tellme

ST3.2.1

New communication strategies for health agencies and healthcare professionals

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WP3 Developing new communication strategies

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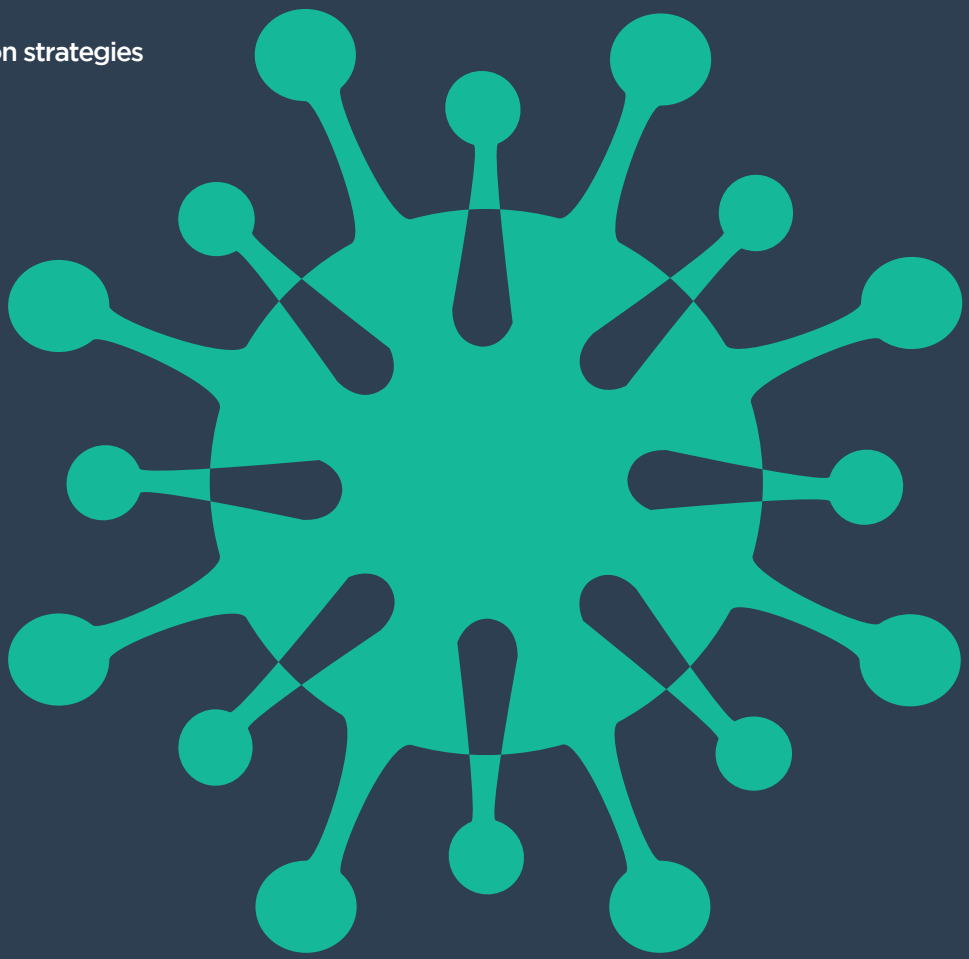

TELL ME - Transparent communication in Epidemics: Learning Lessons from experience, delivering effective Messages, providing Evidence.
Project co-funded by the European Commission within the 7th Framework Programme – HEALTH theme

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ST3.2.1 New communication strategies for health agencies and healthcare professionals

Glossary

Health agencies - National and local organisations in each country with the responsibility of protecting the public's health and coordinating a response to an infectious disease outbreak such as a flu pandemic.

Healthcare professional - Abbreviated to HCP and also known as a healthcare worker (HCW), this term is used to refer to all healthcare professions across primary, secondary and tertiary care. That is from the healthcare assistant all the way to the medical director.

Logos - Emphasis on logical/valid arguments and justification by use of facts.

Pathos - Emphasis on the credibility of the source – character perceived as knowledgeable and moral.

Ethos - Emphasis on expression and emotion – arousing stimuli – use of colourful and vivid language to evoke emotions.

Elaboration Likelihood Model - The Elaboration Likelihood Model (ELM) of persuasion is a dual process theory describing how attitudes are formed and changed, developed by Richard E. Petty and John Cacioppo during the early 1980s. The model examines how an argument's position on the "elaboration continuum", from processing and evaluating (high elaboration) to peripheral issues such as source expertise or attractiveness (low elaboration), shapes its persuasiveness.

Source: http://en.wikipedia.org/wiki/Elaboration_likelihood_model

Wicked problem - A problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize. The term "wicked" is used to denote resistance to resolution, rather than evil. Moreover, because of complex interdependencies, the effort to solve one aspect of a wicked problem may reveal or create other problems.

Source: http://en.wikipedia.org/wiki/Wicked_problem

ST3.2.1

Introduction

As a part of the TELL ME communications toolkit this guidance document focuses on communication strategies tailored for health agencies to help increase the number of healthcare professionals (HCPs) who get vaccinated against flu.

A summary of research into the communication of flu, the flu vaccine, and outbreaks is provided and gives the foundation upon which the subsequent guidance is based.

Use of a participative strategy to help health agencies turn healthcare professionals from critical recipients of outbreak communications to active advocates of outbreak communications is described. Using a theoretical case study a practical picture is built of what the application of a participative strategy rich in pathos and ethos looks like.

In turn, communication strategies for HCPs talking to non-vaccinated and vaccine resistant patients about flu vaccination are discussed, highlighting how different information and modes of persuasion fit sub-groups of patients.

The appendices explore real-life case studies of developing communication networks for use in seasonal flu campaigns and outbreak communications. They describe local and national networks which provide information and support to HCPs and the public. These case studies exhibit how ethos, pathos and participation in the development, use and refinement of messages leads to positive communication outcomes.

While the document has a focus on pandemic flu, elements such as the use of a participatory approach to outbreak communications planning and the use of social media to reach target audiences are relevant strategies for the majority of outbreak communication strategies.

Section 1

The research background

Introduction

This section is a summary of the research presented in TELL ME Work Package 1: Population behaviour during epidemics, and Work Package 2: New challenges and new methods for outbreak communication. The summary aims to provide the reader with a core understanding of what is known to affect HCP's vaccination compliance and how HCPs impact their patients' vaccination decisions. Additionally the summary highlights important areas such as perceived risk versus actual risk, health agency communication practices and segmenting the non-vaccinated patient population.

Healthcare professionals and the flu vaccine

Healthcare professional compliance with flu vaccination

Despite the World Health Organisation strongly recommending HCP flu vaccination for both seasonal and pandemic flu, no discernable pattern of flu vaccination compliance exists. Healthcare professionals' flu vaccination compliance is often low and varies the world over. In some countries, younger HCPs show higher vaccination rates than their older colleagues; in other countries older HCPs have the highest compliance rates. Similarly there is no standout medical profession when it comes to flu vaccination compliance; nurses are no better or worse than General Practitioners (GPs) for example (TELL ME deliverable D1.3[1]).

This pattern of 'there is no pattern' highlights the importance for all nations, their regions and local healthcare organisations to measure their HCPs' compliance. After all, communications can't be efficiently targeted without knowing which HCP groups are or aren't getting vaccinated.

Seasonal flu vaccination predicts pandemic flu vaccination

In general, vaccination against seasonal flu predicts whether a HCP will be vaccinated against pandemic flu (Chor, et al., 2001) (Hollmeyer, Hayden, Poland, & Buchholz, 2009) (Kelly, et al., 2008) (Prematunge, et al., 2012) (Virseda, et al., 2010). Therefore efforts to increase seasonal flu vaccination among HCPs can be predicted to help increase pandemic flu vaccine compliance among HCPs.

[1] TELL ME Deliverable D1.3 Segmentation and Specific Communication Needs of Target Groups. Available from http://www.tellmeproject.eu/content/d13-segmentation-communication-needs-target-groups

Factors affecting healthcare professionals' compliance with flu vaccination

As discussed in detail in TELL ME deliverable D1.3[2], the following list of factors are known to affect HCPs compliance:

1. Desire for self-protection.
2. Desire to avoid infecting patients.
3. Desire to avoid infecting family members.
4. Perceived safety of the vaccine.
5. Perceived efficacy of the vaccine.
6. Perceived seriousness of the disease.
7. Perceived risk of the disease.
8. Perceived seriousness of complications from the disease
9. Access to the vaccine (convenience - for example the existents of mobile carts).
10. Cost of the vaccine (e.g. do the HCPs need to pay to get the vaccine?).
11. Fear that the vaccine could cause disease (a negative effect).

Healthcare professional vaccination compliance: The necessity of local research

Multiple complex and inter-related reasons stand behind the reasons HCPs decide to get or not get vaccinated. The majority of the research used to create this list focused on a single country and therefore we believe shouldn't be readily extrapolated to other countries with different healthcare cultures and contexts.

Instead, the list should be viewed as a list of potential factors that may affect HCPs in a locality. Local research will always be required to better understand why local HCPs do or don't get vaccinated. For example, TELL ME deliverable D2.3[3], looked at GPs experiences of the H1N1 outbreak and found a range of views on the H1N1 vaccine and it's uptake.

That being said, Hollmeyer et al's 2009 review of 25 studies does provide a useful big picture summary of the body of research, which we believe can be cautiously applied across countries and localities.

"These studies identified two major reasons for lack of vaccine uptake by HCW [healthcare workers]: firstly, a wide range of misconceptions or lack of knowledge about influenza infection; and secondly, a lack of convenient access to vaccine." (Hollmeyer, Hayden, Poland, & Buchholz, 2009).

Local research will always be required to find the solutions to these barriers to vaccination.

[2] TELL ME Deliverable D1.3 Segmentation and Specific Communication Needs of Target Groups, pages 12-13. Available from http://www.tellmeproject.eu/content/d13-segmentation-communication-needs-target-groups

[3] TELL ME Deliverable D2.3 Report on Health Care Professional Communication Requirements, sections 3 & 4. Available from http://www.tellmeproject.eu/content/d23-report-health-care-professional-communication-requirements

Perceived risk vs actual risk

Healthcare professionals' perceptions of the disease and vaccine risks are often not aligned with the actual risks. This mismatch between perceived and actual risk can lead to lower or higher vaccination rates, as the below formula describes.

$E [C_d]$ = Expected cost of the disease
$E [C_v]$ = Expected cost of the vaccine

$E [C_d] - E [C_v] = < 0$ leads to a decrease in vaccination
$E [C_d] - E [C_v] = > 0$ leads to an increase in vaccination

Source: (Betsch, Böhm, & Korn, 2013)

Expected cost is the perceived risk and can be based on a mixture of subjective and objective reasoning. For example, a HCP may base their expected cost of disease on their personal experience of having had the flu, $E [C_{d10}]$, and their expected cost of vaccination on a mixture of urban myths and actual risk calculations from a vaccination leaflet, $E [C_{v5}]$.

