

DEPARTMENT OF COMMUNICATIONS GENEVA, SWITZERLAND

THE MEL MANUAL MEASUREMENT, EVALUATION, AND LEARNING

for communication campaigns and activities including

- MEDIA PUBLICITY
- SOCIAL MEDIA
- WEBSITES
- PUBLICATIONS
- VIDEOS / FILMS
- EVENTS
- INTERNAL COMMUNICATION
- CAMPAIGNS

Prepared by



AUGUST 2021

© Copyright 2021

World Health Organization Department of Communications Geneva Switzerland

Web: https://www.who.int

Authors: Distinguished Professor Jim Macnamara, PhD, FAMEC Professor Maureen Taylor, PhD

Produced by the University of Technology Sydney PO Box 123 Broadway, NSW, 2007 Australia

All rights reserved. This manual is protected under international copyright law, the *Copyright Act 1968* of Australia and subsequent amendments, and equivalent legislation and regulations in other countries. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means, electronic or mechanical, photocopying, recording or otherwise, without the prior written permission of the World Health Organization and the authors.

CONTENTS

INT	RODUCTION	3
GL	OSSARY OF KEY TERMS	4
1.	EVALUATION THEORY AND BEST PRACTICE	7
	Monitoring, Measurement, Evaluation, Learning	7
	The MEL Model	8
	Three Types of Evaluation	9
	Theory of Change and the Logical Framework Approach (LFA)	10
	Program Logic Models	10
	Logframes	11
	Value-Adding Vs. Cost Centre	13
	Goals and Objectives	13
	SMART Objectives	13
	Key Performance Indicators – What Should be Measured and Evaluated?	13
	Metrics and Indicators	14
	AMEC Recommendations	14
	Integrated Planning and Evaluation Model	17
	Taxonomy of Stages, Indicators, and Methods	18
	Applying the right metrics and indicators at each stage	20
	Methods	20
	A Note About Advertising Value Equivalents (AVEs)	22
	Causality / Causation	23
	Organizational Listening and the Fallacy of 'Injection Theory'	24
	Reporting	25
	Summary	26
2.	MEDIA PUBLICITY	29
	Media Monitoring	29
	Media Content Analysis	29
	Key Metrics, Indicators, and Methods for Traditional Media Publicity MEL	32
3.	SOCIAL MEDIA	34
	Social Listening	34
	Accounts and #hashtags	35
	Benchmarks and Comparative Analysis	35
	Internal Social Media Platforms	35
	Social Network Analysis (SNA)	35
	Key Metrics, Indicators, and Methods for Social Media MEL	35
4.	WEBSITES	37
	Internal Website Tracking	37
	Third Party Website Tracking	38
	Key Metrics, Indicators, and Methods for Website MEL	38
5.	PUBLICATIONS	41
	Formative Evaluation	41
	Page 1 of	63

	Process MEL	41
	Summative MEL	41
	Metrics, Indicators, and Methods	41
6.	VIDEOS / FILMS	44
	Formative MEL	44
	Summative MEL	44
	Viewing Panels	44
	Orientation of Panel Members	44
	Questions (before showing any segments)	44
	Exit Questions	45
	Closing	45
	Metrics, Indicators, and Methods	46
	Training and Technical Videos	46
7.	EVENTS	48
	Formative Evaluation	48
	Process MEL	48
	Summative MEL	48
	Metrics, Indicators, and Methods	48
8.	INTERNAL COMMUNICATION	50
9.	CAMPAIGNS	52
	Omnibus Surveys	53
10.	REFERENCES AND BIBLIOGRAPHY	54
AP	PENDIX A. Sample <i>ex-ant</i> e (pre) reader survey for publications	56
AP	PENDIX B. Sample <i>ex-post</i> reader survey for publications	57
AP	PENDIX C. Sample viewing panel consent form	58
	Sample viewer consent form – 'Health Issues Video Viewing Panel'	58
AP	PENDIX D. Sample post event survey	59
AP	PENDIX E. Public Feedback Questionnaire for WHO	60
ТΗ	E AUTHORS	63

INTRODUCTION

How do we know if WHO communication is effective? How can the WHO improve the outcomes and impact of communication? These questions are at the heart of the WHO communications function and the answers matter a great deal to the lives of billions of people.

The WHO 13th General Program of Work (GPW13)¹ requires and prioritizes "accountability" through monitoring and "performance assessment".

The WHO *Strategic Communications Framework*² identifies the importance of 'assessment' and 'evaluation' and notes that a key purpose of evaluation is "continuous learning" to improve communication. WHO principles for evaluation state that it is important to "measure progress" at regular intervals, with such measurements providing an evidence-base for evaluation and continuous learning.

The 'Evaluation' pages of the WHO website³ recommend planning based on a five-stage program logic model, also called a *logframe*. This model aligns with evaluation theory identified in academic research and international best practice, and is applied in this manual to WHO communication activities and campaigns (see Figure 6, p. 12).

In accordance with the *GPW13*, WHO principles and requirements for evaluation, and the WHO *Strategic Communications Framework*, this manual provides detailed guidelines, templates, and tools to "translate" **measurement, evaluation and learning (MEL)** in relation to communication "into action". It contains:

- 1. A **glossary of key terms** used in measurement and evaluation;
- 2. An **overview of theories, models, principles, and guidelines** for measurement, evaluation, and learning (MEL) for public communication activities and campaigns (Section 1); followed by
- 3. Sections 2–9 that provide specific guidelines and recommendations in relation to particular WHO communication activities, channels, and campaigns.

In addition to overall guidelines and recommendations, this manual includes sections with guidelines, templates, and tools for MEL in relation to:

- Media publicity (press, radio, and TV);
- Social media;
- Websites;
- Publications;
- Videos / films;
- Events;
- Internal communication; and
- Campaigns, involving a combination of communication activities (e.g., World Days and Weeks).

The WHO *MEL Manual* is provided as a key reference document and resource and its use is supported by briefings and capability development workshops for communication staff.

¹ World Health Organization. (2018). 13th General Program of Work2019–2023: Promote health, keep the world safe, serve the vulnerable. https://apps.who.int/iris/bitstream/handle/10665/324775/WHO-PRP-18.1-eng.pdf

² World Health Organization. (2017). *Strategic Communications Framework for effective communications*. Geneva, pp. 40–47. https://www.who.int/mediacentre/communication-framework.pdf

³ WHO 'Evaluation'. https://www.who.int/about/communications/evaluation

GLOSSARY OF KEY TERMS

Term	Meaning						
Activity	An undertaking or series of undertakings as part of a program. In communication, activities include writing, graphic design, arranging events, etc. (See 'input' and 'output')						
Analytics	The discovery and interpretation of meaningful patterns in data. Applied to websites and social media in applications such as Google Analytics and Facebook Insights						
Baseline	The level of a factor or element, such as awareness, attitude, behaviour before an activity begins						
Behavioural Insights	Behavioural Insights (BI) provides insights about why people behave in a certain way with a view using those insights to inform the design of a policy, program, or a campaign						
Benchmark	A measure taken at a point in time. A measure taken before an activity begins is the <i>baseline</i> . Later benchmarks can help track progress						
Campaign	A series of activities undertaken within a specific time frame with a common target audience and objective (typically to create awareness, or change attitudes or behaviour). Communication campaigns can be paid media (i.e., advertising), or a combination of paid, earned, shared, or owned media. (<i>See</i> 'paid media', 'earned media', etc.)						
Causality / causation	Identification of the cause of a change or effect. In MEL, this requires evidence, not assumptions						
Clickthrough	Clicking a hyperlink inserted in a document or Web page that access more detailed or specific information and demonstrates interest. T percentage of viewers of links who clickthrough to more information referred to as the clickthrough rate (CTR)						
Communication	The exchange of information that leads to the creation and sharing of meaning and understanding						
Communications	Signals or materials transmitted or distributed, such as electronic signals in computing and telecommunications, printed materials, web pages, etc. It is important to understanding that <i>communications</i> do not necessarily create <i>communication</i>						
Cut through	The capacity of activities, or messages, to be noticed and capture audience attention amid the clutter of information in circulation						
Duration	The length of time a viewer remains on a web page or viewing a video. Very short duration indicates lack of interest. YouTube usually only counts views of 30 secs or more; Twitter, Facebook, Instagram, and Snapchat counts views of 3 mins or more. LinkedIn, Reddit, and Pinterest count only video views of 50% of the full length						
Earned media	Media space or time gained at no cost because of the news value or human interest value of the content (e.g., editorial publicity)						
Engagement	While the term is used loosely, engagement is a psychological state involving both <i>cognition</i> (thinking about) and <i>affect</i> (emotional connection), leading to some form of <i>participation</i> or action, such as inquiring, registering, joining, subscribing, etc.						
Evaluation	Making an assessment or judgement about the value or significance of something (usually within a context or against goals or objectives)						
Formative	In education and evaluation, formative refers to assessment <i>before</i> a program begins that informs design and planning (See 'summative')						
Frequency	The number of times a message or item appears						
Impact	The flow-on results of an action or condition, particularly the broader implications and downstream effects						
Impressions	Some use the term as a synonym for 'reach' (the number of people who are exposed to communication), while others calculate						

	impressions as reach (<i>r</i>) multiplied by frequency (f) – i.e., the number of times that they have been exposed to it (e.g., an advertisement with an audience of 500,000 x three times = 1.5 million impressions)		
Indicator	A quantitative or qualitative sign, datum, or data set that shows a level or condition (e.g., steam is an indicator of heat; clapping is an indicator of appreciation)		
Input	What goes into a process or program, such as budget, planning, organizing, and preparation in order to		
Intervention	An activity designed to change awareness, attitude, or behaviour in a way that achieves a desired outcome		
Interview	A qualitative research method that asks open ended questions of participants face-to-face or via telephone or video conferencing		
Key informant interviews	Purposively selected interviews with key stakeholders who have an informed perspective on an issue (See also 'Stakeholder interview')		
KPI	Key performance indicator (can be quantitative or qualitative)		
Learning	Acquiring insights, understanding, skills, and knowledge in a field		
Measurement	The taking of measurements (e.g., counts, scores, percentages, etc.)		
Metric	A quantitative indicator (i.e., a number representing a measure of volume, frequency, proportion, rating on a scale, etc.)		
Monitoring	Observing and checking the progress or quality of something; keep under systematic review. Maintain regular surveillance over ⁴		
Objectives	Brief statements of what an activity or campaign is intended to achieve developed as part of early planning (see SMART objectives)		
Opportunities to see (OTS)	Another term for <i>impressions</i>		
Outcome	What occurs as a direct result of an activity (i.e., what <i>comes out</i> of actions taken). See also 'impact'		
Output	What an individual or organization puts out, such as information in publications, web pages, social media posts, or traditional media		
Out-take	A term used in some evaluation frameworks for immediate and short- term outcomes (i.e., what audiences take out of communication)		
Owned media	Communication channels owned and controlled by an organization, such as its website, intranet, newsletters, etc.		
Paid media	Media space or time purchased as advertising or as part of a sponsorship or media partnership		
PESO	An abbreviation for paid, earned, shared and owned media (See 'paid media', 'earned media', 'shared media' and 'owned media')		
Pre-test / pre-testing	Evaluating a mock-up or idea with a sample of the intended audience before committing to production or implementation		
Primary data	Data collected from original research or analysis		
Process (evaluation)	Evaluation undertaken during the process of communication, such as monitoring, reviewing feedback, and use of tracking statistics		
Program	A series of inter-related activities		
Reach	The number of people who are potentially exposed to communication (e.g., audited circulation of print media, audience of a TV program, viewers of a web page or video, followers of a social media account)		
Recall	The percentage of those reached who can recall communication. Usually applied to measuring recall of brand names or messages (most commonly measuring using post-exposure surveys)		

⁴ Lexico, Oxford Dictionaries. (2020). https://www.lexico.com/definition/monitor

Results	Outcomes achieved from a program or campaign. Also referred to as 'effects' in media research. In MEL, most models use the term 'outcomes'		
Secondary data	Data drawn from existing sources, such as internal or external databases or records, published literature, etc.		
Shared media	A term used for open social media platforms		
SMART objectives	SMART is an acronym for specific, measurable, achievable, relevant and time-bound objectives developed as part of early planning		
Stakeholder interviews	Interviews with those involved in or affected by a decision, policy, or issue as part of qualitative research (see also 'Key informant interviews')		
Summative	In education and evaluation, summative refers to assessment after a program to summarize what was achieved and/or learned		
Survey	A structured quantitative research instrument that asks a series of questions of a selected sample of participants. Questions may be closed ended (e.g., scales, ranking, multiple choice), or open ended		
UX	An abbreviation for user experience. Sometimes referred to as CX (customer experience).		

1. EVALUATION THEORY AND BEST PRACTICE

This section provides foundational knowledge for understanding and conducting MEL including:

- 1. A summary of evaluation theory and best practice principles in relation to public communication;
- 2. Frameworks and models for measuring, evaluating, and learning to create effective public communication.

Footnotes and references provide further information about each of the issues discussed.

Before we begin:

A Quick Word About Theory

The term 'theory' is often misunderstood, with *theoretical* confused with *hypothetical*. While hypothetical denotes ideas that have not yet been proven, theoretical refers to knowledge based on substantial research and testing over time. A simple definition of theory is 'what others in other places and at other times have learned based on evidence and documented'. Therefore, it is important to refer to theory, as well as practical experience, as a valuable source of knowledge.

A Definition of Communication

The word and concept 'communication' is derived from the Latin noun *communis* meaning 'community' and the Latin verb *communicare* meaning to 'build' or 'create'. Disseminating information and messages is part of the process of communication, but distributing information and messages is not communication. Information and messages can be ignored, or rejected. They can be misunderstood or forgotten – or even be misinterpreted in ways that support contrary attitudes and behaviour. Communication is the *exchange and creation of shared meaning and understanding*. In very simple terms, it is more about what arrives in the minds of participating parties and what they think and do as a result, than it is about what is sent out.

Communication or Communications

The plural term 'communications' is frequently used for human communication initiatives and materials. However, *communications* is widely used to refer to telephony, computers, the internet, and other telecommunications processes and systems. As noted above, *communication* refers to the exchange and creation of shared understanding between humans and, therefore, the singular term is used in this manual.

Monitoring, Measurement, Evaluation, Learning

Many models exist for the inter-related processes of planning, implementation, monitoring, measurement, evaluation, and continuous learning in relation to products, services, activities, projects, and campaigns ranging from large-scale infrastructure development to communication activities and campaigns. One of the simplest is the PIE model, which identifies three stages referred to as *planning*, *implementation*, and *evaluation*.⁵

The public communication field has long recognized that *monitoring* is required during implementation to inform progress (e.g., practices such as media monitoring). However, monitoring is associated in evaluation theory with one stage of evaluation only – *process evaluation* (see the 'Three Types of Evaluation' explained in the following sub-section). Also, monitoring is usually restricted to observing and collecting data, rather than measurement and evaluation.

Most models recognize that *measurement* is required to conduct evidence-based evaluation. A large body of literature refers to 'measurement and evaluation', abbreviated as **M&E**.⁶ The main international organization responsible for standards in communication is the Association for Measurement and Evaluation of Communication (AMEC).

In this manual, the three terms – measurement, evaluation, and learning (MEL) – are used because they identify the three key steps in achieving accountability and effectiveness.

⁵ Cutlip, M., Center, A., & Broom, G. (1985). *Effective public relations* (6th ed.). Prentice-Hall.

⁶ Swenson, R., Gilkerson, N., Likely, F., Anderson, F., & Ziviani, M. (2018). Insights from industry leaders: A maturity model for strengthening communication measurement and evaluation. *International Journal of Strategic Communication*, 13(1), 1–21.

- Measurement involves the taking of *measures*, which is necessary to achieve evidence-based evaluation. However, measures on their own can be meaningless (e.g., they need to be compared with previous measures, or assessed against targets).
- Evaluation involves making an assessment or judgement about the significance or value of something.⁷ Rather than being subjective, this typically involves systematic analysis and comparison with baselines, objectives, and targets.
- Learning is the gaining of insights and new knowledge that can be applied in future (in this context to facilitate improvement and increased effectiveness).

