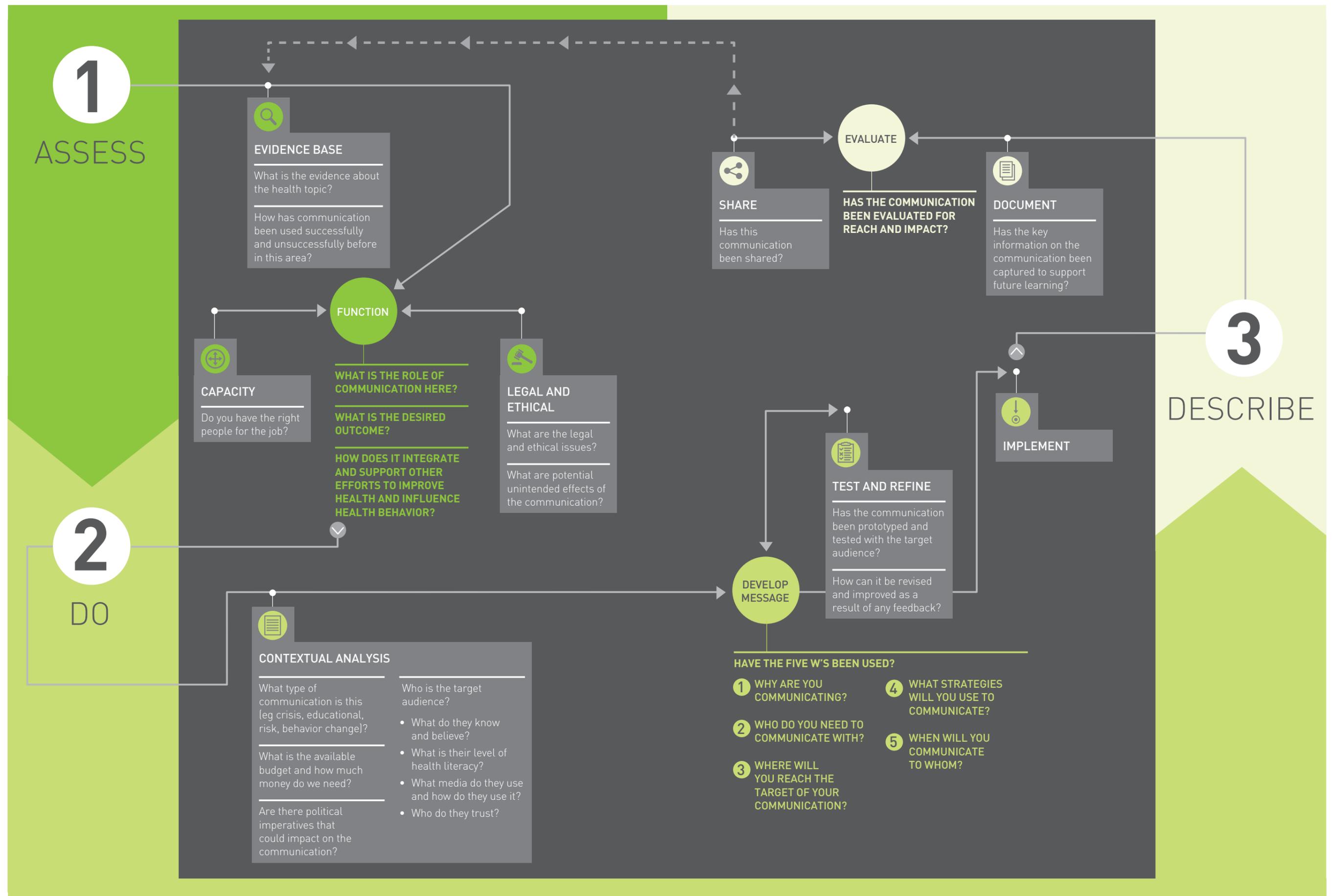
Messages should be pre-tested, using focus groups, interviews, or other appropriate methods. Then they should be refined and improved where warranted. Once messages are implemented they should be monitored and evaluated – for their effects, but also for issues needing refinement if necessary.