$E [C_{d10}] - E [C_{v5}] = 5$

In this case the HCP gets vaccinated.

Patients and the flu vaccine

The impact of a healthcare professional's recommendation on a patient's vaccination decision

A positive recommendation to be vaccinated from a HCP greatly influences many patients to get vaccinated. As Evans & Watson (2003) found a "lack of advice from a doctor or nurse" to get a flu vaccination decreases uptake of the vaccination. TELL ME deliverable D1.4[4] states, "the literature clearly indicates that recommendation from a healthcare professional is one of the strongest influences on vaccine acceptance".

TELL ME deliverable D1.3[5] describes how "the main factor affecting compliance rates with influenza vaccines among the elderly [chronically ill patients and pregnant patients] in both Europe and the U.S. is the number of visits the person pays to a physician during the year", highlighting patient-HCP contact as an important part of a patient's vaccination decision.

Patient segments healthcare professionals talk to about flu vaccination

Not all patients are equally influenced by their HCP's recommendation. In their 2008 paper, John & Cheney identified three patient segments within groups of patients who had yet to be vaccinated against seasonal flu:

1. Plans to get – a group of people who planned to get vaccinated but due to barriers mainly of time and access had not done so.
2. Needs more information – have a variety of concerns about the safety and efficacy of the vaccine.
3. Ideologically opposed to vaccination – due to lifestyle choice (e.g. naturalists), those who oppose vaccination on medical/scientific grounds and those who distrust the authorities.

John & Cheney concluded no specific intervention should be developed for the 'ideologically opposed' group due to the strength of their negative views about flu vaccination (John & Cheney, 2008). We agree with this to a point. The flu vaccination communication process is based on the use of finite resources and cannot be expected to use these resources on groups who are steadfast in their anti-vaccination stance.

[4] TELL ME Deliverable D1.4 Report on Vaccine Acceptance/Refusal and Resistance to Vaccination, pages 65-66. Available from http://www.tellmeproject.eu/content/d14-report-vaccine-acceptancerefusal-vaccination

[5] TELL ME Deliverable D1.3 Segmentation and Specific Communication Needs of Target Groups, pages 15-16. Available from http://www.tellmeproject.eu/content/d13-segmentation-communication-needs-target-groups

This approach builds on the recommended application of Pareto's principle (also known as the 80-20 rule) as discussed in TELL ME deliverable D1.4[6].

"Applying Pareto's principle, the population groups for which resources and interventions would be the most effectively and efficiently applied must be specified for each vaccination effort. Influences on vaccination acceptance vary among population groups. Identifying a specific subset of the population on which to concentrate efforts enables consideration of influences, information resources, and other important characteristics unique to that group. This will result in targeted messaging and interventions that are highly effective for the key strategic groups most likely to impact overall vaccination success."

However, the ideologically opposed group should not be alienated. As described in TELL ME deliverable D1.4[7], "Do not abandon vaccine resistant patients; continue to provide care, and take advantage of every opportunity to further educate about the benefits of vaccination."

It is however, interesting to note that the ideologically opposed group can be segmented further to reveal groups of patients who are ideologically opposed based on:

1. A naturalist lifestyle.
2. A wider distrust in power, government and pharmaceutical companies.
3. A deep-seated medical opposition perhaps based on personal experience.

In turn these groups are likely to spread different themes of rumours, urban myths and misinformation to others, making it important to understand how and why they may spread such information. Being aware of these groups' beliefs and behaviours may help health agencies combat misinformation during an outbreak. Lason et al's 2013 paper, 'Measuring vaccine confidence: analysis of data obtained by a media surveillance system used to analyse public concerns about vaccines' represents a good introduction to how such anti-vaccine groups could be monitored and understood.

[6] TELL ME Deliverable D1.4 Report on Vaccine Acceptance/Refusal and Resistance to Vaccination, page 65. Available from http://www.tellmeproject.eu/content/d14-report-vaccine-acceptancerefusal-vaccination

[7] TELL ME Deliverable D1.4 Report on Vaccine Acceptance/Refusal and Resistance to Vaccination, page 67. Available from http://www.tellmeproject.eu/content/d14-report-vaccine-acceptancerefusal-vaccination

Health agencies current communication practices

A country's health agencies should be the main source of official outbreak and pandemic information for HCPs. In the case of a flu pandemic, nationally developed messages are fed down to HCPs via health agencies (see definition on page 22). However, TELL ME deliverable D2.3[8] has shown, during the H1N1 outbreak of 2009 this wasn't always the case with messages first reaching many HCPs via the media instead of directly from health agencies.

The roll of command and control in how health agencies communicate with healthcare professionals

The structures and processes in place for health agencies to communicate with HCPs vary from country to country. However, research has shown that consistent approaches exist in how health agencies communicate with HCPs.

Command and control, or top-down messaging, is used across the world in the event of a pandemic. This method of communication relays messages down a chain of command. Benefits include the possibility of maintaining a consistent message. However, just like in the game Chinese whispers, the ability for the message to change the further it gets from its source can make this approach susceptible to the generation of misinformation.

This approach also does not easily exist alongside two-way communication processes, which enable HCPs, patients and the public to feedback about the messages being delivered.

Alongside the use of top-down messages, HCPs are often treated in communication plans as a single group and receive a single message. This approach does not take into account the different HCPs sub-groups and their distinct vaccination cultures and beliefs. For example, it may be that the large majority of GPs in a region support vaccination while midwives do not. A single message, 'Get vaccinated to protect yourself and your patients', given to these two different groups is unlikely to change the midwives' stance as it does not recognise the underlying reason(s) behind their vaccine resistance.

A consistent theme across the literature is the lack of participation of HCPs in helping to develop local pandemic response plans. Not including HCPs in the planning stage of a pandemic response can lead to HCPs having false expectations once an outbreak or pandemic begins due to them not being familiar with the plans.

[8] TELL ME Deliverable D2.3 Report on Health Care Professional Communication Requirements, page 13. Available from http://www.tellmeproject.eu/content/d23-report-health-care-professional-communication-requirements

The roll of the deficit model in how health agencies communicate with patients and the public

In the past the prevailing approach to vaccination communications has been to provide the public with facts on the risks of the disease and the vaccine and provide recommended actions to take. This approach, known as the deficit model of science communication (Frewer, et al., 2003), aims to bridge the gap between expert knowledge and lay person knowledge of vaccination. Crucially it does not discuss the uncertainty surrounding the topic of vaccination, choosing instead to present the facts as they stand. When the facts inevitably change during a pandemic this approach can fuel distrust in the source of the information; for example health agencies.

This approach has three main drawbacks:

1. It relies too heavily on the use of logic (logos) and does not use enough emotion (pathos). Facts and figures don't paint a personal and emotive story for the audience, and can therefore be unpersuasive.
2. It does not transparently recognise the uncertainty surrounding an outbreak and vaccination.
3. It is often used to communicate a one size fits all message (additional facts and figures may be provided for at-risk groups) to multiple different patient segments.

As communication culture has changed in the last decade, the deficit model has begun to fall out of favour, replaced by a communications approach which places the emphasis on openness and transparency. However, during the H1N1 flu pandemic of 2009, an open and transparent approach to the uncertainties of the pandemic was not always followed (see box 1, page 25).

A summary of the research background

A lot is known about what impacts HCP vaccination compliance and how HCPs can influence patients' vaccination decisions.

From this body of research the following practical summary is provided to act as reminders when developing a flu vaccination communications plan.

- The reasons HCPs get the flu vaccine can differ between and within countries and between professions – local research into vaccination behaviours and intentions is essential.
- Ease of access to the vaccine has a major influence on HCP vaccination rates.
- A HCPs recommendation is the major influencer of a patient's vaccination decision.
- Patients who are ideologically opposed to vaccination are very unlikely to change their views; working with other non-vaccinated patients is a better use of finite communication resources.
- Seasonal flu vaccination predicts pandemic flu vaccination in both HCPs and the public, increase seasonal flu vaccination and pandemic flu vaccination is likely to increase.
- An open and transparent approach which recognises the uncertainty of pandemics, uses emotionally engaging content (pathos) in its messages and two-way communications is consistently highlighted in the literature as best practice when communicating with the public.

Gaps in our knowledge

Despite a large amount of research on: HCP vaccination, the communication approaches of health agencies and vaccination compliance across multiple patient groups and the public, gaps still remain in the literature and in practice. The silver lining is practice lags behind the evidence base, as was seen during the 2009 H1N1 pandemic (see box 1, page 25). This presents an opportunity for national and local planners to not only bring their plans in line with the research, but to provide original real-world research to fill the following gaps in our knowledge.

- Consistent measurement of compliance rates across different stakeholder groups throughout Europe (e.g. HCPs, at-risk groups).
- Measurement of compliance rates within HCP sub-groups (e.g. A&E consultants versus GPs) within countries across Europe.
- Developing an understanding of what impacts the vaccination recommendation HCPs give to different groups of patients, e.g. at-risk groups compared to non-at-risk groups. Does a HCP's level of knowledge about flu impact on their recommendation? Does a HCP's personal vaccination history or flu infection history impact on their recommendation?
- Finally, the literature has not looked at how an increase in HCP vaccination impacts, or does not impact on the patient and the public's vaccination compliance for either the seasonal or pandemic flu. We are unaware of any examples in the literature of health agencies setting out to increase HCPs' vaccination compliance with the expressed aim of consequentially increasing patients' compliance.

Section 2

Segmenting healthcare professions, their role in outbreak communication and their information requirements

Introduction

In section two we discuss which HCP sub-groups have the greatest amount of patient contact, HCPs 'trusted translator' role between health agencies and patients and HCPs information requirements during each pandemic phase. Additionally, we provide a list of HCPs and health agency lessons learnt during the 2009 H1N1 outbreak.

Audiences within the healthcare profession

Within healthcare many different professions exist. Dermatologists, orthopaedics, dentists and neurosurgeons, to name a few, all should receive the vaccine, and all could influence a patient's vaccination decision. They act as opinion leaders, as highlighted in the framework model presented in TELL ME deliverable 3.1[9].

For the purpose of this document, it is necessary to focus on specific healthcare professional groups and not the entire healthcare professional population. This targeted approach allows us to discuss in more detail the specific communications strategies relevant to the HCP groups who have the majority of contact with patients[10]:

- General Practitioners (GPs)/family physicians
- Nurses (both hospital and community based)
- Midwives (both hospital and community based)

We include midwives in this section due to their influential role in mothers' and parents' vaccination decisions, both before and after birth. Additionally, midwives were highlighted as an important group to engage with on pandemic communications and planning by the GPs who took part in the research for TELL ME deliverable D2.3[11].

The amount of contact a HCP has with patients is important for two reasons, firstly the more patients HCPs see the further an infected HCP can spread the virus. Secondly the more patients HCPs see the greater the opportunity they have to influence a larger number of patients' vaccination decisions. We will concentrate primarily on HCPs working in primary care as these clinicians have the greatest amount of patient contact and care for outbreak at-risk groups.

