D5.3

Updated plan for use and dissemination of foreground

WP5 Dissemination and policy dialogue

Responsible partner: Zadig

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

Document Management

PROJECT FULL TITLE	Transparent communication in Epidemics: Learning Lessons from experience, delivering effective Messages, providing Evidence.
PROJECT ACRONYM	TELL ME
	Collaborative Project funded under Theme HEALTH.2011.2.3.3-3 "Development of an evidence-based behavioural and communication package to respond to major epidemics outbreaks"
GRANT AGREEMENT	278723
STARTING DATE	01/02/2012
DURATION	36 months

D5.3 Updated plan for use and dissemination of foreground
Task: 5.3

Leader: Zadig – Other contributors: none

History of changes:

Vn	Status	Date	Organisation / Person responsible	Reason for Change
V1	Draft	October 2014	Zadig/Luca Carra	
Vf	Final	25 March 2015	Zadig/Luca Carra	

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EXECUTIVE SUMMARY

The aim of this report is to describe what has been done and planned by TELL ME project in terms of dissemination and use of foreground.

The first part of the report deals with a synthetic overview of what has been and what will be the social, cultural and economic impact of the project's results and of the project as a whole. Briefly, it has to do with the legacy of TELL ME in view of future developments, and must be considered a sort of general framework to better understand the second and the third parts.

The second part focuses on the dissemination of foreground (that is the more relevant results of the project), and some ideas and commitments for the future, keeping in mind that an exhaustive description of the dissemination activities has been done by the Report D 5.1 on Dissemination.

The third part describes the exploitation of foreground, that is: the feasibility that the project foreground may generate in the future (commercially or not) with exploitable products or services.

1 Introduction

TELL ME is almost a self-explanatory acronym: Transparent communication in Epidemics: Learning Lessons from experience, delivering effective Messages, providing Evidence. This 3-year project was initiated back in 2012 and is characterised by the innovative, multi-national, and multi-institutional dimension. The main objective for TELL ME is to develop evidence-based models and tools for improved risk communication during major infectious disease outbreaks, epidemics or pandemics.

After the mixed results of public health campaigns aimed at preventing the spread of influenza during the 2009 A(H1N1) pandemic (including the controversies raised by vaccination and anti-viral drug campaigns), and after the tragedy of Ebola, there was a need to reconsider the current perception about human behaviour in outbreaks and epidemics, communication policies, and the involvement of health professionals in the process.

At the heart of the TELL ME research stood the development of the **Framework Model for Outbreak Communication** which embraces the opportunities presented by the exponential growth of new media and crucially places the public at the heart of the communication process underlining the importance of a constant dialogue between the Health Care Professionals, other major stakeholders and those who need protection from the risks at each stage of an outbreak. Complementing the **Framework Model,** TELL ME developed a set of strategies and recommendations encapsulated in an integrated **Practical Guide for Health Risk Communication**[1] and a **TELL ME Book,** an **Online Course for Health Workers, a Guidance for using the WHO Threat Index** and an innovative **Social Simulation Software Package for Decision Makers**. The latter is specifically designed to allow public health officials and agencies to plan communication policies and strategies for future infectious disease outbreaks. The foreground emerging from the project is fully and freely available on the TELL ME website.

Considering this as the legacy of TELL ME, new strategies for the exploitation of foreground are a must. This Report outlines these strategies taking into account the expected cultural, social and economic impact of the project itself. Together with the partners of similar projects (some of which have in some ways been generated by TELL ME), the Document encourages the commitment to a dedicated **Network** supporting public and private customers through consultancy on issues related to health and risk communication while inspiring new projects / initiatives.
The outcomes of the TELL ME project have rapidly gained traction both in the field of pandemic flu, but also in wider health related emergencies such as the Ebola crisis in West Africa, and maybe also in very different contexts, such as the “pandemic” use of social media used by ISIS in their terroristic attacks… to spread fear all over the world taking advantages of new communication technologies. As a matter of fact, it’s always a question of viral dissemination.

To date, TELL ME foreground is already having some relevant impact: for instance, approximately 30,000 Italian Health Care Workers have already undertaken an **Ebola e-learning course** based on the **TELL ME Practical communication guidelines,** while the **Guidance for using the WHO Threat Index** is rising some attention as a potential new standard for communication on pandemics.

The use and dissemination of TELL ME foreground will be assured by the multifaceted activity of project’s partners via the TELL ME website, and also throughout associated EU projects such as ASSET.

[1] Previously named “TELL ME Communication Kit”. It was renamed into "Practical Guide for Health Risk Communication” for communicative purpose.

2 Social, cultural and economic impact of TELL ME project's foreground

2.1 Cultural and scientific impact

As stated in the TELL ME DOW: "Overall, the TELL ME project is expected to have an impact in the following two directions: **1)** Lead to improved communication preparedness for the next major epidemic outbreak, **2)** Minimise deviations between perceived and intended messages in the course of a pandemic".

To do that, the project developed an integrated, evidence-based communication package - the **TELL ME Practical Guide for Health Risk Communication** (based on a specific **Framework Model**) and of a model prototype (the **Agent-Based Social Simulation Model)** to test the effect of new communication strategies developed in TELL ME. These are clearly the two pillars of the project, that the consortium has begun to disseminate to public health agencies, media, academics, policy makers, and civil society organizations toward the end of project's period. Other important tools developed by the project are the **E-learning course**, and The **Guidance for using the WHO Threat Index**, that will be described in the second part of the Report for their potential exploitation.

We can say that all these results are the durable heritage of TELL ME project. All this has ignited an important scientific activity with some papers published or in progress, and conferences, but also some attention by lay media (*see the Dissemination lists, below*).

The scientific impact

The scientific work of TELL ME has also prompted a certain amount of research and has generated some valuable points that deserve further analysis in future projects. Some of the questions that initiated (research-wise) TELL ME itself have been answered. The main questions were:

- How can the general public be better motivated or positively influenced to take effective preventive measures during the outbreak?
- What are the most appropriate communication methods to deal with the complexity, uncertainty, misinformation and malicious information?
- What are the best communication strategies to maximise vaccine uptake, and to assist health professionals and agencies to cope with vaccine-resistant groups?

However, as it is often the case, new questions, doubts and things to clarify have emerged, mainly concerning the disclosure of uncertainty and the emphasis on transparency that TELL ME project contributed to highlight as the most relevant feature of communication during outbreaks:

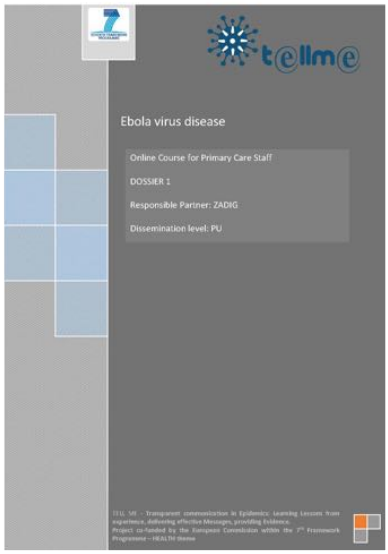
- Seemingly, risk communication in the field of communicable disease has to recognize and report the uncertainty of what we already know. But does this way of communicating always have a positive effect on people and stakeholders? What are the potential negative consequences of inappropriate communication in this context?

- How can institutional and non institutional agencies in charge of the health communication practically reach different audiencies and stakeholders? There have also hardly been any formative research studies into communication strategies that accompanied and built social marketing campaigns to promote the issue of vaccines against seasonal and epidemic flu.
- How to monitor the effect of these messages and correct them accordingly?
- How to achieve an effective participation of the public, and notably of the "skeptical" segment?
- How to keep or restore trust in health communication process?
- The issue of accountability has also been highlighted. For this reason, it is paramount to better define the roles and relationships between the different institutions and agencies, as well as the national public health authorities, which on a second level could translate into redefining the role of the state in relation to different stakeholders and entities deemed to be particularly important in outbreak communication.

Research-wise these are some of the many questions that TELL ME consortium would like to answer, either through other common projects still in progress (like ASSET, *read below*), and through a specific scientific activity carried out by a dedicated Network.

Other social and cultural Impacts

TELL ME results raised the interest of major National and International Health agencies as US CDC, ECDC and WHO. Their members took part in our meetings, also collaborating to validate and refine these tools, and expressed interest in their exploitation.



It is the case - just to name a few - of the World Health Organization[2] which considered our e-learning course on Ebola a good example for its trainees.[3] This course has been already delivered to around 30,000 Italian MD and Nurses - through their professional Federations - with excellent results.[4] Also The International Emergency Management Society[5] wanted to adopt this kind of online courses.[6] The European Centre for Disease Prevention and Control[7] is willing to network with projects like TELL ME to face risk and crisis communication challenges, and to uptake its guidelines.

[2] WHO: http://www.who.int

[3] Reference: WHO_Ebola_Annex 1

[4] Reference: see Chapter 4: E-Learning course

[5] TIEMS: http://tiems.info

[6] Reference: TIEMS_Ebola_Annex 2

[7] http://www.ecdc.europa.eu/en/Pages/home.aspx

It is also worth mentioning that TELL ME consortium responded to the Policy Officer's call for suggestions about Ebola outbreak (autumn 2014) with a specific Note summing up TELL ME results useful to face Ebola crisis[8]. Again a short summary of TELL ME results useful to face Ebola outbreak in terms of communication was published on the website of the EU Commission[9] in February 2015.