The MEL Model

The WHO approach to evaluation of communication recognizes the importance of (1) **measurement** to collect evidence, (2) **evaluation**, and (3) **learning**. Beyond providing a basis for reporting, which typical M&E does, the MEL approach produces learning that can be applied in two ways:

- To the program or campaign at hand to refine or revise strategy and tactics. This recognizes that circumstances and contexts change during communication, resulting in a need to make adjustments. The three types of evaluation outlined in the following sub-section provide progressive feedback and evidence that can inform fine-tuning and adjustment of tactics and strategy if required;
- To future programs and campaigns to achieve greater effectiveness and contribute to theory of change.



Figure 1. The MEL Model (Macnamara & Taylor, 2020).8

Replanning / refining / improving

⁷ Oxford Dictionaries. (2020). Evaluation. www.oxforddictionaries.com.definition/english/evaluation

⁸ Draws on literature such as Devex. (2019). Measurement, evaluation, and learning (MEL) Lead – Health services delivery on behalf of USAID. https://www.devex.com/jobs/measurement-evaluation-and-learning-mel-lead-health-services-delivery-678519

Three Types of Evaluation

Evaluation (the single term is often used to include measurement and learning) is often thought of a process done at the end of projects and campaigns after activities have been completed (*ex-post*).

However, planning of activities and campaigns should be based on the collection and analysis of data in order to be evidence-based. That frequently requires measurement, evaluation, and learning in relation to existing awareness, attitudes, conditions, practices, processes, and so on. In short, **MEL is usually required before as part of planning, or even before planning** (*ex-ante*).

This has given rise to the identification of three types or stages of evaluation:⁹

- Formative;
- Process, and
- Summative.¹⁰

In simple terms, evaluation (incorporating various forms of measurement and learning) should be conducted before, during, and after activities in a project or campaign. (See Figure 2.)

Figure 2. Three types or stages of evaluation.



Formative evaluation undertaken before activities (also called *ex-ante*) provides:

- Insights such as understanding of audience interests, needs, and concerns, which inform the selection of information to convey and appropriate phrasing of messages. Behavioural insights can be used as part of formative evaluation;
- Channel preferences i.e., the media or other channels through which target audiences prefer to receive information and those that they trust most;
- Baselines, such as pre-existing levels of awareness or compliance, against which results can be compared.

Without such information, projects and campaigns can be misdirected, or fail to demonstrate results even if they are successful. Therefore, best practice MEL starts with formative evaluation.

Measurement and evaluation *during* activities involves monitoring and analysis to identify if progress is being made towards achievement of objectives. For example: Have the organization's messages been reported in media articles? Are members of the target audience viewing online content such as videos?

Measurement and evaluation *after* activities have been completed attempt to identify what has happened as a result.

⁹ Here the single term 'evaluation' is used to incorporate measurement and learning.

¹⁰ Rice, R. & Atkin, C. (Eds.) (2013). *Public communication campaigns* (4th ed.), Sage, p. 13.

Theory of Change and the Logical Framework Approach (LFA)

Best practice planning, design, and measurement, evaluation, and learning of programs¹¹ are grounded in *theory of change* and a Logical Framework Approach (LFA). These bring evidence, logic, and systematicity to planning and MEL.

Theory of change involves two key steps: (1) identification of all the possible interventions and/or stimuli that can lead to change in a particular context and (2) examination of the evidence and assumptions that underpin such beliefs. A theory of change informs the design and planning of programs, as well as measurement, evaluation, and learning MEL by:

- Describing how and why the planners think change happens. This is often identified by hypothesis building such as "if we do X, then Y will change because ..."; and
- Questioning whether there is evidence to support hypotheses in relation to change, or whether they are based on assumptions and, if so, are the assumptions reasonable.¹²

Examples of how theory of change and a LFA are applied are provided in the following sections.

Program Logic Models

At the simplest level, a Logical Framework Approach is illustrated by program logic models.

Change does not occur in a single simple step. Psychology, social psychology, and research in public communication fields of practice such as advertising show that, other than in cases of dramatic events or experiences, awareness, attitudes, and behaviour are influenced by multiple *touchpoints* and progressively form in stages, often over time.

Programs with specific objectives (ideally **SMART objectives**)¹³ involve a number of stages from planning and collecting *inputs* to *activities* such as production and distribution of various *outputs*, to (if successful) *outcomes* and *impact*.

A basic program logic model that has been widely used in literature and practice related to aid programs, international development, and even business planning is shown in Figure 3.

Figure 3. Basic program logic model (Kellogg Foundation, 2004, p. 1, first published 1998).



Your planned work

Your intended results

Program logic models vary in terms of the names and number of stages. For example, while the widelyused Kellogg Foundation model lists five stages (Figure 3), a contemporary guide to program logic models lists seven stages by separating short, intermediate, and long-term outcomes (see Figure 4).

Some refer to short-term outcomes as *out-takes* (see Figure 8), while others refer to long-term outcomes as *results*. But all involve recognition of and planning based on a progressive series of stages from what health communicators refer to as *interventions* (and others call *activities*) to caused effects.

¹¹ The term 'program' is used in program evaluation theory to refer to any undertaking or series of undertakings designed to achieve a pre-determined outcome. It can include products, projects, and campaigns.

¹² Tools4Dev [Tools for Development] (n.d.) http://www.tools4dev.org/resources/theory-of-change-vs-logicalframework-whats-the-difference-in-practice

¹³ Objectives that are specific, measureable, achievable, relevant (to overall goals), and time-bound.

Figure 4. Program logic model (Knowlton & Phillips, 2014, p. 37).



It is important to recognize that human communication does not automatically or easily progress from activities and outputs to outcomes and impact. Research shows that humans misinterpret and even resist information and persuasive messages in some circumstances (e.g., because of *cognitive dissonance* and other factors). Also, people apply *selective attention* and are subject to *confirmation bias* and other influences, causing them to interact with information and with others in *filter bubbles* and *echo chambers*. See more details on the 'blockages' to communication under 'Organizational Listening'.

Logframes

Logframes map out the details of a Logical Framework Approach for specific activities. They come in various forms, but typically identify the theory of change developed, as well as assumptions made (risks), and identify the indicators (evidence) required to show whether or not an activity is successful.

Figure 5 is an example of a logframe presented as a table or 'matrix' for a communication activity designed to improve health among villages – in this case, a video on hygiene. In the left column, the matrix lists the stages of the project from undertaking *activities* (at the bottom) to producing *outputs* that are expected to lead to *outcomes* which ultimately achieve the goal or objective of the project (broadly reflecting the stages of typical program logic models).

In the right column, Figure 5 shows the assumptions involved in planning and implementing the activity. For example, the effectiveness of the video depends on the villages having internet connectivity or access to video players. Distribution of the video also depends on the villagers viewing the video, remembering its messages, and ultimately applying the messages. Part of a logical framework approach in this instance is seeking evidence that the villages have internet connectivity or video players, and that they watch videos.

Importantly, this logframe also identifies the indicators that can show if the stages are successful and how these indicators will be obtained - i.e., the third and fourth columns provide the MEL strategy for this activity.

Stage	Project Summary	Risks and Assumptions	Indicators	Means of verification
Goal	Improved health among villages	N/A	Reduced incidence of disease vs. baseline	WHO data on disease incidence
Outcomes	Longer term: Implementation of hygiene measures Short term: Awareness of hygiene measures	Viewers will apply messages Viewers will remember messages	% application vs. baseline % awareness vs. baseline	Observation study Survey
Outputs	Video view by 3,000 villagers	Target audience will watch video	No. of video views	Web statistics
Activities	Video on hygiene	Video players or internet connection available	Production complete, on time, on budget	Internal reporting

Figure 5. Sample logframe matrix (based on Department of International Development, 2011).

In contemporary literature, program logic models and logframes have increasingly merged, with many models (basic diagrams of the stages) incorporating details of what needs to be achieved at each stage and how this will be measured. The program logic model published in the Evaluation guidelines of the World Health Organization is an example of this (see Figure 6).

Figure 6. WHO program logic model / frame.



There are a number of important features to note about WHO logic model / logframe.

- It follows the approach and stages of program logic models developed since the early 1970s as part of a large body of evaluation theory;
- It identifies the importance of achieving outcomes and impact not simply distributing outputs. The WHO's GPW13 specifically states that all work must be "impact and outcome focussed".¹⁴
- It recognizes that impact is influenced by multiple factors not only communication. As the model states, "communication is just one factor leading to impact". This means that identifying the impact of communication can be challenging, as *causality* needs to be established (see 'Causality / Causation' later in this section). Also, there are often delays in achieving impact e.g., impact such as disease reduction sometimes takes time (indicated by the gap between stages in the model). Notwithstanding, MEL must progress to at least *outcomes* and ideally put in place methods to identify impact in due course.

Another way of describing this series of stages in a communication context is the *informational and experiential journey* to behaviour change. Understanding this journey allows communicators to design activities that effectively reach and influence audiences, and to fine-tune and adapt approaches when required.

¹⁴ World Health Organization. (2018). *13th General Program of Work*. Geneva, p. 49. https://apps.who.int/iris/bitstream/handle/10665/324775/WHO-PRP-18.1-eng.pdf

Value-Adding Vs. Cost Centre

Program logic models draw attention to a further compelling reason that communicators must apply MEL and, importantly, why they must identify outcomes and, ideally, impact. *Inputs* (such as design, printing, HTML coding, etc.), *activities* such as planning, writing, and organizing events, and even distribution of materials (*outputs*) are **costs** in terms of time and money. During the stages of inputs, activities and outputs, a communication function is a *cost centre* in an organization. It is only when *outcomes* and *impact* are demonstrated that a communication function becomes a *value-adding centre*.

With a management focus on minimizing costs and prioritizing value-adding activities, MEL is the path to ensuring – and being able to demonstrate – that you are contributing value.

Figure 7. The value points in the stages of a program.



Goals and Objectives

As shown in Figure 5, goals are broad and often long-term, such as 'universal health care', 'elimination of malaria', etc. In program logic models and logframes, *impact* typically aligns to organization goals. Thus, impact often occurs beyond the life of a communication program or campaign as a 'downstream' result and may have multiple contributing factors. MEL should attempt to show how an activity or campaign contributes to impact.

Objectives are specific to activities and campaigns. Therefore, at a minimum, **communication should achieve** *outcomes* **as expressed in objectives** (see 'SMART Objectives').

SMART Objectives

SMART objectives are those that are:

- Specific;
- Measurable;
- Achievable;
- **Relevant** (e.g., to overall organizational goals); and
- Time-bound (i.e., achieved by a specific time).

The first two key criteria – specific and measurable – require objectives to include target numbers, or other indicators of success, such as a percentage increase in vaccination or cancer screening, or a high level of satisfaction among key stakeholders. Objectives without indicators of 'what success will look like' are unmeasurable.

Key Performance Indicators – What Should be Measured and Evaluated?

Indicators of success should be identified and collected at each stage of communication activities and campaigns. The most relevant indicators are referred to as **key performance indicators (KPIs)**.

In the first instance, at a formative (planning) stage, theory of change, logframes, and advanced program logic models are informed by existing internal and external evidence such as public health statistics, trend data, case studies, and past experience that can help identify the likelihood of a proposed activity achieving its objectives. If available data, case studies, and past experience indicate a low likelihood of a proposed program being effective, an alternative approach should be considered. Conversely, if available data, case studies, and past experience indicate a high likelihood of a proposed activity being effective, those responsible can proceed with reasonable confidence.

The input stage of program logic models also identifies the importance of obtaining some key measures and indicators as **baselines**. If a program aims to increase awareness, for instance, the level of awareness prior to communication needs to be identified so pre- and post- comparison can occur.

KPIs also should be identified at activities, outputs, and particularly at outcomes and impact stages.

Metrics and Indicators

Indicators of success can be *quantitative* and *qualitative*.

Quantitative measures include a range of numbers, commonly referred to as **metrics** in M&E and MEL, such as counts and percentages (e.g., number of views of videos or readers of publications, percentage increase in awareness, etc.).

Qualitative measures include a range of other indicators, such as positive comments and feedback, endorsements, and ratings in which numbers are used to indicate a level, such as satisfaction. These are commonly referred to simply as **indicators**.

Metrics are *numeric* measures, such as numbers denoting counts and percentages.

Indicators include *qualitative* factors that indicate success, such as ratings, as well as positive comments and feedback, endorsements or, in some cases, winning awards.

Metrics are *cardinal* numbers (also referred to as natural or 'real' numbers) that indicate quantity based on counting and mathematical calculations.

Some qualitative measures can be expressed using *nominal*, *ordinal*, and *interval* numbers that stand for something such as a category (e.g., 1 = male; 2 = female; 3 = Prefer not to say); denote an order (first, second, third, etc.); or express ratings on a scale. For example, satisfaction or trust may be rated on a 0–5 Likert scale or a 0–10 scale.

Note also that KPIs refer to "the critical (key) indicators of progress toward an intended result"¹⁵ – not to every possible indicator.

Most programs have 5–7 KPIs in total. At least one should be selected at each key stage – particularly at the advanced stages of outcomes, and impact.

Identification of KPIs is directly linked to SMART objectives – in simple terms, **KPIs are derived from objectives**. For example, if an objective is to increase awareness of some issue or practice, the KPIs is evidence of increased awareness of that issue or practice. If an objective is to increase hand washing and sanitiser use, the KPIs is evidence of these practices greater than pre-communication levels.

KPIs are compared with baseline data to show the level of change.

AMEC Recommendations

Figure 8 shows the stages of communication addressed in the evaluation framework of the International Association for Measurement and Evaluation of Communication (AMEC) – a six-stage program logic model after listing objectives as step one. The AMEC Evaluation Framework includes an interactive online application that can be used for all types of communication activities. It is open source freeware.

As shown in Figure 8, the AMEC Evaluation Framework uses the term **out-takes** as a stage in its sixstage model. This term, used mainly in the public relations field, is another way of referring to **shortterm outcomes**, which are identified separately to long-term outcomes in models such as Figure 4.

¹⁵ KPI.org. (2020). What is a key performance indicator (KPI)? https://kpi.org/KPI-Basics

The AMEC Evaluation Framework also identifies the final stage of its model as "organizational impact". This focus is critiqued by researchers, who describe it as "organization-centric". Impact on stakeholders and society should be identified more broadly, not only from the perspective of the organization.¹⁶

However, a significant and important part of the AMEC evaluation framework is a **taxonomy** (a comprehensive list or 'look-up' table) of metrics and indicators relevant to various communication activities and channels, together with the methods for generating these. See Table 1 for the wide range of metrics and indicators, and methods to obtain these, based on the AMEC evaluation framework and other research literature. This should be viewed as a 'menu' of possibilities and options. Only a selection of the metrics and indicators listed should be selected as appropriate to each stage of a communication activity or campaign.

For details of the AMEC Evaluation Framework, its guidelines, and taxonomy see:

- https://amecorg.com/amecframework to view the model and introduction;
- https://amecorg.com/amecframework/home/supporting-material/taxonomy/#taxonomy-table to view the taxonomy of metrics, indicators and methods. This is a list of options, from which one or two metrics and indicators are typically selected for each stage of evaluation;
- https://amecorg.com/amecframework/framework/interactive-framework to access the application.

AMEC also publishes *The Barcelona Principles*, a set of seven core principles for MEL – see https://amecorg.com/2020/07/barcelona-principles-3-0.

Figure 8. Evaluation framework of the International Association for Measurement and Evaluation of Communication (2016).