- 3. Describe** flows on from Do and involves an ongoing process of documenting, evaluating and sharing to add to the health communication evidence base. All steps in the Assess and Do phases should be documented to ensure accountability, transparency, and to improve evidence. The communication and process should be evaluated for desired and unintended effects so that lessons can be learned about what worked well and what could be improved. All should be shared electronically in the ADD e-archive application (available at www.add4hcomm.info), which provides a print and electronic template for entering information. This application serves as a platform for exchanging practices and their effects, becoming part of the evidence base for other communicators who are beginning their Assess phase.

Table 1: The five Ws of message design

Why are you communicating?	Know exactly why you are communicating. Is it to inform, invoke an action, change behavior, change social norms?
Who do you need to communicate with?	Be clear on all the key groups in your communication. Who do you need to reach with the communication? Who are the gatekeepers to access your target audiences?
Where will you reach the target of your communication?	Understand all aspects of your communication channels. Where will you reach people? This will include the technology used and settings (eg school, homes, work, clinic, community).
What strategies will you use to communicate?	<p>Have absolute clarity on what your message is:</p> <p>Make it consistent with the predetermined objectives set in the Assess phase.</p> <p>Make it simple. Use language, visuals, and ideas that are easy to process, quickly.</p> <p>Make it intuitive. People need to be able to understand what you are asking them to do and why it matters, and be able to act accordingly.</p> <p>Consider who is best placed to deliver your message:</p> <p>Who are the most trusted and influential sources of health information for your audience?</p> <p>Consider how your message framing will affect your audience response:</p> <p>Is your message framed in terms of the benefit gained or the loss of something?</p> <p>Does it play to people's drive to conform to norms?</p> <p>Consider the tone and look of the communication:</p> <p>Is it serious, inspiring, humorous?</p> <p>Is the presentation of the communication (colors, type of visual) consistent with the objectives and target audience characteristics?</p>
When will you communicate to whom?	For each target audience: Know the right communication dose to be applied at the right time. When will the dissemination start and finish? How many messages, how often and when exactly? When will your audience be most receptive to your message?

Figure 1: The ADD framework



COMMUNICATING TO ADDRESS POLICYMAKERS' CHALLENGES: CASE STUDY EXAMPLES

Health communication is core to many of the most fundamental challenges faced by health leaders. In this section, we illustrate that well-designed health communication, delivered in line with the principles of the ADD framework, can support health policymakers in tackling such challenges.

The case study examples shown are relevant, common priorities of governments and policymakers worldwide and have short- and long-term human and financial implications. They illustrate the value of following the ADD framework phases and processes in full, as well as the consequences of not doing so. Themes include Tobacco use; Overweight and obesity; Maternal and child health; Early detection and diagnosis; and Infectious disease control in crisis situations.

Tobacco use

The World Health Organization (WHO) estimates that tobacco kills approximately 6 million people per year and causes the global economy more than half a trillion dollars of economic damage.³¹ Although almost 80 percent of tobacco-related deaths occur in the developing world,³² the Centers for Disease Control and Prevention estimate that, in the US alone, smoking costs the economy at least \$133 billion for direct medical care expenditure and more than \$156 billion in lost productivity.³³

A number of evidence-based policy initiatives to reduce smoking uptake exist, including restrictions on advertising, taxation on tobacco products and mandating smoke-free public places and workplaces. To supplement these legislative measures, cessation programs and other anti-smoking messages have helped to reduce smoking rates.³⁴



The following two examples – Thai Smoking Kid and Stoptober – illustrate the value of selecting the right messenger, channel and timing of communication. They use social and cultural norms to motivate behavior, based on contextual analysis, the evidence and legal and ethical considerations – all based on steps conducted during the Assess and Do phases. They evaluate their effects and describe their process and share outcomes with others.

Thai Smoking Kid – Ogilvy & Mather Thailand and Thai Health Promotion Foundation

The Thai Smoking Kid anti-smoking campaign used children to deliver an anti-smoking message to adults through a video that went viral on the internet.³⁵ With only a \$5,000 budget and no media spending, the video received over 5 million views in 10 days on YouTube, and significant press coverage across the world. Calls to the help-line for smoking cessation support increased by 40 percent.

