

Science and Public Health

Communication Workshop

How we communicate science matters

Resource Pack



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Foundations of Science and Public Health Communication



Why Science and Public Health Communication Matters?

Clear communication is essential for turning evidence into real-world understanding. Data must be interpreted, framed, and contextualised to avoid confusion, mistrust, or misuse. Good communication helps people make informed decisions, supports healthier behaviours, and strengthens trust in healthcare systems. It's not just about accuracy it's about relevance, clarity, and impact.



Science Communication as a Career Skill

Whether you work in a lab, clinic, industry, policy, or media, the ability to explain complex ideas clearly is a core professional skill. The workshop highlights that communication influences funding, policy decisions, patient care, and public understanding. Strong communicators bridge the gap between evidence and action, making science accessible, meaningful, and ethically framed for diverse audiences.



Med Comms: Same Data, Different Messages

Med Comms professionals translate scientific and clinical evidence for different stakeholders including clinicians, regulators, patients, and the public. As we have seen, the same dataset can produce a clinician pitch, scientific discussion slides, or a public-facing infographic. Each output requires different levels of detail, tone, and framing. Effective Med Comms is about accuracy, clarity, and tailoring the message to the audience's needs.


Translating Evidence for Different Audiences


Understanding Evidence Translation


Scientific evidence doesn't speak for itself it needs interpretation. As highlighted in the workshop, "different audiences need different levels of detail" and poor framing can lead to misunderstanding or mistrust. Translating evidence means choosing what to emphasise, what to simplify, and how to present information so it supports informed decision-making.


Med Comms Roles Overview

MedComms professionals shape how scientific and clinical data are communicated across healthcare:

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Sales reps communicate approved, on-label information about a medicine or device to clinicians. Their goal is to support appropriate use by highlighting the most relevant, clinically meaningful benefits and safety considerations. They emphasise key efficacy numbers and safety monitoring information which is important because they are often the first point of contact for clinicians and help ensure treatments are used safely and effectively.
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Medical Science Liaisons (MSLs) engage in scientific exchange with clinicians, researchers, and key opinion leaders. They discuss data in depth including methodology, limitations, and real-world considerations. Because they are able to explain study design, endpoints, and statistical meaning and respond to complex clinical questions they ensure clinicians have the understanding needed for evidence-based practice.
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Medical writers create accurate, neutral, and highly structured scientific materials. These may include manuscripts, posters, abstracts, regulatory documents, slide decks, and patient information. They communicate in precise, unbiased language with good data visualisation which ensures scientific evidence is communicated transparently and rigorously across academia, industry, and healthcare.
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Public health communicators or **science journalists** translate scientific and medical information for the general public, helping people understand risks, benefits, and health behaviours. Their content includes accessible language and inclusive, culturally sensitive messaging. They bridge the gap between evidence and everyday life, reducing misinformation and supporting healthier communities.

Practical Tools for Clear, Ethical Communication

Tips for Effective Communication

Good communication is intentional. It's not just about simplifying information it's about making it meaningful, accurate, and actionable.

Key principles to guide your communication:

- **Start with one main message** If your audience remembers only one thing, what should it be?
- **Use simple, direct language** Avoid jargon unless your audience expects it.
- **Support understanding with visuals** Charts, icons, and diagrams help people grasp complex ideas quickly.
- **Check for bias and tone** Avoid fear-based messaging, blame, or assumptions about people's behaviour or background.
- **Be transparent about uncertainty** It's okay to say what we know, what we don't, and what we're still learning.

Remember the CLEAR framework: Clarity, Listen, Encourage, Accessible, Respectful

Public Health Communication

Public health communication turns scientific evidence into messages that help people make informed, healthy choices. It's not just about sharing facts, it's about building trust, reducing barriers, and supporting communities.