¹⁶ Gregory, A., & Macnamara, J. (2019). An evaluation U-turn: From narrow organizational objectives to broad accountability. *Public Relations Review*, *45*(5). https://doi.org/10.1016/j.pubrev.2019.101838; Macnamara, J. (2020). Embracing evaluation theory to overcome "stasis": Informing standards, impact and methodology. *Corporate Communications: An International Journal*, *25*(2), 339–354, p. 340. https://doi.org/10.1108/CCIJ-04-2019-0044

One of the latest and most comprehensive program logic models for planning and evaluation of public communication is shown in Figure 9. While aligning with the WHO program logic model, this model incorporates a number of key elements not recognized or inadequately recognized in other models, including:

- It includes stakeholders, publics, and society not only the organization as participants in communication. Other models of communication and PR evaluation are organization-centric in that they do not include stakeholders, publics, and society other than as 'targets' for information and persuasive communication;
- Communication objectives are set taking account of the needs, interests, and concerns of stakeholders, publics, and society, not only of the organization's objectives. This may involve formative research, consultation, and even collaboration;
- The arrows in the model in relation to objectives and the stages indicate that the information flow and communication are two-way, not only one-way distribution of information;
- The dotted lines represent **feedback loops** in which learnings are used to adjust or refine strategy;
- The stages of programs and campaigns inputs, activities, outputs, outcomes, and impact are shown as overlapping, rather than as discrete separated steps. In practice, activities continue while outputs are being accessed by audiences; outcomes should begin to occur while activities and under way and outputs are being distributed, etc.;
- All communication occurs within **contexts** economic, political, social, cultural, and competitive, shown as the shaded background.

Integrated Planning and Evaluation Model

Figure 9. Integrated model of evaluation recognizing stakeholder and societal as well as organizational interests, objectives, and impact (Macnamara, 2018).



Table 1 provides a comprehensive list of metrics and indicators applicable at each stage for various types of communication. Evaluators typically select one or two relevant indicators for each stage.

Taxonomy of Stages, Indicators, and Methods

Table 1.	Taxonomy of the stages and activities	that create the informational and experie	ential journey of audiences (Macnamara, 20)18).
----------	---------------------------------------	---	--	-------

Stages in	INPUTS	ACTIVITIES	OUTPUTS	OUTC	OMES	IMPACT
communication				Short-term (outtakes)	$) \rightarrow Long-term$	
Brief description	What is needed to plan and prepare communication	What is done to produce and implement communication	What is put out or done that reaches and engages the target public/s	What the target public/s take out of communication and initial responses	What sustainable effects the communication has on target public/s	What results are caused, in full or in part, by the communication
FOCUS of this stage	 Planning and preparation 	 Production Distribution 	 Exposure Reception 	 Attention Awareness Understanding Learning¹⁷ Interest Engagement Consideration 	 Attitude change Satisfaction Trust Preference Intention Advocacy 	 Target public's action/behaviour in line with objectives Organization ROI Social/political change Organization change (See examples below)
EXAMPLES of what happens at this stage	 Formative research to establish baselines (e.g., audience surveys) Formative research to gain insights (e.g., stakeholder interviews, behavioural insights) Budgeting Strategic planning Resource allocation (e.g., staff, agencies) 	 Writing (e.g., news releases, brochures) Media relations Design Web site development Social media site development Publication production (e.g., newsletters, reports) Event management Sponsorships Advertising campaign development 	 Media publicity Advertising placement Web content posted Brochures distributed Newsletters distributed Videos posted Events staged Social media posts (e.g., in blogs, Facebook) E-mail/e-marketing Community engagement 	 Web visits Return visits Video views Social media engagement Comments posted Inquiries Registrations 	 Social media discussion Feedback Reviews Satisfaction levels Trust levels Trialling Joining Strategic relationships Partnerships 	 Sales revenue Donations (e.g., money, blood) Compliance (e.g., <i>immunization</i> rates) Customer retention/loyalty Staff retention Social benefits (e.g., public health improvement, quality of life/well- being increase) Policy change

The continuation of Table 1 on the next page shows metrics and other indicators that identify progress along the informational and experiential journey.

¹⁷ Audience learning is necessary in order to achieve some outcomes and impact (e.g., creating understanding of a disease in order to effectively promote treatments). In other cases, behaviour change may be triggered by incentives or enforcement such as fines.

METRICS & INDICATORS	 SMART objectives Targets / KPIs¹⁸ Baselines / benchmarks (e.g., existing awareness) Audience needs, preferences, etc. identified Channel preferences identified 	 No. of media releases issued No. of interviews, news conferences, etc. Web content posted Publications, events, etc. on time on budget Videos /GIFs produced Positive feedback Awards 	 Publicity volume Reach (e.g. audited circulation, ratings) Impressions¹⁹ Share of voice Tone/sentiment²⁰ Messages in media Event attendance Clickthrough rates Cost per click / view 	 Web statistics (e.g., views) Likes Shares Retweets Recall ²¹ Positive comments Inquiries Registrations 	 Customer satisfaction Employee satisfaction Reputation Trust Reduced criticism Conversions²² Endorsements 	 Targets met (e.g., revenue, donations, immunization rates) Customer retention Employee retention Cost savings (e.g., reduced health costs) Positive opinion Public support
METHODS for obtaining the metrics and indicators	 Literature review Environmental scanning Database statistics Case study analysis SWOT analysis²³ Market/social research (e.g., surveys, focus groups) Pre-testing 	 Activity reports Distribution statistics Expert/peer review Award entries or applications 	 Media metrics (e.g., audited circulation, TV ratings) Web statistics Advertising TARPs²⁴ Media monitoring Media content analysis (quantitative) Social media analysis (quantitative) 	 Social media analysis (qualitative) Surveys (e.g., awareness, message recall) Database statistics (e.g., inquiries, registrations) Trend data 	 Social media analysis (qualitative) Surveys Interviews Focus groups Ethnography Netnography²⁵ Net Promoter Score (NPS)²⁶ Market mix modelling²⁷ Random controlled trials (RCTs)²⁸ 	 Policy approval Database records (e.g., sales, cancer screening rates, etc.) CRM data Employee surveys Cost benefit analysis Return on Investment (ROI) RCTs²¹ Quality of life / well-being (e.g., QALYs / DALYs)²⁹

* Methods are listed top-down in order of rigour and sophistication. Best practice MEL advances as far to the right as possible and as far down as possible.

¹⁸ *Key performance indicators* (KPIs). Typically, a program will have 3–5, ideally including some at outputs, outcomes and impact stages.

¹⁹ *Impressions* is an estimate of the potential total audience based on media circulation statistics, TV ratings, or social media followers.

²⁰ *Tone* or *sentiment*, sometimes called *favorability*, is a media metric that rates traditional or social media content as positive, negative or neutral, or as a score.

²¹ *Recall* is widely used in evaluating advertising. Usually, recall measures the capacity of audience members to recall an activity such as an advertisement or commercial.

²² Conversions refer to moving someone from one stage to a more engaged stage (e.g., a viewer of a web page to register for an event or subscribe to a newsletter).

²³ SWOT analysis is a strategic planning tool that involves identifying *strengths, weaknesses, opportunities* and *threats*.

²⁴ TARP is an abbreviation of *target audience rating points*, a measurement system used for evaluating the reach of advertising.

²⁵ The application of ethnography (close first-hand observation) online.

²⁶ Net Promoter Score (NPS) is a post-transaction survey that asks participants to rate how likely they are to recommend a product or service to others on a scale of 0–10.

²⁷ *Market mix modelling* involves adding or deleting elements from the marketing/communication mix and monitoring results to identify what causes change.

²⁸ Random controlled trials (RCTs) involve study of a randomly selected *control group* not exposed to or intervention compared with a randomly selected *treatment group*.

²⁹ QALY is an abbreviation of *quality adjusted life years* and DALY is an abbreviation of *disability adjusted life years*, method of evaluating human well-being.

Applying the right metrics and indicators at each stage

Most communication professionals do some measurement and evaluation and many recognize the stages of program logic models / logframes. However, one of the common pitfalls is *substitution error*. This refers to using metrics or indicators appropriate at one stage as alleged evidence of results at another stage.³⁰ In particular, substitution error typically involves low-level indicators being applied at a higher level, as pointed out by Emeritus Professor, Jim Grunig, who defined 'substitution error' as use of "a metric gathered at one level of analysis to show an outcome at a higher level of analysis."³¹

There are two simple tests that can help ensure the right metrics and indicators are used at the right stage of a program or campaign. The first is the *Doer Test*.³² This asks the question 'Who is doing what the indicator shows?' As shown in Figure 10:

- *Activities* and *outputs* are what communication practitioners do (e.g., producing, distributing, and placing content in media such as traditional media, social media, websites, etc.);
- Outcomes are what target audiences do as a result of the activities and outputs such as evidence to show receipt and response.

A second related test is the *Site Test*.³³ The Site Test identifies where the reported action or phenomenon occurs.

- What appears in media traditional or social and in media / channels such as websites, videos, event programs, presentations, briefings, etc. are *outputs*. Messages in media are potentially on their way to a target audience, but it cannot be assumed that they will be seen, heard or read, or that they will create the desired response;
- What happens in target audiences to show receipt and response (cognitively, affectively, or behaviourally) are *outcomes*. Outcomes occur in the minds and behaviour of target audiences;
- What happens in society, industry or a field of practice caused wholly or partly by the activities and outputs is *impact*. (See Figure 10)

Methods

A number of the methods for collecting or generating metrics and indicators that inform MEL are shown in Table 1 (bottom row).

These include methods to obtain **primary data** (data generated from proactive research and analysis) and **secondary data** (data drawn from existing sources).

Also, these include methods to obtain *quantitative* and *qualitative* data. The *Barcelona Principles 3.0* launched by AMEC at its 2020 Global Summit stipulate that MEL "should include both qualitative and quantitative analysis".³⁴ A simple example of why this is important is the case of media publicity. A high volume of media reporting (quantitative) is not an indicator of success if the media reporting is negative (qualitative). Similarly, a large number of social media followers (a quantitative metric) is not an indicator of success if many post negative comments (a qualitative indicator). Usually, a combination of quantitative and qualitative data is required for reliable and valid MEL.

A key point to note in measurement, evaluation, and learning is that you do not have to collect and analyse every piece of data required. You can draw on publicly available data (e.g., public health data, national statistics, etc.) and data collected by other departments or teams in your own organization. **Data sharing is a key strategy for cost-efficient and time-efficient MEL.**

There is a wide range of methods for obtaining or generating data to inform MEL. The common methods are as follows.

³⁰ Cutlip, M., Center, A., & Broom, G. (1985). *Effective public relations* (6th ed.). Prentice-Hall, p. 295.

³¹ Grunig, J. (2008). Conceptualizing quantitative research in public relations. In B. van Ruler, A. Verčič, & D. Verčič (Eds.), *Public relations metrics, research and evaluation* (pp. 88–119). Routledge, p. 89.

³² Macnamara, J. (2020, November 29). Avoiding 'substitution error' to get past half-way M&E. [Web log post]. Institute for Public Relations. https://instituteforpr.org/avoiding-substitution-error-to-get-past-half-way-me

³³ Ibid.

³⁴ Association for Measurement and Evaluation of Communication. (2020). *Barcelona Principles* 3.0. https://amecorg.com/2020/07/barcelona-principles-3-0

Figure 10. A 'dissected' program logic model to illustrating the 'Doer' and 'Site' tests (Macnamara, 2021).



Primary quantitative research methods:

- Structured surveys (custom-designed, or standardized such as RepTrak[®] reputation studies or Net Promoter Score [NPS] surveys);
- Structured interviews;
- Content analysis (e.g., media content analysis focussed on volume, share of voice, trends, etc.);
- Social media analysis focussed on volume of likes, followers, fans, tweets, posts, etc.;
- Social network analysis (SNA) to identify the volume and intensity of online connections;
- Random controlled trials (RCTs) and experiments;
- Cost-benefit analysis (CBA);
- Return on investment (ROI) studies.

Primary qualitative research methods:

- Interviews (e.g., with key stakeholders, partners, or samples of a target audience such as readers of publications, viewers of videos, attendees at events, etc.);
- Focus groups;
- Viewing panels to review videos and films;
- Content and textual analysis that measures tone or sentiment of media coverage;
- Social media analysis that identifies shares, retweets, and tracks the tone of comments;
- Ethnography (i.e., direct personal observation);
- Video ethnography (video recording of activities);
- Netnography (observation of online behaviour such as in discussion groups, forums, etc.);
- Participatory action research (PAR) in which researchers and those involved in a process collaborate to identify opportunities for improvement or solving of problems;
- Behavioural insights, which involves testing of multiple interventions and messages with audience samples to identify those most effective in triggering behaviour change. BI research pays particularly attention to discovering the emotional triggers of behaviour among particular groups;³⁵
- Quality adjusted life years (QALY) and Disability adjusted life years (DALY) studies identify the effect on various conditions and interventions of human well-being.

Secondary data sources:

- Circulation of media publications (e.g., from a circulations audit database);
- Ratings of TV programs and audience statistics from published ratings and audience surveys;
- Website statistics automatically collected by website tracking software;
- Internal or external databases, such as records of registrations, subscriptions, donations, etc.;
- Public databases (e.g., public health statistics, road toll records, economic data);
- Case studies that have been published (e.g., reports of similar projects or campaigns);
- Academic literature, such as research reports.

A Note About Advertising Value Equivalents (AVEs)

The logframes, program logic models, and lists of metrics and indicators provided in the following tables do not include estimates of "earned³⁶ media value", also commonly referred to as *advertising value equivalents* (AVEs), because this method of evaluating media publicity is regarded by researchers as invalid and is disavowed by international bodies including AMEC. *The Barcelona Principles*, a set of broad standards agreed to by more than 200 delegates from public relations and communication organizations in 33 countries in 2010, states as its fifth principle: "AVEs are not a measure of public relations."³⁷ Also, a number of leading industry and academic researchers also have strongly condemned the use of AVEs because:

³⁵ In BI, research seek to identify three types of influencing factors: (a) cognitive factors (how do people process information and understand and reality; (b) social factors (how people decide to do something as result of what other people do and think around them); and (c) environmental factors (how physical environments affect what people do.

³⁶ 'Earned' media is print or broadcast content gained without payment on the basis of its news value or human interest, also commonly called *editorial*. Other forms of media content are referred to as paid, shared (social media), and owned (e.g., organization websites and publications), with the four types collectively referred to as the PESO model.

³⁷ Association for Measurement and Evaluation of Communication. (2015). Barcelona Principles 2.0. Retrieved from https://amecorg.com/barcelona-principles-2-0

- 1. The figure calculated is **not a 'value'** it is the estimated *cost* if the same amount of space and/or time was purchased as advertising;
- 2. Editorial and advertising content in media are **not equivalent**. While advertising content is controlled, which means it is always highly positive and well positioned, editorial media coverage can be positive, neutral, or even negative, and it may be prominent or poorly placed.

Causality / Causation

A key consideration in evaluation is establishing *causality*, also referred to as *causation*. In short, this is a requirement to establish that what was done actually caused the reported outcomes and/or impacts.

Correlation should not be confused with or assumed to illustrate causality (i.e., even if desired outcomes occur, they could be caused by some other influences or factors). For example, an increase in vaccination may occur during and immediately following a campaign. But it may be caused by an outbreak of measles and peer discussion on social media. In health communication, a number of organizations such as local health authorities may be distributing similar messages. Establishing causality involves identifying the cause of change as credibly and reliably as possible.

There are three rules to establish causality as follows:

- Temporal precedence The alleged cause must precede the claim effect. It sounds obvious, but some effects are evident before communication (e.g., stock price rises may cause positive media publicity, or be caused by positive media publicity);
- Covariation of cause and effect There must be a clear relationship between the alleged cause and effect. For example, there must be evidence that the audience accessed and used information provided;
- 3. There must be *no plausible alternative explanation* That is, other possible causes must be ruled out as far as possible.

Causality can sometimes be established through logical deduction. For example, if (1) an effect occurred during or soon after an intervention of some kind, and (2) those affected can be shown to have received the information designed to achieve the effect, and (3) there were no other obvious stimulants or factors related to the effect, this can be reported to show reasonable evidence of causality.