Contextual and target audience analysis found that, in Thai culture, adults are expected to educate children when they misbehave, and serve as role models. This culturally normal behavior was used in the campaign and child actors holding a cigarette approached adult smokers and asked if they could use their lighter. All smokers refused the request and instead told the children about the dangers of smoking. The children then asked, “If it’s so bad, why are you smoking?” before handing them a piece of paper with the message: “You worry about me, but why not about yourself? Reminding yourself is the most effective warning to help you quit. Call the 1600 hot-line to quit smoking.”

The encounters were filmed and released on YouTube, a channel that requires more active viewing than television. The video went viral and stimulated discussion about smoking around the world (over 20,000 comments were generated globally about the hazards of smoking). The messenger (children), the medium (film) and the distribution channel (YouTube) contributed to the impact of the program. The ability to take advantage of the internet and the rapid spread of the message it enabled was also critical.³⁶

This is an example of using the principles of the framework successfully. The communication strategy was based on a solid evidence base, assessment of legal and ethical considerations and team capacity, and having a good understanding of the function of the communication (to get people to call the quit smoking hotline). The strategy enabled communicators to undertake a contextual analysis to understand the best way to communicate in this setting. Consistent with the five Ws of message design, an effective messenger was used and the message itself was simple and intuitive. Lessons learned from the communication were shared through videos, documents and interviews made available online and this has added to the evidence base.

See the campaign film at: www.youtube.com/watch?v=qHH2LSAHeHc

Stoptober – Public Health England

Stoptober, a Public Health England initiative, which has since expanded into other countries, is a 28-day challenge to stop smoking during the month of October. The program, which started in 2012, is based on the evidence that if someone is able to stop smoking for 28 days, they are five times more likely to give up smoking for good.³⁷ The choice of timing for Stoptober has been critical to its success as it aimed to recreate the ‘January effect’, when large numbers of smokers try to quit. Smokers were asked to commit to a specific time period of 28 days during the month and

this commitment was made public. A giant red ball was pushed around the UK, and participants were asked to communicate their commitment by signing the ball. This communicated the reach of the program by showing participants that large numbers of smokers from across the UK were undertaking the challenge. This situated the mass quit movement within a social norm of trying to quit smoking. A smartphone app provided daily messages of support and encouragement, with the option of daily motivational text messages. It is estimated that the campaign prompted an additional 240,000–350,000 quit attempts (9.1 percent of smokers tried to quit in October 2012 compared to an average of 6.3 percent in other months).^{38,39}

See more about the campaign at: <https://stoptober.smokefree.nhs.uk>. The initiative has also been implemented in Wales (www.wales.nhs.uk/stoptober), New Zealand (<http://stoptobernz.co.nz/>) and the Netherlands (<http://stoptober.nl/>).

Overweight and obesity

Tackling overweight and obesity is a critical challenge for health policymakers across the world. Globally over 3 million people die each year from complications caused by obesity.⁴⁰ Excess body weight is directly linked to higher risk of type 2 diabetes, stroke, heart disease, and other health issues. Childhood obesity is particularly problematic as the higher the body mass index (BMI) is in childhood, the higher the probability of developing obesity in subsequent years.⁴¹ Policymakers must address poor diet and lack of physical exercise from a policy perspective, which includes persuading people to make smarter choices about their eating and movement-related behaviors.



The following two cases – FAN and FoodSwitch – illustrate the value of carefully addressing every process step in the ADD framework. They highlight the value in integrating the evidence with the contextual analysis, the critical role co-creating content (What?) can play in providing persuasive communication using channels (Where?) and methods embraced by the target audiences (Who?). They show the importance of timing and dosing of messages (When?), use of appropriate channels (Where?), pre-testing, evaluation, documenting and sharing.