What effective public health messaging does:

- **Supports healthy behaviours** Clear messages help people understand risks and benefits.
- **Builds trust in health services** Transparency and respect strengthen public confidence.
- **Reduces preventable illness** Early detection campaigns (e.g., Be Clear on Cancer) save lives.
- **Makes information accessible** Simple language, inclusive visuals, and culturally sensitive framing ensure messages reach everyone.

When Communication Goes Wrong

Poor communication can have real consequences. Unclear or culturally insensitive messages can undermine public health efforts.

Common pitfalls to avoid:

- **Too complex or unclear** Overloaded posters or jargon heavy messages confuse audiences.
- **Not relevant to the audience** Messages fail when they don't reflect people's lived experiences or needs.
- **Fear-based or blaming tone** This can increase stigma and discourage people from seeking help.
- **Misused statistics** Numbers without context can mislead or overwhelm.
- **Lack of cultural sensitivity** Messaging that ignores cultural norms or language barriers widens health inequalities.

Examples, Pitfalls & Tackling Misinformation

Examples of Effective Public Health Messaging

Public health campaigns work best when they are simple, memorable, and action-focused. The workshop showcased several strong examples:

- **Catch it. Bin it. Kill it.** A concise, behaviour-driven message that clearly explains what to do and why it matters.
- **Be Clear on Cancer** Campaigns encouraging people to “Tell your doctor” if they notice symptoms like breathlessness or a persistent cough. These messages are direct, empathetic, and empower early help-seeking.
- **FAST Stroke Signs** A highly visual, easy-to-remember acronym (Face, Arms, Speech, Time) that helps the public recognise stroke symptoms quickly.

These campaigns succeed because they use plain language, strong visuals, and specific actions, making them accessible to diverse communities.

Misinformation & Framing Pitfalls

Common framing pitfalls include:

- **Ambiguity or visual overload** Messages that resemble “a cryptic escape room clue” fail because people can’t decode them quickly.
- **Sensationalism** Exaggerated claims (“THIS CURES CANCER!”) undermine trust and spread misinformation.
- **Fear-based framing** Campaigns that shame or blame individuals can increase stigma and reduce engagement.
- **Lack of context** Statistics without explanation can distort meaning and fuel misunderstanding.

Effective communication avoids these traps by prioritising clarity, accuracy, and empathy.

Bringing It All Together: Key Lessons from the Workshop

In this workshop you learned:

- How to translate complex scientific and clinical data into clear, accurate, audience-specific messages.
- To adapt tone, depth, and format depending on whether you're communicating with clinicians, regulators, patients, or the public.
- Using visuals and structured storytelling makes evidence accessible and engaging.
- How to apply ethical framing to avoid bias, fear-based messaging, and misused statistics.
- That Med Comms is about building trust through transparency, accuracy, and cultural sensitivity.

Other Careers To Consider in Med Comms:

Medical Editor | Publication Planner | Regulatory Writer | Health Economics Writer | Patient Engagement Writer | Digital Medical Writer | Medical Copywriter | Account Manager | Project Manager | Medical Education Specialist | Market Access Writer | Science Journalist | Medical Animator | Visual Communicator | Scientific Advisor | Medical Affairs Associate | Patient Insights Researcher | Scientific Reviewer | Academic Liaison Officer | Medical Illustrator

Recommended Reading

- EMWA (European Medical Writers Association) – Workshops, conferences, and a comprehensive journal for aspiring writers.
- ISMPP (International Society for Medical Publication Professionals) – Best practices for publication planning and scientific communication.
- Plain English Campaign: Writing Guides – Free resources on simplifying complex information.
- Sense About Science – Guides on evidence communication and public engagement.
- Wellcome Trust: Public Engagement Resources – Frameworks for ethical, inclusive communication.
- The Scientist's Guide to Writing – Stephen Heard
- Writing Science – Joshua Schimel
- The Craft of Scientific Communication – Joseph Harmon & Alan Gross
- Communicating Science Effectively – National Academies Press (free PDF)



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