Other example of exploitation of the general competences of TELL ME is, for instance, the collaboration with the World Health Organization for the publication "Health and environment: communicating the risk", namely the report of the workshop held in Trento, Italy in 2013 together with the WHO Regional Office for Europe.[10] Although not in the context of risk communication during infectious outbreaks, the document does develop some concepts outlined by TELL ME, especially with regards to the use of social media and to some mechanisms that can hinder fair and proper forms of risk communication.[11] The said report, originally written in English and later translated into Italian and Russian has been distributed by the WHO European Office for Investment for Health and Development in approximately 250 copies reaching all WHO regional offices in Europe and a great number of stakeholders too, mainly through the download of the Document in PDF.

Also an important example of implementation of TELL ME tools into a University course must be mentioned. Together with BMJ experts, a blog has been devised (#fluscenario) to facilitate a discussion on the role of social media in case of pandemic. #fluscenario was uptake by the University of Dundee for didactic purpose with its medical students[12].

[8] http://www.tellmeproject.eu/content/note-ebola-epidemic-west-africa

[9] ec.europa.eu/research/health/infectious-diseases/emerging-epidemics/ebola-projects_en.html

[10] http://www.euro.who.int/en/publications/abstracts/health-and-environment-communicating-the-risks

[11] Particularly pp. 22, 24

[12] See also: D5, Dissemination Report, Chapter 7

Finally, it is worth mentioning that TELL ME did have another additional impact – both because of the success of its Final Conference (Venice, 4-5 December 4) and as many of its members and partners participated in numerous workshops and conferences – defining measures to monitor the fear mongering about flu vaccines and how to fight it effectively.[13]

2.2 Connections with other projects

Throughout the whole project, the TELL ME consortium has already made a significant impact in many ways. First, it has created a new European project with some of its partners (Zadig, Haifa University, Absiskey, ISS), that is to say the **ASSET** initiative.[14] ASSET is meant as a continuation of TELL ME, since it will try to implement the main scientific outcomes of TELL ME (e.g. the Framework Model).

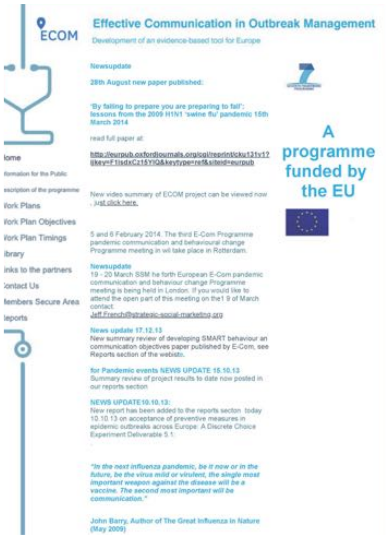
"ASSET (Action plan in Science in Society in Epidemics and Total pandemics) is a 48 month Mobilisation and Mutual Learning Action Plan (MMLAP), which aims to 1) forge a partnership with complementary perspectives, knowledge and experiences to address effectively scientific and societal challenges raised by pandemics and associated crisis management; 2) explore and map SiS-related issues in global pandemics; 3) define and test a participatory and inclusive strategy to succeed; 4) identify necessary resources to make sustainable the action after the project completion. ASSET combines public health, vaccine and epidemiological research, social and political sciences, law and ethics, gender studies, science communication and media, in order to develop an integrated, transdisciplinary, strategy, which will take place at different stages of the research cycle, combining local, regional and national levels". At the first phase of the project (WP1 and 2), ***TELL ME is declared the first source for providing "the baseline knowledge, and the common approach and language in a cooperative, multi-actor, environment".***[15]

[13] See also "List of dissemination measures", below

[14] http://www.asset-scienceinsociety.eu

[15] Reference: "Asset. Action plan on sis related issues in epidemics and total pandemic" Grant agreement no: 612236

As stated by members of ASSET project[16] "TELL ME and ASSET share four Partners (ABSISKEY, HU, ISS, ZADIG): Mutual sharing between the two Consortia, participation to physical meetings. Many TELL ME deliverables can be ASSET utilities: from communication strategy, to literature reviews to vaccine story to myths, etc". ASSET has also shown some interest in what the Network TELL ME is going to create, and to invest some resource on it.



Also, the connection with the "twin" project **E-com**[17] has resulted into a very positive exchange of information and good practices. E-com (which will run for another year) is keen to utilize some synergies established with TELL ME, first and foremost the TELL ME website, whose informative features have been greatly appraised.

2.3 The TELL ME Network

All of these examples show that TELL ME has outstanding potential in terms of impact and exploitation of its outcomes and competencies – something that should be fully maximized through the creation of a dedicated Network bringing together all its partners, ASSET consortium and maybe other partners as well. ECDC declared its interest to have a connection with this Network as a competent source for issues related to risk communication.

This is what was discussed in the meeting held in London on 23rd January 2015, during the final days of the project. The need for a Network specialized in risk communication and health topics and outbreaks comes about mainly from the multifaceted nature of TELL ME - bringing together all the main disciplines in the field: epidemiology (ISS, School of Public Health, Haifa University); journalism and training (BMJ Group, Zadig); risk communication (Cedar3); human rights (VUB); groups representing the cultural and professional interests of doctors (UEMO) and risk management during health crises (NDSLF).

To this aim, a first analysis of what has already been done in terms of Health Risk Communication[18] was conducted, concluding that very few scientific societies and journals have focused on this topic. At the London conference, the ECDC has also stated its interest in using the Network to decide on specific guidelines and future projects for collaboration on communication of health risks. This is surely a crucial endorsement for TELL ME and a useful starting point for future initiatives.

Hence, there are the right prerequisites to establish a Network involving all TELL ME members, with the tentative purpose of:

- Taking up consultancy assignments on risk management and communication
- Joining new national and European projects

[16] Reference: Donato Greco, London final workshop, 23rd January 2015

[17] http://www.ecomeu.info

[18] Reference: Presentation in London Workshop by Donato Greco. Annexes

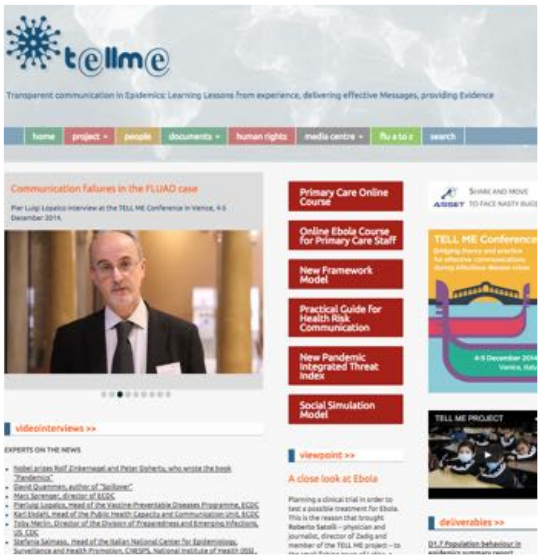
- Providing a TELL ME package to potential "customers": e.g. academics; companies; professional organizations; health agencies. The said package would include: the Practical Guide, tailored solutions for training, social simulation models, social media monitoring systems.
- Creating a dedicated scientific journal (perhaps an online journal).

The TELL ME Consortium will then proceed with the following steps forward:

- Defining what partners are really interested in the Network and in taking an active role in it
- Stating the corporate purpose and mission of the Network
- Completing the market analysis
- Understanding the economic feasibility of the products and services to offer
- Identifying which legal form the Network can have
- Designing a multi-year development plan

3 Dissemination of foreground

As planned in the preliminary PUDF in the Annex 1 of the Consortium Agreement (CA), TELL ME made a considerable effort to disseminate the foreground (notably the TELL ME Framework Model, the Practical Guide for Health Risk Communication, the Online Course for Health Workers, the Guidance for using the WHO Threat Index and the Agent-Based Social Simulation Model). As a Consortium, we can say that it has been a truly cooperative work which involved each partner and the members of the External Advisory Board[19], culminating in the successful Final Conference, which took place in Venice 4-5 December 2014[20]. The intensity and the extension of this work has been carefully described by the D5.1 Report on Dissemination[21] and D5.2 Networking Report.[22]



In terms of future dissemination strategy of the foreground, two are the main tools we can count on: the TELL ME Book (that is described in the second section of this Report as specific foreground as well) and the TELL ME Website (http://www.tellmeproject.eu). The former synthetise all the deliverables in order to spread the project's results throughout the academic and the scientific milieu. The latter was conceived at the very beginning of the project as a credible web journal about what's going on in the field of risk and heath communication (focused on communicable diseases outbreaks). Through convenient modifications already in progress, TELL ME website can become a powerful tool for the dissemination of foreground, run by Zadig (the partner in charge of communication activities during the project), together with other partners of the project and other entities taking part to the Network. The website will be constantly updated with News and Videos, as well as with a regular activity on Twitter (@TELLMEProjectEu), so to attract more traffic and followers. In the second part of 2015, specific attention will be devoted to prepare a set of Policy Briefs of foreground to be sent to all relevant stakeholders (either commercial and institutional).

Furthermore - should the Network be launched successfully, a specific Dissemination Plan would be carried out. For the moment each partner commits itself to show the TELL ME logo (and link) in the home page of its website and to disseminate the project's foreground through every conference and meeting it will take join, and through new scientific papers. Since TELL ME has been essentially a RD project, dissemination via the publication of new researches must be considered an important asset.

More in detail, the foreground has been disseminated through the following measures.