FAN – BeCHANGE Research Group, Università della Svizzera italiana and Department of Health and Social Affairs, Canton Ticino, Switzerland

The FAN project (Family, Physical Activity and Nutrition) in Ticino, Switzerland (see www.bechange.info/projects/fan/) is an example of effective communication about a complex issue: regular physical activity and consuming a healthy diet. The communication targeted children aged 6–12 years and their parents. It was based on evidence about the effects associated with healthy and unhealthy diets and activity

behaviors, what works in communicating these behaviors in community-based settings, and the legal, ethical, and cultural aspects of communicating these behaviors. It also assessed the role that communication could play in tackling the challenge of adhering to dietary and activity recommendations and was part of an overarching statewide health promotion initiative that included school-based activities, teacher training, and providing access to healthy options at schools, homes, and in communities. The promotional materials, the brand, the communication content, wording, framing, graphics, timing and dosing, and the pre- and post- assessments were developed and pre-tested with the target audience. Adjustments were made to sub-optimal communication and pre-tested again.

Using channels familiar to the target audience (print, online, email and smartphone) and delivering the content from trusted sources (the local Department of Health and the university), parents and children received tailored communication for eight weeks. Each week, parents received communication through a website, email and text message, while children received a weekly printed letter. Communication was tailored to the behavior that was most difficult for each participant (such as following a healthy diet or getting regular exercise), and their demographic characteristics (age, gender of parents and children, number of children, and child's class in school). All communication was personalized with the name of the recipient by addressing each person by name (for example, "Ciao Sara!" "Buongiorno Signora Greco").

Participation in the project exceeded what was planned (goal: 250 families, actual: 550 families) and retention rates in follow-up surveys also exceeded the 50 percent that is typically published in the evidence base, with 72 percent of families completing the follow-up assessments.

Increase in adherence to a healthy diet increased significantly over time for both children and parents, with fruit and vegetable consumption increasing and fat and sugar consumption decreasing. The majority of parents and children were highly satisfied with the communication provided and stated that it helped them improve their behaviors, increased parents' confidence in lifestyle-related parenting skills, and served as a communication instigator in the family. The project team embraced the Describe phase of the ADD framework by disseminating the work at academic, government, and community-based conferences and meetings, published papers, and through local and national media channels. They also conducted training activities in designing effective communication with health departments to build capacity at the local level.⁴²

FoodSwitch – The George Institute for Global Health, Food Policy Division, Australia

To more effectively communicate and interpret information presented on food labels, the FoodSwitch mobile app provides messages about the health ranking of food items.⁴³ It is designed to help Australian consumers better understand food labels and influence healthier choices when purchasing food.

An iterative process of development, review, and testing resulted in a program that contained intuitive messages in an easy-to-use interface. Consumers use their smartphone to scan the barcode on food products.

The program initially contained nutritional data for around 17,000 programmed food products, and this grew to over 47,000 through crowdsourcing information from users. After scanning a barcode, the user receives a red, yellow or green traffic light communicating the nutritional information of the product. When necessary, healthier products are recommended to the user. Within 18 months, the app has been downloaded by more than 400,000 individuals in Australia, has maintained a 4-plus star user rating, and more than 2,000 users have given feedback about the functionality of the app.

The results showed that nutrition communication, specifically making food labels easy to understand, can be achieved through a solid evidence base, good formative research and pre-testing with the target audience. The program is an example of effective communication that helps improve food choices for Australian consumers. It also demonstrates that crowdsourced data, (the 'sharing' part of the ADD framework), can be a good source for low-cost information about foods and their nutritional composition.

See more information at: www.bupa.com.au/foodswitch. The program is also available in the UK – www.foodswitch.co.uk – and New Zealand – www.foodswitch.co.nz – with plans to expand to China, India and North America.⁴⁴

Maternal and child health

Improving maternal and child health – United Nations millennium development goals 4 and 5 – continues to be a central aim of global health efforts. Steady progress has been made in reducing maternal and child mortality, but a significant increase in pace is required to meet the target by the end of 2015. Using appropriate new technology to communicate effectively with pregnant women and new mothers is proving to be successful in improving their health.



The example below (Wired Mothers) illustrates the important role of the analysis of cultural context, use of appropriate channel (Where?), timing of information provided (When?) and using trusted sources (What?).

