

E-Com@Eu Programme Work Programme 3



The use of Segmentation and Customer Journey Mapping

**In three European Countries in relation to pandemic
influenza, based on the 2009 H1N1 outbreak**

Part One

**A report of three case studies (England, Italy and Hungary)
and their use of audience research for communications
aimed at health care workers and the general public.**

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Executive summary

This report describes case studies from three European countries – England, Italy and Hungary - and their use of audience research to inform their communication strategies in response to pandemic influenza. The focus of the research was on the use of social marketing – and specifically customer journey mapping and segmentation of audiences.

The three selected case study countries were selected because they were broadly representative of Europe in terms of geography (North, South and Eastern Europe), size of population (two large and one medium) and level of economic development.

The case studies involved site visits and interviews with a range of government and health officials with responsibility for planning and implementation of communications on pandemic influenza. Much of the discussion focused on the experience of each of the countries in relation to the H1N1 outbreak in 2009, and lessons learnt from that time. However, while this research draws heavily on that experience, it is not intended as an evaluation of any country's response to the 2009 outbreak.

A lack of audience research used to inform communications

The most important- and the most unexpected - finding from all three countries, was the lack of audience research that had been used in the development of communications with healthcare workers or the public. The concept of 'customer journey mapping' was unfamiliar to all but a couple of respondents – although a basic 'process or systems map' had been considered in England. While the notion of segmentation was used to identify priority groups for vaccination, it was not used for communications purposes.

The main reason given by respondents for the lack of audience research related to the nature of pandemic influenza as an exceptional public health event. An outbreak of pandemic influenza was described as being intrinsically different from all other public health priorities. This was because it affected everyone, because of the urgency of the crisis and because of its dominance of the news agenda.

Message content

The recommended behavioural messages were broadly similar in each of the three countries. They included messages about how to prevent the spread of infection (hand and respiratory hygiene messages, social distancing messages, how to treat symptoms, identification of groups prioritised for vaccine uptake, and how to access vaccination when it became available.

Tone of communications

There was some consideration given to the tone of communications aimed at the general public – and in the way that spokespeople communicated with the news media. In general, the intended tone was one of seriousness at the potential risk posed by the pandemic coupled with reassurance that appropriate measures were being taken. There was awareness of the need to communicate reassurance and to avoid panic.

Emotional appeal of social advertising campaigns

There was little evidence that much consideration had been given to the emotional appeal of the communications campaigns aimed at the general public. Where respondents had knowledge of this aspect, it was reported that the aim had been to communicate in a direct, unemotional manner, and to avoid seeking to achieve any specific emotional impact on the audience. In England, more emotionally driven creative executions were discarded in favour of instructional advertising.

Message givers

In England and Hungary the primary spokespeople who provided updates to the news media throughout the pandemic were senior health experts. The non-partisan role of these communicators was felt to have been important in establishing trust among the public about the management of the pandemic. In Italy, both the Prime Minister (Berlusconi) and the Health Minister (Fazio) took a personal – and highly visible – role in the publicity campaign and in the weekly media briefings. This identification of the pandemic with politicians in Italy was felt to have contributed to distrust in the way the pandemic was managed, and to have given succour to the anti-vaccination movement there.

Reasons for the lack of audience research

Respondents felt that the pandemic itself, as well as the messages from government and health experts - applied to all groups in society, and thus there was no need to segment the audience for the purpose of communications. It was also felt that the emergency nature of the event – and its widespread coverage on daily news media - ensured that levels of awareness and knowledge were near saturation point.

Other reasons given for the lack of audience research – both prior to the outbreak, during and subsequent to the event – included a lack of time to prepare, a lack of expertise in the commissioning and application of such research, and a culture in which communications for public health topics were planned and delivered by

technical experts, advertising agencies and policy makers (including government politicians directly in the case of Italy) - without consideration of audience research.

Mainstream media

While all three countries developed their own social advertising campaigns in 2009 to communicate messages to the general public, there was appreciation that for most people, the main source of information about pandemic influenza was obtained via mainstream media (TV, radio and print media). The importance of leadership – and particularly the role of the message giver – in communicating an appropriate tone and message, was identified as critical by all respondents. As noted, Italy provided a useful contrast with England and Hungary, as the only example of the three where national politicians took a leading role in communicating with the media. Respondents were alert to the importance of working closely with media outlets, and of providing regular updates on the progress of the pandemic and of response.

Social media and the internet

There have been a number of important developments in social media in the few years since 2009. Respondents reported that the official communications developed in response to the H1N1 pandemic had not sought to exploit social media channels in the way that would be done today. In England and Italy there was no use of Twitter, Facebook or other social media sites to communicate to key audiences. Hungary made reactive use of social media in the middle of their campaign to ameliorate the effects of the social media elements of the anti-vaccination campaigns. The main use of the internet was to post timely information on government and health service websites, reinforcing messages from the communications campaign. The exception was the National Pandemic Flu Service in England (NPFS), which used a web based tool to triage patients with suspected infection and to distribute anti-viral medicines. The NPFS also reported working with modellers to monitor trends in search terms in search engines (e.g Google) related to influenza, as a means of predicting demand for the service.

Overall, respondents reported that they perceived the role of the internet to have been an obstacle to communication. They felt that anti-vaccination proponents had been more advanced in their use of social media and other digital technologies, and that the official voice had been either absent or had been slow and cumbersome. There was a widespread view that the 'blogosphere' was dominated by oppositional voices. Respondents in England in particular, pointed out that present day planning for communications was much more advanced in how to use social media. Hungary plan to make much more proactive use of social media next time.

Role of evaluation

An important observation about the nature of communications programmes for pandemic influenza, was that they were considered important only at the moment of the crisis. As soon as the emergency passed, there was very little opportunity, and in some cases, interest among policy makers in reviewing, reflecting or evaluating their impact. However, this study did identify interest among public health and other social scientists, who were concerned about the impacts of communication on behaviour. In two of the three case studies these academics were not sufficiently engaged with the communications programmes to effect change. A key recommendation would be to broaden the range of roles involved in the planning, development and evaluation of communications to include public health and behavioural experts.

Contextual factors: mixed reaction to the H1N1 pandemic of 2009

Following the 2009 pandemic, respondents from all three countries reported some level of criticism at the perceived 'over reaction' to the pandemic. These criticisms had been directed at both the national level – at governments and policy makers - and at the international agencies (WHO) that were held to be responsible for failing to properly assess the risk posed by the H1N1 virus.

Respondents reported that the perception of having over-reacted had led to accusations of 'crying wolf' and wasting public money on unused antiviral medicines and vaccines.

Respondents' assessments from 2009: success factors

A number of respondents from all three countries commented that they felt that the 2009 experience had revealed a range of factors that had been successful, and a number of flaws in the preparedness to respond to that outbreak.

In England for example, there was satisfaction that the National Pandemic Flu Service had worked well. This web and phone based service – promoted by the public communications campaign – was identified as the key response mechanism for people affected by flu symptoms. It operated as a triage service, and ensured that the 'worried well' did not inundate primary care and hospital services. It was reported that 60 per cent of anti-viral medicines distributed in the UK during the pandemic, were sent to people who made contact with the NPFS either via the internet or by telephone.

In Italy, the elements of the response that were identified as working well included the surveillance system and the communication across the 21 regions with professionals – including health administrators and local and regional government officials.

In Hungary, the fact that there was a rapid development of a vaccine thanks to the efforts of domestically based pharmaceutical companies, was felt to have enabled

rapid production of the vaccine and helped achieve a relatively high level of vaccine uptake among both health professionals and the general public. Furthermore effectively challenging the anti-vaccination lobby ensured that misinformation about the vaccine was kept to a minimum.

2009 – Key Lessons

However, together with the sense of achievement that came with having successfully implemented an emergency response, there were several respondents from all three case studies who felt that the response had been sub-optimal, for a number of reasons. Some commented that there had been insufficient preparation and planning, particularly in the area of communications.

In all countries there were reports that the communications planning was done at the very last moment – and in some respondents' opinions was done too late.

Academic researchers in both Italy and England reported disappointingly low levels of knowledge, understanding and adoption of key behavioural messages, including behaviours designed to limit the spread of infection as well as the uptake of the vaccine.

Most worrying of all perhaps, was perception that the wrong lessons had been drawn from the 2009 pandemic. While there was acknowledgement that there had been an over-reaction and a waste of public money spent on unused vaccines as a result of an inadequate risk assessment, the overriding concern for those most closely involved was that little had changed in terms of improving the preparedness of countries to deal with the next pandemic. There was a concern that the first line of defence against a new and potentially more virulent pandemic remained the use of communications, and that overall, these had not proven effective in 2009.

Impact of communications on uptake of recommended behaviours

It was beyond the scope of this study to assess the impact of communications on the uptake of preventive behaviours. However, the little evidence that was reviewed in this area, indicated that the behaviour change messages had not been taken up at anything near the levels that would be required to prevent – or even slow – the spread of infection. Rather, the reason why the response to the H1N1 pandemic had generally been considered to be a success from the public health point of view, was due to the mild nature of the virus itself. As one respondent commented, 'the truth is that in 2009, we got lucky.'

Commentators who reviewed the research evidence on the uptake of vaccination in response to the 2009 pandemic concluded that a number of related psychological

factors influenced people's decisions to have the vaccination¹. These included perceptions about the degree of threat and personal risk of infection, beliefs about the value of vaccination as an effective coping strategy – which related to attitudes to the safety of the vaccine and its side effects. They also found that social pressure was positively associated with the uptake of vaccination, and concluded that preparations could be made in advance of a pandemic influenza outbreak to increase compliance with recommended behaviours. This would involve research to understand the nature of the behaviours to be changed and implementation of evidence based interventions and policies to support the behaviour change.

The need for guidance on customer journey mapping and segmentation

This study identified an absence of audience research in all three case study countries. It also identified a lack of expertise and infrastructure in some settings to develop timely audience research that is capable of contributing to a behaviour change strategy to prevent or reduce the spread of transmission of infection during a pandemic influenza outbreak.

Meanwhile, experts interviewed for this study also confirmed that individual level behaviours (in the form of hand and respiratory hygiene measures, social distancing and help seeking behaviours) remain the principal means of defence against pandemic influenza in the period prior to the development of an effective vaccine.

Given the importance of individual level behaviours during a pandemic, it will be important that future communications strategies are developed in a way that offers the best hope of their bringing about the necessary behaviour changes.

Central to this goal must be greater understanding of the needs and motivations of the public and health professionals targeted by official communications. Both segmentation and customer journey mapping are vital tools in the development of behaviour change strategies.

In response to this challenge, this study has led to the production of two prototype audience research guides, on segmentation and customer journey mapping. These will be further developed and tested among member states in the coming months.

¹ Rubin G, Potts H and Michie S. *The impact of communications about swine flu (influenza AH1N1v) on public responses to the outbreak: results from 36 national telephone surveys in the UK*. Health Technology Assessment. 2010 Vol 14. No 34

Respondents

We are very grateful to the following participants who agreed to be interviewed or provided information for inclusion in the country reports.

England

Ms Charlotte Gilks, Senior Account Manager, Experian

Mr Dan Metcalfe, Senior Communications Expert, Department of Health

Ms Sheila Mitchell, Senior Communications Expert, Department of Health

Prof Nick Phin, Head of Pandemic Flu Office, Health Protection Agency

Mr Colin Seward, Health Intelligence Manager, Chelmsford Primary Care Trust

Mr Kirk Summerwill, Manager, National Pandemic Flu Service/ NHS Direct

Italy

Prof De Giusti, Public Health Department, La Sapienza University

Prof La Torre, Public Health Department, La Sapienza University

Dr Maria Grazia Pompa, Senior Policy Expert, Ministry of Health

Prof Giovanni Rezza, Head of Infectious Diseases, Istituto Superiore di Sanita

Hungary

Dr Beatrix Oroszi, Senior Epidemiologist, Office of the Chief Medical Officer

Dr Agnes Csohán, Senior Epidemiologist, National Centre of Epidemiology

Ms Iboyla Luif, Senior Communications Expert, Office of the Chief Medical Officer