While concentrating on these three HCP sub-groups, it should be recognised that many of the communications strategies relevant to these three professions contain practices that are applicable to other groups of HCPs as well. For example, increasing the ease of access to the vaccine for HCPs can increase vaccination compliance (Hollmeyer, Hayden, Poland, & Buchholz, 2009). Furthermore, this segmentation does not take into consideration more detailed segmentation by gender, professional experience and ethnicity for example. Localised, detailed segmentation such as this may be useful in understanding local HCP vaccination behaviours and cultures.

[9] TELL ME Deliverable D3.1 - New Framework Model for Outbreak Communication, page 12. Available from http://www.tellmeproject.eu/content/d31-new-framework-model-outbreak-communication

[10] The UK's Royal College of General Practitioners reports GPs "[deal] with 90 per cent of all patient contacts" in the UK: http://www.rcgp.org.uk/campaign-home/about.aspx (last accessed 15/08/14). Original statistic from The King's Fund: https://www.kingsfund.org.uk/sites/files/kf/General-practice-in-England-an-overview-Sarah-Gregory-The-Kings-Fund-September-2009.pdf (last accessed 15/08/14).pdf (last accessed 15/08/14).

[11] TELL ME Deliverable D2.3 Report on Health Care Professional Communication Requirements, pages 4, 23, 36, 39 & 47. Available from http://www.tellmeproject.eu/content/d23-report-health-care-professional-communication-requirements

Who is communicating with healthcare professionals?

During any of the pandemic phases listed in the introduction to TELL ME deliverable D3.2. HCPs will be receiving information from a variety of sources: the media, professional journals, patients, peers, and health agencies. To give this document a structure, it is necessary to place a framework around pandemic communications with HCPs. This structure is illustrated in figure 1. It enables us to discuss the communication strategies from the perspective of the message sender (health agencies), message intermediaries (HCPs) and message receivers (patients).

In this document we focus on health agencies as the source of official messages directed towards HCPs in all of the pandemic phases. We look at communication strategies capable of providing HCPs with information suitable for their dual role as a WHO recommended vaccination group and trusted translator of vaccine information.

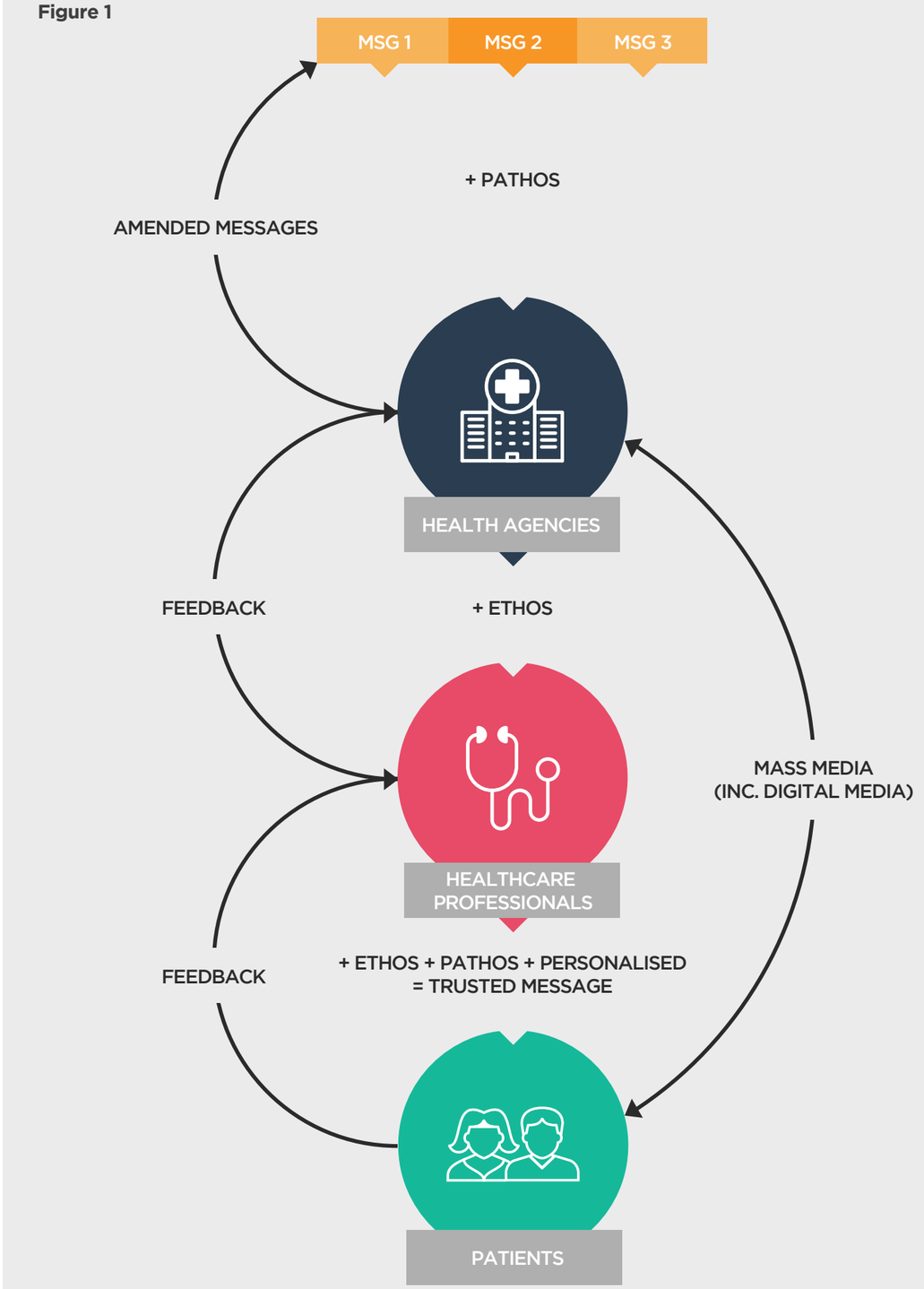
Health agencies: a working definition for this document

Health agencies: "organisations in each country with the responsibility of protecting the public's health and coordinating a response to an infectious disease outbreak such as a flu pandemic."

Known collectively as 'health agencies' the label includes employers of HCPs, HCP membership organisations such as trade unions and colleges, the government's Ministry of Health, national and regional public health organisations and local hospitals; all of which communicate with HCPs and the public.

Figure 1 oposite, shows the various lines of communication between health agencies, healthcare professionals and the public, including how HCPs can add ethos, pathos and personalisation to messages to increase patients' trust in the message.

Figure 1



Healthcare professionals as information translators and carriers

Figure 1 highlights healthcare professionals' 'trusted translator' role between health agencies and patients. Healthcare professionals in general and doctors specifically, are often one of the most trusted professions in the EU. For example, doctors are the most trusted profession in the UK (Ipsos Mori, 2013).

Healthcare professionals help to carry health agencies' messages to the public via their interactions with patients and any public facing communication they take part in (media work, blogs and social media profiles). Their central position in the communication network gives HCPs an important communications role throughout a pandemic. The role has influence over the messages which reach patients, the method of delivery of those messages, and how much trust a patient puts in the messages.

When a pandemic breaks, patients are faced with a storm of new information to digest. Many look for an expert summary of the situation from a trusted source. The media, health agencies and HCPs can all help to provide this.

Importantly however, HCPs have the opportunity to provide this information in a personalised format based on their knowledge of a patient's medical and vaccination history. This allows HCPs to translate the information into a contextualised and easy to understand message for each patient.

For example, a HCP could provide detailed information about the risks of the disease and vaccination to patients in the 'need more information' segment discussed in section 1, while discussing the best non-pharmaceutical interventions available to patients ideologically opposed to vaccination.

The ability to deliver a tailored message in a one-to-one consultation with an expert, who is likely to be trusted by the patient, gives HCPs a crucial position in vaccination communications. The consultation environment also gives HCPs the ability to ask patients about their vaccination stance, prompting reflection by the patient and the possibility of the HCP being able to increase the alignment between the patient's perceived risk of the disease and vaccination and the actual risks.

Box 1: Key learnings for health agencies and HCPs from the 2009 H1N1 pandemic

- The uncertainty surrounding the details of an outbreak (speed of transmission, at-risk groups, expected impacts etc) should be recognised and publically acknowledged as soon as the alert phase begins to ensure subsequent changes to projections are not seen as untrustworthy or worse, as signs of a conspiracy.
- HCPs need single, or very few points of access to the latest information.
- HCPs should be engaged with as soon as possible and before the media begins to run stories about a potential flu pandemic. This will enable GPs, nurses and midwives to answer patients' questions from the very beginning of a potential outbreak, helping doctors to build trust.
- The need to respond flexibly to hotspots of outbreaks (often very localised). For example, a localised area going into the pandemic stage earlier than the rest of the country
- A single respected source of information was highly regarded by GPs in the UK. Dr Maureen Baker's weekly update was the go-to source of the latest H1N1 information for many GPs.
- The switch from alert phase to pandemic phase will likely be rapid, giving little time to warm up response efforts. Global travel and business mean the pandemic strain will quickly be transmitted far beyond the original source. This is likely to occur before global surveillance systems have recognised the spread of a new strain due to flu's incubatory period before symptoms occur.
- National pandemic response planning must plan for both the worst case scenario and a mild version of a pandemic to try to ensure a potential over-reaction during the alert and pandemic phases does not negatively impact non-pharmaceutical intervention and vaccination uptake.

Sources: All TELL ME documents especially, D2.3 Report on Health Care Professional Communication Requirements. The United Kingdom's Department of Health UK Influenza Pandemic Preparedness Strategy 2011 and UK Pandemic Influenza Communications Strategy 2012

Healthcare professionals' information requirements during the four phases of a pandemic

We now consider what HCPs need to know and when, throughout the phases of a pandemic to be able to confidently discuss outbreaks and vaccination with their patients.

The information requirements listed here should be used by health agencies as a checklist when producing outbreak information for HCPs, e.g. education courses on vaccination and outbreak contact and role responsibility maps.