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[19] Reference: Annexes

[20] http://tellmeproject.eu/node/338

[21] LINK TO BE PASTED HERE ONCE THE DELIVERABLE HAS BEEN UPLOADED

[22] http://tellmeproject.eu/content/d52-networking-report

3.1 The Framework Model

The Guidance has been disseminated via a lot of activities, mainly through conferences and policy relevant meetings carried out by the scientific coordinator Manfred Green with the the US Centers for Diseases prevention and Control, CDC, in Atlanta on 24 October 2014 and other Agencies.[23]

3.2 TELL ME Communication Kit (A Practical Guide for Health Risk Communication)

A number of different channels have been deployed for the dissemination of the TELL ME Practical Guide for Health Risk Communication, with the aim to reach out to various groups of stakeholders in the field of risk and outbreak communication.

Zadig considered a variety of options for raising awareness about the TELL ME Practical Guide for Health Risk Communication across different stakeholder audiences. The following TELL ME resources were exploited for this purpose:

- **TELL ME Stakeholder Directory:** Key representative stakeholders from national public health authorities and international agencies received a notification email about the release of the Practical Guide for Health Risk Communication from the TELL ME website.
- **TELL ME October/January 2015 Newsletter:** 1,273 stakeholders, journalists and subscribers to the TELL ME newsletter received announcement about the official release of the Practical Guide for Health Risk Communication.
- **TELL ME Social Media platforms:** The Practical Guide for Health Risk Communication and sample content from the four guidance documents was publicised via TELL ME Twitter and Facebook accounts.

The TELL ME Practical Guide for Health Risk Communication was also promoted via external online platforms, such as the **British Medical Journal (BMJ)**, and more specifically the @BMJ_company Twitter account, which numbers more than 19,000 followers, as well as the **Medical News Today**[24], the largest independent medical and health news site on the web - with over 11,000,000 monthly unique users and 16,000,000 monthly page views it is ranked number one for medical news on Google, Bing and Yahoo! The **SciDev.Net** also expressed interest to present the TELL ME Practical Guide for Health Risk Communication on their website.

The four guidance documents that comprise the Practical Guide for Health Risk Communication will form part of the **TELL ME Book** – a TELL ME initiative to consolidate the scientific outcomes of the project in a book format – with a dedicated section on new communication strategies for infectious disease outbreaks and international public health threats. The TELL ME Book is edited by Prof. Manfred Green, University of Haifa, and will be published later in 2015.

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[23] Reference: For a detailed description of these meetings see D5.1 Dissemination Report, 6. Cooperation with other projects and policy dialogue

[24] Medical News Today (4 February 2015): Practical Guide to improve communication during disease outbreaks launched. Available from <http://www.medicalnewstoday.com/releases/288886.php>

3.3 The Social Simulation Model

Pre-release versions of the simulation were presented at three conferences, two for modelling audiences and one for infectious disease management practitioners.

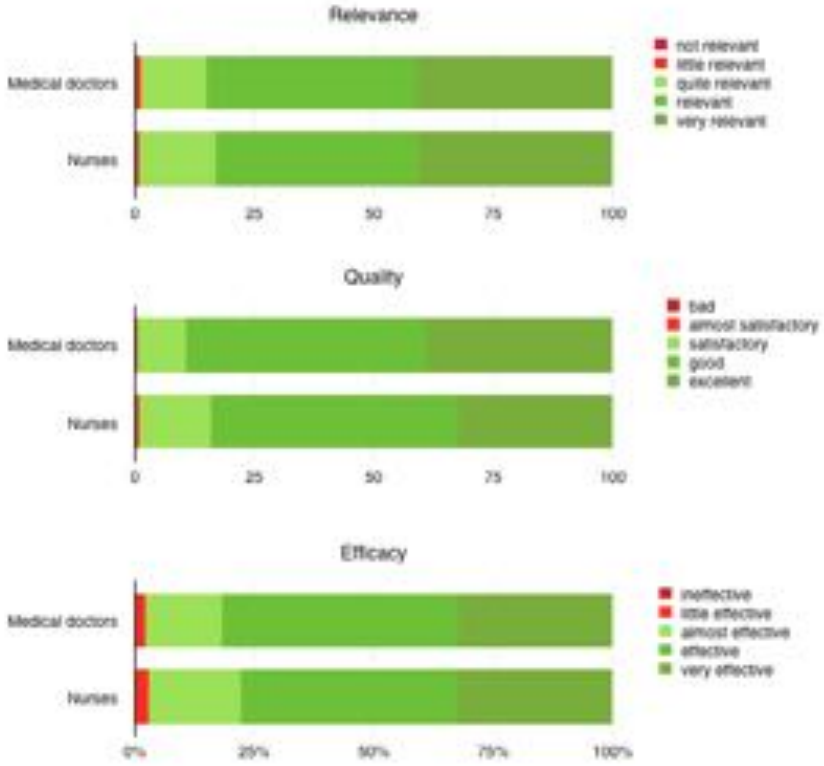
There were five workshops with stakeholders during development and validation of the simulation. Participants were drawn from epidemic management policy, communications planning, and other practitioner groups. In addition to the design and validation activities, these workshops included discussion about how the simulation could be used in the stakeholder's organisations.

Title	Type, venue, date	Author
Personal Protective Behaviour During an Epidemic	Social Simulation Conference – SSC 2014, Barcelona 1-5 September 2014. Paper presented by Jennifer Badham	Jennifer Badham and Nigel Gilbert
Protective behaviour during an epidemic: Feedback between social and viral contagion	Computational Social Science (satellite conference of European Conference on Complex Systems), Lucca 22-26 September 2014. Paper presented by Jennifer Badham	Jennifer Badham and Nigel Gilbert
Modelling Individual Decision Protective Decisions within an Influenza Epidemic	ESCAIDE (European Scientific Conference on Applied Infectious Diseases Epidemiology), Stockholm 5-7 November 2014. Poster presented by Jennifer Badham	Jennifer Badham and Nigel Gilbert

3.4 The Online Courses (E-learning)

Zadig – the partner of TELL ME project that developed this tool - disseminated the two existing e-learning courses through the project website (www.tellmeproject.eu), with considerable feedback (google analytics, december 2014).

The dissemination has been performed also by the periodical Newsletter and e-mailing addressed to all relevant European Health Professional Federations. As already said, the Italian FNOMCEO (MD Federation) and IPASVI (Nurses Federation) bought the course on Ebola[25]). The World Health Organization[26] showed some interest in the Ebola course as well, although with no practical result up to now. The same happened with The International Emergency Management Society (TIEMS[27]). Eventually, Zadig intends to go on investing in dissemination and marketing activities also towards international, European, national and local health authorities and professional federations all over Europe.



SIAE has entered into agreements with Authors' Societies all over the world, to protect all the repertoires it manages. These agreements regulate the exploitation of its members' works in foreign countries as well as the exploitation in Italy of the works of foreign societies' members. It therefore belongs to a network that ensures the protection of rights worldwide.

SIAE belongs to all the most important international organizations whose institutional goal is to cooperate in the field of copyright.

Association (possibly interested to get CME credits)
Austrian Medical Chamber
Association Belge des Syndicats Médicaux
Ordre de medecins
Bulgarian Medical Association
Croatian Medical Association
Czech Medical Association

[25] (See Annexes)

[26] WHO: www.who.int

[27] http://tiems.info

Association (possibly interested to get CME credits)
Cyprus Medical Association
Danish Medical Association - Dr. HANSEN, Mads Koch - President
Estonian Medical Association
Finnish Medical Association
Conseil National de l'Ordre des Médecins (CNOM)
The German Medicla Association
Local Athens representative for the Medical Association
Hungarian Medical Chamber
Irish Medical Association
FNOMCEO (Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri)
The Association of Physicians of Latvia
Lithuanian Medical Association
AMMD (The Association of Doctors and Dentists)
Luxembourg Association for Continuing Medical Education (ALFORMEC)
The Medical Association of Malta
Royal Dutch Medical Association (KNMG); GAIA (Joint Accreditation Internet Application, e-learning)
Polish (Supreme) Chamber of Physicians and Dentists and Regional Chambers of Physicians and Dentists
Portuguese Medical Association (Ordem Dos Medicos)
Romanian College of Physicians
Slovak Medical Association
Slovenian Medical Association
Spanish Accreditation Council for CME (SACCME)
Swedish medical association
British Medical Association

3.5 The Guidance for Using the WHO Threat Index

The Guidance has been disseminated via a lot of activities, mainly through conferences and policy relevant meetings carried out by the scientific coordinator Manfred Green with the the US Centers for Diseases prevention and Control, CDC, in Atlanta on 24 October 2014 and other Agencies.[28]

Furthermore, a specific Policy Brief[29] (the first of this sort in TELL ME) has been recently produced (after the formal end of the TELL ME Project) and sent to the following stakeholders, as a first step towards in-person meetings.

List of recipients of the mailing on the Policy Brief: "A new integrated pandemic Threat Index"

Organisation	Name	Role
World Health Organization	Dr Zsuzsanna Jakab	Regional Director
World Health Organization	Dr.Gaya M. Gamhewage	Technical Officer, Geneva
World Health Organization	Dr Daniel Lins Menucci	Team Leader. Ports, Airports and Ground Crossings. Global implementation of IHR
Who Europe Regional Office	Dr Govin Permanand	Team Leader, Evidence-informed Policy Programme, and Manager of the Health Evidence Network
Who Europe Regional Office	Dr Guénaël Rodier	Director of the Division of Communicable Diseases, Health Security and Environment
Who Europe Regional Office	Dr Nedret Emiroglu	Deputy Director, Division of Communicable Diseases, Health Security and Environment, and Special Representative of the Regional Director on Millennium Development Goals and governance
European Commission	Dr Germain Thinus	Health security and Health threats policy officer
European Commission	Dr. Vytenis Andriukaitis	Commissioner for Health and Food Safety
Ecdc	Karl Ekdahl	
Ecdc	Pierluigi Lopalco	
Ecdc	Marc Sprenger	

[28] Reference: For a detailed description of these meetings see D5.1 Dissemination Report, 6. Cooperation with other projects and policy dialogue.