Similarities and differences England, Italy and Hungary

	England	Italy	Hungary
General planning undertaken prior to pandemic	Both written plans and development of 'shadow' infrastructure that could be put into operation when required including National Pandemic Flu Service. Communications strategy linked to proposed response services, but only after announcement of pandemic in 2009. Clear goals to drive public behaviour to web and telephone services, and away from physical primary care and emergency care settings	The national preparedness plan included a section on the role of communications (but only a single paragraph). Criticisms that in 2009 the response was reactive and un-thought-through. The correct prevention and vaccine promotion messages were used but little consideration had been given to how to communicate effectively	Several versions of the pandemic preparedness plans were produced. Some reference to communications. Worked with professional communicators to make sure the campaign was well organised.
Comms planning pre pandemic	Limited audience research, not used to inform communications	No evidence of audience research to inform communications	No evidence of audience research to inform communications
Customer journey mapping	Not formalised or researched with audiences. A basic 'systems' map was prepared, with two journey types: a) to web/phone and b) to physical services.	No formalised research.	No formalised research
Segmentation	Used for identifying vaccine priority groups. No segmentation used for communications, but 'follow up' work undertaken by intermediary services (health and social care services)	Used for identifying vaccine priority groups. No segmentation for communications.	Used for identifying vaccine priority groups. No segmentation for communications.
Communications research during pandemic	Weekly national survey of public's awareness, knowledge, attitudes and behaviours. Qualitative research with identified audiences to adjust communications to some public and professional groups	No evidence of audience research. But independently commissioned and conducted (ie not linked to official response) survey of professionals' awareness and uptake of vaccination	Conducted some polling to assess uptake of vaccinations. Also some analysis of the "Emotional Epidemiology" of the pandemic flu
Broad consensus on response among political establishment?	Yes. Non-political response: primary message giver: health experts (Chief Medical Officer and senior health officials). Responsible reporting by news media	No. Politicised response: primary message giver: Minister of Health. Media reports of over-reaction to the pandemic, corruption in relation to payments for the vaccine, and a well organised anti vaccine movement promoting scares undermined	Yes. Non-political response. Chief Medical Office was the main message giver. Responsible reporting by the media. Needed some initiatives to persuade health care workers to be vaccinated. Some well organised opposition to vaccination generally

		the response	which had to be addressed
Response 'touchpoints'	Web and phone based services specially set up for pandemic, together with primary and secondary care services	Limited role for freephone (enquiries/signposting only) and web (static information provision). Primary care and hospitals were the main point of contact	Telephone information helpline but not used for triage- not needed. GP and special centres used to administer vaccines
Criticisms	Inadequate assessment of the risk posed by H1N1, and an over-reaction based on worst case scenario planning - manifested in the purchase of expensive and unused vaccines and anti-virals.	Over reaction, inadequate assessment of the risk. Poor value for Italian state in purchase of unused vaccines. Poor communication with the media and public during the pandemic – large anti vaccine lobby	Some criticism that the public health response was an overreaction
Uptake of vaccine rates	Healthcare workers 57% (seasonal flu – 13%) ECDC data: HCW 40%: overall NA	Healthcare workers 15%, Pregnant women 12% Persons < 65 years at high risk 13%, and institutionalised individuals < 18 11% . General population 1.5% ECDC data: HCW 15%: overall 4%	Health care workers 50%. General public 28% ECDC data: HCW 68%: overall 27%)
Other behaviour or knowledge changes	Evidence of very low levels of engagement with and uptake of recommended preventive behaviours		
Costs/expenditure	£1 billion on 90 million doses of vaccines and anti-virals, £10.4 million on communications. £13.5 million on NPFS	Expenditure on vaccines: Euros 184 million for 24 million doses (Norvartis). Communications costs unknown	
Number of Confirmed Cases Deaths	28,456 confirmed cases (UK) 474 deaths HPA Weekly National Influenza Report ". Week 01. UK HPA. 2010-01-08. Retrieved 2010-01-09.	3,333 confirmed cases 244 deaths "Influenza A/H1N1 – Il punto della situazione" (in Italian). 2009-11-26. Retrieved 2009-11-27.	283 confirmed cases 134 deaths "A/H1N1 flu virus claims 4th victim in Hungary" . Xinhua. 2009-10-16. Retrieved 2009-10-16

1. England

This is a report of interviews conducted in London (January-March 2013) as part of Work Package 3 of the E.Com programme, investigating the role of social marketing (and specifically the use of customer journey mapping and segmentation of audiences) in the response to pandemic influenza.

England – population and the public health system

England has a population of 53,013,000 people. It is the largest of four home nations that make up the United Kingdom (England, Scotland, Wales and Northern Ireland). In England, responsibility for planning and delivery of healthcare services including public health is held by the UK government. However, thanks to the process of political devolution, in each of the other home nations, there is substantial autonomy over health policy.

Key points from the research

Planning: England's response to pandemic influenza was planned - and rehearsed - in advance, with scenario planning for different levels of infectivity and spread anticipated. Despite this, the service response and communications with the public, were only finalised once the outbreak was announced.

Infrastructure: the National Pandemic Flu Service – which was a dedicated service designed to respond to a pandemic flu outbreak, had been developed and 'mothballed' in the pre-pandemic period, and was put into operation when required. It included a web and telephone based clinical consultation element, designed to avoid swamping GPs and Emergency Departments with demand from people affected by flu. An indication of the success of the response the way communications directed members of the public to the NPFS. It was reported that around 60% of all antivirals that were prescribed during the pandemic were prescribed and sent from the NPFS's website.

Leadership: Information was delivered to the public and health professionals via a prepared communications campaign, developed by relevant agencies, with limited direct involvement of politicians. The Chief Medical Officer and other identified health experts led the media response. There was broad political consensus on the actions taken and no evidence of any political party seeking to gain advantage from the management of the pandemic.

Audience research: there was surprisingly little audience research conducted in the pre pandemic phase with the public and none with health professionals. The reason for the lack of audience research was put down to lack of time and the emergency nature of the crisis. During the pandemic, the key research used by government to monitor public knowledge, attitudes and behaviour was a weekly tracker survey. This identified gaps in knowledge and unanticipated responses among some groups. Additional qualitative research was conducted in response to this emerging intelligence in order to re-orient communications for these groups.

Limited evidence of behaviour change: despite widespread praise for the planning and delivery of the communications element of England's response to pandemic influenza in

general, and to the 2009/10 pandemic in particular, the only summative evaluation research identified for this study, that sought to assess the impact of communications on the uptake of recommended behaviours, was underwhelming in its conclusions. Analysis of the government's own public tracker survey found that only 33% of the adult population reported carrying tissues with them during the pandemic, 9.5% reported having bought sanitising gel, 2.0% reported avoiding public transport and 1.6% reported having visited a GP or hospital or phoning NHS Direct for flu related reasons.

Learning from the 2009 experience – theory and targeting: an independent evaluation of England's response recommended that in order to bring about greater uptake of preventive behaviours, future communications required changes in the development of messages. Specifically, the evaluators recommended that future communications should be informed by a theoretical model of behaviour change, and should aim to evoke a higher level of worry and emphasise the efficacy of recommended behaviours.

It also found that there was evidence that people from particular demographic groups were more or less inclined to engage in behaviour change, indicating a need for a more segmented approach to communications.

The United Kingdom's updated Pandemic Flu Communications Strategy, reflects the learning from the evaluation of the 2009 pandemic, and includes a statement that communications should be based on evidence about what will most enable people to engage with recommended behaviours.

The updated strategy also includes recognition of the need for a more targeted approach to communications.

Building a relationship between communications leads and academic researchers: there was evidence of limited involvement of academic behavioural scientists in the delivery of the communications campaign of 2009, and to a greater extent in the analysis of government data on communications. However, the role of these academic experts was described as 'shouting from the touchline' by some respondents.

1.1 England's reputation for effective response to emergencies

England has a strong reputation for good planning and effective delivery in responding to emergency health situations. This includes a positive reputation for the role of its communications as part of the overall response. This reputation was strengthened by the perception that England performed well in response to the 2009/10 pandemic.

Following the 2009 pandemic, the UK government commissioned an independent review of the response to that even from Dame Deirdre Hine. The overall conclusion of that report was that the UK response had been 'proportionate and effective'. There were some specific recommendations for future planning – including preparing for a more flexible response, which would be determined by the emergence of scientific and epidemiological research evidence, once the outbreak had commenced.

Dame Hine's review was complimentary about the role of communications,

'Development of the communications and messaging strategy was informed by a significant amount of audience research. Public opinion would be tracked throughout the pandemic to provide feedback that would support the tailoring of communications activity to best meet public concerns..

I heard considerable praise for the government and devolved administrations' communications efforts during the pandemic. Particular praise was expressed for the efforts of the CMO for England. Public opinion tracking work on behalf of DH throughout the outbreak shows very high levels of public satisfaction with the amount of information available. In contrast, I heard that governments in several other major European countries were criticised for their communications efforts.' *Hine, D. 2010. The 2009 Influenza Pandemic.*

Part of the reason for England's established reputation as a leader in this field relates to its renown as an effective planner. In addition to a National Pandemic Preparedness Strategy, the UK has produced a comprehensive communications plan, the *UK pandemic influenza communications strategy 2012*, which sets out a clear statement of how the government intends to communicate with the public and health and social care organisations. The communications strategy was updated in response to the 2009 H1N1 pandemic, and responds to the Hine's call for greater flexibility in response to a range of possible scenarios, from mild to moderate and severe pandemic.

A number of respondents spoke of the importance of planning, and of the need to have both the infrastructure and the intellectual development prepared, so that when a pandemic arrives, the response can be implemented swiftly and effectively.

'The key issue is maintaining that level of preparedness... In 2008 out of the blue we saw the emergence of resistance to the antivirals in one of the strains of H1N1. In a matter of months every H1N1 strain was resistant and then it disappeared almost as quickly. The thing is that these things don't evolve slowly. They will happen quickly and we simply don't know when they will happen and because there may not be the gradual evolution we would like to see, it will just be that a new flu virus emerges and then bang - the virus doesn't read the textbook!' Senior epidemiology expert in pandemic influenza

All respondents acknowledged that uncertainty is both an inevitable and a major factor in pandemic flu outbreak planning. Several respondents commented that the most important task in the pre pandemic period is to identify what can be done in the non-emergency phase ('the broad brush stuff') and what could not be planned for until the outbreak arrived and more information became known.

'The uncertainty is key. There are things you don't know until you're almost into the pandemic, but you can put a lot of generic preparation in place in advance. In 2006/07 the UK had guidance for funeral directors, police, ambulance services, the hospitality industry and so on, specifically targeted at them. A lot of preparation in generic form, but they were alerted that there may be additional measures when we are in the pandemic.' Senior epidemiology expert in pandemic influenza

Professor Angus Nicoll from the ECDC described at a meeting in 2010 organised to review the response to the pandemic – how uncertainty (in the form of the specific characteristics of the H1N1 virus) had posed particular challenges for communication.

'There was a Jekyll and Hyde quality to the disease in that it was mild in most but very severe in a few including in some unlucky young healthy people. This complicated risk communication; the severity and associated risks were especially difficult to understand and harder to convey. There was a conflict between reassuring people that it was not so bad and then explaining that vaccination was important as it was killing young adults.' *Nicoll, A. 2010 Lessons learned from swine flu for behavioural and social scientists.*

1.2 Infrastructure

What was evident from interviewees' comments was that key elements of England's response had been carefully developed over a period of years, and that both the written plan and the range of services designed to respond to a future outbreak, had been routinely reviewed and updated. In particular, attention had been given to the need to implement the written plan in the pre-pandemic period, and not to regard it simply as a check list of actions to take once the outbreak arrived. Examples of what this entailed in practice included:

- Creating the National Pandemic Flu Service's web site and Freephone service, so that they could be 'rolled out at the touch of a button' to respond to enquiries, remotely assess patients' needs using a pre-planned clinical assessment algorithm – and enable members of the public to order antivirals for collection at a designated collection point
- Ensuring that the necessary logistical arrangements were in place for when key resources were required. This included having sufficient supplies of paper warehoused and ready for use when the national household leaflet drop took place, and being able to draft in sufficient operators to staff the NPFS's web and phone service at short notice
- Ensuring that communications messages had clear goals that linked to the provision of services. Examples of these communication goals included:
 - promoting the web and phone based services of the NPFS in order to drive behaviour of the public to these 'virtual' and phone based 'touchpoints', and prevent the physical health services becoming overloaded with people with flu symptoms – which could spread infection and reduce the capability of services to respond

- promoting preventive behavioural messages about how to avoid the spread of infection through hand and respiratory hygiene to self-care, and to take care of family and neighbours
- managing expectations over the availability of a vaccine – given understanding that any vaccine would take at least three months to prepare before it was available for use
- ensuring that the messages would be accessible to a diverse range of public and professional audiences, and that the tone of the messages would enable people to take action to protect themselves and others, and to seek appropriate treatment where necessary

1.3 Communications planning: top down and last minute

Respondents described how the communications strategy was developed to ‘mesh’ with the service offering, so that the marketing activities would ‘drive’ behaviour.

However, it was also clear that the coming together of the communications with the delivery of the services, only took shape in the days around the declaration of a pandemic influenza outbreak.

All that was thrashed out in about a week. There was no consumer research – nothing. You were in crisis management mode in terms of developing the service and our contribution from the marketing team was to make it look as though there was an NHS service, that there was a cohesive call to action.. and that there was a clear differential between pan flu and flu. But that wasn’t researched.’ Senior communications expert, Department of Health

The National Pandemic Flu Service was conceived as a service that would be ‘unboxed’ when needed – i.e. when an outbreak occurred. It was important that the communications were developed with the service’s key offerings in mind. Staff from NHS Direct (the ‘parent’ agency of the NPFS) worked with the Department of Health’s communications team in the preparation of key messages in the pre-pandemic period.