1. Inter-pandemic phase: Education and familiarisation

- Which organisation plans the response to a pandemic and where can the pandemic response plans and guidance be found
- Which communication channels will be used to contact HCPs when the alert phase begins (email updates, website(s), telephone lines, face-to-face meetings)
- Important local contacts during a pandemic (healthcare commissioners, emergency planning and resilience teams)
- Healthcare professionals' roles during a pandemic (surveillance, healthcare delivery, media work, weekend surgeries, home visits etc)
- Likely surveillance requirements
- Planning assumptions on staff absences and mitigation of absences
- Planning assumptions covering the delivery and prescription of anti-virals
- Likely vaccine development and delivery timetables
- Educative information on how vaccines are developed, e.g. TELL ME Online Course for Primary Care Staff
- Areas of uncertainty in pandemic planning and why these areas are uncertain
- The benefits, as well as the risks, of vaccination
- The top public health messages to be used at the start of a pandemic
- The top preventative measures for use during the first wave of a pandemic, e.g. non-pharmaceutical intervention
- How to feedback on health agencies' pandemic plans
- Encouragement to participate in seasonal flu campaigns to help familiarise HCPs and health agencies with vaccination communication

2. Alert phase: Knowledge management

- The latest risk assessment partnered with a clear technical and lay person description of the strengths, weaknesses and implications of the assessment
- Known characteristics of the pandemic strain
- Expected at-risk groups
- Surveillance requirements, swabbing every influenza-like illness (ILI) case? Reporting every ILI case across all GPs?
- Repetition of important local contacts during the pandemic (healthcare commissioners, emergency planning and resilience teams)
- Repetition of top public health messages for patients
- Repetition of top preventative measures for use during the pandemic, i.e. non-pharmaceutical interventions
- Next steps in managing the outbreak (isolation, ILI specific clinics etc)
- Planned communications activities at a national, regional and local level, including the messages being used
- A set of FAQs to help HCPs answer patient questions
- A set of FAQs for HCPs from health agencies covering the expected roll out of support as and when a pandemic is locally confirmed
- Where to find verified information – a central information resource – and planned communication channels to be used throughout the alert and pandemic phases
- When communications collateral such as posters and patient leaflets will be available and how to order them
- Preliminary plans for extending patient access to HCPs, e.g. weekend opening hours and how the costs (monetary and staffing wise) of this will be met
- Planned anti-viral logistics – delivery, timing and storage

3. Pandemic phase: Logistics and transparency

- Updated risk assessment partnered with a clear technical and lay person description of the strengths, weaknesses and implications of the assessment
- Updated known characteristics of the pandemic strain
- Updated known at-risk groups
- Updated top public health messages for patients
- Updated top preventative measures for use during the first wave of a pandemic, i.e. non-pharmaceutical interventions
- Any planned roll-out of anti-virals
- Likely vaccine development, delivery and roll-out timetables and logistics
- Concise educative information on how vaccines are developed
- The uncertainties that exist around the pandemic
- Surveillance requirements
- Repetition of important local contacts during the pandemic (healthcare commissioners, emergency planning and resilience teams)
- Strategies to deal with staff absences based on latest data (these will differ from one locality to the next)
- Where to get the latest information from

4. Transition phase: Recognition and resilience

- Wash-up sessions to learn what went well and what didn't
- Public recognition of HCPs efforts made during the first waves of the pandemic
- The planning assumptions and risk assessments for any predicted next waves of the pandemic and the next seasonal flu
- A set of patient facing FAQs about how the latest pandemic vaccine will be used in the seasonal vaccine
- Where to get support to update crisis plans based on the lessons learnt

Section 3

Communication strategies for health agencies

Introduction

Having discussed the evidence surrounding HCPs flu vaccination compliance; HCPs crucial position in outbreak communications; and the known information requirements of HCPs at each pandemic phase; we now outline communication strategies based on this knowledge for health agencies to engage HCPs with major disease outbreak communications.

Mode of persuasion	Persuasive appeal	Main characteristics
Logos 'Logic'	Appeal to reason	Emphasis on logical / valid aruguments and justification by use of facts
Ethos 'Credibility'	Appeal to one's character	Emphasis on the credibility of the source - character perceived as knowledgeable and moral
Pathos 'Emotionally engaging'	Appeal to emotion	Emphasis on expression and emotion - arousing stimuli - use of colourful and vivid language to evoke emotions

Table 1: The three modes of persuasion and a description of their principle characteristics.
Source: TELL ME Document 1.5 – Report on Narrative and Urban Myths.

Specific strategies for communicating with healthcare professionals and patients

Reliance on the deficit model to communicate flu and flu vaccination facts has often led to a fact and figures (logos) heavy approach to flu communications. This approach fails to address the subjective decision making process used by many people and can lead to a perceived vs actual risk mismatch.

Here we discuss the use of credibility (ethos) with HCPs and emotionally engaging content (pathos) with patients; which can help persuade each audience in the vaccination discourse.

The use of credibility (ethos) with healthcare professionals

While HCPs are part of the public and behave as such in many ways, they are also part of a highly hierarchical profession which places great value on the job held by a HCP. Healthcare profession leaders are therefore often well respected and trusted within and outside of their profession, making them a source of credibility-derived influence over HCPs.

This influence is gained via the characteristics attached to the leadership position. For example, the national leader of midwives has worked their way up to the top of the profession. To do this they must have shown high levels of endeavour, knowledge and professionalism. Therefore these characteristics are imprinted on the leadership role giving it and its holder credibility.

The credibility of HCP leaders should be used as a source of influence during vaccination campaigns and disease outbreak communication. The use of credibility as an influencer is exhibited in the flu fighter campaign described in appendix 1.1, and the evidence of GPs in the UK citing the flu tsar's weekly bulletin as being invaluable during the H1N1 outbreak of 2009 (TELL ME deliverable D2.3[12]). Working with HCP leaders in a proactive way will also help health agencies have the necessary contacts and influence to be able to quickly bring together HCP leadership groups in the event of an outbreak.

This does not mean discounting the use of emotionally engaging content with HCPs. Pathos is still an important influencer of HCPs as it is with any population group. We highlight the ethos of HCP leader in particular as it offers a great way of making outbreak communications more relevant and trustworthy for the HCP population.

[12] TELL ME Deliverable D2.3 Report on Health Care Professional Communication Requirements, pages 13.
Available from http://www.tellmeproject.eu/content/d23-report-health-care-professional-communication-requirements

The use of emotionally engaging content (pathos) with patients

As patients make their vaccination decision based on objective and subjective criteria flu vaccination messages should reflect this dichotomy. Using only facts and figures in flu vaccination communication does not adequately answer a patient's questions and concerns which can be rooted in their subjective experience. For example, a patient who has never had the flu is unlikely to respond to facts highlighting how many people get the flu every year. However, a pathos driven approach which highlights the personal benefits of avoiding disruption to day-to-day life by getting vaccinated – less time off work, not having to re-arrange child care arrangements – is likely to have a greater influence.

TELL ME deliverable D1.5[13] describes, "Analogies and figurative speech allow health experts and professionals to communicate the messages more effectively". In addition emotionally engaging content is able to reach a wide array of audiences as the engaged emotions are universal with few cultural variations. Discussing vaccination decisions in more figurative language enables HCPs to park complex medical language and jargon and simplify their vocabulary when discussing vaccination. Pathos is also believed to be the most powerful of the modes of persuasion due to the speed at which the speaker is able to build engagement via emotive discourse.

The use of emotive content on social media platforms has been found to engage patients with health agencies' and build a trusting relationship between a health board and the local public. This is described in appendix 1.2 which details the response to the measles outbreak in South Wales during 2012 and 2013.

[13] TELL ME Deliverable D1.5 Report on Narratives and Urban Myths, pages 26. Available from http://www.tellmeproject.eu/content/d15-report-narratives-and-urban-myths

Localising message content

It is important to remember the use of ethos and pathos only works if relevant to the audience. For example the ethos a national HCP leader holds is relevant to all HCPs but may hold less influence than the ethos of a local HCP leader with whom local HCPs have regular contact. Furthermore empathetic stories can work well over large segments of the patient population but should always be localised with the use of appropriate names, locations and scenarios to ensure the message fits the intended patient segment as well as possible. For example, first names in a story would likely differ in a predominantly ethnic local population to a predominantly white local population. With this in mind local communication teams and HCPs must be given clear guidance on what they can change in the central messages. Alongside this, channels to feedback significant issues and themes should be available to inform the iterative development of the central messages (see figure 2).

Helping healthcare professionals to become active partners in pandemic communication strategies

Throughout the literature a lack of HCP participation in planning for a pandemic is apparent, as is a lack of HCP participation in developing seasonal flu vaccination campaigns. This may come from a false assumption from health agencies that HCPs support their stance(s) on vaccination.

While outbreaks are individual in their characteristics and uncertain in their severity and scale, ensuring HCPs are aware of pandemic response plans and communication strategies enables them to be as up-to-date as possible on the latest local thinking and best practice as and when an outbreak occurs.

Not involving HCPs in the development and refinement of pandemic response plans and communication strategies risks creating a knowledge gap that is simply too large to bridge during the fast-moving environment of a major disease outbreak. Consequentially rushed decision making, known as the peripheral route in Petty and Cacciopo's Elaboration Likelihood Model, is likely to lead to many HCPs maintaining their original view of vaccination. As the research shows this will include many neutral and unsupportive HCPs. Work on HCPs participation in pandemic planning and response must start during the inter-pandemic phase.

An imperfect solution for all

It is important to note at this stage the participative approach to such a wicked problem as vaccination will produce imperfect results for everyone. However as wicked problems cannot be solved in a right/wrong manner, this participative approach enables health agencies and HCPs to find common ground that maximises the outcomes for both groups.

Using a participative approach also leads to engaged individuals and groups gaining ownership of the developed strategies and messages. Groups and individuals who have helped to develop the strategies and messages are far more likely to support and defend them when they are implemented; in part due to them having had the time to learn about the subject matter and go through attitudinal and behavioural change curves towards a consensus view. Turning neutral and critical HCPs into advocates in this way takes a lot of effort, but promises to help increase the number of HCPs who actively support and fully understand outbreak communication efforts.

As stated in TELL ME deliverable D1.4[14], "The collaborative approach, recognizing that the results will be imperfect to some degree for everyone involved, provides the best means of reaching a strategy that maximises the overall benefits for all stakeholders. In order to achieve the necessary support of the adverse groups involved in and affected by vaccine programs, all of these groups must participate in developing the messaging, communication and implementation of strategies entailed."

The participative approach fosters an environment in which those involved are given an extended opportunity to align their perceived risks with the actual risks. As perceived risks are never consistent or stable the participative strategy, and feedback loop described in figure 2, helps to ensure health agencies are as up-to-date as possible with local perceived risks and can factor these into their communications approach.

Even though the characteristics of pandemics are unpredictable, development of draft messages and content should not be overlooked during the inter-pandemic phase. Having messages developed and tested before a pandemic begins will help ensure health agencies can respond quickly to an outbreak and utilise the social capital and advocacy built up through a participative strategy.

[14] TELL ME Deliverable D1.4 Report on Vaccine Acceptance/Refusal and Resistance to Vaccination, pages 72. Available from http://www.tellmeproject.eu/content/d14-report-vaccine-acceptancerefusal-vaccination

Avoiding close-mindedness within a participatory strategy

The culture of command and control traditionally used during the alert and pandemic phases often permeates into the inter-pandemic phase and decreases the uptake of a participatory approach to the development of outbreak communication strategies.

For a participative approach to work well, it is important health agencies (the managers of the participative process) do not engage HCPs on a pre-determined outbreak plan. For HCPs (and patients) to be able to fully participate, all options must still be available to them. This ensures HCPs have a real say in the outcome of the engagement, and the health agencies do not miss HCPs' insights due to the close-mindedness of a pre-determined outbreak plan. Health agencies and HCPs should aim to learn from each other during the process.