Wired Mothers – Department of International Health, University of Copenhagen, Denmark and Ministry of Health, Zanzibar, Tanzania

The Wired Mothers mobile app aims to “empower women to make informed decisions about attending regular antenatal care and delivery with a skilled attendant”.⁴⁵

During the first antenatal care consultation, pregnant women in Zanzibar agree to receive the mobile health communication and provided a healthcare worker with personal details used to tailor the text messages. Educational messages provide information about pregnancy, including danger signs and the importance of having a skilled person deliver the baby. Prompt (cues to action) messages include appointment reminders and delivery preparations. Additionally, women receive the phone number of their local midwife and a voucher (worth approximately US \$0.25) to use for calls to the midwife. The message and the frequency of messages change over time and increase as the mother’s due date approaches.

24 primary healthcare facilities participated. Wired Mothers was effective in reducing perinatal mortality. Children born by women who received the text-based communication had a 50 percent reduction in perinatal mortality compared with children born by women who did not. There was an insignificant reduction in death of children within the first 42 days, suggesting that the duration of communication was not long enough to have an impact on post-delivery needs.

A film about the project is available at <http://vimeo.com/11760668>

Early detection and diagnosis

The risk/benefit balance around cancer screening is complicated, and poor communication can cause uncertainty and misunderstanding. The purpose of screening is to enable earlier diagnosis and therefore earlier intervention. When detected early, many cancers, such as oral, ovarian, and skin, can be treated and lives can be saved. However, in case of prostate and breast cancer, screening can also lead to over-diagnosis and over-treatment, with little to no benefit.⁴⁶

Based on longitudinal evidence from a Canadian study, in February 2014 the Swiss Medical Board recommended that no new mammography screening be introduced and that a time limit be placed on existing programs.⁴⁷ Despite this complicated situation, websites for mainstream cancer organizations, such as the American Cancer Society, continue to actively promote screening mammograms without acknowledging any risks or potential harm.⁴⁸



The following two cases – Informed Choice about Cancer Screening and Celebrities as health messengers – demonstrate the effective adoption of analysis of the evidence base, sophisticated understanding of audience (Who?), use of graphics in message design, including framing of the message (What?) and trusted messenger (What?).

Informed Choice about Cancer Screening – King’s Health Partners Integrated Cancer Centre, UK

Informed Choice about Cancer Screening, a group of independent experts working with NHS Cancer Screening Programs (hosted by King’s Health Partners Integrated Cancer Centre) in the UK, have been working with the public and others to develop information which enables the public to make informed decisions about their screening options.⁴⁹ Based on the evidence about co-creation and peer-to-peer models for message design, a ‘citizens’ jury’ was held in 2012 to inform the design of messages about mammography screening. This approach is recommended for understanding perspectives on complex issues and when information is contested.⁵⁰

A cross-section of women heard evidence from screening experts, and worked with graphic designers and communication experts to decide how best to present the evidence to other women. The team worked directly with the proposed audience for the communication, considered the evidence base with them, and debated message framing (for example, to use ‘lives saved’ or ‘deaths prevented’) and data presentation. The leaflet that resulted from this co-creation model of development, consistent with the five Ws of message design, has now been implemented and sent to all women eligible for screening.

See: www.informedchoiceaboutcancerscreening.org

Celebrities as health messengers – Angelina Jolie

Celebrity experiences can also have a significant impact on cancer screening and testing behavior. Celebrities can act as trusted health messengers, particularly where they are well-liked and have a personal link to the health issue. In some cases, the reporting of celebrities’ personal health stories may prompt action by others, even when there is not a deliberate communication. For example, news of Angelina Jolie’s preventive double mastectomy was widely reported in traditional news outlets and through social media. The number of genetic test referrals doubled in the two months following her highly publicized experiences.⁵¹ Evidence suggests that, while awareness is raised by celebrity stories, understanding is not. In this case, the communication from the media did not give context or relevance to the story as it did not state clearly how rare her situation was or how it dramatically differed from the general population.⁵² Communicators need to be accurate and give perspective in stories. Being able to take advantage of increased media interest in an issue because

of a celebrity experience could be a useful tactic in timing other communication, but the public understanding of the complex science must be considered and addressed when designing messages. This case illustrates the power of celebrities and the critical role of the communicators who tell the stories.