‘We were all over [concerned with], “how are you going to present this meaningfully to the public so that they know where to go to – to get their Tamiflu?” So there was “what is the digital presentation of the service” and, “what is its look and feel?” And then “how are we going to make sure people know what to do and where to go to?” Senior communications expert, Department of Health

The planning of the communications strategy - albeit that it was produced once the outbreak had been announced - involved identifying the desired ‘patient journey’. This was that members of the public would become aware of the pandemic either through news reports or through government provided media outlets. The information provided by these channels would give sufficient information for members of the public to assess their own health status, become aware of the prevention messages concerning transmission of infection, and also what to do if they suspected that they – or a family member – were infected. At this point, the communication goal was to direct people with normal flu symptoms to the NPFS’s web or Freephone service – and not to GPs, other primary care services or Emergency departments.

'In order to reduce demand at A+E and GPs, the marketing would heavily push people towards a first contact at the Pandemic Flu Service – and with a 'web first' approach, because a) it is more convenient, less physical effort for someone with the virus and also because the management of colds and flu is part of our normal work, and it's very well established. I think somewhere in the region of 60% of antivirals were given out via the web, so that's a very high proportion of web usage.' Senior manager, National Pandemic Flu Service

1.4 Audience research: customer journey mapping and segmentation

Surprisingly perhaps, there was very little audience research conducted prior to the outbreak of the pandemic in 2009, and unusually for the Department of Health, no in depth research was used to develop creative executions. This lack of audience research was attributed to the emergency nature of the pandemic and to the lack of time to conduct research, but also to a presumption that the nature of communications would be both universal (targeted at everyone), and that what was required was very basic 'public information'.

Q. Talk me through what kind of audience research was done..

None – there wasn't time. I mean normally we would go through a completely rigorous 'deep dive' looking at objectives setting, looking at planning, the audience, audience segmentation, coming up with different propositions, proposition testing. But this all happened in the space of about two weeks, and the 'paid for' element happened because – on the Tuesday we were all sitting watching TV and a national announcement came out saying there was going to be a national door drop and a national campaign coming out on the Friday. So that's the mode you were in. It was mass communications out. All decided at COBRA at the Cabinet Office crisis management team. So, good practice goes out the window.' Senior communications expert, Department of Health

While there was no formal 'customer journey mapping' conducted to inform the communications, it was clear that some of the ideas that are central to this technique were used in the planning decisions.

'what actually happened then was – if you're going to communicate to the end public in a mass broadcast national crisis situation, we had to make sure that all the intermediaries involved in the health care system – like the GPs, Hospitals, schools – were briefed that this was what we were going to do. So in terms of customer journey mapping or audience segmentation – there wasn't any. And a bit of journey mapping in terms of 'what is this service and how are we going to run it'.

'It was more of a stakeholder map than a customer journey map. There were two customer journeys: one was into digital space – where they had to do some kind of self-assessment thing before you could get a code to get your Tamiflu. So that was all mapped out – not as you would map it out from a marketer's perspective. It was just so that we could understand what had to happen. And in fairness it was all thrown together in 2 weeks or so. And then there was the interaction between the digital and the face to face.... It all seemed to work relatively well. They managed to get all the face to face activity set up. We were not all over this like a rash. There

wasn't the time to do the 'how are you feeling at this point' and 'have you got the clarity here' and this, that and the other.' Senior communications expert, Department of Health

There was no testing of creative executions for their emotional impact, nor for how they would be received by different audiences in terms of tone.

Q. So, there was no consideration given to emotion and tone?

It was basically an information campaign – “this is what you need to do”. There was reassurance – not a panic. We looked at different [existing creative] options - dominos falling over and all that – but we binned all that. It had to be absolute clarity. “If you have these symptoms, this is what you do”. Done by the authority of the NHS. So it looked like an NHS piece of communication.’ Senior communications expert, Department of Health

However, a range of audience research had been conducted in the years prior to the 2009 pandemic which helped inform both the communications elements of the response and the planning assumptions about how people were likely to behave in a time of pandemic.

Pre pandemic: Scenario planning: qualitative research

Qualitative research was undertaken in the pre-pandemic period to explore the likely responses of members of the public to an outbreak of pandemic influenza. This research was used to guide communications development.

‘There was quite a bit of research. Ipsos Mori conducted a series of focus groups with 4 different scenarios for the pandemic. How they would react what would they found useful in terms of communication - fairly sound ideas. The conclusion was that people would basically do whatever they could to protect themselves and their family. It was fairly predictable really.’ Senior epidemiology expert in pandemic influenza

Pre-pandemic: creative development research

The Department of Health had also commissioned qualitative research to assess audience responses to the proposed *seasonal* flu campaign messages and iconography in 2008. Indeed, the mainstay of the 2009 communications campaign involved using ‘existing stock’ and adapting it for the pandemic.

‘The sneezing man ran over it [the campaign], good hand and health hygiene – don't spread germs. If you have these symptoms... that was on the stocks, and we re-purposed it.’ Senior communications expert, Department of Health

During the pandemic: Public tracker survey

The key tool used during the pandemic was a public ‘tracker’ survey, conducted weekly to monitor and assess the public's responses to the communications and to the pandemic more broadly. This survey was then used to ensure that messages were reaching all population groups, and where there was some suggestion that they may not, additional qualitative research was conducted.

‘Tracking surveys.. will help to ensure the communications messages are reaching all population groups and that those who are particularly vulnerable have access to advice.’ Communications Strategy

Qualitative research with identified audiences during the pandemic

- Black and minority ethnic groups: during the 2009/10 pandemic the tracking survey was used to identify groups that responded atypically. One such group was black and ethnic minority members of the public. As a result, the Department of Health commissioned qualitative research among these groups to identify specific concerns and to recommend adjustments to the communications to ensure that they achieved their goals with these groups.
- Social care employers and staff: qualitative research was undertaken in October 2009 to assess attitudes to the uptake of a vaccine against H1N1 – and specifically to creative executions aimed at promoting vaccine uptake among social care workers.

1.5 Using insight to adjust the response during the pandemic

In addition to commissioned research among the public and health professionals, England’s response also made use of audience insight to determine the response to the 2009 pandemic. Respondents spoke of the way in which emerging intelligence from epidemiology, virology and behavioural studies was used to adjust the response once the pandemic began in 2009. The combination of information about the location and time – as well as how people behaved -made it important for service providers to adjust their service provision to meet the emerging needs.

‘if you look at the issue of staged segmentation, you’d want to look at who is going to be infected and affected first, because there were certain modelling assumptions. For instance, Central London – because of its position and transport and so on – is a likely nucleus for the spread of these things. And then there will be other nucleates in other city centres as it spreads and so on. Tracking it region by region was something we did, to see how things were going.’ Senior manager, National Pandemic Flu Service

Web and phone based sources of insight

The insights available from web and phone based services were particularly important in providing ‘real time’ data, that could be monitored and used to ensure services were able to meet demand.

In order to receive antivirals from the NPFS’s website, a person would have to prove they were a unique person and not simply a repeat visitor. To do this, they would have to provide a name, address and postcode. This information was then used as a proxy for how the pandemic was spreading.

‘We can then look at the postcode and assume that every antiviral dispensation is an instance of a virus similar to the pandemic. And so in real time we had this tracking of how the virus was spreading.’ Senior manager, National Pandemic Flu Service

Combining information about the spread of the pandemic with evidence of specific age groups that were more or less susceptible to the H1N1 virus that became available only after the outbreak began, enabled service providers to target their interventions more effectively. This involved consideration of time, place and age.

‘During the previous pandemic, the SPI-M group (the expert modellers) were pointing out that there was some shared immunity with a B strain that came around about 30-35 years ago. So anyone over the age of 30 was less likely to get the virus in its full form. So they kind of target the demographic by age – understanding who is likely to become infected, and by geography – understanding where is likely to become infected first.’ Senior manager, National Pandemic Flu Service

Use of geo-demographic analysis to assess impact of communications

While the NPFS did undertake a limited analysis of its own data during the pandemic, there was no evidence of any widespread use by it – or any other branch of the NHS – of any systematic use of geo-demographic analysis tools – such as Mosaic or Health Acorn – to evaluate the impact of the communications campaign.

Respondents were divided on the potential value of additional analysis using geo-demographic tools. For the NPFS, it was felt that further analysis of this type – linking communication channel with behaviour and a socio-demographic typology, would help in future efforts to influence behaviour.

‘I think if you are looking at optimising communications, you need to know who successfully moved across – and to which channel (web or phone) and who did not successfully move across, but was affected by the virus. So, I would probably want something quite simple like a breakdown showing which groups were above average users and which were below average users. And then if we could access HES data, we could say which groups were below average users of A+E, but maybe they used the NPFS, so they were successfully reached. And if you find some groups that were not successfully reached – just some desk research that identifies what their possible needs might be that were not met either by the marketing or by the service itself.’ Senior manager, National Pandemic Flu Service

On the other hand, it was felt by communications experts that geo-demographic analyses tended to be a luxury rather than a necessity. Other, more pressing concerns – particularly in the case of pandemic influenza – were felt to be more important, including the basic task of ensuring that the population received the messages.

‘The real challenge for government is making a fast iteration. No too much of a problem for comms because in the media space as many people own a mobile phone now as own a television. How do you use that specificity and that targeting ability to understand where you are getting resistance? Whether that is geographical or not. Tower hamlets has 50% Bangladeshi community and people are better placed to address that on the ground.

You need to do national comms and make sure you have researched it with a representative audience base to make sure they understand it... In the pandemic you need fast comprehension.’ Senior communications expert, Department of Health

Gaps in insight that should be collected and analysed

The very success of the NPFS's web and phone based services prompted respondents to question what more could be done to improve the service. While it was clear that a large proportion of those with flu symptoms had followed the official advice, there remained questions about the characteristics of those who had not behaved in the desired manner.

'If I was to look at how this intelligence could be used, I'd be looking at the types of people who used the NPFS and get some information about those people. Because they were the ones who were managed successfully into the gateway service – with a good safety record and reducing the demand on A+E. I would be interested in the people who did not come to the NPFS (but did have symptoms). So, who was it that attended an A+E department with cold and flu symptoms or an out of hours service. What types of people were they and how can you best reach those groups? From my perspective – looking from the NPFS outwards – that's all missing information to us and I think that's crucial to know.' Senior manager, National Pandemic Flu Service

In order to understand the characteristics of those who attended hospital emergency departments or out of hours primary care services, analysis of Hospital Episodes Survey (HES) data would be required.

1.6 Leadership: tone and credibility of communication

Key learning from the 2009 pandemic concerned the way in which people responded to the communications. The revised 2012 communications strategy included additional consideration to the overall tone of communications. It described the broad aim that the messaging should be reassuring, but also make the public aware of the seriousness of the threat posed, without generating undue anxiety.

'Communications should first and foremost reassure the public. They should also establish and maintain confidence in the ability of the Government and health and social care services to prepare and manage an effective response and otherwise support the normal running of society as much as possible.' *Pandemic Flu Communications Strategy 2012*

An important factor in ensuring that the tone of communications is correct – and that messages are not dismissed or misinterpreted – is the choice of the message givers. In England, the main spokespeople used to communicate up to date information during the pandemic, are health leaders and experts. For England this is the Chief Medical Officer, and similar roles are used in the other nations of the UK.

'Chief Medical Officers, and other trusted health professionals identified as effective spokespeople will issue regular press briefings.' *Pandemic Flu Communications Strategy 2012*

The advantage of giving these non-elected, civil service/health experts the role of key message givers, is that they are not subject to the accusation that they may be 'spinning' or misrepresenting information for any purpose.

Respondents confirmed that part of the communications strategy had involved ensuring that the message-givers were respected leaders in the medical field.

‘We always put white coats out. It was Liam Donaldson [the Chief Medical Officer] and the HPA said they were talking too. I guess they were talking to the professional bodies. But to the public it was everyday – the CMO. And the media didn’t panic. I think that trust was built up.’ Senior communications expert, Department of Health

Respondents reported how some of the key prevention messages had been developed and implemented in previous public information campaigns, and that part of the success of the communications strategy was that it built on messaging that had already been communicated in relation to good hand and respiratory hygiene.

‘The message about respiratory hygiene and stay at home if you are ill started in 2008, and the rest of it was trying to keep people informed and giving them information.’ Senior epidemiology expert in pandemic influenza

An important example of what could - and what could not - be planned for in advance included decisions on priority groups for vaccination. One respondent described how three different options had been considered – a) prioritising those most affected (i.e. the risk groups), b) prioritising groups most likely to spread infection and c) prioritising those most important for maintaining the economic infrastructure.

‘The modellers thought children should be prioritised because there was greatest potential for spread in the population. At a political level it was about protecting the most vulnerable and from an economic perspective, it was wanting to be sure that UK industry kept going.’ Senior epidemiology expert in pandemic influenza

In practice however, the enforced delay caused by the time taken to produce the vaccine, provided time for decisions to be taken about the prioritisation of groups for vaccination.