As shown in figure 1, throughout the pandemic phases HCPs must be given an open communication channel to feedback on the messages and their effect on the target population – be that the HCPs themselves or patients and the general public. This channel may be project group meetings during the inter-pandemic phase. However, as an outbreak occurs and the phase moves from inter-pandemic to the alert and pandemic phases the channel will have to match the pace of the outbreak in order to gain as much feedback as possible. Social media and frequent formal situation reporting (sitreps) offer faster feedback channels. This approach enables health agencies to assimilate knowledge from their networks as fast as possible in order to stop messages which have a detrimental effect and ramp up messages which are having the desired effect. It can also be coupled with findings from social media monitoring (see section 6) to give health agencies a deeper understanding of the impact of their outbreak communications across target audiences.

Figure 3 oposite, shows the feedback loop gives local health agencies and HCPs an opportunity to include their frontline experience of the use and effect of the national health agency's messages in subsequent message development.

Figure 2

Section 4

Local implementation of a participative strategy: a theoretical example

Introduction

In order to bring the theoretical use of ethos, pathos and a participative approach to life we present here a theoretical example of the use of all three. This example is not based on a real world case study.

Midwives have been found to be a key vaccination audience. Research has shown midwives are resistant to being vaccinated and resistant to recommending vaccination to their patients. Consequently the seasonal vaccination rate of local pregnant women is low compared to the national and European averages.

Planning the work

Aim

Find out why local midwives hold vaccine resistant views, what they see their role as being in a vaccination campaign and understand their level of knowledge about pandemic vaccination.

Objectives (SMART – specific, measurable, achievable, realistic and time-bound):

- Complete all work for the start of the next flu season.
- By week one develop a set of flu vaccination questions to ask midwives.
- Within two months speak to all local midwives face-to-face about their views on flu vaccination.
- By week four refine the questions based on the first meetings with midwives.
- After two months identify the midwifery leaders who set and maintain the vaccination culture and behaviours.

Strategy

Using a cross-disciplinary group of peers, actively engage midwives at their places of work, and create a supportive environment, meeting them face-to-face at times which suit them to find out which midwives lead the local vaccination culture and behaviour.

Tactics

- Meet with midwives at their team meetings.
- Provide an online questionnaire to all midwives.
- Actively seek the support of HCP leaders such as the Director of Nursing, Chief Executive, lead immunisation nurse and national midwifery representative.

Insights

After two months the following insights become clear.

Why local midwives hold vaccine resistant views:

- Of the two local midwifery teams, one team, team A, is significantly more resistant to vaccination than the other.
- The resistant team is led by a highly respected and experienced midwife, ‘Leader A’, who holds long-held doubts about the use of flu vaccines having got a bad cold after receiving the vaccine in the past.
- The leader of team B is supportive of vaccination but is faced with team members taught by leader A before team B existed.
- There is a commonly held belief amongst vaccine resistant midwives that the vaccine is higher risk to mother and foetus compared to the flu virus itself – a perception of flu as a mild illness persists.
- An educational divide exists in both teams, with recently qualified midwives more likely to support flu vaccination than more experienced midwives.
- Leader A holds the national lead for midwifery in high regard.
- Leader A went to college with the local Director of Nursing.
- The national lead for midwifery supports flu vaccination and was heavily involved in the response to the H1N1 pandemic due to pregnant women being an at-risk group.

What the midwives see their role as being in a vaccination campaign:

- There is a lack of confidence from many of the midwives that they have the knowledge to be able to advise pregnant women on flu vaccination, they remain vaccine resistant as they see this as the safest option for their patients and their professional conduct.
- All of the midwives held the view that administering a vaccination was the role of GP surgeries and not midwives.

The midwives level of knowledge about pandemic vaccination plans:

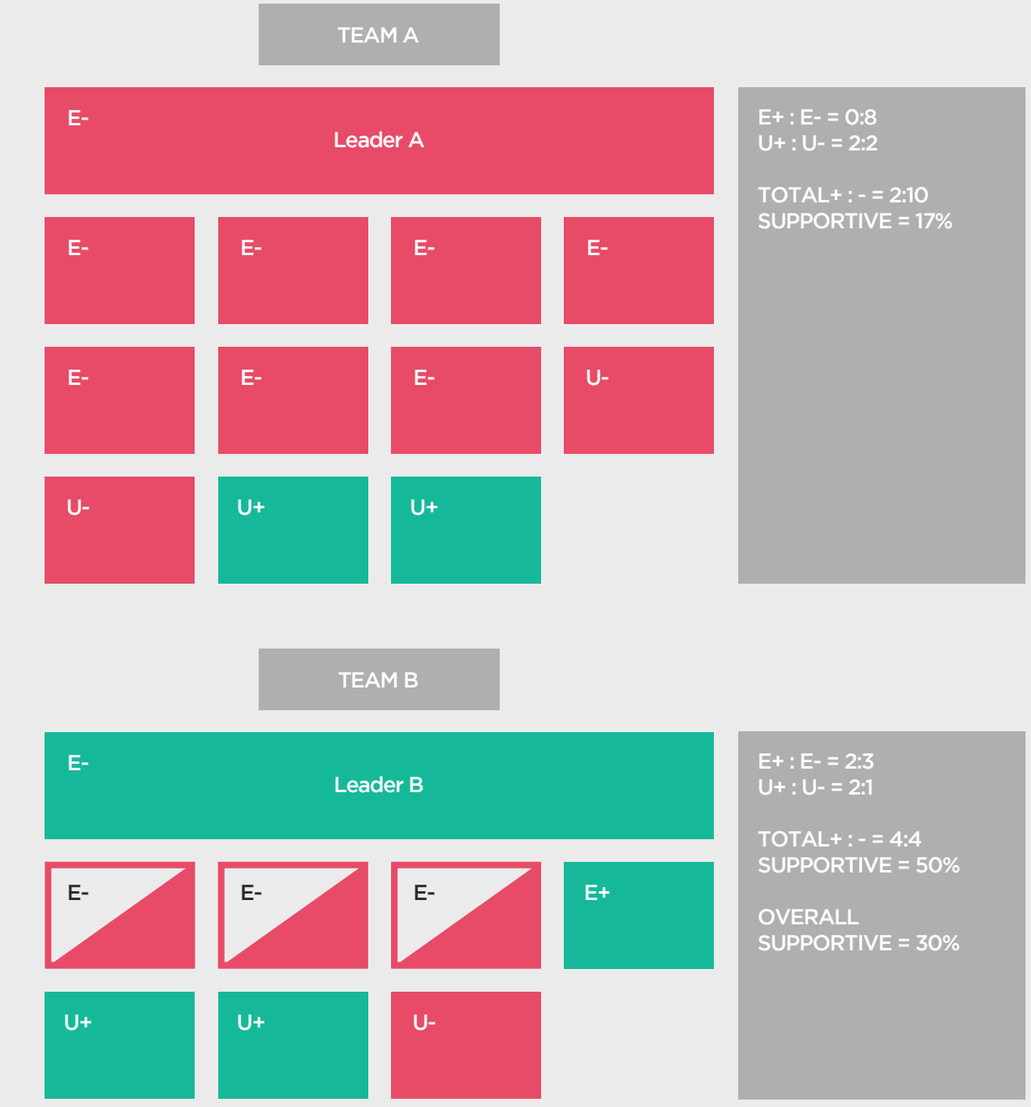
- Neither team is aware of their employers’ or the national pandemic flu plans, they don’t know what would be asked of them during a pandemic.

Figure 3.1 illustrates the flu vaccination stances of both teams of midwives, highlighting that only 30% of the midwives are supportive of flu vaccination for themselves and their patients.

In the second part of the work with the midwives the aims develop to:

- Increase the vaccination rate within the two midwifery teams and begin to engage the midwives, stressing the importance of their role in vaccination campaigns, including during a pandemic.

Figure 3.1



E- = experienced, vaccine resistant
E+ = experienced, vaccine supporter
U- = unexperienced, vaccine resistant
U+ = unexperienced, vaccine supporter
= vaccine supporter
= vaccine resistant
= vaccine resistant, originally led by Leader A

Actions

Increasing the vaccination rate within the two midwifery teams

- Have a face-to-face meeting with Leader A, Leader B and the Director of Nursing to talk about the insights, concentrating on how increasing the vaccination rate will help improve the midwifery service's national standing.
- Provide and promote an online module on flu vaccination, which includes a video of the national midwifery leader setting out why she supports flu vaccination in which she details her personal experience of a death of a pregnant woman from H1N1 (emotionally engaging content).
- Follow-up the online training module with team meetings dedicated to answering the midwives questions about flu vaccination led by the local occupational health team and attended by the Director of Nursing (logic and credibility).
- In the team meetings, provide the midwives with a letter from the national midwifery lead outlining why flu vaccination is so important (credibility).
- Arrange a patient who has had flu while pregnant to visit the next team meetings in order to show the teams the different between a cold and the flu (emotionally engaging content).
- At the following team meetings arrange for the vaccination to be available, ensuring any absentees are offered the vaccination at a later date at a convenient location and time.
- Re-circulate the vaccination questionnaire in order to measure whether beliefs and behaviours have been changed.

Engaging the midwives in discussion on their role in vaccination campaigns, including during a pandemic

- Involve two representatives of the midwives in the next pandemic response practice session.
- Organise a set of meetings between local GPs and the midwives in order for the two groups to be able to find a consensus view on their respective roles during a pandemic vaccination campaign.
- Include the midwives' and GPs' consensus view in the latest pandemic response plans.
- Provide and promote national communication materials about flu vaccination for pregnant women to the midwives for use during clinics and consultations.

How this approach differs from current approaches

- A measurement directed approach - targeting vaccination and communication efforts to groups who have the lowest vaccination rates, making effective use of finite resources to improve vaccination as much as possible.
- Tailored approach to local groups of HCPs, not a single message covering all HCPs.
- It recognises HCPs views on seasonal and pandemic flu vaccination are linked; engaging on one should lead to engagement on the other.
- The use of both ethos (the national midwifery lead and Director of Nursing) and pathos (emotive patient stories) brings to life flu and vaccination facts and figures (logos).
- Multi-disciplinary approach (executive, occupational health and health agency project team working together).
- It recognises the granular approach required to segment and work with different audiences, in this case segmenting the audience to the individual level.

Results

By the end of the next flu season, the collective vaccination rate for the midwives had risen from 30% to 70% (see figure 3.2). Vaccination rates of local pregnant women showed an increase of 19% on the previous year, a change attributed to the work of the midwives as the national seasonal flu campaign remained unchanged.