[29] See Annexes

Organisation	Name	Role
Us Cdc	Dr Toby Merlin	Director of the Division of Preparedness and Emerging Infections
Public Health England	Dr. Brian Mc Closkey	Director of Global Health and of WHO Collaborating Centre on Mass Gatherings and High Visibility/High Consequences Events, UK
Norwegian Directorate Of Health	Dr.Bjørn Guldvog	Director General of Health and Chief Medical Officer, Norway
Denmark Staten Serum Institute	Dr.Thea Kølsen Fisher	Head of Virus Surveillance and Research, past Head of national influenza and pandemic preparedness programs at National Board of Health
Finland National Institute For Health And Welfare (Thl)	Dr. Hanna Nohynek	Chief Physician, Team leader Vaccine Programme Development
Istituto Superiore Di Sanità	Dr Ranieri Guerra	
Istituto Superiore Di Sanità	Dr Stefania Salmaso	
Israeli Minister Of Health	Prof. Itamar Grotto	
Hellenic Center For Disease Control And Prevention	Agoritsa Baka	

3.6 List of Scientific publications and Dissemination activities

TELL ME Project has generated a huge amount of scientific and dissemination activities (for a detailed description of the latter see also D5.1 Dissemination Report). We reported in Annex the complete list of Scientific Papers (published and submitted), and the more relevant Dissemination activities i some way connected with foreground.[30]

[30] See Annexes

4 Use of exploitable foreground

Once we have considered the dissemination, the present impacts and the future of TELL ME in the broader sense, we will then be better able to state how each and every foreground can be exploited by each partner of the project.

List of foreground that might be exploited

Type	Confidential	Name	Sectors of application	Timetable	Patents or other IPR exploitation (licences)	Owner & Other Beneficiary (s) involved	Link
General advancement of knowlendge	no	The Framework Model	M72 2.0 Research and experimentale development on social science and humanity	2016	Copyright	Haifa University	http://www.tellmeproject.eu/node/314
General advancement of knowlendge, Exploitation of results through EU policies	no	Practical Guide	M72 2.0 Research and experimentale development on social science and humanity	2016	Copyright	Zadig, Haifa University, ISS, Cedar3, BMJ	http://www.tellmeproject.eu/node/390
General advancement of knowlendge, Exploitation of results through EU policies	no	The Simulation Model	J58 2.9 Other Software publishing	2016	Copyright	University of Surrey	http://www.tellmeproject.eu/node/392
Commercial exploitation	no	The Online courses	Sector of application P85. 6.0 Educational support activities (Continuing Medical Education, CME)	2016	Copyright	Zadig	http://www.tellmeproject.eu/node/300
Exploitation of R&D results via standards	no	The Guidance for using the WHO Threat Index	M72. 2.0 Research and experimental development on social sciences and humanity (Standardization)	2016	Copyright	Haifa University	http://www.tellmeproject.eu/content/d35-guidance-using-who-threat-index
General advancement of knowlendge, Commercial exploitation	no	The Book of TELL ME	J58.1.1 - Book publishing	2016	Copyright	Haifa University and all partners	http://www.tellmeproject.eu/documents/deliverable

List of all the intellectual property rights (patents, trademarks, registered designs, utility models and others) applied for (and which are under examination or have been granted) from the beginning until after the end of the project:

Type of IP Rights	Confidential	Application references	Subject or title of application	Applicant(s) as on the application
Copyright	no	N/A	The Framework Model	Haifa University
Copyright	no	N/A	Practical Guide	Zadig, Haifa University, ISS, Cedar3, BMJ
Copyright	no	N/A	The Simulation Model	University of Surrey
Copyright	no	N/A	The Online courses	Zadig; in progress
Copyright	no	N/A	The Guidance for using the WHO Threat Index	Haifa University
Copyright	no	N/A	The Book of TELL ME	Haifa University and all partners

4.1 The Framework Model

Description

The Framework Model for risk communication in case of a pandemic is a theoretical model developed by TELLME experts from the School of Public Health at the University of Haifa. This new graphical representation shows that the public sphere, with all its segmentation, should be at the center of the outbreak communication: the public, as all stakeholders as well, must be partners, not a target to aim at.

Important factors about the Framework Model:

- Our framework suggests a holistic map for outbreak communication.
- It harnesses new communication technologies.
- It is specifically aimed at local-level health organizations in different countries often lacking adequate "maps" for EID communication.
- There is no attempt to shape or funnel reality into clear, linear spreadsheets- That’s why you don’t see any arrows.
- Different elements overlap- because communication does not have clear-cut limits.
- Formal stakeholders are not at the center of the model but rather they encompass the public.
- Our framework refocuses the center of communication to the public sphere, which is therefore represented at its heart.

Broadly speaking, the model focuses on four crucial elements that shape the distribution of information in outbreak communication:

1. WHO: what actors are called for involvement at which stage?
2. HOW: what communication channels are best used by those actors to achieve the intended objectives?
3. WHEN: which time is best to communicate messages, prior, during or after an epidemic?
4. WHAT: what risk communication theories and tools ought to be considered in producing messages, for a more effective involvement of the public and a better level of immunization, also keeping ethics in mind?

Sector of application

M72 2.0 Research and experimentale development on social science and humanity

IP Protection
Copyright

Purpose
The Framework Model was designed to set a theoretical basis for the development of the TELL ME Practical Guide for Health Risk Communication.

While pandemic outbreaks in the last decade showcase that public health authorities use the best tools available and the newest technologies to contain outbreaks from a medical point of view, the aspect of outbreak communication does not always reflect the new communication reality. Moreover, the hierarchical and linear models being used for outbreak communication still hold outdated assumptions that focus on direct effects rather than on mediation of the message, and on the dichotomy between sender and addressee instead of on two-way communication. The goal of the Framework Model is a pioneering effort to break through this barrier and overcome these deficits, formulating the implementation of risk communication beyond the state of the art.

- In order to establish a framework model that aims to answer the general questions, it considers the following challenges:
- How can the public be included in decision making effectively during the crisis?
- What response can be given to public health workers' concerns and fears?
- How can media professionals be included in risk communication to the public (not only as informers but as partners during the pre-crisis, warning, emergency, resolution and evaluation stages)?
- What messages/issues should be communicated to different subpopulations during pandemics?
- How can public sentiment be tracked during real time pandemics and responded to immediately and forcefully, bringing about maximum public participation and collaboration?

Exploitation Plans
As part the dissemination activities (see chapter Dissemination of foreground), the Framework Model could become an important theoretical resource - together with the Practical Guide for health communication - for consultancy activities at global and local level. A feasibility plan for these activities is one of the tasks of the Network.[31]

Further research required, if any
N/A

Socio-economic impact
The significance of the proposed risk communication Framework Model is that it integrates relevant concepts and theories with a practical approach. The contribution of this model is that it can be adapted to many specific risk situations through simulations where the ideas can be developed into concrete plans. It pinpoints misconceptions, offering a new outlook on the relationship between components involved in risk communication. Its primary goal is to map the major contenders in EID communication and their interrelationship. Although it provides some details on certain aspects of risk communication, it is not

[31] Reference: see chapter 2.3

meant to serve as a communication kit per se, but as the foundation for such a kit, and also for further research. This Framework Model TELL ME has been the theoretical model used by TELLME experts to develop a Practical Guide for Health Risk Communication.cxv

4.2 TELL ME Communication Kit (A Practical Guide for Health Risk Communication)

Description

The TELL ME Practical Guide for Health Risk Communication is the outcome of a collaborative effort made between four TELL ME partners (Zadig Srl – British Medical Journal – Istituto Superiore di Sanità - CEDARthree) and comprises in essence a set of *four guidance documents* geared towards risk communication professionals, crisis managers and public health officials at national or international level.

The core objective was to develop and present new communication strategies to support the risk communication process and the management of public health threats at different phases of an influenza pandemic. Mainly, the four guidance documents and the Communication Kit as a whole, sought to address the key research questions of the TELL ME project:

1. How can the general public be better motivated or positively influenced to take effective preventive measures during outbreaks?
2. What are the most appropriate communication methods to deal with the complexity, uncertainty, misinformation and malicious information?
3. What are the best communication strategies to maximise vaccine uptake, and to assist health professionals and agencies to cope with vaccine-resistant groups?

Sector of application

M72 2.0 Research and experimentale development on social science and humanity

IP Protection

Copyright

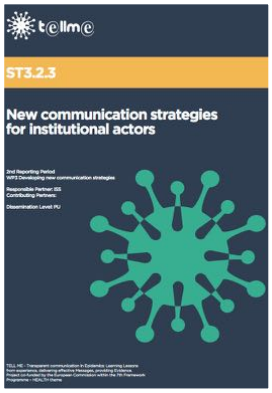
Purpose

A key objective and outcome of the TELL ME project has been the creation of an evidence-based communication package for preparedness and response to major infectious disease outbreaks, notably influenza pandemics. This communication package comprises a set of conceptual and practical tools such as a new participative model for risk communication, an agent-based simulation model for decision makers, an e-learning course for primary healthcare workers, and a communication kit for public health officials.
The Practical Guide for Health Risk Communication was designed to offer a set of practical recommendations, evidence-based communication tools and templates to support the development of messages, which could be tailored for different sub-populations and target groups across various contexts,

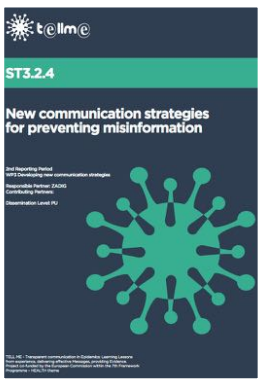
with the goal to minimise deviations between perceived and intended messages in the communication process. The objectives for each of the guidance document are summarised below:

➡ **ST3.2.1 New communication strategies for healthcare professionals and agencies**. This guidance document aims to help healthcare communicators and healthcare professionals (HCPs) responsible for drafting and delivering communication strategies in outbreak situations, to develop appropriate messages for their local populations to increase the uptake of preventative behaviours and vaccination. The document has a specific focus on vaccine resistant groups both on the patient and HCP sides. Moreover, the document sets out the key areas to understand and consider when to develop the messages and provides a summary of the best practice available. Finally, the document sets out the foundation from which healthcare communicators and HCPs can set to work on developing effective messages for each phase of an outbreak.