‘We had the discussion and were aware of the arguments. Factors such as the severity and the groups that were affected would drive decisions one way or another.’ Senior epidemiology expert in pandemic influenza

1.7 The role of mainstream media

The communications strategy developed by the government included working with mainstream communications media agencies (TV, press, radio and online), in both informing the public about the pandemic and in communicating the tone of response.

Respondents commented on the generally supportive role played by the news media (press, TV and radio) in not seeking to alarm or panic the public, and in reporting the 2009 pandemic responsibly.

‘We were very fortunate to have people understand the cost of creating a panic. Equally it’s one thing to have a gentleman’s agreement and another to have something concrete. The ebbs and flows in terms of use of the NPFS were linked to media activity.’ Senior manager, National Pandemic Flu Service

The Hines Report concluded that the responsible reporting of the pandemic in the UK

was due in large part to the manner in which key spokespeople engaged with the media. The leadership role played by the CMO and others was important in conveying a sense that the matter was serious, but that there was no need for alarm or panic.

The non-partisan role of the CMO and health leaders no doubt contributed to the news media reporting the event in a more sympathetic manner than may have been the case had there been party political divisions over the response.

1.8 The role of social media and the internet

Respondents reported that during the 2009/10 pandemic, social media played only a very limited role in official communications,

For the pandemic flu service, it was out of scope for the operation of the service. NHS Direct does have active Facebook and Twitter engagement and people respond to questions on there. It does have pitfalls in terms of a clinical assessment service. It's prone to deluges and people asking for advice on symptoms – and it's a hazardous thing to leave people unresponded to.' Senior manager, National Pandemic Flu Service

However, since then, the rapid developments in this field mean that all government departments now routinely review the potential of social media, and recognise the need to engage with online discussions and blogs.

'It has reached a tipping point (compared to four years ago)... The scale of it now means you have to manage it in a different way. The old school view is that social media is just another channel... YouTube is the 2nd biggest search engine now - particularly among younger target audiences. It is not sufficient to just have broadcasting information because it will create a vacuum which will be filled with various voices (including professors) who will have their views. So, if you look at Fukushima for example, I don't think they handled the social media very well. But there were nuclear experts from Harvard with their own blogs which got millions of views because it was hard to find the detailed information about what was happening because the government information was not clear enough. Government has to get in there (social media spaces) and really engage with it. In all our campaigns we have social media listed and train contacts to engage within social media spaces.'

Senior communications expert, Department of Health

This sentiment echoed the views of Prof Angus Nicoll of ECDC who commented in 2010 that an important lesson from the 2009 pandemic was the need to be more cognisant of the power of the internet – and to challenge inaccurate reporting on the blogosphere.

'The Blogosphere brought a whole new dimension to communication. It provided a medium by which non-official and uncontrollable negative messages and myths were communicated widely. With hindsight it can be seen that it was a mistake not to counter these quickly. The clinical, epidemiological and therapeutic facts of the pandemic made for special challenges for those who had to influence attitudes and behaviours in the public and professionals. The involvement of professional staff in the key countermeasures meant their involvement was crucial and to be frank in

some countries the authorities lost the confidence of proportions of both.’ *Nicoll, A. 2010 Lessons learned from swine flu for behavioural and social scientists.*

Respondents reported how search engine enquiries – and particularly Google Flu Trends - had been used to predict the spread of the pandemic. This role of social media was felt to be important, and respondents agreed that in the future social media would play an increasingly important role. It was also felt that new media was impacting on the way members of the public sought and obtained information. More traditional channels of response used to provide personalised information, including telephone helplines, were found to be declining in popularity and use, as alternative methods became available.

‘Social media is different from all other traditional channels so you have to treat it differently. We should be using it to monitor the likely outbreak of pandemics... In terms of disseminating information which is trusted and having conversations with people - calls to all of our help lines are dropping off massively every year - people don't call, it's a real change. The comms strategy has to reflect that. Every campaign needs to use those channels and it's not just broadcasting through those channels, that would be a mistake. Stuff which is Twitter friendly e.g. "there are the three things you can do to limited your exposure to pandemic flu', then gets transmitted by a million people to another 10 million people with much more power.’ Senior communications expert, Department of Health

1.9 Impact of communications on the uptake of recommended behaviours

Despite widespread praise for the planning and delivery of the communications element of England's response to pandemic influenza in general, and to the 2009 pandemic in particular, the only summative evaluation research identified for this study that sought to assess the impact of communications on behaviours, was underwhelming in its conclusions. The study involved analysis of the Department of Health's own public tracker survey, which involved weekly cross sectional samples of between 1047 and 1173 members of the UK public. It concluded that engagement with key recommended behaviours to prevent the spread of infection had been disappointingly low.

‘In total, 33.1% of respondents [of the adult population of the UK] reported carrying tissues with them, 9.5% reported having bought sanitising gel, 2.0% reported avoiding public transport and 1.6% reported having visited a GP or hospital or phoning NHS Direct for flu related reasons... Uptake of recommended behaviours during the swine flu outbreak was low.’ Rubin et al 2010

This evaluation study concluded that in order to increase uptake of behavioural recommendations, future communications campaigns should aim to evoke a higher level of worry and emphasise the efficacy of recommended behaviours.

The analysis of the tracker survey also found that there was evidence that people from particular demographic groups were more inclined to engage in behaviour change, and concluded that there may a need to ‘segment’ communications strategies to target specific audiences differently.

‘Our results showed that ethnicity, age, household size, health status, socioeconomic status and gender all played a role in determining whether someone engaged in a given behaviour or not. The mechanisms underlying these effects are likely to be complex and may have important implications for the way in which messages for these groups should be framed. Additional research to understand the reasons for and implications of these effects would be of value.’ Rubin et al 2010 of value.’ Rubin et al 201

1.10 Lessons from 2009

The updated *Pandemic Flu Communications Strategy 2012*, reflects the learning from the evaluation of the 2009 pandemic, and includes a statement that communications should be based on evidence about what will most enable people to engage with recommended behaviours.

‘A key learning from swine flu was the potential to use insights from behavioural science better.. Research also suggests that people are more likely to take up recommended behaviours when they clearly understand the risk the pandemic poses to them. Alongside understanding the risk, people need to have access to the tools and information to respond to it. Communications are likely to be most effective when they explain clearly why certain actions are protective and why people are being asked to take them. If individuals understand the risk but do not know how to mitigate it, then this is likely to increase the uptake of non-recommended behaviours, such as presenting at a GP surgery for assessment and treatment.’ *Pandemic Flu Communications Strategy 2012*

The updated strategy also includes recognition of the need for a more targeted approach to communications.

‘Messaging should avoid ‘one size fits all’ approaches and instead be targeted to segments of the population to achieve the greatest level of engagement with any communications campaign.’ *Pandemic Flu Communications Strategy 2012*

Some respondents questioned the assumption that audience segmentation was a worthwhile approach for a ‘general campaign’ such as pandemic influenza.

‘This is where I get unconventional. Segmentation can be no use whatsoever. Do you get payback for the specificity? If you know older people are less likely to go for vaccination you need have some evidence that campaigns targeted specifically to that group would be worth the investment - would it deliver the payback? Will creatives tailored specifically to particular groups make enough difference to be worth the investment of effort? Sometimes there is a case for the "general" because it can deliver the width and depth to reach most of the key groups cost effectively.’ Senior communications expert, Department of Health

A criticism of segmentations used by the public sector was that they could not emulate the role they play in the commercial sector. Commercial sector segmentations were considered valuable because they help in moving people from one segment to another. However, without this dynamic, segmentations risk becoming mere pen portraits.

2 Italy

This report is a summary of interviews conducted in Rome in January 2013, as part of Work Package 3 of the E.Com programme, investigating the role of social marketing (and specifically the use of customer journey mapping and segmentation of audiences) in the response to pandemic influenza.

This study found few written commentaries on the Italian experiences of the 2009 pandemic influenza outbreak that focused on the role of communications. However, those that did touch on this issue were generally critical of the impact of the communications element of the Italian response.

The following extract is from a review of the response covering the various elements of the strategy.

'The communication strategy adopted in Italy turned out to be a major problem. While at the beginning, the fast worldwide spread of the pandemic generated among the general population the feeling of a threat that was able to disrupt social life. Given the WHO pandemic level-6 declaration in June 2009, it was quite clear that the 2009–10 pandemic was caused by a virus able to spread effectively between humans. The uncertainty of the data (regarding disease severity and real number of affected individuals and of deaths) between April and October 2009 caused a high degree of disconcertion among healthcare workers and the public. This heavily influenced the vaccination campaign, in which the communication strategy plays a crucial role. The low vaccination uptake led to coverage of only 4% of the target population: 15% of the healthcare personnel and 1.5% of the general population [10]'

Source: Rizzo et al. Response to the 2009 Influenza A(H1N1) pandemic in Italy. Eurosurveillance 15.49. 9.12.10

In addition to the interviews conducted for this study, interviews were also sought with the advertising agency – Metabenesserre Srl - commissioned to develop the 2009 pandemic influenza prevention and vaccination campaign. However, the agency declined requests for interview. Similarly, interviews were sought with members of the Minister of Health's personal office, responsible for pandemic influenza communications planning, but this request for interview was declined. A possible reason for the latter's unwillingness to be interviewed – and a point that is of relevance to the future planning of communications in Italy – was identified in interview with respondents. This was that with the change of each political administration, the key individuals responsible for decision-making, also leave office. A consequence of this strong link between the Minister of Health's personal staff and the communications, with each change of administration, any 'corporate knowledge' built up by incumbents, is lost.

All interviews were semi structured, and while a topic guide had been prepared to guide discussion (appendix 1), in practice, much of the guide was not used, as none of the respondents had first-hand experience of conducting audience research or developing campaigns aimed at the public or health professionals. Having said that, all respondents had a close association with the response to the pandemic outbreak and were able to

comment in detail on the communications and other aspects of the Italian response – including the fact that little – if any – audience research was conducted to inform or evaluate its impact.

Italy: population and administrative system

Italy has a population of 60,770,000. It is a unitary state with 20 administrative regions, five of which are ‘special autonomous regions’ with additional powers.

Key points from the research

- Planning - a general malaise towards planning – the fact that planning was not prioritised or was done too late to be effective. Also, a general disregard for evaluation. As a consequence, when the 2009 pandemic outbreak occurred, Italy was under-prepared, and respondents spoke of a reactive and panicked response. Arguably, anti-vaccine groups, identified as particularly successful in Italy, were able to exploit the lack of preparedness
- Inadequate and under-developed infrastructure at national level (including personnel with requisite skills, expertise and knowledge) to commission, undertake, assess audience research to inform a communications strategy, and then to implement that strategy. Respondents had limited understanding of concepts like segmentation (only used in relation to ‘risk groups’ and not in relation to communication groups) and no understanding or awareness of Customer Journey Mapping
- National temperament – respondents spoke of a sense that the Italian people were easily panicked – and that this sensibility had to be taken into account when determining how to communicate with the public. This was evident in officials’ uncertainty about what - and how - to communicate in relation to the pandemic. E.g. should the message be ‘direct’ and encourage alarm, or be calming and reassuring? Respondents felt that the Italian ‘way of doing things’ was to tend towards reassurance and to avoid direct or blunt truths. (There were useful comparisons with HIV/AIDS campaigns – the more direct campaigns showing dying people affected by HIV used in US and Australia were considered unacceptable for use in Italy)
- Politicised nature of the response to pandemic influenza: the way in which decisions about all aspects of the response – but particularly the communications – were taken by senior government ministers (PM and Health Minister) and that this continued through the pandemic in the form of weekly press conferences. This identification of the response with the government was important (in a negative way) in how the public were felt to engage with prevention and vaccine messages – due to a lack of trust in the message givers.
- Subordination of the role of civil service to technical advisors, giving approval to decisions taken by politicians. Limited involvement in commissioning communication campaigns with public/ professionals beyond checking of scientific content of messages.
- The method of communication was three-fold:
 - *Government and health networks*: Official ‘ordinances’ and health circulars (that carry legal status) were communicated by the Ministry of Health to regional and local health authorities – to inform health professionals. One respondent identified this as a successful element of the response, and stated that informing health professionals first was vital because they form the first line of

communication with the public. Other respondents felt that this element had not been successful, and cited survey research undertaken during the pandemic revealing high levels of ignorance and poor awareness of prevention messages and vaccination uptake among health professionals.