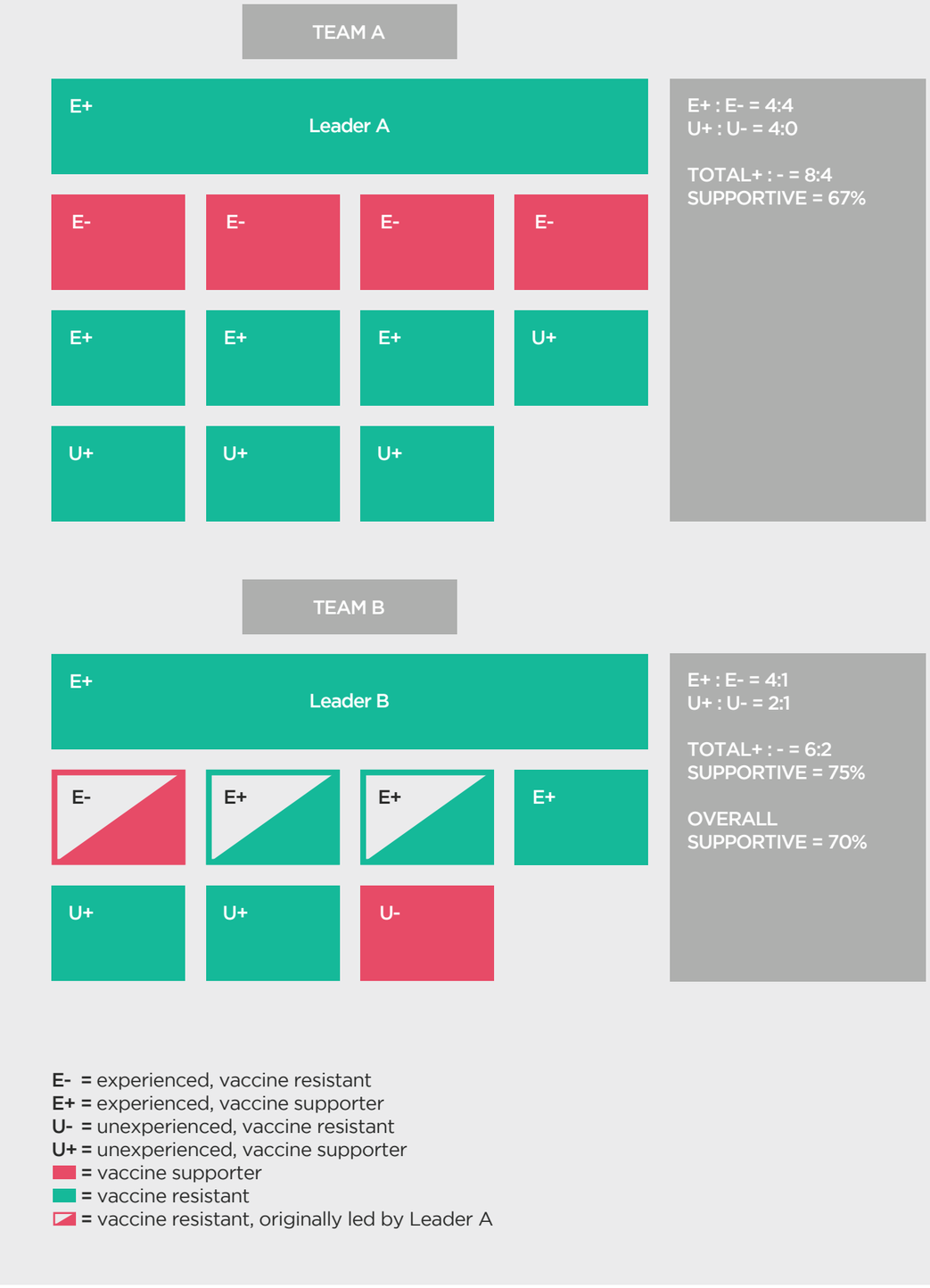
The tracking questionnaire showed the majority of midwives to be more confident in answering common flu vaccine FAQs and confident in recommending the vaccine to their patients. Many of the midwives cited the patient stories as having the greatest impact on their own vaccination uptake.

Leader A has turned her vaccination resistance into vaccine advocacy and along with a member from team B represents the midwives on the local crisis planning committee. An example of a HCP being turned from a critical vaccination communication recipient to an active advocate of vaccination and outbreak communications. The local pandemic plans have been amended to provide greater recognition and detail of the role of midwives during a pandemic, especially in coordinating their response with their GP colleagues. This has led to calls for local community nurses to also be included in the committee and coordination plans.

Feedback from local GPs has been extremely positive. It is felt the midwives are now more committed to coordinating flu vaccination efforts with GPs than ever before. Most importantly, feedback from pregnant women highlights that being able to get their flu vaccination questions answered by the midwife has greatly helped them make their vaccination decision. The majority of midwives are no longer non-committal in recommending pregnant women to get the flu vaccine.

Plans for the next flu season are now being drawn up to enable midwives to administer seasonal and (if needed) pandemic flu vaccinations to their patients across the community. The health agency project team has submitted the midwives flu vaccination work to the national midwifery awards and it has been shortlisted. The midwives have taken particular pride from this added credibility. This has raised community nurse colleagues' interest in the subject of flu vaccination and there are plans for midwives to join their team meetings to discuss flu vaccination with them using a peer-to-peer format.

Figure 3.2



E- = experienced, vaccine resistant
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= vaccine resistant
= vaccine resistant, originally led by Leader A

Section 5

The practical application of a participative strategy

The four elements

The theoretical midwifery example contains four elements that are applicable to any HCP population. These are illustrated in figure 4 and show how a participative strategy is made up from coordinated sub-strategies of measurement, education about vaccination, network development and message development; all of which undergo iterative cycles of development, testing and refinement (figure 5).

Figure 4: The elements of a participative strategy which lead to developed vaccination messages which are supported across multiple professional groups.

Importantly, the participative approach should be carried through all of the sub-strategies. For example, the measurement and segmentation strategy could use a network of local HCPs to collect the data – such as the flu leads described in appendix 1.1. The education strategy should not prescribe what is required for HCP education but involve HCPs in defining the curriculum, for example via crowd sourcing flu vaccination FAQs from a group of HCPs. Similarly, network development should not be controlled by the health agency but be informed and directed by HCP insights, as is shown in the midwifery theoretical example by colleagues planning for the inclusion of community nurses in the pandemic planning committee.

Figure 4

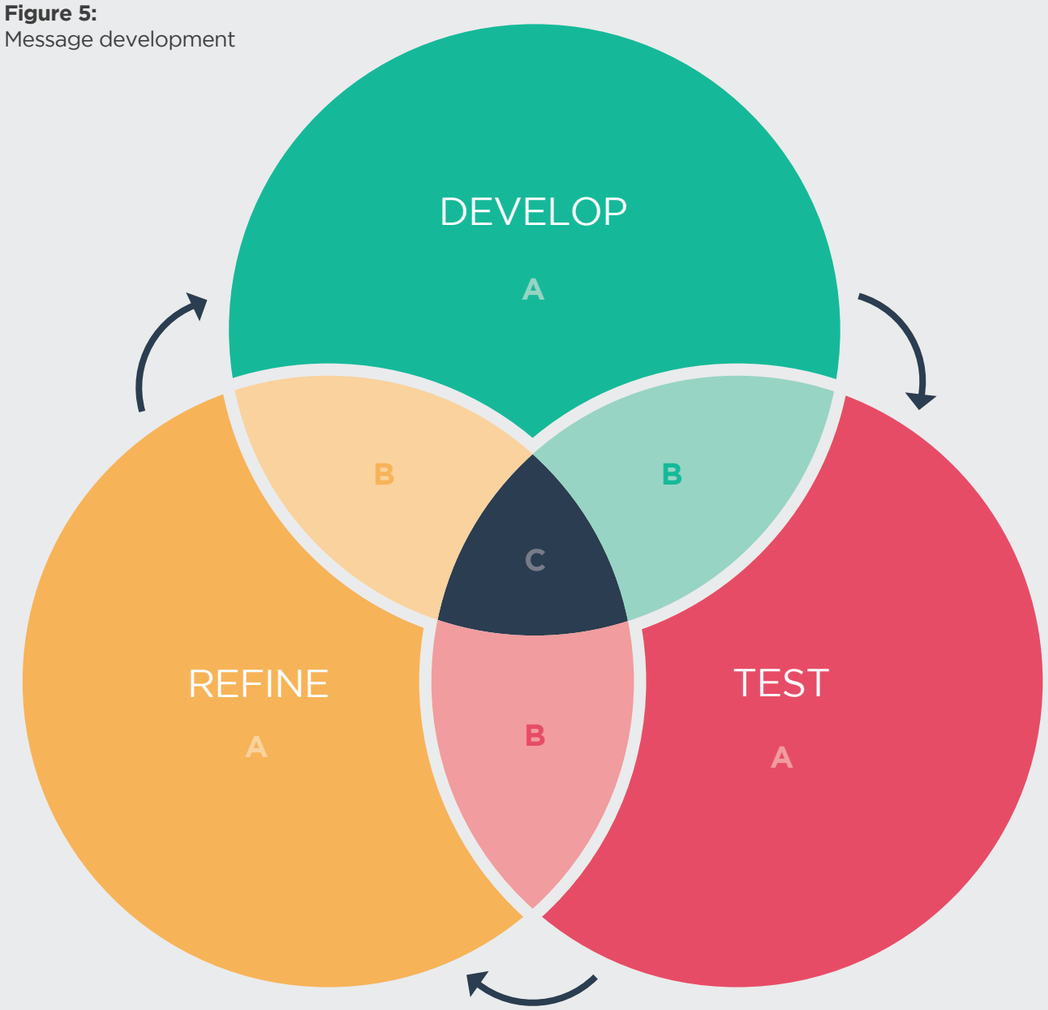
The develop, test, refine cycle of message development

Figure 5: The development, testing, refinement cycle required to produce flu vaccination messages based on group consensus gained from a participative strategy. Example stakeholders are detailed below the figure and are taken from the earlier midwifery flu vaccination theoretical example.

By segmenting which HCP groups have the lowest vaccination rates and highest patient contact levels (e.g. this could be GPs), resources can be directed in the most effective way. This approach enables health agencies to make an evidence based decision to target a segment of HCPs with concise, clear and customised information, stopping the resource consuming task of targeting all HCPs groups.

Following the participative strategy the targeted HCP segment should be involved in developing, testing and refining their information. The ownership of the messages garnered from this strategy will help ensure the target group stand behind the messages, help promote them to their peers and take ownership of future iterations of the 'develop, test, refine' cycle in partnership with health agencies.

Figure 5:
Message development



A INTERESTED PARTIES

- Professional Journals
- National representative groups
- Awards
- National midwifery leaders

B KEY STAKEHOLDERS

- HCPs midwives collaborate with, e.g. GPs
- Pregnant women
- Organisation's executives

C CORE STAKEHOLDERS

- Midwife representative group
- Health agency pandemic planners
- Health agency communications professionals

Section 6

Peer-to-peer channels and social media

Peer-to-peer communication channels are trusted by healthcare professionals

Just as a HCP recommendation influences a patient's vaccination decision; recommendations from fellow HCPs can influence HCPs vaccination decisions. In general peer-to-peer channels are trusted by HCPs as they offer information from a respected, knowledgeable and trusted source. Examples of peer-to-peer communication channels include:

- Peer vaccination clinics (work colleagues vaccinate each other).
- Public vaccination pledges.
- Scores highlighting how many HCPs have been vaccinated.
- Healthcare professionals' social media profiles and blogs.
- Leadership letters supporting flu vaccination or other protective behaviours (see appendix 1.1 - Building a country-wide flu network: flu fighter).
- Professional journals.
- Trade unions magazines and websites.
- Conferences.
- Newsletters from HCP leaders.
- Awards.