Digital media produce 'digital trails' that facilitate the establishment of causality. For example, #hashtags embedded in social media messages allow the tracking of online posts that relate to a topic or issue. Links to URLs³⁸ (unique web page names) also can be used to identify the sources of web visits.

Formal research methods that can demonstrate causality include the following.

- Market mix modelling This technique removes some elements from a marketing mix in commercial or social marketing and then monitors change in effects as a test. For example, in a campaign involving paid media advertising, media publicity, social media posts, and website information, media publicity may be ceased for a period. If results decline (such as awareness, or conversions to registrations for an event), the amount of the decline can be attributed to media publicity. Conversely, if there is no effect, the activity removed from the mix is shown to be ineffective.
- Random controlled trials (RCTs) RCTs are regarded as the 'gold standard' in research. RCTs involve random selection of a *control group* and a *treatment group* with identical characteristics. The treatment or intervention is administered to the treatment group, but not to the control group, who receive either no intervention, or a placebo. The difference in measured results between the two groups is the effect of the intervention.
- Behavioural insights BI can help design messaging that will attract attention, be understood, and trigger engagement and participation. Through testing a number of interventions and messages and measuring their effects on audience behaviour in advance of rolling out projects and campaigns, BI can identify the primary causes of compliance and change.

³⁸ Acronym for unique resource locator, the unique name of each web page made up of words, numbers, and symbols.

Market mix modelling is often not possible and RCTs are usually time consuming and sometimes costly to conduct. Hence, these methods appear at the far right and bottom of the taxonomy of metrics, indicators, and methods shown in Table 1.

Organizational Listening and the Fallacy of 'Injection Theory'

In its simplest sense, measurement, evaluation, and learning (MEL) is organizational listening.

Listening has long been recognized as essential for effective interpersonal communication and relationships. Recent research has shown that organizational listening is equally essential for effective public communication.³⁹

Underlying the frequent lack of MEL and a demonstrated lack of organizational listening is a history of assumptions and *transmissional* thinking about communication. Eminent sociologist James Carey remarked in the late 1980s that "the transmission view of communication is the commonest in our culture."⁴⁰

Contemporary communication studies have shown the fallacy of transmission models and thinking about communication as presented in the 1949 Shannon and Weaver *Mathematical Model of Communication*⁴¹ and the similar *source, sender, channel, receiver* (SMCR) model of Berlo.⁴² These are referred to as 'injection theory' and the 'hypodermic needle' concept of communication because they focussed on sending messages and assumed that received messages equated to awareness or desired attitude or behaviour change. Contemporary research recognizes that **communication between humans is contingent and context bound**. It depends on many factors and is subject to many influences. These are too numerous to list here, but include:

- Selective exposure people tend to read particular newspapers, join particular groups, and follow others on social media selectively based on the extent to which views expressed match their own. This is widely recognized today in discussion of *filter bubbles* and *echo chambers*;
- Selective attention people pay attention to certain information and ignore other information;
- Cognitive dissonance people often reject information that conflicts with their existing perceptions, attitudes, and behaviour;
- Confirmation bias people often interpret information in ways that confirm their existing views;
- Reactance people sometimes reject information when they feel pressured to change;
- Peer influence also can contradict information received.

Transmissional 'injection' thinking leads to assumptions that attempts at communication always work. The history of personal conflicts, wars, lost election campaigns, divorce, and break-ups of families and friends – along with multi-million-dollar advertising campaigns that fail to convince consumers – shows that this is not the case. Communication works sometimes – and sometimes it doesn't. Sometimes it works exponentially – and sometimes partially. Occasionally it causes an opposite reaction to its objectives. Often the cause of communication failure is beyond the control of the initiator, located in economic, social, cultural, political, demographic, or psychographic characteristics of the intended audiences.

Therefore, **evaluation is essential**. It is a 'must do' and should be included in all proposals and plans for communication.

³⁹ Macnamara, J. (2016). Organizational listening: The missing essential in public communication. Peter Lang; Macnamara, J. (2019). Explicating listening in organization-public communication: Theory, practices, technologies. International Journal of Communication, 13, 5183–5204. https://ijoc.org/index.php/ijoc/article/view/11996/2839

⁴⁰ Carey, J. (2009). *Communication as culture: Essays on media and culture* (rev. ed.). Routledge, p. 12. (Original work published 1989)

⁴¹ Shannon, C., & Weaver, W. (1949). *The mathematical theory of communication*. University of Illinois.

⁴² Berlo, K. (1960). *The process of communication*. Rinehart & Winston.

Reporting

The key findings of measurement, evaluation, and learning (MEL) need to be reported for two reasons:

- 1. Accountability, which is often a requirement under organization policy;⁴³ and
- 2. Sharing findings with relevant functional units and staff in order to **apply learnings** (i.e., translating findings into practice).

Positive findings provide justification for expenditure and affirm strategies.

However, negative findings should not be left out of, or 'buried', in reports and they should not be 'swept under the carpet' operationally. Negative as well as positive findings provide learning that can be applied to improve future communication. Open, honest reporting is a sign of a mature organization and the professionalism of practitioners.

There are a number of formats for MEL reports. The format of reports should be selected to meet the requirements of management, but also they should take into account the most effective ways of presenting information. Common formats include:

- Written narrative (i.e., text with relevant numbers presented in the document) It should be noted, however, that busy managers and staff often do not have time to read long documents, and text only documents are less appealing than some other formats. If written reports are produced, an *executive summary* should be provided. However, when this is done, many will only read the executive summary;
- 2. Written **narrative with tables and charts** to illustrate key findings *Visualization* improves the effectiveness of communication. As the aphorism says: 'A picture is worth a thousand words';
- 3. A table / matrix presenting key metrics and indicators for each stage a project or campaign;
- 4. **Dashboards** As the metaphor suggests, these involve a display of graphic and numeric data in a panel conceptually similar to that presented to operators of motor vehicles. MEL dashboards can include some text (e.g., sample social media posts) or bullet-point summaries of findings, but primarily illustrate data so they can be understood quickly and easily.

Most researchers and MEL experts recommend a substantial level of **data visualization**, such as pie and line charts, histograms, and scatter plots, as well as tables to summarize data.

Some dashboards are one page only. However, they can include multiple pages when reporting a range of data and findings.

A hybrid method of reporting is to present a dashboard with a short executive summary to provide brief explanations and list key findings as bullet points (e.g., one-page dashboard and one page of bullet-point text).

A sample table / matrix used by the New South Wales Government for MEL reporting (with data fictionalized for confidentiality) is provided in Figure 11.

A sample dashboard produced by a government agency as part of the UK Government Communication Service (GCS) evaluation framework is provided in Figure 12.

While dashboards can be produced manually, a range of specialist PC, enterprise, and online applications are available to produce dashboards. These allow customization to suit the needs of an organization. Also, once templates are created, updated data can be imported in minutes. Popular PC applications include Tableau and Microsoft Power BI (business intelligence). A widely used online application is Datorama.

⁴³ The WHO *13th General Program of Work* emphasizes the importance of accountability (WHO, 2018). See https://apps.who.int/iris/bitstream/handle/10665/324775/WHO-PRP-18.1-eng.pdf, pp. 43–49.

Summary

Key concepts and principles outlined in this section, which should be carefully noted and applied in planning, undertaking, and reporting MEL for communication, include the following.

- 1. Communication involves **achieving shared meaning and understanding** between participants. In the case of persuasive strategic communication, it is designed to lead to desired changes in awareness, attitudes, or behaviour. Distributing information is only one part of communication.
- 2. Like other activities and programs, **public communication activities and campaigns involve a number of stages, commonly identified as** *inputs, activities, outputs, outcomes,* and *impact.*
- 3. Planning of effective communication activities and campaigns is **aided by** *theory of change* that identifies all the possible pathways to achieve a desired change and the logical framework approach (LFA) that is set out in logframes and *program logic models* identifying stages and indicators of success at each stage.
- 4. All **communication activities and campaigns should have SMART objectives**, identified early in the planning stage (specific, measurable, achievable, relevant, and time-bound).
- 5. SMART objectives should **identify desired outcomes and impact**, not only activities and outputs, and all communication should seek to achieve outcomes and impact. For example, 'to generate positive media publicity' is only an interim step in communication. SMART outcome and impact-oriented objectives are 'to create awareness' of XYZ health practice; 'to increase hand washing so as to reduce disease transmission', 'to increase trust in and support for the WHO', etc.
- 6. In addition to monitoring, which involves observation of relevant factors and collection of raw data, measurement need to be carried at various stages in communication activities and campaigns to gain comparative data.
- 7. Evaluation involves making a judgement about the efficacy and effectiveness of activities and campaigns, ideally based on evidence gained through systematic measurement.
- 8. Based on measurement and evaluation, learning should be applied for continuous improvement of communication activities and campaigns.
- 9. **MEL should be conducted before, during, and after communication activities and campaigns**, referred to as *formative*, *process*, and *summative* research or evaluation. Formative MEL provides understanding of target audience needs, interests, concerns, and channel preferences, and establishes baselines against which future measures can be compared. Process evaluation involves monitoring and progressive review to fine-tune strategy. Summative evaluation identifies outcomes and impact following communication activities and campaigns.
- 10. There is a range of metrics (numbers) and indicators (including qualitative indicators) applicable to communication at inputs, activities, outputs, outcomes, and impact stages. Key performance indicators (quantitative and qualitative) should be selected for each stage of communication activities and campaigns.

NOTE:

You do not have to collect and analyse every piece of data required. You can draw on publicly available data (e.g., public health data, national statistics, etc.) and data collected by other departments or teams in your organization. **Data sharing is a key strategy for cost-efficient and time-efficient MEL.**

Figure 11. Table / matrix used for MEL reporting by the NSW Government. (Data is fictionalized for confidentiality.)

				COVERNMENT REPORT & Cabinet
AGENCY: Transport for NSW	CAMPAIGN: Smithtown	Toll Road BUDGET: \$40	0,000	PERIOD: 1 Feb - 30 June 2019
 Organisational Objectives To demonstrate the NSW Government's commitment to Northern Sydney To generate traffic on the new Smithtown Toll Road, reducing congestion on urban streets To generate sufficient revenue to cover road maintenance costs 	 Communication Objectives To create 80% awareness of the new Smithtown Toll Road (STR) in local area by 30 June 2017 To convert 25% of local commuters to use the new Smithtown Toll Road by 30 June 2017 To create a favourable image of the NSW Government's Transport Strategy 		t Audiences nuting from Northern City Centre or southern in Northern Sydney rs and community	 Key Messages The NSW Government is committed to improving transport in Northern Sydney The new Smithtown Toll Road will substantially reduce commute times for motorists The NSW Government is committed to developing the amenity of Northern Sydney and supporting the community
 INPUTS Pre-campaign survey in Northern Sydney to identify: Current awareness of the Smithtown Toll Road project Current commuting patterns Awareness of and attitudes towards NSW Government transport strategy RTA data on traffic flows from Northern Sydney (volume and route) Focus groups in Northern Sydney to identify attitudes towards tolls and toll levels Research literature review (similar tollway promotions) 	 Analyse pre-campaign survey and focus groups findings Strategic planning based on research findings and objectives Media advertising bookings (local press; metro press; radio) Creative development Media relations with key local and state media Web site design and content production E-newsletter for local residents (design and produce) Plan social media campaign (Facebook page; Twitter hashtag; Instagram photos) Stakeholder engagement (e.g., meetings with local councillors and action groups) 	 OUTPUTS Local press advertising (75% target audience reach; 200,000 impressions) Metro press advertising (20% target audience reach; 2.2 million gross impressions) Radio advertising (45% TARPs) Media articles in local and metro press (24 articles; 1.1 million impressions) Web site content (120,000 visitors; 68,000 views of highlights page; 18,000 views of highlights page; 18,000 views of sideo) E-newsletter (distributed to 85,000 residents) Facebook page posted (12 photos; 11 Wall posts) 24 tweets 12 photos on Instagram 	OUTCOMES Short-term: • 44,000 Facebook likes • 9,000 retweets • 12,000 shares • Positive comments on sor • 11,000 registrations to rec- e-newsletter regularly • Mid-campaign survey Apr 1 = 400) - 54% aware ness o • 10% switch of local commu- to the STR (RTA data 1 Apr Long-term: • Post-campaign survey 20 J (n = 640) found 89% aware of STR; 39% intend to use • 29% of local commuters switched to STR (RTA data Jul 17)	 Cial Series Congestion reduced in local streets (RTA traffic counters recorded 24% decline on 18 local streets) Post-campaign survey reported 62% of local residents "very satisfied" with the STR; 58% say "substantially reduced commute time" Dept of Health reported improved air quality in local area Toll fees (revenue) on target Interviews with key stakeholder groups found broad support (e.g., local schools very supportive) Rumour of increasing toll fees identified, requiring issue management * RTA = Roads & Traffic Authority

Figure 12. A dashboard reporting traditional and digital media volume, sentiment, and trends (outputs), and public and stakeholder opinion (outcomes).⁴⁴



⁴⁴ Department of Transport. (2016). Her Majesty's Government, UK.

2. MEDIA PUBLICITY

Mass media, particularly newspapers, radio, and television, remain important information sources for billions of people worldwide. While media effects vary, due to various factors in human information processing, as outlined under 'Organization Listening and the Fallacy of Injection Theory' in the previous section, most public communication utilizes traditional mass media, in addition to other channels.

Public health communication commonly seeks to generate media reporting in news, lifestyle, current affairs, and specialist health publications and programs through:

- Media relations (engaging with editors and journalists to build relationships, interest them in health issues, and answer their questions);
- Media releases and other information materials such as speeches, statements, fact sheets, reports, photographs, and video footage;
- *Media events* such as news conferences and briefings.

The aim of media relations, media releases, and media events is to generate media reporting and programming that convey the messages of the World Health Organization to relevant audiences.

Media Monitoring

To identify the extent to which WHO messages are presented to audiences through mass media and track what is said about the WHO (and its peers if required), media monitoring is conducted. Media monitoring also can provide information about issues of concern to the WHO and the public through accessing comments reported in media.

Media monitoring is typically undertaken by specialist media monitoring agencies that access published, online, and broadcast media and retrieve content relevant to clients based on key words searches. Media monitoring provides either the full text of media articles, or summaries, depending on the brief.

The process of monitoring media content is *data collection*.

To gain meaningful insights from that data, most media monitoring goes a step further to provide *counts* of items⁴⁵ and mentions of the name of an organization, product, issue, or campaign in tables and sometimes in charts. Therefore, media monitoring reports that present counts as well as content are a *quantitative* measure of media coverage related to an organization and/or its interests.

While monitoring the level of media discussion on various topics provides some useful data, independent media sometimes report negatively as well as positively from an organization's perspective. Also, some articles and programs fail to fully or accurately present an organization's messages. Furthermore, they often present alternative or contrary views from other sources.

Media monitoring is therefore not sufficient for measurement, evaluation, and learning (MEL). A high volume of negative media coverage, or media coverage that does not present key messages, does not constitute effective communication. Therefore, best practice MEL goes a step further to examine media coverage *qualitatively*.

Media Content Analysis

Content analysis is a well-established research method that has been used since the mid-eighteenth century. In recent times, content analysis has been used in linguistics to analyze patterns in language and by psychologists to analyze lengthy transcripts of recorded sessions with patients in order to identify patterns and key themes that lead to understanding of attitudes and perceptions.

In the 20th century, content analysis was applied to media content, initially by Harold Lasswell in studies of propaganda.⁴⁶

⁴⁵ 'Items' is used as a general term in media monitoring and analysis to refer to news reports, articles, broadcast reports, editorials, opinion columns, and other forms of media content.

⁴⁶ Lasswell, H. (1927). *Propaganda techniques in the world war*. New York: Knopf.

In the 1920s and 1930s, media content analysis was used to study the content of movies to examine portrayals of violence, and later in numerous mass communication studies of films and television to examine portrayals of women as well as violence, racism, and other important social issues.