➡ **ST3.2.2 New communication strategies for working with different subpopulations/at-risk groups.** This guidance document aims to assist health communicators, operating at decision-making level, who are responsible for drafting and delivering communication strategies in outbreak situations, with the practical tools that will help them to develop appropriate messages. The document seeks to provide a visual aide-memoire of the issues to be considered and addressed when drafting communications to the key 'at-risk groups' at each stage of an outbreak.



➡ **ST3.2.3 New communication strategies for institutional actors**. This guidance document aims to assist institutional actors to help them contribute in the trust-building process and the overall communication strategy. The document offers a description of the perspective, role and responsibilities of institutional actors in the communication process, and includes a "toolbox" with supporting material and operational tools for institutional actors to use in communications with their widely diversified audience during epidemics and – even – pandemics.



➡ **ST3.2.4 New communication strategies for preventing misinformation**. This guidance document aims to support public health officials, risk communicators and decision makers, to prevent the emergence and/or handle the widespread diffusion of misinformation in the course of a major infectious disease outbreak. The document presents a methodological framework to describe the conditions under which misinformation is generated and spread, and offers key recommendations to deal with complexity and uncertainties in various contexts, and across different phases of the outbreak, to ultimately produce messages that have the desired outcome.

Exploitation Plans

A number of different opportunities have been identified as possible gateways for future exploitation of the TELL ME Practical Guide for Health Risk Communication.

Current opportunities

- Istituto Superiore di Sanità (ISS): The Italian National Institute of Health has been one of the TELL ME partners who contributed in producing the TELL ME Practical Guide for Health Risk Communication, and more specifically developed the guidance document that presents new communication strategies for institutional actors. The ISS will consider and import practical recommendations and tools included in the TELL ME Practical Guide for Health Risk Communication in the development of a revised national preparedness and response plan for infectious disease outbreaks.

- European Centre for Disease Prevention and Control (ECDC): The ECDC plans to develop guidelines and a toolkit for risk and crisis communication. The TELL ME Practical Guide for Health Risk Communication can serve as point of reference and provide base material and tools for the development of the ECDC toolkit.

- ASSET project: ASSET is an EU-funded project under the theme of Science in Society, which aims for the implementation of a participatory approach on issues related to risk communication in pandemics, based on active cooperation between policy makers, scientists and the general public. The TELL ME Practical Guide for Health Risk Communication can serve as a practical guide and offer good practices for communications among the different groups of stakeholders, as it was conceptualised and constructed on the same principles of participatory governance. Zadig and ISS have a leading role in ASSET for the next three years in the project, so the Practical Guide for Health Risk Communication will keep on being promoted to institutional actors and the expanded network of experts of ASSET. This will ensure continuity in the promotion/dissemination and visibility of the Practical Guide for Health Risk Communication after the TELL ME project is over. In addition, it could be written that the Practical Guide for Health Risk Communication will be advertised via the ASSET webpage, available for download by stakeholders.

Future opportunities

- Improved national preparedness and response pandemic plans: The TELL ME Practical Guide for Health Risk Communication is an evidence-based communication package with practical value for any public health authority who seeks to update national plans for pandemic preparedness and response, to incorporate new elements (e.g. social media, opinion leaders, segmentation etc.) as part of future communication strategies.

- Schools of Public Health and Communication: The University of Haifa and TELL ME partner is member of ASPHER, the Association of Schools of Public Health in the European Region. It is proposed that the guidance documents that comprise the Practical Guide for Health Risk Communication are used as reference for university students to demonstrate how theoretical concepts in risk communication can find application into practice.

Further research required, if any

At least two scientific publications are planned specifically concerning the Practical guide. They will discuss

different aspects of the guide and they will be addressed to specific relevant academic communities, including health communication and public health behaviour researchers. The two articles currently in preparation are:

Title	Authors	Targeted journal
Analysis of factors associated with compliance in accepting influenza vaccination during infectious outbreaks and pandemics. A systematic review	Chiara Cattaneo, Valentina Possenti, Barbara De Mei, Caterina Rizzo, Antonino Bella, Antonella Lattanzi, Chiara Bassi, Simona Di Mario, Maria Luisa Moro, Stefania Salmaso	Annali ISS
Integrated outbreak communication strategies for Institutional Actors"	Valentina Possenti, Barbara De Mei, Dimitri Dimitriou, Alexander Talbott, Mitali Wroczynski, …	Health Communication

Socio-economic impact

The aforementioned communication strategies build on scientific research outcomes from a comprehensive literature review carried out in the scope of WP1 and WP2, and elaborates further on theoretical concepts presented in the TELL ME Framework model for outbreak communication, which identifies the need to make an ideological shift toward a participatory approach where citizens can also be considered as *partners* in the communication process.

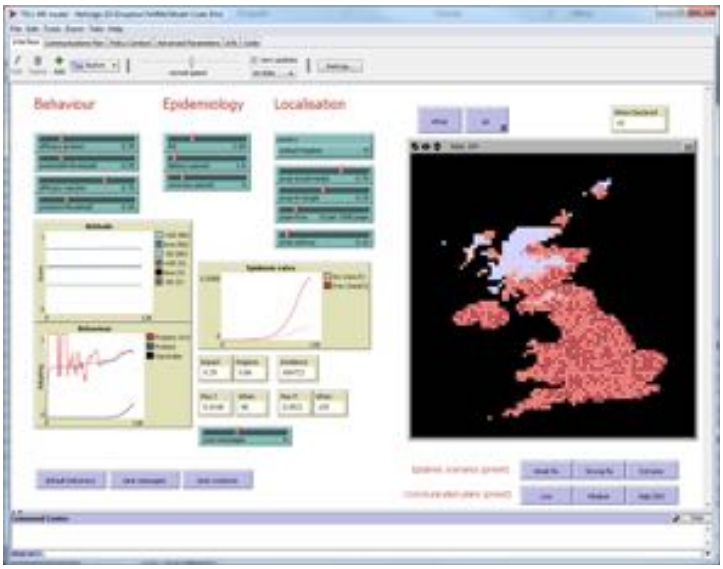
It should be noted that while the TELL ME project was conceived and constructed around communication issues associated with influenza outbreaks, the Practical Guide for Health Risk Communication and respective guidance documents may also find some applications on other type of communicable disease outbreaks, where there is a need to communicate risk and/or plan a public health campaign to raise awareness about an infectious disease, influence positive behavioural responses, and further support the take-up of protective measures.

The authors envisage for the Practical Guide for Health Risk Communication to serve as base material for the preparation of future pandemic preparedness and response plans, either at national or international level. The TELL ME Practical Guide for Health Risk Communication is freely available and accessible from the TELL ME website at http://tellmeproject.eu/node/390

4.3 The Social Simulation Model

Description

CRESS (Centre for Research in Social Simulation at the University of Surrey), partner of TELL ME project, has released a prototype software that simulates the effect of health agency communication on protective behaviour (such as vaccination or hand hygiene) and its contribution to epidemic management. The prototype has been developed in conjunction with other TELL ME project partners, health communication experts, epidemic managers and other stakeholders.



This model is the first to successfully combine five requirements:

1. It includes the effects of communication on behaviour;

2. It considers two-way influence between the simulated epidemic and personal behaviour;

3. It shows that decisions to adopt protective behaviour are based on appropriate psychological models;

4. Individuals to be examined in the simulations must have different characteristics (such as attitude and media access) and react differently to the same situation, and perceive differently their environment (such as proximity to the epidemic), reacting differently to different situations.

5. The model has been parameterised with available empirical data.

Sector of application
J58 2.9 Other Software publishing

IP protection
Copyright

The purpose
The prototype can be used to compare communication plans, helping users to understand the complex interactions between communication and behaviour.
The development of the model also highlighted what information need to be collected about the effect of communication during future epidemics to be able to create a full communication planning tool.

Exploitation Plans
As an academic partner, the University of Surrey plans to exploit the simulation in further research. The rigour of developing the prototype simulation has identified gaps in the knowledge about the connections between communication and personal behaviour. Two of these are substantial: the contribution of different influences to personal decisions to adopt or cease protective behaviour; and the effect of different types of communication on these influences. Both are suitable for investigation with targeted research programmes that involve academic researchers from different disciplines and practitioners. In addition, the experience of developing the TELL ME simulation will support research in more general behaviour modelling. These

opportunities will be pursued by developing health and modelling consortia and submitting collaborative research bids. There are additional ways in which the model could be used that require some work before they could be exploited. This work could be undertaken by the University of Surrey, as the developer of the prototype, or by other organisations with the University of Surrey's support. Three such uses have been identified.