Social media and health agencies

Increasingly peer-to-peer channels of communication involve channels outside of employer organisations. This includes social media, with many prominent and influential HCPs discussing every aspect of their profession openly online. Outbreak communication and flu vaccination campaign planners must recognise these conversations and join them, creating content specifically for them but not trying to control them.

The speed at which information (both true and false) can spread over the networks makes social media an important part of any outbreak communications strategy. Developing a valued and valuable social media profile takes a long time and a lot more thought than just posting a few things now and again. When, how, to who and from where you post have great impacts on the value of your profile to its followers, and the likelihood of genuine engagement with them. With this in mind it is important to have mature, trusted and engaging social media profiles in place before any crisis or outbreak occurs. Here are four key areas for health agencies to work on.

1. Proactively build your social media presences

The pace and scale of social media means that late arrivals to a platform are often unlikely to gain traction in ongoing conversations; unless they are of sufficient public standing to generate large numbers of followers very quickly. Health agencies and HCPs risk not being part of the conversation if they aren't already using social when an outbreak occurs. To avoid this risk it is imperative that health agencies and willing HCPs build their social. media presences before any crisis or outbreak occurs.

2. Use the inter-pandemic phase to build social capital and monitor vaccination conversations

In order to have an active network through which to promote outbreak information, build online social capital with community leaders such as HCPs, religious leaders, media outlets, community bloggers, politicians and other public institutions.

Health agencies must not try and re-invent social media communities within their organisational boundaries but seek acceptance from existing communities.

Monitor conversations about vaccination on social media using key words such as 'flu AND jab' 'flu AND vaccination AND [location]' to learn some of the questions, opinions and myths the public have about vaccination. Feed these into your organisation's rounds of message development and testing.

3. Setup a sound process to ensure clinically correct information is shared on social media platforms

Put in place a system which enables social media channel managers to have access to clinically correct information. This should include a central information point to help multiple organisations and individuals refer to the same content, and include a process for social media channel managers to be able to get quick answers to the public's questions from clinicians.

Social media channel managers should be given training in 'outbreak facts' as they will represent the organisation's point of view on flu and other outbreaks. Similarly, it is a good idea for clinicians to be given social media awareness training to show them how social media works and why quick responses to questions are required.

4. Be open and transparent about why you're using and monitoring social media

Don't use the accounts to 'spy' on the public. Engage in two-way conversations about vaccination by monitoring and answering vaccination questions in pre-existing online communities. Answering questions and being comfortable with the public challenging your answers helps to build social capital on platforms.

Share your learning from monitoring social media with staff outside of the pandemic planning and communications team. This will help build knowledge and acceptance of the use of social media in communicating complex health messages.

Social media and healthcare professionals

Healthcare professionals can benefit from the above four points but they should also consider, and be given the opportunity to learn about, the following HCP specific areas of using social media.

Professional guidance

Many of the HCP regulators, colleges and unions have published professional guidance or codes of conduct for social media. These often set out what is deemed to be unprofessional behaviour for HCPs on social media platforms.

Patient confidentiality

Healthcare professionals should be aware of possible breaches of patient confidentiality online. Patient's contacting their HCP on social media platforms can be signposted to offline channels in order to speak to their HCP confidentially.

Using Dr, Nurse, Consultant etc. online

Just as in everyday life, HCPs titles have an impact on how likely the owner of the title will be trusted. By going onto social media platforms and being open about being a HCP, healthcare professionals have a responsibility to their profession to uphold its norms of respect to others and providing honest information. Healthcare professionals should be aware their online opinion may be used by the public and media to discuss professionals' opinions during an outbreak.

Section 7

Supporting healthcare professionals to engage with vaccine resistant patients

Introduction

Just as HCPs must not be presented with a pre-defined pandemic plan when participating in planning, patients should not be presented with a vaccination or nothing decision. Treating patients as individuals, empathising with their views and beliefs, and sharing power and responsibility between HCP and patient all help to increase patient vaccination rates (TELL ME deliverable D1.3[15]).

These approaches manifest themselves in the way HCPs talk about vaccination with a patient. A HCP may state, "You need to get the flu vaccination", or may ask "Would you like to get the flu vaccination?" The two different approaches produce a closed and an open conversation respectively. Only in the open conversation can a HCP truly begin to understand the reason for any vaccination resistance and begin to influence a patient's stance.

[15] TELL ME Deliverable D1.3 Segmentation and Specific Communication Needs of Target Groups. Available from http://www.tellmeproject.eu/content/d13-segmentation-communication-needs-target-groups

Non-pharmaceutical interventions

"Do not abandon vaccine resistant patients; continue to provide care, and take advantage of every opportunity to further educate about the benefits of vaccination."

(TELL ME deliverable D1.4[16])

Non-pharmaceutical interventions (NPIs) are an extremely important part of a pandemic response, offering a practical way to try and minimise the transmission of flu and giving the public a way to respond to a stressful situation. Vaccine resistant patients should be given clear information about how NPIs can help protect themselves and their loved ones from seasonal and pandemic flu. Use of NPIs as an introduction to flu prevention can help start to discuss with vaccine-resistant patients the risks of flu and the benefits of preventing it. This is particularly important for patients who are not used to preventative interventions such as some ethnic minority patients (TELL ME deliverable D2.3[17]) and during the initial stages of an outbreak when a vaccine may not be available.

[16] TELL ME Deliverable D1.4 Report on Vaccine Acceptance/Refusal and Resistance to Vaccination, page 67. Available from http://www.tellmeproject.eu/content/d14-report-vaccine-acceptancerefusal-vaccination

[17] TELL ME Deliverable D2.3 Report on Health Care Professional Communication Requirements, page 36. Available from http://www.tellmeproject.eu/content/d23-report-health-care-professional-communication-requirements

Communicating with different patient segments: A decision tree

Table 2 sets out the different messages HCPs should deliver to different unvaccinated patient segments. The overall aim of the communication is to help the patient align their perceived risk from the disease and vaccination with their actual risks.

It should be noted that the decision tree is based on a primary care consultation setting, and a best case scenario. That being one in which health agencies have developed, tested and published flu vaccination (seasonal and/or pandemic) information in accessible formats online and offline which target the variety of segments that exist in the target population. This also includes work outside of communications such as improving access by partnering with employers to offer the flu jab at work, and running weekend flu jab surgeries. Finally, much of the success of using the suggested information relies on HCPs being given the knowledge to be able to segment their patients 'on the fly' and deliver the same message in different ways to match individual patients.

TELL ME's free online course[18] for primary care staff allows healthcare professionals to test their epidemic and pandemic knowledge and communication skills against a selection of case studies.

[18] Free e-learning course to help healthcare professionals get used to issues surrounding a major disease outbreak before it occurs. It provides reliable information based on TELL ME research, scientific publications and health authority (WHO, ECDC, CDC) sources. The contents of the course focus on preventative measures, from hygiene to vaccination. It trains HCPs to convey this information to the public using counselling principles and improved communication skills.
Available at: http://elearn.tellmeproject.eu/

What patient group does the patient belong to?*

Patient group	Likely elements of patients' histories	Suggested information to provide	
Plan to get Help them access the vaccine	• Has been vaccinated against flu in the past • Was not vaccinated during the last flu season • Finds getting the vaccine difficult to fit into their schedule • May not perceive flu as a threat.	• Personalised information on how to best access the vaccine, e.g. after work and weekend clinics or workplace programmes • Let the patient know as a HCP you support their decision to get the vaccine • Where clinically appropriate, advise them to suggest other members of their family follow their lead.	Pathos, logos and ethos equally important
Need more information Discuss their perceived threat of flu	• May have been vaccinated in the past • Not vaccinated during the last flu season • Has concerns about the efficacy and/or safety of the vaccine • Less likely to perceive flu as a threat than the 'plan to get' group • More likely to believe some urban myths, e.g. the flu jab gives you flu • Likely to trust HCP advice on vaccination	• Discuss the patient's concerns and suggest sources of further information (health agency websites, leaflets) • Provide fact sheet debunking urban myths to take away with them, including relevant patient specific information, e.g. long term condition patients • Discuss a relevant empathetic patient story outlining the potential seriousness and impact of getting the flu, e.g. the social impact of having the flu • Information on how to best access the vaccine.	Logos most important
Ideologically opposed Start a long- term conversation	• Has never had the vaccine in the past • Has ideologically anchored views against flu vaccination, and likely all vaccination • More likely to follow non-medical, 'naturalist' prevention and cures • More likely to distrust authorities, including HCPs, health authorities and vaccine manufacturers about vaccination • Believes and propagates urban myths about the vaccine • May be willing to change their behaviour to protect others.	• Openly discuss and take on board their concerns • Appeal to altruistic motives to be vaccinated, e.g. to protect elderly parents or a relative in an at-risk group • Provide clear advice on NPIs, reinforcing the vaccine is the best line of defence we have against flu • With more receptive patients, provide a relevant empathetic patient story outlining the potential seriousness and impact of getting the flu, e.g. a younger patient having severe complications • View this as part of a long-term conversation over the coming flu seasons.	Pathos most important

*For the purposes of this table patients with three years of uninterrupted flu vaccine coverage are considered outside of all of the listed groups.

Section 8

Bibliography & Appendix

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Virseda, S., Restrepo, M. A., Arranz, E., Magan-Tapia, P., Fernandez-Ruiz, M., de la Camara, A. G., . . . López-Medrano, F. (2010). Seasonal and pandemic A (H1N1) 2009 influenza vaccination coverage and attitudes among health-care workers in a Spanish university hospital. Vaccine, 28(30), 4751-4757. Without a network to disseminate your well-researched and targeted messages you won't succeed in reaching your target audiences.

Appendix 1: The importance of networks

This section discusses real-life examples of how networks can be built and maintained, and how existing networks can be re-purposed for pandemic communications. It also looks at what makes a network succeed.

Appendix 1.1: Building a country-wide flu network: flu fighter

Flu fighter is a seasonal flu vaccination campaign for healthcare professionals (HCPs) run in England and Wales. Managed from a central healthcare organisation, NHS Employers, flu fighter provides healthcare organisations across England and Wales with the communication materials required to organise and run a staff facing flu vaccination campaign. The campaign follows a model of centralised development of communications material and local implementation of the campaign. This approach enables a national campaign to be tailored to local audiences and cultures.

Levels of support

The flu fighter team have built and maintain a network made up of over 1,100 contacts or 'flu leads', working hard to ensure they have two contacts at each NHS Trust[19]. The team provide support on three levels to the flu leads:

Level one (materials):

Posters, leaflets, stickers, social media content and other marketing collateral (developed and designed based on feedback from the flu leads and HCPs) are printed and delivered for free to any flu lead who requests them.