- *Public information campaign*: A mass media campaign aimed at the general public (there was no evidence of any research to inform the campaign). The campaign iconography was chosen personally by the Prime Minister (Berlusconi) and involved an animated character from an early 1960s children's TV programme – Topo Gigio. Authoritative information was also posted on the Ministry of Health's website – but respondents to this study found the information posted there during the pandemic on numbers of cases in Italy to be 10 days out of date by comparison with what was available on the ECDC website, and in any case felt that this was not a well-known or well used source of information.
- *Weekly press conferences*: presented by the Minister of Health and his spokespersons – and communicated by news media (TV, radio, press etc). These press conferences were used to update the media on latest developments and to reinforce prevention and vaccine promotion messages. In practice however, respondents felt that the prevention and vaccine messages were under attack from the news media and one respondent described having to appear on chat shows to argue against celebrities who led an anti-vaccine campaign
- Distrust of authority: a sense that the Italian people are extremely distrustful of all forms of authority – including the government, politicians and also medical doctors and industry including the pharmaceutical industry. The consequences of this distrust of authority were felt to be several:
 - the view that the Italian people are ready to believe what celebrities say (over medical doctors for instance)
 - that news media / journalists were always interested in challenging the orthodoxy presented by government and its agents
 - that anti-vaccination ideas/movements are particularly successful in Italy (partly because of public suspicion of corruption, and distrust of the government and politicians)
- Low rates of knowledge about immunisation and a reckless attitude to infectious diseases – even among health professionals. This was felt to be due to poor/inadequate quality of education on public health and infectious diseases as part of the training of medical students
- The response mechanisms to the outbreak (the 'touchpoints' for the public and professionals) included the media described above, and physical touchpoints included Freephone helpline (telefono verde) which provided answers to questions, but not clinical advice. Italian law prohibits the kind of web and phone based consultation used in England by the National Pandemic Flu Service. The telefono verde scheme was used mainly as a signpost to local doctors. The main physical structures or touchpoints were family GPs, local health clinics, hospital services and pharmacies.

2.1 A lack of planning

Respondents described a general failure to plan adequately in advance of the 2009 outbreak. This was especially the case for the communications element of the response. Communications represented only a very small part of the National Preparedness Plan. And there was insufficient information within the plan about *how* to undertake communications with the public and health professionals.

‘Actually there was a preparedness plan because the European Union required it. ..As far as I remember, information campaigns were not the key part of the plan. The most important element was supply of the vaccine – how to get it in such a short time. I don’t think the information campaign was an important part of the preparedness plan.’ Senior epidemiology expert, Istituto Superiore di Sanita

Italy first developed a national preparedness plan in 1998, and this was published in 2002. It was updated in 2006 following the Avian flu outbreak. In that plan Italy included a paragraph about communications, but there was awareness that the Italian plan fell some way short of the preparations in other countries.

‘We gave priority to the training of healthcare workers, and in this programme (for healthcare workers) we also considered communication skills. But we don’t have a communications plan as the UK has. I have tried to push for this to happen here but it is very hard.’ Senior policy expert, Ministry of Health

There was general agreement from all respondents that more direction from Europe would be valuable, about how to plan and conduct communications with the public and health professionals (including audience research – pre and post testing, monitoring and evaluation).

Respondents described a sense of being overwhelmed by the 2009 pandemic. This was manifested by a panic response and reactive communications from the government and its officials that was challenged by news media and the anti-vaccination lobby.

There was also a lack of consultation between Government and university researchers engaged in public health research, and the latter agreed that there was a need for better efforts to be made by independent researchers to assist the government and its agencies in the planning of public health interventions.

An example of the Ministry of Health’s lack of preparedness and inadequate communications planning included the fact that during the first months of the outbreak, the Ministry of Health’s own website - the main source of official information in Italy - contained details about the number of people infected in Italy that was 10 days out of date, whereas the ECDC’s website showed the correct and up to date information.

2.2 Infrastructure – the physical and human ‘touchpoints’

In addition to the communications that aimed to inform members of the general public and healthcare workers about the pandemic – other sources of information and advice in Italy include a freephone helpline (telefono verde). However, this is only for responding to enquiries – and is not used as a clinical assessment tool. This is not an equivalent to England’s National Pandemic Flu’s website and freephone service, with online diagnostic tools and ordering of antivirals. In Italy the law prohibits anyone giving medical advice other than a doctor face to face. In practice, the only recommendation the freephone operators could give to a caller concerned that they may have been infected, was to seek advice from the local doctor.

The role of the doctor was regarded as vital as the front line, public facing agent of the public health response- and hence much effort was put into communicating with healthcare profession via existing networks. The key physical settings identified by respondents included primary care (family doctors, local health clinics) pharmacies and hospital settings.

2.3 Communications – a lack of skills, knowledge and expertise

‘We have no model or an agency that develops for us a plan of communication.’
Senior policy expert, Ministry of Health

Respondents identified a lack of an infrastructure within the Ministry of Health (or anywhere else in government) with the necessary skills, expertise, knowledge or staff, to commission research to inform communications.

The civil service was described as having responsibility for technical and scientific matters – including making arrangements for surveillance, ensuring that the content of proposed messages was scientifically accurate. It was not responsible for the development of – or the implementation of - a communications strategy.

‘For example, I said we need to reach people who normally don’t take up the vaccine of seasonal flu, people involved in public facing roles (police, fire), messages about the value of the vaccine. They (the Minister of Health’s press office staff) develop a brief, and they issue a tender call to obtain some proposals about the messages and the campaign. And that’s it. Then there is a committee to evaluate the proposals and to choose with the press office and spokesperson of the Minister the best proposal. The best proposal is put into place and then developed via the various channels. This is the normal way for a campaign.’ Senior policy expert, Ministry of Health

Responsibility for the mass media public information campaign was described as having been handed over to the advertising agency appointed by the Minister of Health and his personal staff, with only minimal briefing.

‘The health minister decides he needs a campaign – prepares a brief and invites one or two advertising agencies to pitch – ‘it’s like shopping in a supermarket.’ Senior academic, public health, La Sapienza University

Decisions about what to communicate and how, remained with the political administration and with the politicians who took a personal interest in this element of the response.

'I would underline that during a pandemic and during all health threats, in the last 10 years, there is always the opinion of the Minister and his staff that lead the contents of the campaign.' Senior policy expert, Ministry of Health

2.4 Leadership and credibility of communications

The Italian response to the pandemic influenza outbreak was characterised by a highly visible involvement of senior politicians in key decisions concerning what and how to communicate to the public. This personal identification of senior politicians with 'emergency situations' and public health campaigns more broadly, was understood to be the norm in Italy.

Examples of the way in which this involvement was manifested included the fact that the Prime Minister at the time (Berlusconi) personally selected the campaign iconography for the public information campaign; the Minister of Health and his personal staff (as distinct from the civil service) oversaw the commissioning of the public information campaign; and the Minister of Health personally addressed the national media in the form of weekly press conferences which were also used to communicate prevention and vaccine uptake messages to the general public.

While respondents were frustrated by this level of personal involvement of politicians in matters that might be better felt to be beyond the politicians' sphere of expertise, it was generally felt to be the 'Italian way of doing things' and there was little expectation that this approach would change. Respondents felt that politicians enjoyed the opportunity to be seen to be 'at the helm' in a crisis, as it was felt to be a valuable way of demonstrating their value to the public. At the same time, respondents reasoned that politicians calculated that if the outcomes were not good, it was unlikely that the politician would be held to account by the public.

However, there were several specific consequences of this high level of association of the political administration with the response to the pandemic. Respondents identified both a lack of appreciation by the politicians of the importance of the relationship between the message and the message giver, and specifically the vital role of trust in the message giver. Because the Italian response to pandemic influenza was so strongly personalised in the hands of leading national politicians – and because there was a large degree of lack of trust in the political establishment – respondents felt that both the public and the news media instinctively distrusted the official communications presented by the Minister of Health on pandemic influenza.

Moreover, respondents identified instances where the message giver (the Minister of Health) failed to appreciate his position as role model for vaccination uptake.

'If you go to a TV programme as Minister of Health and say, 'I don't need to be vaccinated' that is a problem. And that is what happened. What was the reaction? Very simple – no one in the general population went for a vaccination and among healthcare workers the uptake of vaccination was no higher than for seasonal influenza.' Senior academic, public health, La Sapienza University

2.5 Methods of communication

Respondents described three main means of communicating information to the public and healthcare professionals in relation to pandemic influenza.

2.5.1 Government and health networks

The first approach involved the use of existing inter-departmental and administrative communication channels to inform regional and local governments and health authorities about the pandemic from the Ministry of Health. The aim of this approach was to provide administrators, managers and health professionals – who were identified as the first point of contact for members of the public – with upto date information and with any actions that were required (for instance in relation to monitoring and carrying out surveillance in hospitals). These comminques were in the form of ordinances and health circulars that carried the weight of legal requirements to act. Because of the federal nature of Italy, local regions can develop their own communications – but in practice they tend to amplify national campaigns, if they do anything. But they must observe the laws and the ordinances.

There is a high level of bureaucracy and much attention was on communicating with the various 21 regions and the national health system (Italy is a federal state). Communication about what to do, when and how is governed by law – so national laws, ‘ordinances’ and circulars are the main method of communication (this covers all the technical requirements relating to surveillance, procurement of vaccines etc) but decisions about what to communicate and how was the Minister’s alone. Senior policy expert, Ministry of Health

2.5.2 Public information campaign

The second approach involved the use of the national mass media – and the development of the *Topo Gigio* campaign. The main public information campaign was managed by the personal office of the Minister of Health and several respondents commented that the Prime Minister at the time (Berlusconi) had a personal interest and involvement in selecting the icon used in the campaign – the *Topo Gigio* character. The public information campaign was launched in October 2009, which was felt to be ‘too little, too late’ by some respondents.

‘There was a campaign – it was mainly run by one of the Ministry of Health’s departments – there I’m sure they used some advertising agency experts. It was the famous’ *Topo Gigio* campaign. He would give prevention messages – wash your hands, used handkerchiefs.. the *Topo Gigio* campaign was an odd choice because the character was famous among people 30-40 years ago – perhaps not so relevant to today’s younger people – there was some criticism.. but the messages were correct from the health point of view.’ Senior epidemiology expert, Istituto Superiore di Sanita

2.5.3 Weekly press conferences

The third approach involved the use of weekly press conferences at which the Minister of Health and his spokespersons would address the national news media and field questions. The purpose of this approach was to use the free media (TV, press, radio etc) to reach the general public with upto date information and any new or specific measures that had been taken at the weekly 'pandemic emergency meetings'. This was where important information about the state of the pandemic, and also prevention messages, including behavioural advice and vaccine uptake, as well as what to do if you suspected symptoms – was communicated.

This third approach was the most durable of the three, and because of the *ad hoc* nature of the event – as well as the evolving situation regarding the pandemic – respondents reported that the press conference approach was frequently unpredictable and difficult to manage.

'In Italy it is common to have the Minister of Health that gives the press conference. The Minister of Health was a doctor – not in infectious diseases – but he holds press conferences with journalists – and they ask technical questions which is crazy – because he is not qualified to answer these types of questions. He is accompanied by technical experts..but it can be embarrassing. But anyway that is how it is done in Italy.' Senior epidemiology expert, Istituto Superiore di Sanita

2.6 Messages and tone

While respondents felt that the correct behavioural messages (prevention and vaccine promotion) had been communicated, there was agreement that there had been a failure to consider how to communicate these messages effectively. In particular, respondents pointed to a concern about uncertainty over the tone that should be used. This was felt to be a concern that applied to all areas of public health, and not just to pandemic influenza. Respondents described how HIV prevention campaigns in Italy differed from those elsewhere, to illustrate the cultural differences in what was felt to be achievable.

'We Italians don't want to be very aggressive – we say, 'don't worry too much about it' – also in the case of HIV - the Australian campaign with the deaths – people dying everywhere– if you do that in Italy there's a scandal. The government doesn't want to give the impression that things are going very bad...'. In the US there are many experts who say, 'you have to tell the truth' and to be very direct because otherwise people don't change behaviour. But in Italy it doesn't work like that – you have to keep people as quiet as possible – so usually the campaigns are not very aggressive.' Senior epidemiology expert, Istituto Superiore di Sanita

Another factor in communicating the correct tone in relation to pandemic influenza in particular, was the uncertain nature of the pandemic and how it might develop.

'Q. If it was to happen again – what would you do differently?

A. I would want a communication plan that works. I would like a communications plan with people prepared for this in the Ministry – not only as experts of the problem, but also with the skills to help me write press releases, whether I should use direct language or speak more softly.. In 2009 one of the criticisms of Prof Fazio (Health Minister) was that he was too reassuring at the beginning of the

pandemic and when the vaccination campaign was due to start, people outside the crisis unit said the pandemic was not such a big problem, and why were we spending so much money on vaccines?’ Senior policy expert, Ministry of Health

According to one respondent, the first messages that were communicated by the Ministry of Health were about the severity of the disease, about barriers and controls at the frontiers and about the surveillance – the importance of reporting symptoms to find out whether you should have a sample taken. After the end of July, and the meetings with representatives from the regions, who asked for help, information was given about the vaccine – the composition of the vaccine that had been bought, the manufacturer, the dosage.

It was at this point that there was an unforeseen reaction and the news story rapidly focused on the vaccine.