Infectious disease control in crisis situations

Infectious diseases are caused by pathogenic microorganisms such as bacteria or viruses and can be spread directly or indirectly between people. Communication of pandemic outbreaks is not simple; it relies on transmission of open and transparent information to build trust with the public.⁵³ The cases below illustrate communication efforts around two recent infectious disease outbreaks: H1N1 influenza and Ebola.

The first known incidence of the H1N1 influenza was in California in April 2009.⁵⁴ It is considered the first pandemic to occur after significant global investment in preparedness and governance and the development of WHO International Health Regulations. It also emerged in an environment where immediate communication, rapid social media messaging tools, internet-based platforms and other innovative online resources were available to augment traditional public health communication methods.⁵⁵



The H1N1 case presented below demonstrates good message design, including choice of messenger, use of visual imagery (What?), timing of message delivery (When?), use of channel (Where?), and evaluation.

H1N1

The initial communication reaction of the Mexican Government is held up as a positive example of response to the H1N1 crisis. They undertook a number of successful communication measures such as:

- A single spokesperson was nominated for the Government, ensuring consistent and up-to-date communication to avoid public confusion.
- Multiple health messages were disseminated. Messages used visual imagery to allow for the variation in literacy levels among the population. They were considered to have positively influenced behavior.
- Multiple channels were used to communicate health messages. National television, radio and print media collaborated with the Government to broadcast personal hygiene information.
- Officials responded in real time when citizens began to wear face masks – guidance that was not in the official health communication – by updating public information in how to safely dispose of them.⁵⁶

The Centers for Disease Control and Prevention (CDC) deployed traditional media strategies alongside the use of communication and information technologies to broaden the reach and impact of their messaging. Traditional communication included a 24-hour contact center, factsheets, flyers, brochures and a dedicated website for the pandemic. The CDC also deployed messaging across social media channels, such as Facebook, Twitter and YouTube. Links to videos and other resources could be posted across multiple platforms, allowing the CDC to quickly and easily reach a diverse and geographically dispersed audience. Web analytics, social media tracking and feedback were used in the evaluation process. More than 1.2 million followers on Twitter were reported and the Facebook page grew by more than 55,000 people during the pandemic. The YouTube videos reached over 3 million views.⁵⁷

A WHO evaluation of its own response to the H1N1 pandemic found that its lack of policy or social media communication strategy was an area for significant improvement. Materials need to be tailored to the specific audience through a blend of the most appropriate channels. It recognized that the use of information technologies should be an integral part of its strategic communication planning and training.⁵⁸

The Ebola examples demonstrate the importance of understanding cultural context, getting message design right, including framing and use of graphics and language (What?), using the appropriate channel (Where?) and how not getting these right can result in ineffective communication and even harm.

Ebola

As of 2 November 2014, more than 13,000 cases of Ebola have been reported, with Guinea, Liberia and Sierra Leone labeled by WHO as countries with widespread and intense transmission.⁵⁹ Central to any future success in stopping the spread of the disease is the ability to gain the trust of local communities and communicate effectively with them about transmission risk and preventive action that should be taken. As of the completion of this report, there were mainly examples of sub-optimal communication about Ebola.

A lack of trust can have devastating consequences on whether in-crisis communication or long-term endeavors change health behavior. In Sierra Leone and Guinea, incidents have been reported of community members throwing stones at health workers investigating the Ebola outbreak.⁶⁰ Misconceptions about transmission remain problematic; a survey in September 2014 in Sierra Leone showed that nearly a third of people believed Ebola came from mosquitoes or the air and that bathing in salt and hot water would protect them from infection.⁶¹

Providing information in local languages is central to increasing understanding, as well as building trust with communities who may be suspicious of messages provided in English alone. In fact, English-only messages may have been at least partially responsible for not convincing those who raided a quarantined clinic in Monrovia where 20 infected patients were released into the community.^{62, 63}