- Customisation and extension of the simulation: The prototype simulation can be customised by users with parameter values that are appropriate for their own situation. However, additional customisation of behaviour or amendment of model rules require specialised skills. The University of Surrey would be able to provide such customisation services, including progressive development toward a full planning tool.
- Improved educational programmes: Degree programmes and short courses in communication and public health could use the simulation to enhance the learning of students, providing practical experience to complement theoretical material. The University of Surrey would work with interested education providers to develop a package of scenarios, training materials and discussion guide. The University could also provide lecturers or workshop leaders to deliver the educational materials.
- Adaptation as game for education or entertainment: The behaviour engine within the simulation could for the basis of a game. The University of Surrey could provide assistance to developers who wish to pursue these opportunities.

Further research required

At least four scientific publications are planned specifically concerning the simulation. They will discuss different aspects of the simulation and be targeted to specific relevant academic communities, including modelling, health communication and public health behaviour researchers. The four articles currently in preparation are:

Title	Authors	Targeted journal
Protective behaviour during an epidemic: A modelling framework	Jennifer Badham and Nigel Gilbert	Social Science & Medicine
Calibration in multiple dimensions with multiple criteria: a model concerning protective behaviour during an epidemic	Jennifer Badham, Chipp Jansen, Thomas French, Nigel Shardlow and Nigel Gilbert	Journal of Artificial Societies and Social Simulation
Protective behaviour during an epidemic: Feedback between social and viral contagion	Jennifer Badham and Nigel Gilbert	BMC Public Health
Simulating communication and behaviour in an influenza epidemic	Peter Johnson, Jennifer Badham and Nigel Gilbert	Health Communication

The following additional outlets have been identified as potential vehicles for disseminating the TELL ME prototype simulation to the modelling, health communication and public health behaviour academic and policy communities:

- Journal of Health Communication
- American Journal of Health Behavior
- PLoS ONE

As all publications will be submitted after the completion of the TELL ME project, there are no project funds available for open access fees. Alternative funding will be sought for gold open access but, if unsuccessful, articles will be submitted either to online journals without open access fees or journals that permit preprints in institution repositories. Preprints will be included in the University of Surrey open access repository.

Socio-economic Impact

The simulation is directed to the first impact identified in the TELL proposal: "improving communication preparedness for the next major epidemic outbreak". It was developed as a prototype decision tool. Four important uses have been identified during stakeholder discussions.

Exploring and comparing scenarios: perhaps the most intuitive use of the simulation is to run different scenarios and compare the outputs. The most obvious scenarios are the differing communication plans, however users may also wish to consider different individual behaviour, epidemic parameters, or policy contexts.

Understanding implications of theory: the simulation is based on existing theory from the psychology and health literatures. As such it represents a formal thought experiment on the implications of these theories, and allows users to track the effects and outcomes of the various theoretical assumptions. This can be particularly effective where the model produces unexpected results, as users can then investigate what specific relationship or assumption produces this result and thus consider whether they agree with the model design and underlying research literature.

Informing data collection: the simulation has many parameters that are necessary to connect the theoretical understanding into practical output. While some of these parameters are calibrated with real world data, there are many others for which data were not available. The simulation can help identify what parameters strongly affect the model output and would therefore be useful to collect data about in the future. The parameters associated with the effect of government communication on individuals' behaviour are a prime example.

Discussion and training tool: it is most likely that all of the above uses will be most beneficial when conducted with colleagues and other stakeholders. In this group format, the simulation becomes a discussion tool which can help identify areas of consensus and disagreement, and develop a shared understanding of the effect of communication and improve decision making capability. These four uses can improve preparedness in three broad ways:

- Increased skills for planners: Exploring scenarios and working through the theory are effective ways of helping planners to understand the complexity of their decision making environment. This can be enhanced in a group discussion or with structured training.

- Support resource allocation: The results of scenario comparisons can be used to demonstrate the important role of communication during epidemics, thereby supporting requests for resources to develop communication materials and conduct research to maximise preparedness.

- Shape research priorities: Research about behaviour during an epidemic is most effective when conducted during an epidemic rather than in response to hypothetical situations. The model highlights important research questions to respond to theoretical and data gaps that will further support decision makers during future epidemics.

4.4 The Online Courses (E-learning)

Description

The TELL ME interactive online course – set up by ZADIG, partner of the TELL ME consortium - allows healthcare professionals to test themselves facing a set of real-based case studies, after having studied some documents in which all requested information is included (Dossiers). The course can be done in several sessions, by logging in at different times. It includes/ 6 case histories, each divided in steps with multiple-choice questions with only one correct answer. At the end of each step one gets his/her score; the step is passed if at least 80% of correct answers is given. Each case history is a prerequisite to the next. At the end of each case, a forum is open for discussion. The credits can be achieved when all case histories have been passed. This case-based online courses has been really appreciated by a lot of users, and could be considered as the best practice in online Continuing Medical Education (CME).

The legal feasibility of E-learning. In many EU countries CME courses are mandatory to obtain a certain amount of credits. Part of these courses can be performed online. During TELL ME Project Zadig performed a detailed analysis of the CME situation for each of the 27 UE countries identifying those which release credits for e-learning courses. In this report we give an overview of the CME system in the 27 countries of the European Union. Unfortunately, not all the 27 countries are full members of Union Européen des Médecins Spécialistes (UEMS) and follow the European Accreditation Council for Continuing Medical Education (EACCME) directive.[32] Thus, although there are different types of CME systems in each country, with some systems still in their development phase, there exists a common framework (UEMS) to which all countries tend to align. This helps to reduce the heterogeneity across the different CME systems. However, all 27 European Union countries have their own CME system except Finland, where the system is still being developed. More than half of countries analyzed (15 countries) have mandatory participation to their CME system. In the remaining countries participation is voluntary and based on the assumption that continuing medical education is a civic duty and, in some cases, participation is encouraged by either tax incentives or financial rewards.[33]

The prototype course. After having studied the legal and technical feasibility of this kind of online course for health professionals[34], a fully functioning TELL ME e-learning platform (in open source moodle system) has been set up[35] with a course about management of the influenza epidemic. *The prototype course* designed in TELL ME Project[36] provides reliable information based on TELL ME research, but also other sources (WHO, ECDC, CDC). The course focuses on preventative measures (from hygiene to vaccination), and

[32] http://www.eaccme.eu

[33] http://TELL MEproject.eu/content/d24-technical-legal-and-scientific-feasibility-online-course-primary-care-staff

[34] http://tellmeproject.eu/content/d24-technical-legal-and-scientific-feasibility-online-course-primary-care-staff

[35] http://elearn.tellmeproject.eu

[36] http://tellmeproject.eu/content/d33-prototype-online-course-primary-care-staff

communication skills, with a particular focus on the risk of stigma, in case of influenza epidemic and pandemic.[37]

Sector of application
P85. 6.0 Educational support activities (Continuing Medical Education, CME).

IP protection
Copyright. **(**Zadig intends to protect these online courses through their registration at SIAE (the Italian society that issues licenses for the uses of each work, thus facilitating the payment of royalties by the users and protecting the authors' works). For the future exploitation of these products, Zadig is oriented to sell them directly on the European market whilst the second choice would be to out-license the IP rights).

The purpose
The interactive E-learning courses are aimed at educating healthcare professionals to provide a correct risk communication to the public before, during and after epidemics and pandemics. Based on the TELL ME Practical guide and other tools, the TELL ME Consortium intends to develop new E-learning courses and to offer them to an European audience composed by Healthcare professionals and Agencies, such as GPs, but also nurses, midwives, health assistants, public health workers, medical specialists (such as virologists, vets) etc, since one of the main lessons learnt from the experience of 2009 A(H1N1) pandemic is their crucial role in such cases, especially about vaccination.

Exploitation Plans
The aim of Zadig is to market online courses about communication issues related to infectious diseases epidemics and pandemics all over European Union. The TELL ME Partner Zadig is the proponent of this foreground. Zadig (www.zadig.it) developed the TELL ME online platform and the courses. Zadig is a national CME provider in Italy and has developed several E-learning technological platforms (www.fadinmed.it, www.goal.snlg.it, www.saepe.it, www.formars.it). To date, over Italian 300,000 healthcare professionals have participated to our E-learning courses. Zadig, an expert in E-learning courses, has developed a specific andragogical model of case history that is more appropriate for the education of professional health workers. For this reason the 2 e-learning courses of TELL ME are focused on case histories or vignettes.
This positive experience convinced Zadig to plan a set of online courses (approximately 4 courses) focussed on risk communication in epidemics and pandemics from 2015 to 2018. E-learning represents an ideal tool to achieve the primary aims of TELL ME project to develop an E-learning system for health workers capable of efficiently disseminate information across all 27 European Union countries in case of an infectious disease emergency.

For each course Zadig will offer:

- the free use of the technological platform (in moodle, that is an open source platform)

[37] Here the links to the Dossiers: Dossier 1: http://tellmeproject.eu/content/dossier-1-epidemics-and-pandemics-what-health-professionals-need-know; Dossier 2: http://tellmeproject.eu/content/dossier-2-talking-about-prevention-case-pandemics-information-and-strategies-healthcare; Dossier 3: http://tellmeproject.eu/content/dossier-3-stigmatisation-and-discrimination-guide-healthcare-workers

- the European accreditation of E-learning course (UEMS)
- the publication online of E-learning courses
- the help desk for participants to courses
- the delivery of credits to the participant related to each course.

Market penetration. During the period 2015-2018 Zadig plans to prepare 4 new online courses on risk communication about infectious diseases emergencies. Two of them will deal with Flu epidemic and vaccine acceptance, and will be based on the TELL ME Practical Guide. The other two online courses will refer to other outbreaks, and/or specific aspects of this kind of communication, also driven by the demand of potential customers. In the first year (2015) Zadig will disseminate the offer of these courses - via e-mail, Newsletter and activity in the press - to some selected European countries more willing to invest in medical E-learning courses and not yet equipped with well established CME program in this field. In order to choose the countries a specific research is required, which will be performed during 2015 (*see below*). It is necessary that the selected countries has mandatory participation to their CME system (*see above: "Legal feasibility")*.