Much early use of content analysis was quantitative, employing counts of mentions (e.g., names and key words) and some basic statistical analysis, such as calculating percentages and ratios (e.g., for comparison by region, country, state, or source).

More recently, content analysis has included *qualitative* analysis techniques. Some refer to qualitative analysis of text as *textual analysis* or *text analysis*. *Thematic, narrative*, and *semantic* analysis are also close cousins. However, a leading authority on content analysis, Kimberley Neuendorf, describes content analysis as "the primary message-centred methodology".⁴⁷ This points to a key feature of qualitative content analysis – looking beyond counts to identify the messages that are presented in content.

Qualitative content analysis of media coverage can be conducted at a number of levels, as follows.

- 1. At a basic level, in addition to providing quantitative data, media content analysis assesses the tone, or what some refer to as the sentiment, or favourability of media content. This is described as *positive, neutral,* or *negative*. Some analysis systems use different but equivalent terms, such as *favourable, neutral,* and *unfavourable*; or *beneficial, neutral,* and *adverse* (see Figure 13). Tone or sentiment ratings are based on the words used. This level of analysis is sometimes done manually, but increasingly it is done by software programs that use **natural language processing** (NLP) to match words in media content against customized dictionaries installed in the application.
- 2. At a more advanced level, qualitative content analysis is based on human coding. This involves trained analysts assigning words and phrases to categories in a coding sheet or application. Categories can be pre-determined (e.g., an organization's product names and messages), leading to deductive analysis, or added during analysis based on inductive analysis (discovery of frequent words or phrases). Human coding is more time-consuming than basic computer-automated tone and sentiment ratings - and therefore more expensive. However, coding allows content to be categorized by topic, message, source, prominence,⁴⁸ placement,⁴⁹ size/length, and other criteria to produce sophisticated multivariate analysis. For instance, a positive mention or message that is not prominent (e.g., towards the middle or even end of an article) is not as likely to be seen or have influence as a positive message in a headline or first paragraph. Similarly, a positive mention or message that is placed towards the bottom of a long-scrolling web page is not as likely to be seen or have influence as one featured in a story. Conversely, negative mentions and messages that are not prominent or well positioned are less likely to be seen, and likely to have less influence than prominent, well-placed mentions and messages. Researchers regard multivariate content analysis that takes into account the tone/sentiment of words and phrases as well as positioning, placement, the size or length of items, the sources quoted, and other factors, as more reliable than simple univariate positive/neutral/negative ratings of items. Content analysis based on human coding often uses multiple coders and includes intercoder reliability assessment to ensure coding is not one coder's subjective interpretation.
- 3. Advanced automated media content analysis systems use natural language processing and machine learning software that, rather than arbitrarily matching words against pre-set dictionaries, allows an analyst to instruct the application on how to interpret words and phrases, after which the software automatically applies this interpretation to all content. Analyst input is considered important because, despite their increasing capabilities, computers cannot always interpret text and images the way humans do. Advanced text and content analysis applications increasingly use artificial intelligence (AI) to search for and recognize patterns and themes in textual content. Applications such as SAS Analytics, Leximancer, QDA Miner from Provalis Research, and Method52⁵⁰ produced by Demos in partnership with the University of Sussex and CASM Consulting, are examples of high-end machine learning content analysis tools.

⁴⁷ Neuendorf, K. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage, p. 1.

⁴⁸ Prominence typically refers to the position of mentions or messages within an item.

⁴⁹ Placement typically refers to where an item appears within a publication, web page, or program.

⁵⁰ Bartlett, J., Miller, C., Reffin, J., Weir, D., Wibberly, S. (2014). Vox Digitas. Demos. http://www.demos.co.uk/files/Vox_Digitas_-_web.pdf?1408832211

Figure 13. An example of basic quantitative and qualitative media content analysis.⁵¹



Figure 14. An example of quantitative and qualitative media analysis in relation to vaccines.⁵²



Media content analysis is able to produce data including:

- Number of **media items** (volume) published and broadcast on various topics;
- Number of mentions (volume) of an organization and various topics (there may be more than one mention in media items);
- Volume of media coverage by region, country, or state;
- Number of times various sources⁵³ are quoted;
- Share of voice compared with other sources of information on a topic (typically reported as a %);
- Sentiment, tone, or favourability of media coverage overall, of topics, and of sources;
- Key messages presented in media and their frequency (positive and negative);
- Topics most frequently reported by media;
- Trends in volume and sentiment of media reporting of topics, organizations, and sources over periods.

⁵¹ Polecat. (2020). Weekly report: Face masks (31 March–15 April) for World Health Organization.

 ⁵² Polecat. (2020). Weekly report: COVID-19 vaccines (10–26 June, 2020 for World Health Organization.
 ⁵³ Sources can be organizations, or individual spokespersons and their organization, depending on the brief provided.

A Word About Outputs versus Outcomes

Media monitoring and media content analysis data such as 'reach', 'impressions', and/or positive sentiment, tone, or favourability of media coverage are often claimed as evidence of *outcomes* of communication. However, this is what is termed 'substitution error' – substituting a measure of one thing for something else, usually substituting a measure from one level to a higher level. (See 'Applying the right metrics and indicators at each stage' in Section 1.)

'Reach' and 'impressions' within the target audience demographic, and positive sentiment, tone, or favourability, are evidence of effective *outputs*.

While achieving positive media coverage in media with large audiences is a step towards communication, media analytics provide no indication of whether the target audiences read, watched, or listened to the information. Even if they did, media analytics provide no evidence of whether the content was believed, remembered, or whether it had any effect on awareness, attitudes, or behaviour.

The number of impressions your campaign receives is not the number of people who were impressed.

Outcomes are indicated by evidence of receipt and response of target audiences to messages presented to them.

Appropriate metrics and indicators will be identified if objectives are kept in mind. For example, the objective of a communication campaign should not be to generate media coverage – or even positive media coverage. That is an interim step undertaken in order to achieve some result. A SMART objective is likely to be to increase awareness of a health issue, change attitudes, or even change behaviour. Those are outcomes.

It also needs to be recognized that metrics such as 'reach' and 'impressions' are hypothetical. Reach is the estimated <u>potential</u> number of readers or viewers based on the circulation of a newspaper or audience of a program. Impressions do not refer to impression made on audiences; this metric is also is a hypothetical (the total number of times that an audience might have seen an item or mention). See definitions of these terms in the 'Glossary of Terms' at the front of the WHO *MEL Manual*.

Effects on media consumers cannot be assumed or taken for granted.

Remember the 'Doer Test' to tell the difference between outputs and outcomes in communication:

- Outputs are what communication practitioners do and achieve (quantitatively and qualitatively);
- Outcomes are what target audience members do as a result at a *cognitive*, *affective*, *conative*, or behavioural level (i.e., thinking, emotional engagement, intention, or action).

(See the 'dissected' program logic model in Figure 10.)

Key Metrics, Indicators, and Methods for Traditional Media Publicity MEL

Table 2 provides a list of recommended metrics, indicators, and methods to obtain these for applying MEL to media publicity.

Table 2. Metrics, indicators, and methods recommended for MEL in relation to traditional media publicity.

Stages in strategic	INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES		IMPACT
communication				Short-term (Outtakes)	Long-term	
Brief description of stages	What is needed to plan and prepare communication	What is done to produce and implement communication	What is put out and achieved that reaches and positively engages audiences	What audiences take out of communication and initial responses	What sustainable effects the communication has on audiences	What results are caused, in full or in part, by the communication
MEDIA PUBLICITY - Newspapers - Digital media - Radio - Television	 Audience research or published data on channels most used by the target audience⁵⁴ Baseline media statistics (e.g., average number of media items per week/month in past months; average sentiment in past months 	 News releases News conferences / media briefings Interviews Reports released to media 	 Number of media items published, broadcast, or posted online Reach based on audited circulations; broadcast program ratings; website visitors Impressions Sentiment / tone / favourability of media items Key messages⁵⁵ Share of voice (% of discussion on a topic)⁵⁶ 	 Positive comments online or letters to the editor Conversions (e.g., clickthroughs from digital media to WHO website) Statements of support (e.g., by media commentators or non-WHO interviewees) 	 Increased awareness (e.g., of preventive measures and/or treatments) Positive attitude change (e.g., increased support for WHO, positive reputation) Behaviour change (e.g., increased preventive actions) Adoption of WHO recommendations in policy/practice Increased donations 	 Improved public health (e.g., reduced disease, infant mortality, etc.) Financial savings in health costs Improved wellbeing and quality of life) (NOTE: Evidence that audiences accessed and used WHO information shows causality)
METHODS	 Media statistics Past media monitoring Past media content analysis 	 Activity reports 	 Media monitoring Media content analysis 	 Media content analysis Website statistics 	 Stakeholder interviews Target audience survey Reports or feedback on policy change Donor database 	 Public surveys Public health data

⁵⁴

⁵⁵

This notes that different countries and different age groups use different types of media. Key messages in media coverages should include those of the organization and competitive voices. Share of voice can be tracked overall and on specific issues (e.g., by #hashtag). A high share of voice identifies that an organization or individual source is likely to be influencing public discussion. Accordingly, a high share of voice is close to an early outcome and is sometimes used as a predictor of an outcome. 56

3. SOCIAL MEDIA

Social media are rapidly growing as a source of information and news for people around the world. Therefore, they cannot be ignored. To the contrary, despite challenges as discussed in the following, they offer many benefits and form a key part of public communication programs for government, non-government organizations, non-profits, and corporations.

The affordances of social media are:

- Fast 24/7 communication;
- Large scale reach to millions of people;
- Low-cost albeit monitoring and posting can be time intensive;
- Availability of metrics in relation to reach and engagement, such as likes, follows, shares, retweets, and views of videos.

On the other hand, challenges to be addressed in relation to social media include:

- They are open platforms without 'gatekeepers' such as editors. Therefore, misinformation and disinformation can be published and spread widely;
- Some of the major platforms, such as Facebook, have been criticized for a lack of responsibility and governance in relation to disinformation and privacy.

Particularly in an emergency situation, such as an epidemic or pandemic, social media become important for organizations such as WHO and national and local health authorities because of the speed with which they can distribute information, and also because considerable discussion occurs on social platforms that reflects public concerns, fears, beliefs, and behaviours.

Thus, social media are important sites for gaining insights into public attitudes, perceptions, and behaviour, as well as channels for distributing information. Specifically, social media can be used to:

- Identify key issues of concern among stakeholders and the community so that these can be responded to with appropriate action or information (*formative* evaluation);
- Identify misinformation and disinformation so that this can be refuted and replaced with accurate information (*process* evaluation);
- Identify where WHO information and messages are landing and what the response is, as part of identifying communication effectiveness (*summative* evaluation).

Social Listening

Therefore, the first strategy in relation to social media is using them as a channel for listening. Listening through social media is undertaken using media monitoring applied to social media.

Social media listening can be done manually by staff monitoring popular platforms such as Facebook, Twitter, and Instagram, as well as (if appropriate) localized social platforms such as Weibo and WeChat. However, this can be time intensive, as well as subjective rather than systematic.

Social media listening can be aided by use of specialist Web applications such as Brandwatch, Hootsuite, and Sprout Social, as well as high-end modules offered by SAS Analytics and Salesforce. Specialist monitoring agencies and communication/public relations consultants also use proprietary applications as well as open source tools to provide social media monitoring services.

Social listening is undertaken in the first instance by tracking *key words and phrases* of interest on selected platforms (e.g., masks; vaccine; etc. used in combination with a coronavirus). WHO and its key spokespersons or campaign themes should be among key words tracked, as this enables evaluation of how prominently WHO is positioned in public communication.

Additional qualitative analysis is recommended to identify *key messages* in relation to issues of interest - i.e., what is said about them. This enables identification of misinformation and disinformation, as well as the exposure of messages distributed by WHO and other health authorities.

In addition, collection of some quantitative *metrics* is important to identify the reach and frequency of mentions and messages, which helps determine their likely impact. Metrics that are relevant in social media monitoring are:

- Number of *mentions* of key words or phrases (e.g., vaccines, quarantine; etc.) and #hashtags;
- Number of *likes*;
- Number of *followers* of key spokespersons and influencers (both positive and negative) often counted as *impressions*;
- Shares of posts;
- Retweets of tweets on Twitter.

A combination of (1) tracking placement of key words and phrases and (2) distribution and engagement metrics allows identification of the major discourses in circulation and their likely impact.

Applying this analysis specifically to WHO messages and metrics allows identification of its effectiveness in informing stakeholders and the public and countering misinformation and disinformation (see next section).

Accounts and #hashtags

In addition to establishing and operating accounts on major social media platforms, hashtags are an important part of a social media strategy. Hashtags – so-called because they place the hash symbol (#) in front of a name or term – turn the word into a link. Hashtags allow the tracking of all online conversations in relation to an issue or topic that uses the hashtag. In addition to Twitter, which pioneered hashtags, most social media platforms now support hashtags.⁵⁷

Benchmarks and Comparative Analysis

Due to the fast-moving and changing nature of social media communication, it is often not possible to conduct research to establish benchmarks. When benchmarks cannot be established during what professional communicators colloquially refer to as 'peacetime' (before an event, issue, or crisis), data captured quickly during the first weeks of a program or campaign can be used as benchmarks. Data captured later can then be compared with early metrics and indicators to show progress.

Internal Social Media Platforms

There are also a number of social media platforms that can operate on an organization's network securely behind its 'firewall', affording security and effectively creating a closed user group for communication between employees and between employees and management. See 'Internal Communication'.

Social Network Analysis (SNA)

In addition to monitoring, measuring, and evaluating the content of social media with a view to understanding its likely effects (potential outcomes and impact), **key influencers** in social media discussion can be identified through social network analysis (SNA).

SNA is a quantitative research and analysis method that counts the number of connections to participants in discussion of various topics. Social media users who gain a high number of connections in the form of follows, fans, likes, etc., are termed *hubs*. The individuals who link to them are referred to as *nodes*, and the connections are referred to as *links* in SNA. Social media users who become hubs (with a large number of connections) are considered *key influencers*. Social media strategy typically monitors influencers closely and often seeks their support because of their reach and status.

Key Metrics, Indicators, and Methods for Social Media MEL

Table 3 provides a list of recommended metrics, indicators, and methods to obtain these for applying MEL to social media content.

⁵⁷ See https://mashable.com/2013/10/08/what-is-hashtag

Table 3. Metrics, indicators, and methods recommended for MEL in relation to social media.

Stages in strategic	INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES		IMPACT
communication				Short-term (Outtakes)	Long-term	
Brief description of stages	What is needed to plan and prepare communication	What is done to produce and implement communication	What is put out and achieved that reaches and positively engages audiences	What audiences take out of communication and initial responses	What sustainable effects the communication has on audiences	What results are caused, in full or in part, by the communication
SOCIAL MEDIA - Facebook - Twitter - Weibo - WeChat - Line - Kakou - TencentQQ - TikTok - YouTube - Etc.	 Audience research or published data on platforms most used by the target audience⁵⁸ Baseline social media statistics (likes, followers, shares, etc.) 	 Number of own posts (tweets, videos, comments, responses, corrections, etc.) Posted links to WHO information 	 Reach based on clicks to WHO accounts and #hashtags, followers, fans, mentions Share of voice (% of discussion on a topic)⁵⁹ Recruitment of influencers to support WHO messaging 	 Engagement / response low level – (e.g., likes) Engagement / response (retweets, shares, positive comments)⁶⁰ Conversion (e.g., clickthroughs from social media to WHO website) Statements of support (e.g., by influencers or authorities) 	 Increased awareness (e.g., of preventive measures or treatments) Positive attitude change (e.g., increased support for WHO, positive reputation) Behaviour change (e.g., increased preventive actions) Adoption of WHO recommendations in policy/practice Increased donations 	 Improved public health (e.g., reduced disease, infant mortality, etc.) Financial savings in health costs Improved wellbeing and quality of life) (NOTE: Evidence that audiences accessed and used WHO social media sites shows causality)
METHODS	 Literature Google Analytics 	 Activity reports Google Analytics 	 Google Analytics 	 Google Analytics 	 Key stakeholder interviews Target audience survey Reports or feedback on policy change Donor database 	 Public surveys Public health data

⁵⁸

This notes that different countries and different age groups use different social media platforms. Share of voice identifies how effectively the organization is influencing discussion. Also, other key influencers can be identified by share of voice. Share of voice can be tracked overall and on specific issues (e.g., by #hashtag). Some metrics such as shares and retweets indicate both reach (extended reach) and engagement. 59

⁶⁰

4. WEBSITES

A wide range of metrics can be collected from websites. These can be collected:

- Internally from software installed on the organization's servers; and
- Externally from third party web analytics providers that use specialized tracking software and techniques such as page tagging (code embedded in web pages to allow tracking) and cookies (small applets that attach to visitors' web browsers that sends information on their interactions back to web servers).