Initial messages about banning the sale of bush meat and closing borders may have been the right advice, but they did not take account of the economic impact of such actions and raised anxiety and fueled rumors among affected populations. Fear-based messaging discouraged people from seeking medical help and increased the spread of the disease.⁶⁴

Channels have varying levels of coverage and multiple channels are needed to reach audiences, particularly in health emergencies. For example, 85 percent of those surveyed in Sierra Leone indicated that radio was their preferred means for receiving information about Ebola. However, radio alone is not sufficient, as shown in Guinea when cases spiked in one particular community where there is no access to radio.⁶⁵

To date, the Ebola outbreak has taken place alongside a communication catastrophe. Communication has not been consistent with an evidence-based, generalizable framework for communication about health and has instead violated most published recommendations about communication during crisis situations.^{66, 67}

MAKING IT HAPPEN

The case studies illustrate the importance of using the ADD framework and also highlight the dangers of not doing so. Use of the ADD framework, completely and fully, is therefore the central recommendation of this report. To facilitate its adoption and use, the ADD framework and an easy-to-access checklist are already available from www.add4hcomm.info. Our hope is that the international community of communicators and policymakers will respond by using the framework, sharing their own lessons and learning from others.

To enhance learning, existing institutions of health communication excellence from around the world will connect to form a virtual global center. This virtual center will co-ordinate the organization and diffusion of evidence gathered through use of the ADD framework. The center will collaborate with health communication providers, businesses and patient groups and will support health communication innovation by continually evaluating the framework and the learning generated from its use.

For governments, healthcare providers and NGOs there are three enabling actions that will improve health communication, giving it the resources, prominence and capacity needed.

Enabler 1: Make funding of communication conditional on designing it using the evidence base

Funders of health communication, including government, NGOs and healthcare providers, should link funding for health communication to use of an evidence-based approach, such as that represented by the ADD framework. This will ensure that health communicators are incentivized to follow scientific principles, which will encourage adequate evaluation and sharing of the communication, the final step of the process that is often neglected. The level of funding should also be sufficient to meet the requirements identified in planning the communication. Good, well-planned communication can be extremely cost-effective.

Enabler 2: Health organizations to have a Chief Communication Officer at board level

To help ensure that health communication receives the focus and funding it deserves, we recommend that all health organizations (from ministries of health to hospitals to local health agencies) have a senior figure whose role is to champion effective communication, following the ADD framework principles. This person will be accountable directly to the Chief Executive Officer, or equivalent, of the organization and should be considered the Chief Communication Officer.

Enabler 3: Communication skills training and education

Finally, the importance of a trusted messenger and designing effective messages has been emphasized throughout this report. Simply writing a message is not necessarily effective communication, and using untrained communicators to design messages may be a waste of valuable resources and potentially do more harm than good. Those identified as effective messengers, as well as those who design health messages, need training to be able to communicate effectively. The ability to effectively frame communication, working with news media, conducting interviews, listening and responding to the target audience's realities, and using social and mobile media are essential for reaching audiences with relevant, persuasive, trusted communication. Health communicators and messengers need support to develop those skills.

A CALL TO ACTION

One recommendation. Three enablers. The prescription for action is clear if health issues are to be effectively communicated. The use of the ADD framework is not just the responsibility of government, but also requires strong, sustained support from the business community, academics, advocacy groups, and NGOs. The path to improved health communication requires public, private, and academic partnerships at community, regional, national and international levels that embrace innovative approaches focused on good health for all.

Communication is no substitute for substantive policies that provide the meaningful response to an issue through resources, standards, and procedures. In some cases, where political debate is aligned with disagreements over health issues, it may be overly optimistic to expect consensus to result from health communication efforts. On its own, health communication, even the very best communication, cannot singularly overcome genetic-based or environmental factors that contribute to poor health outcomes, nor can it extinguish strongly held political, cultural, or religious beliefs and practices.

It may not be sufficient, but good health communication is a necessary adjunct to effective health policies. Vaccination without good communication risks high levels of non-compliance. Without good communication, infectious disease, such as Ebola or H1N1 spread at avoidable rates. And, without good communication, attempts to help people tackle the lifestyle choices (smoking, physical activity, nutrition and alcohol consumption) that drive the burden of non-communicable disease will fail. So it is time to acknowledge that health communication is a serious, specialized, evidence-driven, skill-based undertaking that carries profound implications for the wellbeing of many lives. This report demonstrates why and provides solutions. We call on policymakers and communicators across the globe to act on this.