Budget – (the hypothesis is to sell 20 course in 5 countries (see below)):

Product	Cost in euros	Quantity	Total
Implementation of new functions (eg questionnaire of registration specific for single Country) and customization of platform	15,000 una tantum	1	15,000
Server rent	3,000 every year	4	12,000
Ideation and writing of the course	9,000 every course	4	36,000
Editing and upload of the course	3,000 every course	4	12,000
Debugging and publication of the course	2,000 every course	4	8,000
Management of participants via help-desk and production of certifications	0.5 every participants	30,000	15,000
CME course-credit	750 cost of each UEMS credit	7 credits x 4 courses	21,000
Direct costs			**119,000**
Indirect Costs = 25% of the direct costs			**29,750**
Total			**148,750**

Zadig's market penetration strategy is to propose these courses to at least 10 National Medical Federations, 10 National Nurses Federations, from different European countries, and to 5 main National (or local) Health

Agencies, and to sell the courses at least to 5 countries (= 20 courses). The minimum price for each of them (in the case of 20 courses sold) must be of 7,500 euros to get the breakeven.

Further research required

In order to refine TELL ME online courses, it is advisable to conduct some other research. Up to now, Zadig is planning two specific researches, to be conducted during the current year (2015):

- On the basis of the growing use of mobile devices for the connection to Internet, we have to study a system of E-learning via smartphones and tablets with a strong interaction between participants and provider of courses. The "mobile approach" can facilitate the use of E-learning courses everywhere and at any time.
- During TELL ME Project we didn't perform an analysis of the European market of medical E-learning education. We plan to do it during 2015.

Socio-economic impact

Internet based E-learning is becoming an increasingly popular approach to medical education for practical and theoretical reasons. Compared with traditional face-to-face programs, E-learning platforms offer greater flexibility in training times, improved accessibility and dissemination, reduced costs and time, greater adaptability to individual learning styles and easier access to educational material and updates. Therefore, E-learning represents an ideal tool to achieve the primary aims of TELL ME project to develop an E-learning system for health workers capable of efficiently disseminate information across all 27 European Union countries in case of an infectious disease emergency. The review suggested that the effects of E-learning are comparable to traditional residential courses and E-learning is significantly more effective than no intervention.[38]

The first observed impact using E-learning courses is related with Ebola emergency in Africa and - in terms of communication - all over the world. *The course on Ebola* was not strictly complying with TELL ME object, but during the 2014 emergency also TELL ME consortium was alerted by the European Commission on this new threat, and TELL ME promptly responded with the proposition of a dedicated online course. The course on "how to communicate during Ebola crisis" was immediately submitted by the partner in charge with the task of the online course (Zadig) to the Italian Federation of Medical Doctors (FNOMCEO) and the Italian Federation of Nurses (IPASVI), with excellent results. The experience made in Italy was successful: the course on Ebola was made by around 30.000 Italian health workers (updated to 23/01/2015)**.** The income generated by this course has been (up to 23/01/2015) about 12,000 euros (2,000 euro from FNOMCEO + 2,000 euro from IPASVI + 25-30 cent for every participant, up to 50,000 participants, beyond which is free of charge). Among the more than 28,000 questionnaires of customer satisfaction filled by participants, effectiveness, quality and importance of the course was considered very high (>97%). Over 9,200 comments by participants were left on the platform, 98% of which were positive.

E-learning is a very effective tool for the dissemination in EU projects as well. The experience of the e-learning course clearly showed the usefulness of this tool for the dissemination of the project and the implementation of its main results onto the medical and public health community. That's why Zadig will be considering to propose e-learning courses in every dissemination package of European Projects. It can be

[38] http://tellmeproject.eu/content/d24-technical-legal-and-scientific-feasibility-online-course-primary-care-staff

considered also that not only professionals but also lay people can be interested in doing them, not for getting credits but some sort of certification - for instance - of "active citizenship". A pilot study in this sense has been conducted with the Local Health Agency of Verona (Italy): a citizen-based e-learning course on vaccinations has been outlined, at the end of which this kind of certification will be issued.

Swot analysis applied on the e-learning course

Strenghts
High quality of e-learning materials.
Scorm format of e-learning objects, usable on different Scorm compatible technological platforms
Possibility of a quick updating of proposed courses on the basis of the last evidences emerged in scientific literature
Weakness
Necessity of continuous updating of e-learning materials. It's quite impossible to sell the same e-learning course for more than two years
Presence of a not uniform way of accreditation of e-learning courses in Europe (for example the CME accreditation to UEMS is not recognized by all EU countries)
Use of English language: health professionals in most EU countries are not yet confident with English and need the translation of the materials in their national language.
Opportunities
The e-learning courses can serve as a tool to make a project shared by numerous medical Federations in Europe
The e-learning courses can be used also for developing countries, for example Ebola or similar epidemics
The technological platform can be used for other e-learning courses about themes not related to TELL ME
Threats
We are not fully aware of the dimension of the demand of e-learning courses on Health issues.
The presence of big competitors (manly international publishers).

4.5 The Guidance for using WHO Threat Index

Description

The Guidance for using WHO Threat Index, authored by TELL ME experts from the School of Public Health at the University of Haifa (Israel), is a proposal of new Threat Index for establishing what a pandemic is and when it has to be declared. This new Index synthesized three alternative risk communication scales in one: WHO revised pandemic phases (2013), CDC Pandemic Severity Index (2007) and Sandman's risk Scale (2007). Though each presented threat index aims is comprehensive, their alert phases are very much oriented to different aspects. Namely, The WHO's risk assessment of influenza virus with pandemic potential are directed to updates based on the geographical spread of the threat, CDC pandemic index is severity-based and its updates are directed to specific measures individuals and community should undertake to minimize their risk, and Sandman's communicational phases emphasize mass communicational as an educating tool in times of crisis. Subsequently, these three phase systems do not overlap but rather complement each other. In fact, they can be seen as one hybrid threat index that focuses on spread, risk and communication.

Pandemic communication phases

Communication phase	Who pandemic phase	CDC pandemic severity
1. Pre-pandemic cold	1 or 2	
2. pre-pandemic warm (little public attention)	3	1
3. pre-pandemic hot (teachable moment)	3 or 4	1
4. pandemic imminent	4 or	2 or 3
	5	2 or 3
5. pandemic elsewhere	6	4
6. pandemic here	6	5
7. pandemic elsewhere (again)	6	4
8. post-pandemice	1 or 2 or	1
	3 or even 4 (for different strain)	

Sector of application

M72. 2.0 Research and experimental development on social sciences and humanity (Standardization)

IP protection

Copyright

The purpose

TELL ME recommend to connect the three scales to a united integrative pandemic communication phase's threat index. The integrated threat index phases will be designed to consider geographical threat, severity and public risk perception. This comprehensive index might be the solution for the shortcomings of the current WHO threat index, that does not defects its many advantages. It offers the most practical tools for

outbreak communication with different stakeholders, and it takes into consideration international, national and local risk assessments.

Exploitation Plans
A specific Policy Brief has been produced immediately after the end of the project[39] in order to advocate the potential new standard to main International Health Agency (e.g WHO). A mailing list of all relevant stakeholders will then be contacted - asking to meet them in person. Further steps (to be defined) will follow.

Further research required
N/A

The socio-economic impact
Toghether with the Practical Guide for Health Risk Communication, the Guidance for using the WHO Threat Index may serve as new standard for the preparation of future pandemic preparedness and response plans, either at national or international level, by better defining pandemic phases.[40]

4.6 The TELL ME Book

Description
The book provides an overview of risk communication for infectious disease crises. The book is based on Deliverables that were produced and submitted as part of the TELL ME project. Some key features of this book are:

- The book provides infectious disease crisis information presented by experts from around Europe.
- The book can be used as a reference guide for public health professionals, international health organizations, and health departments.
- To use as a training tool.
- To use as a research resource when conducting empirical research.
- To use in a course on risk communication or infectious diseases.
- To transmit health information clearly to stakeholders in ways that will encourage behavioural changes to reduce the risk.

Sector of application
J58. 1.1 Book Publishing

[39] Reference: Annexes

[40] The Guidance is available for free and accessible on the TELL ME website at http://tellmeproject.eu/node/326

IP protection
Copyright.

The purpose
The book, which is comprised of commentaries, empirical data analysis, original research, and theoretical framework analysis, aims to improve communication preparedness for the next major epidemic outbreak, and minimize deviations between perceived and intended messages during the full course of the pandemic. It will present readers with the latest research available in the rapidly developing field of risk communication and analyses on risk communication strategies to address outbreaks and epidemics, and preparedness methods. In addition, the book will include a comprehensive explanation of several products of the TELL ME project, including the outbreak framework model, communication guide, and prototype online course.

Exploitation plans
As an academic partner, the University of Haifa is currently working on finalizing the TELL ME book and securing a publisher. The book provides an opportunity to disseminate findings and commentaries from all aspects of the TELL ME project and from all of our partners. Depending on where the book is published, Haifa University may also make the book available online to ensure that the book is widely available.

Further research required
N/A

Impact
Wider diffusion into academic milieu in the field of Health communication disciplines.