Internal Website Tracking

All organization web servers collect a range of data in relation to transactions on a website such as:

- Visitors to the site;
- Pages they go to (page views);
- Content that they interact with, such as videos (views);
- How long visitors stay on pages or viewing videos (duration);
- Documents that they serve to visitors such as PDFs (i.e., **downloads**).

These data are stored on web servers in what are called *logfiles* (logs of transactions).

The IT department of organizations is able to supply website analytics available from software or services installed or purchased as part of its web strategy. This may be a raw 'data dump', however.

A number of applications are available to display website data in tables and charts that can be analyzed to provide useful insights into website use and performance. Over 50% of the top 10,000 websites in the world use **Google Analytics** [sign in required] for analysis of their websites – a free service that generates detailed statistics about visitors to a website, where visitors are coming from, what they are doing on the site, how long they stay, and how often they come back.⁶¹

P	age	Page Views 📀 🤟	Unique Page Views	Avg. Time on Page	Entrances ③	Bounce Rate 🕜	% Exit 💿
		78,533 % of Total: 100.00% (78,533)	56,020 % of Total: 100.00% (56,020)	00:00:41 Avg for View: 00:00:41 (0.00%)	19,898 % of Total: 100.00% (19,898)	49.24% Avg for View: 49.24% (0.00%)	25.34% Avg for View: 25.34% (0.00%)
1.	/home @	16,215 (20.65%)	12,038 (21.49%)	00:00:46	9,543 (47.96%)	45.00%	36.83%
2.	/google+redesign/shop+by+bran Jyoutube	7,006 (8.92%)	5,823 (10.39%)	00:00:46	5,303 (26.65%)	60.42%	54.68%
3.	/basket.html	3,932 (5.01%)	1,680 (3.00%)	00:01:24	205 (1.03%)	37.69%	15.18%
4.	/google+redesign/apparel/mens J	3,708 (4.72%)	2,633 (4.70%)	00:00:40	251 (1.26%)	52.87%	19.42%
5.	/google+redesign/accessories	3,614 (4.60%)	2,851 (5.09%)	00:00:32	300 (1.51%)	69.33%	19.23%
6.	/signin.html @	3,118 (3.97%)	2,341 (4.18%)	00:00:26	467 (2.35%)	31.76%	14.72%
7.	/google+redesign/bags	2,939 (3.74%)	2,251 (4.02%)	00:00:26	286 (1.44%)	40.28%	14.49%
8.	/google+redesign/office	2,790 (3.55%)	2,143 (3.83%)	00:00:41	85 (0.43%)	48.84%	18.96%
9.	/google+redesign/nest/nest-usa 🖉	2,604 (3.32%)	1,593 (2.84%)	00:00:53	661 (3.32%)	27.93%	22.12%
10.	/google+redesign/drinkware	2,510 (3.20%)	1,981 (3.54%)	00:00:31	209 (1.05%)	53.49%	15.22%

Figure 15. An example of basic web statistics from Google Analytics.

⁶¹ Google Analytics 360 (formerly called Google Analytics Premium) is a commercial enterprise solution. See https://marketingplatform.google.com/about

Figure 16. An example of key web statistics from Google Analytics.



Information about how to set up and use Google Analytics is available in beginner's guides to Google Analytics and there are free websites with tips on how to create dashboards to visually report key website metrics.

There are also a number of commercial products available to produce website analytics. These include:

- Adobe Analytics;
- Crazy Egg;
- IBM Digital Analytics;
- Parse.ly;
- StatCounter;
- Webtrends Analytics.⁶²

Beyond online web-based tracking and visualization tools, there are also desktop graphics applications for producing high quality reports and dashboard of web analytics, such as **Tableau**.

Third Party Website Tracking

Specialist web analytics suppliers collect and provide additional data, such as *click analysis* (what visitors click on and where they click to next); *geolocation* data; and embed invisible code⁶³ in web pages that call back the web server from the rendered page, providing information about the 'client' that can then be aggregated with other data by the web analytics company.

Key Metrics, Indicators, and Methods for Website MEL

- Bounce rate The percentage of visits that are single-page visits without any other interactions (clicks) on that page. A single click in a particular session is called a 'bounce'.
- **Click** Refers to a single instance of a user following a hyperlink from one page in a site to another.
- Click path The chronological sequence of page views within a visit or session.
- Clickthrough rate (CTR) is a ratio of users who click on a specific link to the number of total users who view a page, e-mail, or advertisement. It is commonly used to measure the success of an online campaign for a particular product, service, or message.
- Conversion A broad term that refers to converting a web visitor to some other more advanced form of engagement, such as clicking a link to access more information; register for an event; subscribe (e.g., to receive a newsletter); join a group or activity; or buy a product or service online.

⁶² A comprehensive list of web analytics tools is available online at https://www.trustradius.com/webanalytics?f=25&s=25. Web analytics tools and companies are frequently sold and rebranded, so changes occur regularly in the marketplace.

⁶³ Code such as AJAX (Asynchronous Javascript and XML) enables a range of web tracking functionality.

- Frequency Measures how often visitors come to a website in a given time period. It is calculated by dividing the total number of sessions (or visits) by the total number of unique visitors during a specified period, such as a month or year.
- Hit A request for a file from the web server. Available only in log analysis. The number of hits received by a website is frequently cited to assert its popularity, but this number is extremely misleading and dramatically overestimates popularity. A single web-page typically consists of multiple (often dozens) of discrete files, each of which is counted as a hit as the page is downloaded, so the number of hits is really an arbitrary number more reflective of the complexity of individual pages on the website than the website's actual popularity. The total number of *visits* or *page views* provides a more realistic and accurate assessment of popularity.
- **New visitor** A first time visitor to a web page.
- Page time viewed / PageVisibility time / Page view duration The time a single page (or a blog, video, or ad) is on the screen, measured as the difference between the time of the request for that page and the time of the next recorded request. If there is no next recorded request, then the viewing time of that instance of that page is not included in reports.
- Page view A request for a file, or sometimes an event such as a mouse click, that is defined as a 'page' in the setup of the web analytics tool.
- Repeat visitor A unique visitor who has visited the site previously. The period between the last and current visit is called visitor *recency* and is measured in days.
- Return visitor Same as repeat visitor. Return visitor is the more common term.
- Session duration / Visit duration The average amount of time that visitors spend on a site each time they visit.
- Visit / Session A visit or session is defined as a series of page requests or, in the case of tags, image requests from the same uniquely identified client. A unique client is commonly identified by an IP address or a unique ID that is placed in the browser cookie.
- Visitor / Unique visitor / Unique user The uniquely identified 'client' (web visitor) who is generating page views or hits within a defined period (e.g. day, week or month). A unique visitor (as opposed to the same visitor making multiple visits to a web page) is usually identified by a combination of machine identification (the computer) and browser (e.g., Firefox on that machine). Identification is usually via a cookie that has been placed on the computer by the site page code.

Table 4 provides a list of recommended metrics, indicators, and methods to obtain these for applying MEL to websites.

Table 4. Metrics, indicators, and methods for MEL in relation to websites.

Stages in strategic	INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	
communication				Short-term (Outtakes) Long-term	
Communication Brief description of stages WEBSITE & WEB PAGES	 What is needed to plan and prepare communication Audience survey showing interest in web content Pre-test web pages by showing mock-ups to audience samples 	What is done to produce and implement communication Number of web pages posted Number of blog posts Number of videos posted	 What is put out and achieved that reaches and positively engages audiences Number of visitors Number of page views of key pages (also called sessions) Number of views of videos Duration of visits and views Return visits⁶⁴ 	Shor-term (Outrakes)Long-termWhat audiences take out of communication and initial responsesWhat sustainable effects the communication has on audiences• Clickthroughs to specific information (e.g., campaign materials)• Increased awareness (e.g., of preventive measures and/or treatments)• Number of downloads (e.g., of reports, posters, or brochures)• Positive attitude change (e.g., increased support for WHO, positive reputation)• Engagement such as posting questions or inquiries• Behaviour change (e.g., 	 What results are caused, in full or in part, by the communication Improved public health (e.g., reduced disease, infant mortality, etc.) Financial savings in health costs Improved wellbeing and quality of life) (NOTE: Evidence that audiences accessed and used WHO website information shows causality)
				(e.g., Web user feedback plug- in)	
METHODS	 Audience survey Pre-testing 	 Web statistics 	 Web statistics 	 Web statistics Web feedback plug-in (e.g., pop-up feedback form on pages)⁶⁵ Key stakeholder interviews Survey 	 Public health data Survey

⁶⁴ These statistics are usually automatically and freely available from web analytics tools such as Google Analytics, so more than the usual number of metrics and indicators are listed.

⁶⁵ A number of Website plug-ins are available that offer visitors pop-up mini-surveys to gain feedback on pages (e.g., Usabilla).

5. PUBLICATIONS

Publications are an important mode of communications for the World Health Organization.

Publications are increasingly digital, such as PDFs and online web pages. These include:

- Reports;
- Brochures;
- Pamphlets;
- Newsletters;
- Posters.

WHO has traditionally monitored PDF downloads and maintained records of the distribution of physical copies of publications. However, it must be remembered that this provides measures of *outputs* (what information has been put out to audiences); it does not provide evidence of outcomes (what audiences do with the information and what has happened as a result).

Formative Evaluation

As with most communication activities, MEL should begin *before* publications are designed or produced. Formative MEL for publications can be based on a 'mock up' of a publication shown to a sample of the intended audience, or at least an outline of the proposed format and contents distributed in an *ex-ante* survey. Formative MEL provides insights into intended reader interest, concerns, current awareness and knowledge levels, as well as their interest in receiving and reading publications. It can also inform practical decisions such as provision of printed or digital copies and language preferences.

This learning informs the format and design as well as the content of publications.

Process MEL

Process MEL can include monitoring of distribution, requests for copies, and views and downloads online. Such data indicates the extent to which the audience is accessing and engaging with the publication.

Summative MEL

After distribution of publications, summative MEL provides information on what readers thought of the publication, what messages they received and understood, whether the publication satisfied their information needs, interests, and concerns, and whether they want to continue to receive WHO publications.

This learning informs decisions to produce future versions of the publication, as well as its format, design, and content.

Summative MEL usually requires surveys of readers. Feedback gained from key stakeholders, such as health workers, can also provide useful insights into the effectiveness of publications.

Metrics, Indicators, and Methods

Table 5 provides a list of recommended metrics, indicators, and methods to obtain these for applying MEL to publications.

A **sample** *ex-ante* **reader survey** to identify audience needs and channel preferences is provided in APPENDIX A).

A **sample** *ex-post* **reader survey** to evaluate the effectiveness of publications is provided in APPENDIX B.



For the Future

Towards the Healthiest and Safest Region

A vision for WHO work with Member States and partners in the Western Pacific



Table 5. Metrics, indicators, and methods for MEL in relation to publications.

Stages in strategic	INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	
communication				Short-term (Outtakes) Long-term	
Brief description of stages	What is needed to plan and prepare communication	What is done to produce and implement communication	What is put out and achieved that reaches and positively engages audiences	What audiences What sustainable take out of effects the communication and communication has initial responses on audiences	What results are caused, in full or in part, by the communication
(Print & digital)	 to identify: Channel preference/need for a new publication Reader volume and satisfaction for existing publications (baseline) Pre-test publication content and mock- ups with audience samples 	 Graphic design Coding / posting 	reach (e.g., number of copies distributed, subscriptions, registrations, online views, downloads) ⁶⁶	 recuback (e.g., of links or attachments) Shares (e.g., of links or attachments) Clickthroughs for more information Subscriptions Recall of content (e.g., topics, key messages) Reader satisfaction (e.g., usefulness, relevance, etc.) Recaul of content (e.g., topics, key messages) Recader satisfaction (e.g., usefulness, relevance, etc.) 	 health (e.g., reduced disease, infant mortality, etc.) Financial savings in health costs Improved wellbeing and quality of life) (NOTE: Evidence that audiences accessed and used a WHO publication shows causality)
METHODS	 Audience feedback Audience survey Pre-testing 	 Activity report 	 Distribution statistics Web statistics if digital 	 Monitoring social media Website statistics if digital Reader survey 	 Public health data Survey

⁶⁶ Subscriptions and registrations can be measured by database records (e.g., mailing lists). Online views and downloads can be obtained from Web statistics.

6. VIDEOS / FILMS

Videos and films are an important part of many communication activities and campaigns.

Formative MEL

Ideally, videos and films are evaluated at a formative stage before production. Formative evaluation, based on an outline of the concept, the script, or 'story boards' provides insights into audience knowledge levels, interests, and concerns, as well as their propensity for viewing videos and films.

This learning ensures that videos and films appropriately address the intended audience. Most videos need to be tailored to the interests of audiences.

Summative MEL

After distribution / screening of videos and films, summative evaluation provides information on what viewers thought of the video or film, what messages they received and understood, and whether it satisfied their information needs, interests, and concerns.

This learning informs the production of future videos and films.

Viewing Panels

A key method for evaluation of videos and films is a viewing panel selected from the intended audience in the case of formative MEL and the actual audience for summative MEL.

The following is an example of a viewing panel conducted by a facilitator in relation to maternal and child health. It can be customised to other topics.

Orientation of Panel Members

Facilitator: Good morning and welcome. Thanks for taking the time to join our discussion about health issues in our community.

My name is [INSERT] and I will serve as the moderator for today's discussion. Assisting me is [insert if appropriate]

The purpose of today's discussion is to listen to your opinions about a video/film about health. You were invited to this group because you [INSERT why they were invited].

Our panel today will take [INSERT] hour. You will be asked some questions about health issues in your community, shown a short video/film about health, and then asked additional questions.

We are going to record you so we can remember what you said. Is that OK?

Please know that there are no right or wrong answers to the questions I am about to ask. We expect that you may have differing points of view. Please feel free to share your opinion even if it differs from what others have said.

If you want to follow up on something that someone has said, if you want to agree, disagree, or if you want to give an example, feel free to do that. We're interested in hearing from each of you. So if you're talking a lot, I may ask you to give others a chance to answer a question. And if you aren't saying much, I may call on you to share your thoughts. We just want to make sure we hear from all of you.

Questions (before showing any segments)

Facilitator: There are many health issues facing our communities. Which health issues are the most important to people in your community?

[Facilitator Note: Don't ask about specific health issues such as maternal or infant health. Explore what health issues they identify without prompting. If someone brings up the topic of maternal or infant health, then you can probe into the reasons why.]

[Facilitator Note: After each health topic is mentioned, ask the following question.]

Q: On a scale of 1-10, with 10 being the most important, how important is [INSERT topic]?

[Facilitator Note: If no one mentions a specific area of health on which feedback is sought, then raise this as a specific question and ask participants to rate its importance to them as above.]

Facilitator: Thank you for your answers about **health issues in your community. There are a lot of really pressing issues facing our communities.**

Now, I want to show you a short video/film about maternal and child health.

Here are some of the questions that I am going to ask you to talk about at the end of the video/film.