‘And so the storm started. The media started the storm, they sought alternative views and everyone contradicted each other. So the Minister stopped this kind of consultation and asked the media to communicate just the messages from the Minister for clear information.’ Senior policy expert, Ministry of Health

Problems over communicating messages about risk

Respondents described problems over how to communicate messages on risk of infection that are informative and actionable. For example, during the pandemic outbreak, the Minister of Health spoke at a press conference of the risk of infection in terms of percentage per head of population. This was not understandable by the public.

At a more prosaic level, there was a lack of use of modern communications approaches – for instance there was no use of social media – and no consideration given to how to target different groups.

There was a lack of understanding among respondents that even a campaign with universal messages might need identification of – and strategies to respond to – the needs of different groups within the general population.

The interviews identified a lack of any consumer research that had been used to inform the content of the public information campaign. Asked whether they felt it likely that any such research had been conducted, respondents answered that they thought it unlikely. Several identified a lack of a culture of conducting and publishing research of this nature, together with a sense that (because of a lack of advance planning) the late commissioning of the campaign would have left little time for audience research.

‘With influenza I don’t think there was time to do anything anyway – to prepare pre or post test or evaluation.’ Senior epidemiology expert, Istituto Superiore di Sanita

Moreover, there was no evidence that this campaign was evaluated. This lack of evaluation was felt to be the norm for public health campaigns. The lack of concern about the impact of campaigns was attributed to the fact that decision makers are more interested in being seen to ‘do something’ rather than worry about whether the intervention was successful.

‘Usually the government wants do something to show that it is doing something – then the results (it thinks) – who cares about them?’ Senior epidemiology expert, Istituto Superiore di Sanita

It was also felt to be a consequence of a failure to appreciate the benefits of evaluation as part of the planning cycle.

‘I don’t think (public health) campaigns have been scientifically evaluated, but some were conducted by private agencies and sometimes they do pre and post tests – and sometimes surveys, but the results are not usually given much importance.’ Senior epidemiology expert, Istituto Superiore di Sanita

‘Part of the problem that no one is interested in proper planning. Monitoring doesn’t happen.’ Senior academic, public health, La Sapienza University

2.7 Audience research: customer journey mapping and segmentation

None of the respondents were aware of customer journey mapping, nor of any analogous techniques or approaches for understanding consumer behaviour and motivations.

‘No. this is the first time I have heard about it (CJM).’ Senior academic, public health, La Sapienza University

There was general awareness of qualitative and survey research to pre-test campaign executions and to monitor responses. However, as explained above, it was felt unlikely that any audience research had been conducted to inform or evaluate the pandemic influenza campaign.

Segmentation – only understood in terms of risk behaviours

There was also a lack of understanding of the role of segmentation for communication.

Respondents were surprised initially at the suggestion that there may need to be segmentation and identification of target groups, as they intuitively understood targeting to be related to different risk behaviours of identified risk groups in the population (as in the case of HIV/AIDS which was identified by all respondents as a comparator).

‘Q. How did they devise a strategy to reach different groups in the population?’

A. No. It was just a general campaign – *Topo Gigio* went on TV and said, ‘you have to do this and that’. There was not a strategy to target specific groups of people with the advertising – also because it was influenza and may hit everyone so – it was not like HIV/AIDS that you have special target groups.’ Senior epidemiology expert, Istituto Superiore di Sanita

With further discussion, all respondents agreed that a single message addressed to the population as a whole was unlikely to be received and acted on by all equally, but this appreciation was not ‘top of mind’ and appeared not to have informed official communications planning.

It was felt that in general public health campaigns did not involve research conducted with population groups.

‘Certainly not in the case of influenza – because it is also a sudden crisis and there was not the time to do such research. In the case of HIV – I talk about that because it is also an infectious disease – they usually did it, not in a very good or scientific way.’ Senior epidemiology expert, Istituto Superiore di Sanita

2.8 The role of mainstream media

Respondents described how the Italian news media helped to fuel a sense of panic during the pandemic of 2009 by ‘seeking to create stories’ and by seeking alternative views on the response to the pandemic, to contest the version of events presented by the government and its officials.

The reason for this antagonistic role of the news media was ascribed to the fact that senior politicians were so closely identified with the response, and reflected the lack of trust in politicians – as well as to the commercial incentive of seeking to find a ‘scoop’ that would sell.

‘In the press it was continuous. It was a massacre. Everyday, I was on television or radio – that was all I had time for.

Q. Why was press reaction so antagonistic in Italy?

You know the answer – the people who live in England are English, the people who live in Italy are Italians! So first, the motivity, the emotion, fear – I mean the English are brave. Italians are – stressed – we have fear. Cultural difference. And then Italians don’t trust their government, politicians, health authorities.’ Senior epidemiology expert, Istituto Superiore di Sanita

2.9 The role of social media and the internet

The Minister of Health’s spokesperson identified several reasons for the failure of the vaccination campaign. In part, he felt it was due to timing issues. The vaccine only became available in November 2009, the month when cases of pandemic flu peaked in Italy. Beyond this however, he also identified the role of the internet as a problem for those seeking to communicate a clear and consistent public health message. In particular, the internet was felt to be a resource for people who wished to undermine public health messages and to advance an anti-vaccine ideology.

‘And then another problem is the internet – because there is a lot of disinformation on there and then the role of ideology – you know the anti-vaccine movement – and one of the main problems we had was the anti-vaccine campaign. We have Novartis here – and they used a vaccine that had an adjuvant - MF59 squalene – derived from fat. And someone on the internet started saying that this squalene was dangerous and could cause all sorts of diseases. And so people started talking about the vaccine as an experimental vaccine!

And one of the leaders (of the anti-vaccine movement) was Romina Power, an ex singer – a singer is more famous than a doctor and if people don’t trust authority figures – the internet creates these problems because there is no filter – you don’t

know if the information is trustworthy or not.’ Senior epidemiology expert, Istituto Superiore di Sanita

2.10 Specific challenges to pandemic influenza communications in Italy

All respondents spoke of a successful and flourishing anti-vaccine movement in Italy, which impacted on the ability of the government to promote vaccination during the 2009/10 outbreak.

Similarly, there was concern that Italians had a more sceptical attitude towards the uptake of all immunisations than other nations, and that this pre-existing norm presented an additional obstacle for a vaccine promotion campaign related to pandemic influenza. The causes of the sceptical attitudes were felt to be fear of adverse events of immunisation, false contraindications, a lack of credibility in the messages and message givers, and an underestimation of the seriousness of infectious diseases.

Many of these concerns were felt to be shared by healthcare workers as well as ordinary members of the public, and respondents who have conducted extensive research among healthcare workers in relation to their knowledge, attitudes and behaviours related to immunisation uptake, identified a lack of good quality training on these and related matters in medical and nursing colleges.

There was a sense that there was an immediate and perhaps unwarranted fear in Italy (but elsewhere too including WHO) – that the 2009 outbreak could be the ‘big bang’. This led to hasty decision taking – including the way in which contracts for vaccine manufacture and delivery were agreed with pharmaceutical companies.

‘The Italian state spent a lot of money because it was under-prepared and the contracts were in the favour of the pharmaceutical companies. Now, we have arranged that future contracts will have a ‘get out’ clause which is in favour of the state.’ Senior policy expert, Ministry of Health

2.11 Lessons from 2009

The following are considerations based on the analysis of the interview data, that may be of benefit for Italy in developing its communications response to a future pandemic influenza outbreak.

- Ensure planning of communications is given due attention in the National Preparedness Plan, with details of what audience research should be conducted, how and when, with whom (identified audiences), both in terms of qualitative formative evaluation (pre and post testing of executions) and of monitoring and summative evaluation. Making this a ‘requirement’ or at least a strong recommendation from Europe will give it more chance of being successfully implemented.
- Improve the infrastructure of planning and how decision making happens – broaden the representation of stakeholders to include ‘citizens, people with skills in the field of communications, health professionals, public health specialists, researchers’. There is currently nothing like this in Italy.

- Improve the relationship between independent academic researchers in public health and Ministry of Health – to share expertise and improve the infrastructure. Also improve the skills and expertise of commissioners of communications, to ensure that appropriate research is conducted with intended audiences and consideration is given to behavioural goals and targeting of specific groups (even where the prevention messages are intended to be universal)
- Improved education of medical students: some of the solutions may lie in education (of medical and nursing students during their graduate training). Health professionals are first point of interaction – and the information/direction they give as role models is crucial. Example – Minister of Health saying he did not need immunisation.

3 Hungary

This report is a summary of interviews conducted in Budapest on the 6th February 2013, as part of Work Package 3 of the E.Com programme, investigating the role of social marketing (and specifically the use of customer journey mapping and segmentation of audiences) in the response to pandemic influenza.

Hungary: population and health system

Hungary has a population of 9,939,000 people. It has eight healthcare regions and the expenditure on public health and prevention programmes as a percentage of the current expenditure on health was 2.8% (2010)².

Epidemiology

From May to September 2009 Hungary experienced only sporadic cases of influenza A(H1N1)v and few outbreaks in closed communities. From week 36 (start of the school period) a more widespread transmission began among the population and consequently a mild/moderate epidemic of pandemic influenza between weeks 46 and 51 in 2009 was recorded. The influenza activity declined subsequently, peaking on week 50 in Hungary (mid December).

Timeline of key events: 2009

- 25 May First recognized imported case in Hungary
- 6 June First registered in-country transmission (health care worker)
- 30 June First epidemic at a workplace
- 15 July First death caused by A (H1N1)v
- 12-17 August Sziget Rock Music Festival
- 22 September Second influenza A (H1N1)v death
- 29 September The vaccination campaign begins within risk groups
- 2 November Mass vaccination campaign begins at schools and kindergarten

² Source: OECD Health Data, Eurostat, Central Statistical Office

3.1 The Hungarian approach

The strategic approach to pandemic preparedness was to guide and support integrated contingency planning and preparedness across government, in health care, and in public and private sector organisations.

The first Hungarian influenza pandemic plan was accepted in 1997 - one of the oldest in Europe and revised in 2001, 2005, 2009. The 2009 plan was developed by the Ministry of Health, Office of the Chief Medical Officer, and the National Centre for Epidemiology and approved by the Minister of Health.

Main objectives:

- Protect people against the adverse health consequences of influenza.
- Prevent slow or limit the spread of pandemic influenza in the population.
- Minimise the potential health, social and economic impact.
- Organize and support health care system to provide treatment
- Support the maintaining of essential services in the society and protect critical national infrastructure.

The operational arrangements:

- Prepare proportionally in relation to the risk
- Be able to respond promptly to threats
- Based on existing services, systems and processes, adapting and complementing them as necessary
- Based on the best available scientific evidences
- Adaptable to other threats

Containment, outbreak management and treatment phases

Containment Phase (case based surveillance)

- Meeting aircraft from infected areas, information for travellers
- Identification of cases
- Identification of close contacts

Outbreak management

- Flexible approach to schools - local risk assessment
- Clinical diagnosis for contacts of confirmed cases
- Identifying widespread community transmission areas

Treatment Phase (routine winter surveillance)

- Clinical diagnosis
- Treatment available for risk groups and severe hospitalised cases
- No contact tracing
- No prophylaxis except for risk groups
-

Schools and workplaces

There were no recommendations to close schools during the pandemic.

"School closure for epidemic reason is not an evidence based decision. If you want to close because you have no teacher, fine, but you can't stop an epidemic by closing schools. To close a school is not a preventive measure because people will go out anyway and maybe get it two weeks later. Because we had the vaccine we didn't want to delay the outbreak. If the head of the school decided to close they can of course because he or she has the right because the level of absentees.

....If you want to protect the children there is a vaccine and we organised vaccine campaigns at the school with the help of the health visitors." Senior Epidemiologist

Published guidance was distributed through national system on schools.

The advice on going to work;

"If you experience any sign stay at home. We said people should go to work. You can't say stay at home - how long should you stay at home - what happens to society?" Senior Epidemiologist

Face masks

"We said it is not something you should wear if you are healthy. - we are not sure if it protects you. If you are vaccinated you are protected. If you are ill at your workplace wear it to stop other getting infected. All the health professional argued about things but agreed. The messages have stood to test of time." Senior Epidemiologist 3.2

Communication with the public: messages

The behavioural messages aimed at the general population (before vaccine became available) were as follows:

- Cover nose and mouth with tissue when coughing or sneezing. Dispose the tissue in the trash after use.
- Avoid touching eyes, nose or mouth with unwashed hands.
- Frequent hand washing with soap and warm water especially after coughing or sneezing.
- Avoid close contact with sick people.

If sick with influenza, the guidance was to stay home from work or school and limit contacts with others to keep from infected them. For each topic, messages were formulated.

3.3 Audience research

Given the speed with which the pandemic developed, respondents reported that there was little time to produce new research to formulate messages;

"Information is needed urgently in this process and the decision makers can't wait for a month for the information to be ready. We need the answers now or tomorrow."

"Our approach was to give an evidenced based message and try to formulate it in a way people would understand. We have experience of doing this over many years but we did not use a formal study or focus groups for the pandemic flu campaign. "
Senior Epidemiologist

They used existing tools that were available because they didn't have the time, money or staff to develop others.