Level two (guidance):

Guidance to help flu leads set up and run their local flu fighter campaign is published online for local download. This includes guidance covering the clinical evidence for vaccination written by a leader in the field of flu vaccination and letters to segments of the HCP population[i] supporting vaccination from their respective leaders, for example, the Chief Medical Officer and the Chief Nursing Officer of England.

Level three (support, praise and feedback):

The HCP specific flu fighter hotline provides telephone support to flu leads who want to speak to the team to discuss their campaign and ask any questions. Site visits are also used to provide support and enable the national team to learn about implementation of the campaign at the local level.

Annual flu fighter awards are run to champion best practice and innovation from the flu leads. These act to praise the work of the network and provide a valuable focal point for face-to-face engagement and maintenance of the wider network.

Finally, support level three includes regional round-up meetings at the end of each flu season. These meetings are held across England and Wales and are a forum for all flu leads to provide feedback on what did and didn't work, helping to evolve the campaign from year to year.

[i] NHS Employers, flu fighter resources pack, http://www.nhsemployers.org/campaigns/flu-fighter/running-your-campaign (last accessed 15/08/14)

[19] A NHS Trust can cover one or more hospital and/or community and/or mental health care setting.

Impact of this network

The development of the flu fighter network and campaign has helped lead to a rise in the percentage of HCPs being vaccinated with the seasonal flu vaccination in England[20].

The materials and support offered to members of the network act as an incentive to become a member and have led to the development of flu leads across hundreds of organisations that did not have them before. This has helped raise the issue of the seasonal flu vaccination throughout the National Health Service.

As a member of the National Flu Project Board (run by England's Department of Health) the flu fighter team acts as a link between the flu leads and national policy, ensuring two-way communication and hierarchical support for the campaign.

Important characteristics of this network

Based on the experience of the flu fighter team and the best practice identified during TELL ME's research phase (particularly deliverables D1.3 and D2.3) the following characteristics are of greatest importance to the success of the campaign:

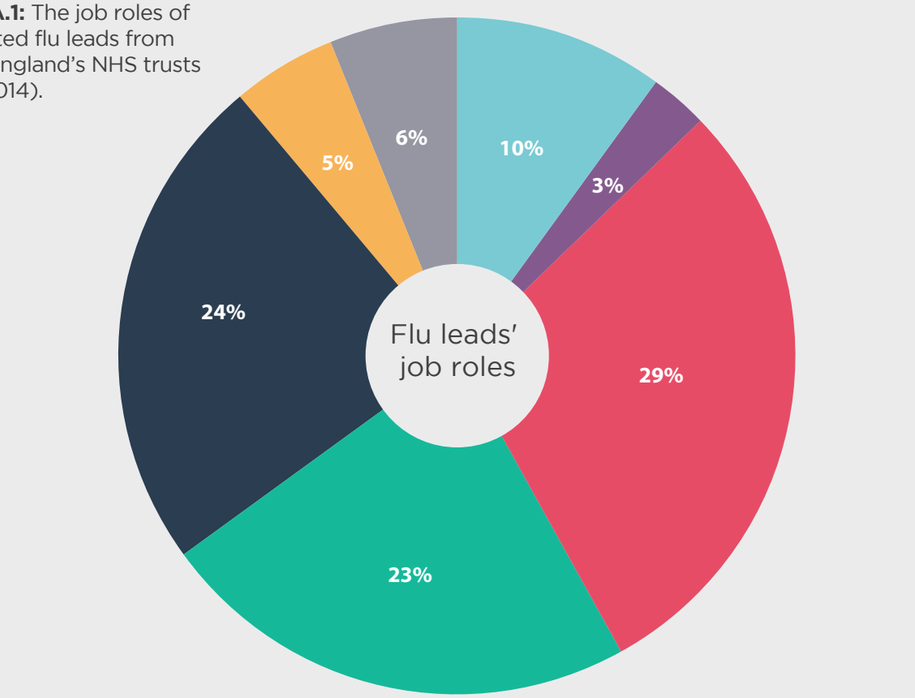
- The flexibility for local flu leads to mould the campaign for their local audiences and cultures, one size does not fit all – audience segmentation based on local knowledge.
- Use of ethos via the letters from the healthcare professions' leaders.
- The recognition that the HCP audience often wants clinical evidence for an intervention and so the team provide that as part of their materials.
- A clear offer to members of the network – "join and be supported by campaign experts".
- The campaign is plugged into the overall national approach to flu (seasonal and pandemic) improving two-way communication and synchrony between local and national plans.
- The diverse range of flu leads allows the network to mould to local organisation structures (see figure A.1).

For those wanting to replicate the flu fighter network it should be noted it only requires 2.5 Whole Time Equivalent (WTE) staff.

[20] Flu fighter was rolled out in Wales in 2013/14 therefore Welsh data doesn't yet exist.

In 2010/11 34.7% of National Health Service (NHS) HCPs were vaccinated against seasonal flu, by 2012/13 this had risen to 45.6%. This has been attributed to both the flu fighter campaign and the rise in importance of the vaccination in national policy post H1N1 2009.

Figure A.1: The job roles of designated flu leads from across England's NHS trusts (2013/2014).



Appendix 1.2: Re-purposing a network: Using social media to combat measles[21]

Between November 2012 and July 2013 South Wales suffered from a measles outbreak totalling over 1,200 cases[ii]. The outbreak was able to take hold in Wales due to a large proportion of school children never having been given the MMR vaccine after the autism scare in the 1990's.

In reaction to the outbreak Abertawe Bro Morgannwg University Health Board (ABMU) ran vaccination clinics across local schools and at four hospitals on weekends. In addition. GPs in the area also vaccinated in their surgeries and many held additional clinics and sessions. The requirement to promote the dates, times and locations of the clinics along with the acute need of local parents for wider information about measles and the vaccination lead to the Abertawe Bro Morgannwg University Health Board's communications team re-purposing their social media networks for use during the outbreak.

But as well as broadcasting information about the vaccination clinics, social media played a much wider role in helping to engage parents in discussion about the MMR vaccine, answer questions, and clarify misinformation. It also allowed parent-to-parent discussion to develop. All of this was important in overcoming lingering prejudice against the MMR vaccine, a legacy of the unfounded link with autism made by Andrew Wakefield in the 1990s. His research has been thoroughly discredited by the scientific and medical community worldwide.

Locally known

Information about the outbreak was managed at a national level by Public Health Wales. However, at a local level the public looked to the ABMU for information as many already had a relationship with the organisation.

Social media, namely Twitter and Facebook, had helped build up a relationship between the health board and the public prior to the outbreak. This included a Facebook group specifically for young families offering health advice and information to that audience.

When the measles outbreak hit many people went directly to these social media contact points to ask the health board questions about measles, the vaccination and the vaccination clinics. Taking advantage of this proactive contact the health board communications team worked with clinical colleagues to quickly answer the questions, embodying the United States' Centre for Disease Control values of, "be first, be right and be credible" during a public health crisis.[iii]

[21] Appendix 1.2 is based on a telephone interview with Susan Bailey, Head of Communications at Abertawe Bro Morgannwg University Health Board and her blog post: http://comms4health.com/2013/08/21/knocking-the-spots-of-measles/

[ii] Public Health Wales, Measles Outbreak: Data, http://www.wales.nhs.uk/sitesplus/888/page/66389#a (last accessed 15/08/14)

[iii] Centers for Disease Control and Prevention (2010d). 2009 H1N1: Overview of a Pandemic, http://www.cdc.gov/h1n1flu/yearinreview/yir8.htm (last accessed 15/08/14)

Trusted content

The pace of the outbreak meant there was not a lot of time to build trust with the public over such a contentious issue as MMR, and the health board used the trust already in their social media networks to help spread their messages. The use of clinical sign off further ensured the content posted to the social media networks was credible and trustworthy.

Staffing the network outside office hours

In order to use social media networks to their full potential during the outbreak the communications team staffed their profiles outside of office hours. This flexibility enabled the health board to talk with parents coming back from work and maintain fast response times to questions. How networks can be managed outside of conventional working hours during a public health crisis is a crucial question for health organisations across Europe as 24/7 media coverage and internet access makes a 9-5 day impractical and ineffective at effectively communicating healthcare messages.

Appealing to emotion

In line with evidence discussed throughout the TELL ME documentation, particularly D1.3 and D1.5, the health board communications team used the rhetorical device of pathos (appeal to emotion, see table A.1) throughout their communications with the public via Twitter and Facebook. Contrast this to Flu fighter which used ethos more readily when communicating with healthcare professionals.

To quote Susan Bailey, Head of Communications at Abertawe Bro Morgannwg University Health Board, “We didn’t want to be seen as out-of-touch or stuffy so we used everyday language to remove the potential divide between us as representatives of a health board and members of the public.

“We made an effort to acknowledge and empathise with the worry many parents were feeling and didn’t shy away from writing emotive responses to anti-vaccine posts.”

“This approach helped us to be trusted by the parents and we received many messages thanking us for our help and support.”

Mode of persuasion	Persuasive appeal	Main characteristics
Logos 'Logic'	Appeal to reason	Emphasis on logical / valid aruguments and justification by use of facts
Ethos 'Credibility'	Appeal to one's character	Emphasis on the credibility of the source - character perceived as knowledgeable and moral
Pathos 'Emotionally engaging'	Appeal to emotion	Emphasis on expression and emotion - arousing stimuli - use of colourful and vivid language to evoke emotions

Table A.1: The three modes of persuasion and description of their principle characteristics.
Source: TELL ME Document 1.5 – Report on Narrative and Urban Myths.

Ceding control

Best practice on social media states organisations should not try and control their communications as stringently as they may do with traditional media. However, this proves difficult for some. In this case the health board let anyone post on their Facebook pages, whether they were neutral, pro or anti the measles, mumps and rubella (MMR) vaccine, deleting no posts.

Ceding control of the content on their Facebook page like this helped the page become a safe place where there were no stupid questions. For those worrying about how this approach gives anti-vaccine people a voice at a crucial time this was the experience of the communications team,

"We found that once the anti-vaccine profiles had posted their arguments twice or more the other parents in the community robustly told them that they had had their say and to allow other people to ask their questions, or state their opinions."

Appendix 1.3: Successful networks have...

From these case studies and the body of evidence discussed in previous TELL ME documents we can see that successful networks for spreading information during a pandemic have the following traits:

1. Exists before a pandemic starts.
2. Members trust each other, the network has credibility (ethos).
3. Feedback loops and processes (two-way communication) exist to improve the network and it's materials.
4. A targeted membership, e.g. parents or flu leads.
5. A clear offer to its members, e.g. come here for the latest information and best resources.
6. The flexibility to be re-purposed at the time of a pandemic.
7. A hub – a central point of information generation and validation.
8. Redundancy, e.g. Flu fighter's two contacts per Trust.

For more information on the TELL ME project or to access the guidance documents and tools, please go to **www.tellmeproject.eu**

Alternatively, you can contact us on the details below.

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