- 1. What are the key messages are you taking away from the video/film?
- 2. Did you learn anything new? If yes, what?
- 3. Have you thought about things differently? If yes, which topics have you thought about?
- 4. How would you describe this video/film to others?

SHOW THE VIDEO / FILM.

Facilitator: Thanks for watching. Now, I want to hear about your opinions about the video/film. (Facilitator Note: Some may want to see a section again. Do not show the entire segment, ask which part they want to see again. Find it and show it.)

- Q: What are the main messages that you take away from the video/film? Q: What is the "most memorable message" or "lesson learned"?
- Q: What role do women have in ensuring maternal and infant health?Q. Do men have in role?Q. If yes, what is men's role?
- Q: Now that you have watched the video/film, does your score change on how important mother and infant health is to you? On a scale of 1-10, with 10 meaning the most important, how important is **maternal and infant health**?
- Q: Have you thought about maternal and infant differently after the video/film? If yes, which topics have you thought about?
 - Q: Do you plan to do anything that was suggested during the video/film?
 - Q: Explain. What actions will you now take? Why?

Facilitator: Now, I want you to describe the video/film in your own words. (Facilitator Note: Keep this brief: Focus on adjectives participants use to describe the video/film.)

Exit Questions

Facilitator: Thank you for your answers today. We appreciate your comments about the video/film.

- Q: Is there anything that you are interested in or concerned about that we did not ask?
- Q: Is there anything else that you want to share with us?

(Facilitator Note: Alternatively, you could also include a "Suppose" question such as the following.]

Q: Suppose that you want to talk to a **male** family member or male friend about **maternal and infant health. What would be your key message to him about this health issue?**

Closing

Thank you for your time. We appreciate your answers and hope you enjoyed the video/film.

Metrics, Indicators, and Methods

Table 6 provides a list of recommended and commonly used metrics, indicators, and methods to obtain these for applying MEL to videos and films.

Training and Technical Videos

While all videos and films should be tailored to the target audience as far as possible, videos produced and used for training and technical purposes such as demonstration require a high level of customization and audience relevance. In most cases, such videos are based on a script developed collaboratively with the technical experts in the field to ensure relevance to the audience and the objectives, as well as accuracy. Table 6. Metrics, indicators, and methods for MEL in relation to videos and films.

Stages in strategic	INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	IMPACT
communication				Short-term (Outtakes) Long-term	
Brief description of stages	What is needed to plan and prepare communication	What is done to produce and implement communication	What is put out and achieved that reaches and positively engages audiences	What audiencesWhat sustainabletake out ofeffects thecommunication andcommunication hasinitial responseson audiences	What results are caused, in full or in part, by the communication
VIDEOS FILMS (including GIFs)	 Viewing panel to test concept, script, or first cut footage Audience research such as a survey or focus groups to identify information needs, interests, cultural understandings, etc. 	 Number of videos produced Number of videos posted online Number of screenings at events Number of sites on which videos hosted Number of partners contacted to promote videos 	 Number of views of at least 50% of video on own site/s Number of views of complete video (90%+) on own site/s Number / names of other organizations hosting the video Number of views of video on other sites (e.g., YouTube, Vimeo, Facebook, or partner organizations) Number of downloads by TV networks Reach (total number of viewers) 	 Likes of video Shares of link to the video Comments about video (positive and negative) Ex-post viewing panel Increased awareness (e.g., of preventive measures and/or treatments) High retention of key messages Positive attitude change (e.g., increased support for WHO, positive reputation) Behaviour change (e.g., increased preventive actions such as immunization) Increased donations 	 Improved public health (e.g., reduced disease, infant mortality, etc.) Financial savings in health costs Improved wellbeing and quality of life) (NOTE: Evidence that audiences accessed and used WHO videos / films shows causality)
METHODS	 Audience survey Pre-testing 	 Web statistics 	 Web statistics for videos Video viewing and sharing site data (e.g., YouTube; Facebook; etc.) 	 Web statistics for video Video sharing site data (e.g., YouTube; Facebook; etc.) Key stakeholder interviews Survey of video target audience 	 Public health data Public survey

7. EVENTS

Events are an important part of many campaigns. Events can include launches, conferences, seminars, symposia, and various types of briefings and meetings (e.g., World Health Assembly). These may involve face-to-face or online engagement, such as videoconferencing using platforms such as Zoom, Microsoft Teams, GoToMeeting, or Adobe Connect.

Media briefings are usually not included in MEL for events because journalists are specialist intermediaries who usually will not respond to surveys or interviews. However, the effectiveness of media briefings and media relations generally can be evaluated through the tone and quality of media content that results from media interactions. In some circumstances, *media audits* are conducted, which usually involve a neutral third party contacting journalists who deal with an organization and asking them for de-identified feedback on their experience and perceptions.

Formative Evaluation

As with most communication activities, MEL should begin *before* events are planned and staged. Formative MEL for events can be based on a draft program shared with a sample of the intended audience, or an *ex-ante* survey of intended attendees. Formative MEL provides insights into intended attendee interest, concerns, current awareness and knowledge levels, as well as their interest in WHO events.

This learning informs the format and the content of events.

Process MEL

Informal qualitative MEL can be gained by observing the audience and social media during an event. Factors that can indicate strong or weak interest include:

- The number of questions asked;
- Social media posts to an event hashtag;
- The number of audience members who leave early;
- The number of audience members who stay back for further discussion.

See Section 3: 'Social Media' for information on MEL for social media.

Summative MEL

After events, summative MEL provides information on what audience members thought of the event, what messages they received and understood, whether the event satisfied their information needs, interests, and concerns, and whether they intend to continue to attend WHO events.

This learning informs decisions to produce future events, as well as their format and content.

Summative MEL usually requires surveys of audiences. In addition, feedback from key stakeholders, such as health workers and partners can provide useful insights into the effectiveness of events.

Metrics, Indicators, and Methods

Table 7 provides a list of recommended metrics, indicators, and methods to obtain these for applying MEL to events.

See attendee survey to evaluate events as APPENDIX D.

Table 7. Metrics, indicators, and methods recommended for MEL in relation to events.

Stages in strategic	INPUTS	ACTIVITIES	OUTPUTS	OUTC	COMES	
communication Brief description of stages EVENTS - Launches - Conferences - Symposia - Forums - Workshops - Briefings - Etc.	 What is needed to plan and prepare communication Audience research to identify preferences and interests in relation to events (e.g., does the target audience want to attend an event; what do they want to hear about?) Baseline event attendance and satisfaction data 	What is done to produce and implement communication Secure guest speakers (if applicable) Venue arrangements Promotion / publicity for event Program development	What is put out and achieved that reaches and positively engages audiences • Registrations • Attendance numbers • Level of engagement (e.g., questions, discussion)	 Short-term (Outtakes) What audiences take out of communication and initial responses Audience satisfaction with the event (e.g., was it useful, informative, etc.) Conversion (e.g., clickthroughs from event program to WHO website) 	 Long-term What sustainable effects the communication has on audiences Increased awareness (e.g., of preventive measures and/or treatments) Positive attitude change (e.g., increased support for WHO, positive reputation) Behaviour change (e.g., increased preventive actions such as immunization) Increased denations 	 What results are caused, in full or in part, by the communication Improved public health (e.g., reduced disease, infant mortality, etc.) Financial savings in health costs Improved wellbeing and quality of life) (NOTE: Evidence that audiences accessed and used WHO social media sites shows causality)
METHODS	 Past event records Pre-test of the proposed event (e.g., program and format) 	 Activity reports 	 Event registration database Count of attendees Observation or recording 	 Post-event audience survey Website statistics 	 Key stakeholder interviews Audience survey Donor database 	 Public surveys Public health data

8. INTERNAL COMMUNICATION

Internal communication with employees is a very important part of an organization's communication. Some communication specialists argue that employees are an organization's most important stakeholder group. Without the productive and effective engagement of its employees, an organization cannot deliver its programs, products, or services and achieve its mission and goals effectively or efficiently.

Also, without effective internal communication, also referred to as *organizational communication*, an organization is likely to face staff turnover, resulting in loss of expertise and 'corporate memory' and increased costs for recruitment and training.

While internal communication is studied as a specific field of communication practice, most of the communication activities and channels used for external communication can be and are commonly applied internally – albeit with customization of content. For example:

- Intranets are websites with access confined to members of the organizations. These are ideal for providing information to employees in digital form that can be quickly and easily updated and distributed at low cost.
- Social media platforms are widely used for internal communication, but specialized platforms that are 'behind the firewall' of the organization's IT network are preferred, rather than public social media platforms such as Facebook, Twitter, LinkedIn, Instagram, etc. Specialized internal social media platforms such as Yammer, SocialCast, Jive, and Workplace by Facebook provide the benefits of fast, interactive, informal communication between employees and between employees and management, protected from public exposure.⁶⁷
- **Videos** are growing in popularity as a channel for communicating with employees.
- Publications both digital and print are also extensively used for internal communication. These
 commonly include newsletters, reports, and manuals, as well as posters, leaflets, and other textual
 and graphic materials.

Therefore, metrics, indicators, and MEL methods related to the effectiveness of these *activities* and *outputs* are largely the same as those for equivalent external channels.

However, the audience and the desired *outcomes* and *impact* are different. Table 8 provides a list of recommended metrics, indicators, and methods to obtain these for applying MEL to internal communication.

⁶⁷ While internal social media platforms operate on organization servers or secure 'cloud' servers, information can be leaked externally if users share information on their public social media sites or in cases such as former employees retaining access. Strict IT and HR policies are important.

Table 8. Metrics, indicators, and methods recommended for MEL in relation to internal communication.

Stages in strategic	INPUTS	ACTIVITIES	OUTPUTS	OUTC	OMES	IMPACT
communication				Short-term (Outtakes)	Long-term	
Brief description of stages	What is needed to plan and prepare communication	What is done to produce and implement communication	What is put out and achieved that reaches and positively engages audiences	What audiences take out of communication and initial responses	What sustainable effects the communication has on audiences	What results are caused, in full or in part, by the communication
INTERNAL COMMUNICATION	 Audience research to understand employee attitudes, interests, concerns, etc. Baseline data on employee satisfaction, engagement, etc. 	 Intranet content Internal social platform content (e.g., Facebook Workplace; Yammer; Jive; Social Cast, etc.) Newsletters Videos for staff 'Town hall' meetings/events E-mail 	 Intranet visits; page views; etc. Active weekly users on social platform Open rate of e- newsletters and mails Readership (e.g., of newsletters) Video views Attendance at staff meetings and conferences 	 Engagement (e.g., comments; suggestions; sharing content) Increased awareness (e.g., of WHO policies and initiatives) 	 Positive attitude change (e.g., increased support for WHO initiatives, employee satisfaction) Behaviour change (e.g., advocating WHO policies; becoming an influencer) 	 Organizational effectiveness and efficiency Reputation Reduced costs (e.g., for recruitment and training)
METHODS	 Intranet statistics Internal social media analytics Past survey findings <i>Ex-ante</i> employee survey Focus groups with employees 	 Activity reports 	 Intranet statistics (e.g., visits, page views) Social media analytics (e.g., Facebook Workplace Analytics) E-mail readership stats (e.g., <u>Campaign</u> <u>Monitor</u>) Staff event attendance numbers 	 Social media analytics Employee surveys 	 Employee surveys Employee focus groups HR staff retention data 	 Organization performance reporting Reputation studies Organizational financial reports

9. CAMPAIGNS

Campaigns often involve more than communication. For example, a campaign to achieve vaccination against a disease may involve policy initiatives such as health orders issued by governments; operational initiatives in healthcare systems (e.g., setting up extra clinics); special training for staff; and other strategic initiatives, as well as communication. As this manual is focussed on communication, particularly public communication, the following information relates to communication campaigns.

Communication campaigns usually do not require special metrics, indicators, or methods for MEL additional to those described in Sections 1–8. Campaigns are typically made up of a number of coordinated communication activities and use a number of channels, as outlined in the previous sections – e.g., media publicity, social media, websites, publications, videos, and events.

Measurement, evaluation, and learning (MEL) for campaigns requires a number of metrics and indicators to be selected relevant to the activities and channels used in a campaign. For example, for a campaign employing media publicity, web pages, and social media, metrics and indicators from those sections of this manual should be selected and produced using the relevant methods.

		Media Publicity	
We	ebsite	Social Media	
Events	Public	ations	

Figure 18. Campaigns are made up of multiple communication activities that serve as building blocks.

However, campaigns have specific objectives to which all communication activities undertaken as part of campaigns should contribute in terms of outputs, outcomes, and impact. Thus, for planning and implementing MEL for campaigns:

- Inputs, activities, and outputs apply metrics, indicators, and methods as listed in the sections of this manual for the activity (e.g., impressions, readership, video views, media sentiment, social media shares and comments, etc.);
- Outcomes and impact apply metrics, indicators, and methods that relate to the SMART objectives
 of the campaign. For example, if a campaign is designed to increase hand washing, the outcomes
 to be evaluated include (a) awareness and understanding of the need for and the correct method
 of hand washing, and particularly (b) increases in the rate of hand washing

The sample dashboards shown in Section 1 illustrate a combination of metrics and indicators for media publicity, websites, social media, etc. that can be applied to campaigns.

Also, campaigns are usually the subject of a detailed written report that presents qualitative as well as quantitative data.

In addition to MEL for the specific elements of campaigns, the overall outcomes and impact of campaigns are typically identified through:

- Feedback from government policy advisers and officials, health authorities, partner organizations, etc. (e.g., have governments adopted WHO recommendations; are health authorities following WHO guidelines, etc.);
- Formal **stakeholder interviews** (e.g., partner organizations; health professionals; community leaders; etc.);
- Surveys among key target audiences (done by WHO or an independent research company);
- Media reporting of policy changes (e.g., through media monitoring and analysis).

Omnibus Surveys

An important point about surveys relevant to campaigns, and their various components, is that a survey is not required for each individual communication activity. Rather than conduct regular reader surveys of publications, audience surveys of events, and public surveys among key target audiences on specific topics and issues, a single survey can be conducted periodically when there is a common target audience. Such surveys can collect data on a range of activities to identify awareness of and response to various WHO communication and initiatives.

A sample general feedback survey relevant to WHO is attached as APPENDIX E.

10. REFERENCES AND BIBLIOGRAPHY

- Association for Measurement and Evaluation of Communication. (2015). *Barcelona principles 2.0.* London, UK: Author. Retrieved from http://amecorg.com/barcelona-principles-2-0
- Association for Measurement and Evaluation of Communication. (2016). Integrated evaluation framework. London, UK. https://amecorg.com/amecframework/framework/interactive-framework
- Anderson, A. (2005). The community builder's approach to theory of change: A practical guide to theory and development. New York, NY: The Aspen Institute Roundtable on Community Change.
- Atkin, C., & Freimuth, V. (2013). Guidelines for formative evaluation research in campaign design. In R. Rice & C. Atkin (Eds.), *Public communication campaigns* (4th ed., pp. 53–68). Sage.
- Bauman, A., & Nutbeam, D. (2014). Evaluation in a nutshell: A practical guide to the evaluation of health promotion programs (2nd ed.). McGraw-Hill.