Time pressure and media coverage

"Because the debate about the spread of the pandemic and the use and efficacy of vaccination - a lot of decisions were driven forward by the considerable media coverage. We planned to do everything based on evidence - but guidance was not always available on time and was at times inconclusive."

"We had some excellent communication and campaign experts working with us but it was not enough - a number of epidemiologists had to take up this role." Public health expert, epidemiologist, Office of the Chief Medical Officer

3.4 Communication channels – professional networks

An important channel for communication was the national public health and medical officer service which consisted of county and sub-regional offices. They could reach out to everyone quickly through this network which was a key strength in tackling the pandemic.

Unfortunately, from 2011 the network no longer operates in that way. In 2010, when there was a political change in Hungary, there was a re-organisation and a number of cuts to public services. The health administration and other administrations were re-organised. Currently, there is just the central office remaining. At the time of the pandemic they had 20 county, 7 sub-regional and 83 local public health institutions in the same organisation.

There is still a regional structure to be tapped into and the CMO has a coordinating task, but it is no longer one institution any more.

"The regional structure was a huge advantage. We don't have it now but we can tap into a regional structure that exists but there is no common chain to the centre. Now we have to deal with all the counties separately. We had one line of command now that has gone". Senior Epidemiologist

This has had a knock on effect for the communications;

"We had a lot of work to do with GPs who were not within our infrastructure. So now with even less control or access to the infrastructure (less unified training and

surveillance systems) it becomes more complicated and disjointed - less controlled.... we will have to convince other ministries to provide resources which slows down our ability to react."

"Public health in Hungary was really very strong. The decision was triggered by the economic crisis as something which saves money. I don't think it will be cheaper to do it this way but it was a political decision. We were faster to react last time - it will be a problem next time". Senior Epidemiologist

3.5 Trust in Government, health bodies, vaccination and anti-vaccination voices

In Hungary, people tend not to put too much trust in many public bodies. The Ministry of Health and the National Centre for Epidemiology are among the institutions that are trusted more, certainly more than the office of the president at that time. Polls of the public have shown this.

"We are known for being a good source of objective information and for not exaggerating things ...we try to be very reliable and describe the risk and what can you do to avoid the risk." Public health expert, epidemiologist, Office of the Chief Medical Officer

"Some of the decisions are not made by us - but we are involved in the decisions. and the professional messages come from us.but we are only one player in the arena."

"There are many players involved , but the country was unified. Politicians were basing their decision on evidence and effectiveness." Senior Epidemiologist

The main aim of communications campaigns was to motivate people to attend for vaccination. It was not compulsory but the historical context is that in Hungary childhood vaccination has a strong tradition, and vaccination is compulsory - so over 99.9% are vaccinated for diphtheria, BCG etc and people generally accept vaccination.

However, seasonal flu vaccination coverage is low in Hungary - only about 10% of the population is vaccinated and only 30% of chronically ill people aged 65 years and over get vaccinated. This figure has remained static for seasonal flu for several years.

Significant numbers of health care workers are also resistant to seasonal flu vaccination as they do not trust its efficacy or think it is not necessary, and some are afraid of getting needle stick injuries. Seasonal flu vaccination is not a priority for them and vaccinating themselves to protect others is also not a priority.

Some GPs were reluctant or resistant to vaccinating their patients. The GPs wanted money to do this. An important part of the campaign was to inform and involve GPs to motivate them to vaccinate patients. Showing the difference between seasonal and pandemic vaccines and answering the objections of those against vaccination were important messages for the campaign.

Pressure on the system

Hungary had 10 weeks to conduct vaccination before the peak. In some intensive care units, where severe cases were treated, even one case would cause pressure because each patient would have to be ventilated for a long time. It never happened that an ICU had two cases.

In Hungary there were sufficient hospital ICU beds to manage the situation in 2009. Occasionally, it was necessary to send patients to another hospital but the system was managed well.

There was no great pressure on the system. People planned to get vaccinated but there was not a great rush. The epidemic evolved slowly. Hungary had a telephone helpline but it was not a triage system - more of an information line.

"If it had got bigger our capacity was big enough to cope with a larger epidemic."
Senior Epidemiologist

There was some concern about mass gatherings - for example music festivals, but there were risk assessments conducted for such events which were generally handled well with public health people on hand if needed.

There was no panic about foreigners bringing in the virus.

"Hungary is at the centre of Europe. The viruses will come inevitably from somewhere to the centre of Europe. The first 125 cases were from the UK and US - there was no problem with public reaction, even when this information was published."
Senior Epidemiologist

3.6 Vaccination and antivirals

As the international consensus is that flu vaccination is the single best method for preventing flu, and it is an essential tool for the prevention of pandemic flu, vaccination had a central role in the Hungarian National Influenza Pandemic Plan. Due to the inevitable vaccine shortages in case of pandemic flu on the international level, it is almost impossible for a small country like Hungary to buy vaccine in time from the market. For this reason Hungary produces its own flu vaccine.

There were only a few countries in the world that could really benefit from the preventive effect of the vaccination campaign in 2009. Hungary was in a good position to have enough vaccine on time as it had its own vaccine production facilities.

Before the epidemic flu wave, emphasis was put on vaccination to achieve a reasonable uptake before the wide scale transmission occurs. However, during the flu epidemic wave antivirals were also used and the communication was much more focused on this issue than before. However it should be noted that Hungary had antiviral stockpiles which were for therapy and not for prevention.

There was a programme of antiviral use - certain target groups were assigned antivirals and stockpiles accumulated. There was a debate about the size of stockpiles as it was unclear how long the pandemic would last.

In Hungary antivirals were not routinely prescribed by GPs and hospitals during seasonal flu. During the pandemic GPs and hospitals were urged to provide triage and provided with the possibility to access antiviral free of charge to those who needed it.

Antiviral were not used for prophylaxis.

"Antivirals were not used routinely before 2009 pandemic flu, so we really put a lot of emphasis to provide information and expert guidance, and also to make antiviral available free of charge for those who were at risk of severe flu". Senior Epidemiologist

3.7 Target groups and the vaccination campaign

In Hungary, the total amount of pandemic vaccine that was planned to be available for the population was 6 million doses. From this amount 4 million was offered free of charge for the **priority vaccination groups**, and 2 million was available at the pharmacies for medical prescription for the **general population**. This vaccine was licensed to be used in a single dose.

The majority of the vaccines were administered by the GPs. Occupational health care services, schools and 203 vaccination centres were also involved to deliver vaccine for the population. Vaccines could be delivered after working hours via the centres but most of the vaccine was distributed via GPs. The vaccination was registered by the GP - if the GP performed vaccination. Personal vaccination cards were also distributed among the patients to provide information about the date of vaccination, the type of vaccines and the name of the doctor who performed the vaccination.

The vaccination campaign started on the 29th September 2009 (10 weeks before the peak of the epidemic in Hungary).

This provided a unique opportunity for Hungary because no other country in Europe could start vaccination so early. They had 2 million doses ready at the start, enough for high risk groups, so there was no panic in terms of getting vaccinations ready.

Target groups for pandemic influenza vaccination (published on 21 September 2009)

Target group 1 – vaccination started on 29. September:

- People aged over 12 months with chronic underlying conditions that put them at risk for severe disease. Underlying conditions, that were considered to be risk factors are the following:
 - Chronic lung diseases, including moderate or severe asthma;
 - Severe obesity or those with impaired lung function due to neuromuscular diseases;
 - Cardiovascular diseases, except for well-treated hypertension;
 - Congenital or acquired immune deficiency (included HIV-positives, or those suffering from malignant tumour);
 - Chronic diseases of the liver or kidney;

- Chronic metabolic disorders, including diabetes mellitus;
- Pregnant women;
- Health care workers;
- Institutionalised people, such as those living in homes providing care for people who are not able to care themselves or only with continuous help of someone else, rehabilitation institution, temporary homes for people who transitionally are not able to care themselves (elderly or disabled people, psychiatric patients and with mental illness) or group-homes (for disabled people, psychiatric patients and with mental illness) and those who provide care for them;
- People working in the central command and control structures, home security services and in essential services and critical infrastructure;

Target group 2 – vaccination started on 02 November:

- Healthy children from 12 months to 18 years of age attending kindergarten or school;
- Those who are older than 18 and live in dormitories;
- Staff working in educational institutions;

Target group 3 - vaccination started on 02 November:

- Household contacts and caregivers of children younger than 12 months of age.

3.8 Impact of communications on vaccine uptake

Health care workers

Health care workers tend to resist getting seasonal flu vaccinations and this attitude persisted when the pandemic flu appeared. It took a media story of a young person dying and others spending long periods in hospitals, before they changed their behaviour.

There was a debate amongst experts about whether to communicate the number of deaths from pandemic flu.

"It was a race - who gets there first with the numbers - us or the media. We wanted hospitals to call us first." Senior Epidemiologist

Communicating the death rate was judged to be the right decision as it helped to increase vaccination rates.

After seeing young people dying and others spending long periods in hospitals, they (the health care worker) changed their behaviour.

"After the death of the first pregnant woman, there was press conference with the head of ICU - they saw this woman and could not do anything to save her - she was young and healthy People thought "this could happen to us". We needed first shocking death case to get doctors on board." Senior Epidemiologist

During the pandemic health care workers' attitudes towards pandemic vaccination changed, more than 130,000 HCWs (50%) were vaccinated - double that of seasonal vaccination.

General public

Vaccination increased significantly from 10% of the population claiming there were vaccinated (November 2009) to 28% claiming they were vaccinated in (December 2009)

The peak pandemic wave was mid-December just before the school holiday. This was fortuitous as children were on holiday and at home.

Emotional Epidemiology

The respondents described the "Emotional Epidemiology" of pandemic flu vaccination which details the unfolding public emotional reaction to events and news stories.

A journal article on this subject was published in 2009. Reference: Ofri D. The Emotional Epidemiology of H1N1 Influenza Vaccination. The source article (10.1056/NEJMp0911047) was published on November 25, 2009, at NEJM.org

News	Emotions	Reactions
A new influenza virus with pandemic potential	Immediate fear of the unknown	When will there be a vaccine?
The novel disease establishes itself within society	Emotional tolerance is created. H1N1 infection waxed and waned over the summer	Patients grew less anxious
News about school outbreaks in the autumn	Expectation from my patients that this swine flu problem should have been solved already	Patients instead grew suspicious
The new vaccine is available	'it's not tested' 'Everyone knows there are problems with the vaccine' 'I'm not putting that in my body'	Reluctance, mistrust, opposition

3.9 The anti-vaccination campaign

There was a powerful anti-vaccination campaign working against the pandemic flu campaign. It was well organised and made good use of social networks and media, and used diverse channels of information. Its key messages were that the vaccine was harmful and untested in clinical trials. It was also claimed that the vaccine contained a "microchip" which will be used to monitor citizens. It was claimed that the risk of influenza was low and that it was a fake pandemic with decision makers being influenced by vaccine manufacturers. It was also claimed that alternative methods were available which were less harmful.

"Fortunately we had an enthusiastic CMO who managed the problem, stuck to the message, provided leadership, organised a special forum to convince HCWs and was involved daily in communications and the news. He was a good communicator-who appeared on the media often. People trusted him and the colleagues he sometimes sent in his place to conduct interviews." Senior Epidemiologist

The pro-vaccination campaign realised they had to make greater use of social media. They also refreshed the campaign ideas to get media attention and wrote more information ready for the press and broadcast media to use. They also vaccinated Santa Clause;

"Santa Clause is overweight, probably diabetic, a bit old older and is the sort of person who needs to be vaccinated. A mass gathering of Santas were vaccinated in front of parliament - this received good national and international coverage including The BBC and the Voice of America good." Senior Epidemiologist

3.10 Lessons from 2009

The learning from the communications campaign pointed to the fact that people wanted information, and not re-assurance, and wanted to make their own risk assessment and decisions about whether to get vaccinated. Younger people particularly don't want to follow didactic instructions but prefer to make their own judgements.

There was a view that there should have been more use of social media. There was good use made of Facebook and Twitter, but this was primarily reactive use to counter the anti-vaccination campaign which made more effective use of social media. In future, social media will be an integral part of their communication plan.

"We need new tools for communication. In the 21st century we need to use social media tools. We need to improve on this." Senior Epidemiologist

The other main lesson from 2009 was that there was a need for greater capacity – including skills and expertise – to develop and implement effective communications aimed at the public.

"We didn't learn enough from the pandemic flu campaign. We are 4 years after the epidemic and there is still not enough spokespeople for public health generally and not enough professional comms people who are skilled at talking to the public." Senior Epidemiologist

Whilst there was routine collection of data on incidence and some polling data on vaccination, the time and financial pressures meant there was very little opportunity to conduct an evaluation.

Hungary did not conduct a post campaign evaluation. Whilst it was believed that it is important to have such information during a pandemic, there was very little possibility to establish new research projects or try out new ideas .

"If there was money and time we would have done it, but it's impossible when people are overloaded." Senior Epidemiologist

The post pandemic phase was not evaluated in a way to assess what would be necessary next time.