APPENDIX: THE ADD FRAMEWORK – KEY QUESTIONS AND PROCESS

Phase	Process step	Key questions	Process
Assess	Evidence	<p>What is the evidence about the health topic?</p> <p>How has communication been used successfully and unsuccessfully before?</p> <p>What is the best practice for this purpose?</p>	You have a thorough understanding of the health topic, what can be changed to improve health, and what communication strategies work best for the topic.
	Function	<p>What is the role of communication here?</p> <p>How does it integrate and support other efforts to improve health and influence health behavior?</p> <p>What is the desired outcome?</p>	You have analyzed the problem, the causes of the problem, and know the role that communication will play in your overarching strategy so that you have clear communication objectives.
	Capacity	<p>Do you have the right people for the job?</p>	You have assessed the capabilities and capacity of the human resources available and strengthened where necessary.
	Legal and ethical	<p>What are the legal and ethical issues?</p> <p>What are potential unintended effects of the communication?</p>	You have considered intended and unintended consequences of communication (eg impact on services due to increased demand) and obtained ethics approval where necessary. You know of potential conflicts of interest and regulations affecting the communication.

Phase	Process step	Key questions	Process
Do	Contextual analysis	What type of communication is this?	You know what type of communication this is (eg crisis, risk, educational, behavior change).
		What is the budget? How much money do we need?	You understand the financial situation. The budget may be a fixed limitation affecting message development, or there may be some flexibility to bid for funding as part of the iteration of communication.
		Are there mandates, politics or other considerations?	You are aware of political imperatives affecting the communication, as well as how it could be misreported or distorted by others.
		Who is your target audience for the communication?	You understand the target audience for each message. You have collected information about them (such as through focus groups and surveys). You know their health literacy and other key influencing factors (sociodemographic, psychosocial, behavioral).
		What does your target audience know and believe?	You know who they trust and who influences them. You know where they get their information, what media they use, how they use it, and how much they use.
		What is their health literacy?	You know who they trust and who influences them. You know where they get their information, what media they use, how they use it, and how much they use.
		What are their media patterns?	You know who they trust and who influences them. You know where they get their information, what media they use, how they use it, and how much they use.
		Who does your target audience trust?	You know where they get their information, what media they use, how they use it, and how much they use.
			You have considered your target populations and ensured communication is accessible to all segments (eg, those with visual or hearing impairments, homeless, different cultural groups, low health literacy groups, prison populations).

Phase	Process step	Key questions	Process
Do	Message development	<p>Have we used the five Ws?</p> <p>Are messages consistent with objectives?</p> <p>Are they simple to understand and intuitive?</p> <p>Have we pre-tested them and made revisions?</p>	<p>You have adhered to the ADD five Ws of message design.</p> <p>You have pre-tested the messages and made changes required.</p>
	Test and refine	<p>Will your communication actually work?</p> <p>What improvements can we make?</p>	<p>You have prototyped your communication and tried it out with some of the target audience. You have taken on their feedback and refined it for maximum impact.</p>
	Implement	<p>Deliver the communication</p>	<p>You have implemented the communication.</p>

Phase	Process step	Key questions	Process
Describe	Document	<p>Are you capturing key information on the communication?</p> <p>Have you inserted it into the ADD reporting template?</p>	<p>You are recording all aspects of the communication process, including the five Ws, to help with evaluation and understanding. You have recorded any deviations from the communication plan and described why changes were made.</p>
	Evaluate	<p>Has the communication been evaluated for reach and impact?</p>	<p>You have evaluated the impact of the communication and included this learning in your documentation.</p>
	Share	<p>Have you added the information and experiences into the ADD e-archive?</p>	<p>Your communication evidence is available around the globe.</p>

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Any errors or omissions remain the responsibility of the authors.

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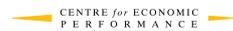
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