Center for Theory of Change. (2019). https://www.theoryofchange.org

- Clark, H., & Taplin, D. (2012). Theory of change basics: A primer on theory of change. Actknowledge.
- Department for International Development. (2011). Guidance on using the revised logical framework. *How to Note*, A DFID Practice Paper.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/fil e/253881/using-revised-logical-framework-external.pdf

- European Commission. (2015). *Toolkit for the evaluation of the communication activities.* Brussels, Belgium. Retrieved from https://ec.europa.eu/info/sites/info/files/communication-evaluationtoolkit_en.pdf
- European Commission. (2018). Communication network indicators. Brussels, Belgium. https://ec.europa.eu/regional_policy/sources/informing/webinar/ec_common_set_indicators.pdf
- Funnell, S., & Rogers, P. (2011). Purposeful program theory: Effective use of theory of change and logic models. Jossey-Bass.
- Government Communication Service. (2016). GCS evaluation framework. Cabinet Office, Her Majesty's Government. Retrieved from https://gcs.civilservice.gov.uk/wpcontent/uploads/2015/11/GCS_GCS-Evaluation-framework_A4-_191115.pdf
- Kellogg Foundation. (2004). Logic model development guide. https://www.wkkf.org/resourcedirectory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide (Original work published 1998)
- Kellogg Foundation. (2010). W. K. Kellogg Foundation evaluation handbook. https://www.wkkf.org/resource-directory/resource/2010/w-k-kellogg-foundation-evaluationhandbook
- Knowlton, L., & Phillips, C. (2013). The logic models guidebook: Better strategies for great results (2nd ed.). Sage.
- Macnamara, J. (2016). Organizational listening: The missing essential in public communication. Peter Lang.
- Macnamara, J. (2018). Evaluating public communication: Exploring new models, standards, and best practice. Routledge.
- Macnamara, J. & Gregory, A. (2018). Expanding evaluation to progress strategic communication: Beyond message tracking to open listening. *International Journal of Strategic Communication*, 12(4), 469-486.
- Macnamara, J., & Likely, F. (2017). Revisiting the disciplinary home of evaluation: New perspectives to inform PR evaluation standards. *Research Journal of the Institute for Public Relations, 2*(2), 1–21. https://prjournal.instituteforpr.org/pr-journal-2017-present
- Milstein, B., & Chapel, T. (2014). Developing a logic model or theory of change. Community Tool Box. Lawrence, KS: University of Kansas Work Group for Community Health and Development. http://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-anddevelopment/logic-model-development/main
- Rice, R., & Atkin, C. (Eds.). (2013). Public communication campaigns (4th ed.). Sage.
- Rossi, P., Lipsey, M., & Freeman, H. (2004). Evaluation: A systematic approach (7th ed.). Sage.
- Taylor-Power, E., & Henert, E. (2008). *Developing a logic model: Teaching and training guide*. University of Wisconsin-Extension Program. https://fyi.uwex.edu/programdevelopment/files/2016/03/Imguidecomplete.pdf
- UK Aid. (n.d.). Developing a logframe. https://www.ukaiddirect.org/wpcontent/uploads/2016/04/UKAD-Guidance-Logframes.pdf
- Valente, T., & Kwan, P. (2013). Evaluating communication campaigns. In R. Rice & C. Atkin, *Public communication campaigns* (4th ed., pp. 83–97). Sage.
- Watson, T., & Noble, P. (2014). Evaluating public relations: A best practice guide to public relations planning, research and evaluation (3rd ed.). Kogan Page.

Wholey, J., Hatry, H., & Newcomer, K. (Eds.). (2010). *Handbook of practical program evaluation* (3rd ed.). Jossey-Bass.

World Health Organization. (2017). *Strategic Communications Framework for effective communications*. Geneva, pp. 40–47. https://www.who.int/mediacentre/communication-framework.pdf

World Health Organization. (2018). 13th General Program of Work. Geneva. https://apps.who.int/iris/bitstream/handle/10665/324775/WHO-PRP-18.1-eng.pdf

World Health Organization. (2020a). Evaluation. Geneva. https://www.who.int/about/communications/evaluation

World Health Organization. (2020b). Evaluate complex campaigns. Geneva. https://www.who.int/about/communications/evaluation/campaigns-evaluation/

APPENDIX A. Sample *ex-ante* (pre) reader survey for publications

WHO PUBLICATION SURVEY

The World Health Organization (WHO) seeks to provide information that is useful to you in safeguarding and maintaining your health and welfare. To help us provide information that is relevant and useful to you in a form you prefer, we ask for a few minutes of your time to complete the following survey questionnaire.

- 1. Have you received WHO publications such as reports, information pamphlets, newsletters, or posters in the past? [If not, go to Question 4]
 - □ Very frequently □ Often □ Occasionally □ Not very often □ Never
- 2. How useful were those publications to you in terms of providing information about health?

Very useful	Useful	Slightly useful	Not very useful	Not useful a tall

3. Please briefly explain why those publications were useful, or not useful.

Click or tap here to enter text.

4. How interested are you in receiving WHO publications in future?

\Box Very interested	□ Interested	□ Slightly interested	\Box Not very interested	Not
interested				

5. How interested are you in receiving information about [INSERT TOPIC]?

Very interested	Interested	□ Slightly interested	\Box Not very interested	Not
interested				

6. What type of WHO publications do you wish to receive (select more than one if you wish)?

- □ Reports (e.g., of health research and health programs)
- □ Brochures
- □ Newsletters
- □ Posters
- \Box Other (please specify below

Click or tap here to enter text.

7. In what format do you prefer to receive WHO publications?

- \Box Printed copy
- □ PDF sent by e-mail
- \Box PDF downloadable from a website
- □ PDF linked from social media sites
- □ Web page (online)
- 8. Do you have any other comments, suggestions, or feedback for WHO in relation to publications, or health information generally?

APPENDIX B. Sample *ex-post* reader survey for publications

WHO READER SURVEY

The World Health Organization (WHO) seeks to provide publications that are useful in helping people safeguard and maintain their health and welfare. To help us continue to improve our publications, we ask for a few minutes of your time to complete the following survey questionnaire in relation to WHO publications.

1. How often have you received WHO publications such as reports, information pamphlets, newsletters, or posters in the past?

	□ Very frequently	□ Often	□ Occasionally	☐ Not very often	□ Never
2.	What type of WHO	publication did y	ou most recently re	ceive (select one)?	
	 Report Brochure Newsletter Poster Other (please sp 	ecify below			
	Click or tap here to	o enter text.			
3.	How useful was t information about	he WHO publica health?	tion you received r	nost recently in ter	ms of providing
	□ Very useful	□ Useful	\Box Slightly useful	\Box Not very useful	\Box Not useful a tall
4.	Please briefly expl	ain why the publi	cation was useful, o	r not useful.	
	Click or tap here to	o enter text.			
5.	How interested are	e you in receiving	WHO publications i	n future?	
	Very interested interested	□ Interested	□ Slightly interested	□ Not very interested	□ Not
6.	Do you have any s publications?	uggestions for to	pics or issues that y	ou would like to see	covered in WHO
	Click or tap here to	o enter text.			

7. Do you have any other comments, suggestions, or feedback for WHO in relation to publications, or health information generally?

APPENDIX C. Sample viewing panel consent form

Sample viewer consent form – 'Health Issues Video Viewing Panel'

Name of the researcher: [Insert]

Purpose of research

The purpose of this research is to collect your impressions and reactions to a short film about a health topic. This viewing panel is conducted as a part of a WHO monitoring and evaluation initiative.

The results of this study will be used to highlight current perceptions surrounding a particular health issue and the impact, if any, after watching a film on the subject called "It Takes A Village."

Specific procedures used

You will be asked to answer questions about your experiences and your thoughts about health issues and then watch a short film. The discussion will be conducted in a conversational style. You can talk as much or as little as you want. You can skip questions if you do not wish to answer them.

Duration of participation

This panel will last approximately 90 minutes including viewing of a 45-minute film.

Benefits to the individual

Participants will benefit from the results of this study in learning more about health issues in your community.

Risks to the individual

The are no known risks to the participants for participating in this panel.

Confidentiality

Confidentiality is guaranteed to the participant: your real name will not be used in any reports or reflections. The results of this panel may be used for analysis and discussion of the impact of the film, but your responses will not be identified or linked to you in these analyses.

Voluntary nature of participation

I do not have to participate in this research project. If I agree to participate, I can withdraw my participation at any time without penalty.

I agree / do not agree to tape/digital recording of my participation in this panel (circle one and sign here):

I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE PANEL, AND I AM PREPARED TO PARTICIPATE IN THIS VIEWING PANEL.

Participant Signature

Date

Participant Name (printed)

.....

WHO Communications Officer / Researcher

Date

APPENDIX D. Sample post event survey

WHO EVENT SURVEY

The World Health Organization (WHO) seeks to host events that provide useful information to health professionals, media, and the public in relation to health and wellbeing. To help us continue to improve our events, we ask for a few minutes of your time to complete the following survey questionnaire in relation to WHO events.

- 1. How often have you attended or participated in a WHO event in the past 12 months?
 - □ Very frequently □ Often □ Occasionally □ Not very often □ Never
- 2. How useful was the WHO event you attended most recently in terms of providing information about health?

Verv useful	🗌 Useful	Slightly useful	🗌 Not verv useful	Not useful at all

3. Please briefly explain why the event was useful, or not useful.

Click or tap here to enter text.

4. Which parts or content of the event was most useful to you?

🗆 Ke	ynote	speaker
------	-------	---------

- [Insert name of presentation]
- [Insert name of film or video as appropriate]
- [Insert other elements of event]
- □ Other (please specify below

Click or tap here to enter text.

5. How interested are you in attending WHO events in future?

\Box Very interested	□ Interested	□ Slightly interested	\Box Not very interested	Not
interested				

6. Do you have any suggestions for topics or issues that you would like to see discussed at WHO events?

Click or tap here to enter text.

7. Do you have any other comments, suggestions, or feedback for WHO in relation to events, or health information generally?

APPENDIX E. Public Feedback Questionnaire for WHO

We would like your feedback because it can help save lives WORLD HEALTH ORGANIZATION (WHO)

The World Health Organization (WHO) is committed to communicating the best available science and providing solutions to improve public health worldwide. This includes promoting universal health care and protecting people during health emergencies. We seek your feedback on WHO communication so that we can improve and better achieve our shared objectives in health and well-being.

- 1. How often have you received or seen WHO information in the past six months through media, publications, websites, or other channels?
 - □ Very frequently □ Often □ Occasionally □ Not very often □ Never
- 2. How useful was the WHO information to you in providing information about health?
 - □ Very useful □ Useful □ Slightly useful □ Not very useful □ Not useful at all

3. In a few words, can you explain why the information was useful, or not useful.

Click or tap here to enter text.

4. Where have you seen or heard health information from WHO in the past six months?

- □ Newspaper articles
- \Box TV news or current affairs
- □ Radio
- □ A WHO website
- □ Another website quoting or providing WHO information
- □ A WHO publication (e.g., newsletter, poster, report, etc.)
- □ A WHO event (conference, seminar, symposium, forum, launch, briefing, etc.)
- \Box An event organized by another organization with a WHO speaker
- □ Social media
- \Box Word of mouth (e.g., from a friend or colleague)
- □ Other (please specify below)

Click or tap here to enter text.

5. Which of the following are your preferred sources of health information? (Select three only)

- □ Newspaper articles
- \Box TV news or current affairs
- □ Radio
- □ A WHO website
- \Box Another website quoting or providing WHO information
- □ A WHO publication (e.g., newsletter, poster, report, etc.)
- □ A WHO event (conference, seminar, symposium, forum, launch, briefing, etc.)
- □ An event organized by another organization with a WHO speaker
- Social media
- □ Word of mouth (e.g., from a friend or colleague)
- □ Other (please specify below)

6.	 How do you rate the WHO as a trustworthy source of information about health on a scale of 0–10 (where 0 = zero trustworthiness and 10 = 100% trustworthiness) 										
	□0	□1	□2	□3	□4	□5	□6	□7	□8	□9	□10
7.	How of trustwo	do you rate orthiness an	e the rep nd 10 = 10	outation 00% trust	of the W worthiness	HO overa	all on a	scale of	0–10 (where () = zero
	□0	□1	□2	□3	□4	□5	□6	□7	□8	□9	□10
8.	To wh your b	at extent w behaviour in	vas WHO n relatior	informanto informa	ation influe alth issue	ential in i or health	ncreasir general	ng your a ly?	warene	ss or cł	nanging
		y influential	🗆 Influ	iential	□ Slightly	influential	🗆 Not v	very influen	itial 🗆	Not influ	ential
9.	What	issues or to	opics in r	relation f	o health a	re you m	ost inter	ested in	or conc	erned a	bout?
	9. What issues or topics in relation to health are you most interested in or concerned about? Infectious diseases and pandemics Maternal health Child health Food safety Dementia Palliative care Mental health Reducing tobacco smoking AIDS Climate change [Insert] [Insert] [Insert] Other (please specify below)										

10.On which of the following health issues have you accessed information from WHO websites, publications, or other WHO communication?

- \Box Infectious diseases and pandemics
- □ Maternal health
- □ Child health
- □ Food safety
- Dementia
- □ Palliative care
- □ Mental health
- \Box Reducing tobacco smoking
- \Box Climate change
- [Insert]
- [Insert]
- [Insert]
- [Insert]
- □ Other (please specify below)

11.To what extent have you applied WHO health advice in relation COVID-19, such as hand washing, quitting smoking, or [insert recent campaign examples]?

□ Not at all □ Seldom □ Occasionally □ Often □ Always

12.Please indicate below what health advice you applied.

Click or tap here to enter text.

13.Are there any other comments you would like to make? (*Type below*)

THE AUTHORS

Distinguished Professor Jim Macnamara PhD, FAMI, CPM, FAMEC

Jim Macnamara is a Distinguished Professor in the School of Communication at the University of Technology Sydney (UTS). He is also a Visiting Professor at The London School of Economics and Political Science (LSE), Media and Communications Department, and a Visiting Professor at the London College of Communication (LCC) in the University of the Arts London (UAL).

Jim is recognized internationally for his research into evaluation of public communication such as advertising, public relations, and health communication campaigns, and for his pioneering research into organizational listening by governments, corporations, and non-government organizations as an essential part of engagement.



His work on evaluation of communication has included being an adviser on development of the UK Government Communication Service (GCS) Evaluation Framework in 2015 and serving as a member of the GCS Evaluation Council in 2016; Chair of the Academic Advisory Group of the International Association for Measurement and Evaluation of Communication (AMEC); a member of the Institute for Public Relations (IPR) Measurement Commission in the USA; and adviser to the European Commission Directorate-General for Communication (DG COM) in Brussels on evaluation of EC communication and citizen engagement. In 2015, he was commissioned to develop an evaluation framework for public communication by the NSW Department of Premier and Cabinet and has conducted research to inform health communication campaigns for Cancer Institute NSW and the NSW Multicultural Health Communication Service.

Jim is the author of 16 books including *Evaluating Public Communication: Exploring New Models, Standards, and Best Practice* (Routledge, UK, 2018) and *Organizational Listening: The Missing Essential in Public Communication* (Peter Lang, New York, 2016). A full list of Jim's publications is at https://www.uts.edu.au/staff/jim.macnamara.

Professor Maureen Taylor, PhD

Professor Maureen Taylor is Professor of Strategic Communication in the School of Communication at the University of Technology Sydney (UTS) and Head of the Public Communication program.

Immediately prior to joining UTS, she was Director of the School of Advertising and Public Relations in the College of Communication and Information at the University of Tennessee, Knoxville.

Professor Taylor is recognized as one of the leading scholars in public relations and communication management internationally. She is the foremost researcher and author in relation to *dialogic theory* of public relations and has extensively researched, published and taught in relation to stakeholder and community engagement, emergency communication, and public diplomacy.



She is the author of more than 60 academic journal articles in national and international publications including the *Journal of Communication* and *Communication Theory*; an author or co-author of more than 40 book chapters and four edited books; and is Editor in Chief of the longest established public relations journal, *Public Relations Review* (Impact factor: 2.086).

In addition to her academic career in the United States, Maureen has worked as a monitoring and evaluation specialist on traditional media, digital and social media, and strategic communication projects across Africa, Asia, Europe, and the MENA region for USAID, Department of State, European Union, GIZ and DFID. As a field researcher, Taylor integrates the traditional methods of social science including survey research, randomized design, network analysis, content analysis, focus groups, interviews, and participatory methods into measuring the impact of traditional and new media projects. As a researcher, educator and trainer, Taylor develops the capabilities within organizations to set up, report, and use M&E findings to improve sustainability and impact.



DEPARTMENT OF COMMUNICATIONS GENEVA, SWITZERLAND