"We didn't learn enough from the fantastic several months that we survived. We didn't write papers or collect enough data as no one had the capacity or funding to do it." Senior Epidemiologist

There was some discussion in the media that the public health response to the pandemic was an overreaction. Since 2011 the amount of money invested in public health has decreased in Hungary.

4. Summary and conclusions

The most important- and the most unexpected - finding from all three cast studies, was the lack of audience research that had been used in the development of communications with healthcare workers or the public. The concept of 'customer journey mapping' was unfamiliar to all but a couple of respondents. The notion of segmentation was used to identify priority groups for vaccination, but was not used for communications purposes.

The main reason given by respondents for the lack of audience research related to the nature of pandemic influenza as an exceptional public health event. An outbreak of pandemic influenza was described as being intrinsically different from all other public health priorities. This was because it affected everyone, because of the urgency of the crisis and because of its dominance of the news agenda.

Message content

The recommended behavioural messages were broadly similar in each of the three countries. They included messages about how to prevent the spread of infection (hand and respiratory hygiene messages, social distancing messages, how to treat symptoms, identification of groups prioritised for vaccine uptake, and how to access vaccination when it became available.

Tone of communications

There was some consideration given to the tone of communications aimed at the general public – and in the way that spokespeople communicated with the news media. In general, the intended tone was one of seriousness at the potential risk posed by the pandemic coupled with reassurance that appropriate measures were being taken. There was awareness of the need to communicate reassurance and to **avoid panic**.

Emotional appeal of social advertising campaigns

There was little evidence that much consideration had been given to the emotional appeal of the communications campaigns aimed at the general public. Where respondents had knowledge of this aspect, it was reported that the aim had been to communicate in a direct, unemotional manner, and to avoid seeking to achieve any specific emotional impact on the audience. In England, more emotionally driven creative executions were discarded in favour of instructional advertising.

Message givers

In England and Hungary the primary spokespeople who provided updates to the news media throughout the pandemic were senior health experts. The non-partisan role of these communicators was felt to have been important in establishing trust

among the public about the management of the pandemic. In Italy, both the Prime Minister (Berlusconi) and the Health Minister (Fazio) took a personal – and highly visible – role in the publicity campaign and in the weekly media briefings. This identification of the pandemic with politicians in Italy was felt to have contributed to distrust in the way the pandemic was managed, and to have given succour to the anti-vaccination movement there.

Reasons for the lack of audience research

Respondents felt that the pandemic itself, as well as the messages from government and health experts - applied to all groups in society, and thus there was no need to segment the audience for the purpose of communications. It was also felt that the emergency nature of the event – and its widespread coverage on daily news media - ensured that levels of awareness and knowledge were near saturation point.

Other reasons given for the lack of audience research – both prior to the outbreak, during and subsequent to the event – included a lack of time to prepare, a lack of expertise in the commissioning and application of such research, and a culture in which communications for public health topics were planned and delivered by technical experts, advertising agencies and policy makers (including government politicians directly in the case of Italy) - without consideration of audience research.

Mainstream media

While all three countries developed their own social advertising campaigns in 2009 to communicate messages to the general public, there was appreciation that for most people, the main source of information about pandemic influenza was obtained via mainstream media (TV, radio and print media). The importance of leadership – and particularly the role of the message giver – in communicating an appropriate tone and message, was identified as critical by all respondents. As noted, Italy provided a useful contrast with England and Hungary, as the only example of the three where national politicians took a leading role in communicating with the media. Respondents were alert to the importance of working closely with media outlets, and of providing regular updates on the progress of the pandemic and of response.

Social media and the internet

There have been a number of important developments in social media in the few years since 2009. Respondents reported that the official communications developed in response to the H1N1 pandemic had not sought to exploit social media channels in the way that would be done today. In England and Italy there was no use of Twitter, Facebook or other social media sites to communicate to key audiences. Hungary made reactive use of social media in the middle of their campaign to ameliorate the effects of the social media elements of the anti-vaccination campaigns. The main use of the internet was to post timely information on government and health service websites, reinforcing messages from the

communications campaign. The exception was the National Pandemic Flu Service in England (NPFS), which used a web based tool to triage patients with suspected infection and to distribute anti-viral medicines. The NPFS also reported working with modellers to monitor trends in search terms in search engines (e.g Google) related to influenza, as a means of predicting demand for the service.

Overall, respondents reported that they perceived the role of the internet to have been an obstacle to communication. They felt that anti-vaccination proponents had been more advanced in their use of social media and other digital technologies, and that the official voice had been either absent or had been slow and cumbersome. There was a widespread view that the 'blogosphere' was dominated by oppositional voices. Respondents in England in particular, pointed out that present day planning for communications was much more advanced in how to use social media. Hungary plan to make much more proactive use of social media next time.

Role of evaluation

An important observation about the nature of communications programmes for pandemic influenza, was that they were considered important only at the moment of the crisis. As soon as the emergency passed, there was very little opportunity, and in some cases, interest among policy makers in reviewing, reflecting or evaluating their impact. However, this study did identify interest among public health and other social scientists, who were concerned about the impacts of communication on behaviour. In two of the three case studies these academics were not sufficiently engaged with the communications programmes to effect change. A key recommendation would be to broaden the range of roles involved in the planning, development and evaluation of communications to include public health and behavioural experts.

Contextual factors: mixed reaction to the H1N1 pandemic of 2009

Following the 2009 pandemic, respondents from all three countries reported some level of criticism at the perceived 'over reaction' to the pandemic. These criticisms had been directed at both the national level – at governments and policy makers - and at the international agencies (WHO) that were held to be responsible for failing to properly assess the risk posed by the H1N1 virus.

Respondents reported that the perception of having over-reacted had led to accusations of 'crying wolf' and wasting public money on unused antiviral medicines and vaccines.

Respondents' assessments from 2009: success factors

A number of respondents from all three countries commented that they felt that the 2009 experience had revealed a range of factors that had been successful, and a number of flaws in the preparedness to respond to that outbreak.

In England for example, there was satisfaction that the National Pandemic Flu Service had worked well. This web and phone based service – promoted by the public communications campaign – was identified as the key response mechanism for people affected by flu symptoms. It operated as a triage service, and ensured that the ‘worried well’ did not inundate primary care and hospital services. It was reported that 60 per cent of anti-viral medicines distributed in the UK during the pandemic, were sent to people who made contact with the NPFS either via the internet or by telephone.

In Italy, the elements of the response that were identified as working well included the surveillance system and the communication across the 21 regions with professionals – including health administrators and local and regional government officials.

In Hungary, the fact that there was a rapid development of a vaccine thanks to the efforts of domestically based pharmaceutical companies, was felt to have enabled rapid production of the vaccine and helped achieve a relatively high level of vaccine uptake among both health professionals and the general public. Furthermore effectively challenging the anti-vaccination lobby ensured that misinformation about the vaccine was kept to a minimum.

2009 – key lessons

However, together with the sense of achievement that came with having successfully implemented an emergency response, there were several respondents from all three case studies who felt that the response had been sub-optimal, for a number of reasons. Some commented that there had been insufficient preparation and planning, particularly in the area of communications.

In all countries there were reports that the communications planning was done at the very last moment – and in some respondents’ opinions was done too late.

Academic researchers in both Italy and England reported disappointingly low levels of knowledge, understanding and adoption of key behavioural messages, including behaviours designed to limit the spread of infection as well as the uptake of the vaccine.

Most worrying of all perhaps, was perception that the wrong lessons had been drawn from the 2009 pandemic. While there was acknowledgement that there had been an over-reaction and a waste of public money spent on unused vaccines as a result of an inadequate risk assessment, the overriding concern for those most closely involved was that little had changed in terms of improving the preparedness of countries to deal with the next pandemic. There was a concern that the first line of defence against a new and potentially more virulent pandemic remained the use of communications, and that overall, these had not proven effective in 2009.

Impact of communications on uptake of recommended behaviours

It was beyond the scope of this study to assess the impact of communications on the uptake of preventive behaviours. However, the little evidence that was reviewed in this area, indicated that the behaviour change messages had not been taken up at anything near the levels that would be required to prevent – or even slow – the spread of infection. Rather, the reason why the response to the H1N1 pandemic had generally been considered to be a success from the public health point of view, was due to the mild nature of the virus itself. As one respondent commented, ‘the truth is that in 2009, we got lucky.’

Commentators who reviewed the research evidence on the uptake of vaccination in response to the 2009 pandemic concluded that a number of related psychological factors influenced people’s decisions to have the vaccination³. These included perceptions about the degree of threat and personal risk of infection, beliefs about the value of vaccination as an effective coping strategy – which related to attitudes to the safety of the vaccine and its side effects. They also found that social pressure was positively associated with the uptake of vaccination, and concluded that preparations could be made in advance of a pandemic influenza outbreak to increase compliance with recommended behaviours. This would involve research to understand the nature of the behaviours to be changed and implementation of evidence based interventions and policies to support the behaviour change.

The need for guidance on customer journey mapping and segmentation

This study identified an absence of audience research in all three case study countries. It also identified a lack of expertise and infrastructure in some settings to develop timely audience research that is capable of contributing to a behaviour change strategy to prevent or reduce the spread of transmission of infection during a pandemic influenza outbreak.

Meanwhile, experts interviewed for this study also confirmed that individual level behaviours (in the form of hand and respiratory hygiene measures, social distancing and help seeking behaviours) remain the principal means of defence against pandemic influenza in the period prior to the development of an effective vaccine.

Given the importance of individual level behaviours during a pandemic, it will be important that future communications strategies are developed in a way that offers the best hope of their bringing about the necessary behaviour changes.

³ Rubin G, Potts H and Michie S. *The impact of communications about swine flu (influenza AH1N1v) on public responses to the outbreak: results from 36 national telephone surveys in the UK*. Health Technology Assessment. 2010 Vol 14. No 34

Central to this goal must be greater understanding of the needs and motivations of the public and health professionals targeted by official communications. Both segmentation and customer journey mapping are vital tools in the development of behaviour change strategies.

In response to this challenge, this study has led to the production of two prototype audience research guides, on segmentation and customer journey mapping. These will be further developed and tested among member states in the coming months.

Appendix 1 Topic guide

Topic guide for use with key informants on flu pandemic in England, Hungary and Italy

Preamble/introduction – explain aims/purpose of the project and tasks

Explain how the information will be used

Offer confidentiality if any aspects are contentious

Explanation of task – seeking to discover whether and how Customer Journey Mapping features in planning of comms around pandemic flu. And – more broadly how audiences are identified, segmented and targeted in coms planning

Q1 Role of respondent

What do they do? How does their role relate to message development, segmentation/identification of audiences, and implementation of messages?

Who else (agencies/job roles) is/should be involved in comms planning – what lessons about how this works (good and bad) that might help others?

Are there different arrangements for national – regional – local levels?

Q2 SEGMENTATION. Are there key target groups for communications with the public and healthcare workers regarding pandemic influenza?

If yes – which groups are they?

In xxxx we know there are identified groups based on perceptions of health risk, who are prioritised for vaccination (older people, pregnant women, children, immuno-suppressed – people with heart disease/diabetes - and healthcare workers).

Is there any further identification of key groups (eg young men, poor people, travellers etc – see Bish).

Does the communications planning include any **customer journey mapping**?

If yes – what, how, who?

Can examples be provided?

How does customer journey planning inform the overall communications planning with public and health care workers?

Q3 What information is used to understand the specific needs of identified target groups and how are messages/interventions crafted to respond?

What other **sources of insight** are used to explore motivations of target groups?

How are all the sources analysed and synthesised and used to inform comms?

What are the key insights about the motivations, beliefs, knowledge and behaviours of the target groups?

- How have these been gained?
- Are any surveys used? If so, which ones?
- How often is this analysis conducted/updated?

What are the **critical touchpoints** for each of the target groups with the comms?

What **physical contact points** exist within the service delivery for each of the target groups?

TIME/EVOLUTION of pandemic. How does this change at different stages of the pandemic (**low to high to tail off**)

Q4 What **knowledge, attitude and behaviour change outcomes** are identified for each group? (eg immunisation uptake, service uptake/distancing, knowledge, behaviour change – eg personal hygiene, social distancing- attitude change?)

What data sources are used - quant and qual to inform the communications about each of the audiences? And to monitor impact of comms?

Q5 Is there a **communications strategy** for behaviour change communication for pandemic influenza? (is it available for us to see/use?)

- Which agencies are involved and what are their roles?

How frequently (if at all) are comms plans reviewed/revised? Why/how?

Q6 How is the content and wording of key messages developed?

Consider PERCEPTIONS OF RISK

Consider TONE and EMOTIONS of communications.

What information is used to determine TONE and what EMOTIONS do communications aim to elicit?

What is the role of health care services in communication?

(How) are hospitals, health centres involved in the development of messages – for consistency?

(How) are hospitals and health centres involved in planning – so that they are prepared to deliver immunisations/flu medicines and agreed advice?