Annexes

List of Scientific publications

Status	Title	Main Author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publications	Year of publication	Relevant pages	Permanent identifiers (if available)	Is/Will open access provided to this publication?
Submitted	Analysis of factors associated with compliance in accepting influenza vaccination during infectious outbreaks and pandemics. A systematic review	Chiara Cattaneo, Valentina Possenti, Barbara De Mei, Caterina Rizzo, Antonino Bella, Antonella Lattanzi, Chiara Bassi, Simona Di Mario, Maria Luisa Moro, Stefania Salmaso	Annali ISS	N/A	ISS	Roma, Italy	N/A	N/A	N/A	Yes
Under Review	Calibration in multiple dimensions with multiple criteria: a model concerning protective behaviour during an epidemic	Jennifer Badham, Chipp Jansen, Thomas French, Nigel Shardlow and Nigel Gilbert	Journal of Artificial Societies and Social Simulation	N/A	SimSoc Consortium	Surrey, UK	N/A	N/A	N/A	No

Status	Title	Main Author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publications	Year of publication	Relevant pages	Permanent identifiers (if available)	Is/Will open access provided to this publication?
Published	Compliance with influenza vaccination among healthcare workers – tailoring risk communication according to the factors affecting compliance	MS Green, N Groag Prior and A Geser-Edelsberg	European Journal of Public Health	October 2013	Oxford University Press	Oxford, England	2013	180	http://dx.doi.org/10.1093/eurpub/ckt123.083	No
Published	Evaluation of Continuing Medical Education (CME) Systems across the 27 European Countries	Tommaso Saita, Pietro Dri	Creative Education	March, 2014	Scientific Research Publishing	Irvine, USA	2014	Vol.5 (9) 682-689	http://dx.doi.org/10.4236/ce.2014.59080	Yes
In Preparation	Fear: the Ebola quarantine debate as a case study that reveals how the public perceives risk.	Gesser-Edelsburg, A., Shir-Raz, Y.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes

Status	Title	Main Author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publications	Year of publication	Relevant pages	Permanent identifiers (if available)	Is/Will open access provided to this publication?
Published	Healthcare workers as part of the system or part of the public: Ambivalent risk perception in healthcare workers.	Gesser-Edelsburg, A., Walter, N, Green, M.S.	American Journal of Infection Control	2014. Vol. 42(8)	Elsevier	New York, USA	2014	829-833	http://dx.doi.org/10.1016/j.ajic.2014.04.012	No
Submitted	Integrated outbreak communication strategies for Institutional Actors"	Valentina Possenti, Barbara De Mei, Dimitri Dimitriou, Alexander Talbott, Mitali Wroczynski, …	Health Communication	N/A	Taylor & Francis Online	London, UK	N/A	N/A	N/A	No
Under Review	Outbreak or epidemic? How Obama's language choice transformed the Ebolaoutbreak into an epidemic.	Gesser-Edelsburg, A., Shir-Raz, Y., Sassoni Bar-Lev, O., Green, M.S.	Health Communication	N/A	Taylor & Francis Online	London, UK	N/A	N/A	N/A	No
Submitted	Protective behaviour during an epidemic: A modelling framework	Jennifer Badham and Nigel Gilbert	Social Science & Medicine	N/A	Elsevier	United Kingdom	N/A	N/A	N/A	No

Status	Title	Main Author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publications	Year of publication	Relevant pages	Permanent identifiers (if available)	Is/Will open access provided to this publication?
In preparation	Protective behaviour during an epidemic: Feedback between social and viral contagion	Jennifer Badham and Nigel Gilbert	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
Under review	Risk communication during the 2009 H1N1 influenza outbreak: literature review (2009-2013) of the methodology used for EID communication analysis.	Gesser-Edelsburg, A., Mordini, E., Billingsley, M., Stolero, N., James, J.J., Green, M.S.	Disaster Medicine and Public Health Preparedness	TELL ME special issue	Cambridge University Press	Cambridge, UK	N/A	N/A	N/A	No
Published	Risk communication recommendations and implementation during EID: The case study of the 2009 H1N1 influenza pandemic	Gesser-Edelsburg, A., Mordini, E., James, J., Greco, D., Green, M.S.	Disaster Medicine and Public Health Preparedness	2014. Vol. 8	Cambridge University Press	Cambridge, UK	2014	158-169	http://dx.doi.org/10.1017/dmp.2014.27	No

Status	Title	Main Author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publications	Year of publication	Relevant pages	Permanent identifiers (if available)	Is/Will open access provided to this publication?
In Preparation	Simulating communication and behaviour in an influenza epidemic	Peter Johnson, Jennifer Badham and Nigel Gilbert	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
Under review	The public sphere in EID communication: Recipient or active and vocal partner?	Gesser-Edelsburg, A., Walter, N., Shir-Raz, Y., Mordini, E., Dimitriou, D., Green, M.S.	Disaster Medicine and Public Health Preparedness	TELL ME special issue	Cambridge University Press	Cambridge, UK	N/A	N/A	N/A	No
Submitted	What Does the Public Know about Ebola? The Public's risk perceptions regarding the current Ebola in an as-yet uninfected country.	Gesser-Edelsburg, A., Shir-Raz, Y., Haiek, S., Sassoni Bar-Lev, O.	American Journal of Infection Control	N/A	Elsevier	New York, USA	N/A	N/A	N/A	No
Published	Why do parents who usually vaccinate their children hesitate or refuse? General good vs. individual risk	Gesser-Edelsburg, A., Shir-Raz, Y, Green, M.S.	Journal of Risk Research	12 Dec 2014	Taylor & Francis Online	London, UK	2014	N/A	http://dx.doi.org/10.1080/13669877.2014.983947	No

Status	Title	Main Author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publications	Year of publication	Relevant pages	Permanent identifiers (if available)	Is/Will open access provided to this publication?
Published	Self respect - A "Rawlsian Primary Good" unprotected by the European Convention on Human Rights and its lack of a coherent approach to stigmatization?	Quinn, P, De Hert, P	International Journal of Discrimination and the Law	March 2014 vol. 14 no. 1	Sage publications	Brunel University, UK	2014	19-53	http://dx.doi.org/10.1177/1358229113509734	No
Under review	Ebola, Discrimination, and Stigmatization. Familiar Social Problems Produced in the Context of an International Health Crisis	Quinn P., De Hert P.	Disaster Medicine and Public Health Preparedness	TELL ME special issue	Cambridge University Press	Cambridge, UK	N/A	N/A	N/A	No
Submitted	Ebola outbreak: use, acceptance and utility of an e-learning course for health professionals in Italy	Dri, P., Saita, T., Valetto, MR., Bellone, M., Villa, R	Disaster Medicine and Public Health Preparedness	TELL ME special issue	Cambridge University Press	Cambridge, UK	N/A	N/A	N/A	No

List of Dissemination activities

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
Introducing.... TELL ME	blog		20/04/2012	DOC2DOC(Connecting Doctors Worldwide), BMJ publishing	Doctors and other HCPs	World	http://doc2doc.bmj.com/forums/bmj_going-viral_introducing-tell
Social media during epidemics: a poisoned chalice?	blog		05/01/2015	BMJ, BMA	Healthcare worrkers, health journalists, experts in risk and health communication	World	http://blogs.bmj.com/bmj-journals-development-blog/2015/01/05/social-media-during-epidemics-a-poisoned-chalice/
How to talk about epidemics: the TellMe project	Institutional website		04/03/2013	CORDIS (Community Research and Development Information Service), EU Commission	Policy makers, experts, other projects' members, journalists	World	http://cordis.europa.eu/news/rcn/134927_en.html
Il Progetto TELL ME dà i suoi frutti	Institutional website		29/01/2015	Epicentro (epidemiological website of the Italian Institute of Health), Italian Minister of health	Public health experts, healthcare professionals, policy maker, stakeholders and health journalists	World	http://www.epicentro.iss.it/temi/infettive/aggiornamenti.asp
La comunicazione in caso di epidemia: il progetto Tell Me	Institutional website		20/05/2013	EPICENTRO (epidemiological website of the Italian Institute of Health), Italian Minister of Health	Public health experts, healthcare professionals, policy maker, stakeholders and health journalists	World	http://www.epicentro.iss.it/temi/infettive/TellMeComunicazione.asp
Practical guide to improve communication during disease outbreaks launched	International medical news website		04/02/2015	Medical News Today	Healthcare professionals, policy maker, public health experts, health journalists	World	http://www.medicalnewstoday.com/releases/288886.php

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
Quando i virus infettano la comunicazione	Italian health website		09/12/2014	Healthdesk	General public	World	http://www.healthdesk.it/cronache/quando_i_virus_infettano_la_comunicazione/1418090400
La comunicazione vale come un vaccino	Italian weekly newspaper (printed edition)		27/09/2014	Pagina 99, Mainstream press	General public	World	http://www.scribd.com/doc/241459481/La-comunicazione-vale-come-un-vaccino
TELL ME project: la comunicazione efficace in caso di pandemia	local medical journal (printed edition)		01/12/2013	TORINO MEDICA, Turin Medical Association	Doctors	World	http://tellmeproject.eu/sites/default/files/Articolo%20TellMe%20(TorinoMedica).pdf
Quarantining health workers returning from Ebola affected countries is “bad science,” says public health adviser	Medical journal		08/12/2014	BMJ, BMA	Healthcare professionals, policy maker, public health experts, health journalists	World	http://www.bmj.com/content/349/bmj.g7559
Healthcare Workers Base Their Positions on Vaccines on Their Own Emotions and Personal Experiences	Medical website		25/08/2014	Infection Control Today	Doctors, infectivologists, public health experts	World	http://www.infectioncontroltoday.com/news/2014/08/healthcare-workers-base-their-positions-on-vaccines-on-their-own-emotions-and-personal-experiences.aspx
Health workers may become less objective if threat near	News website		24/08/2014	San Diego Jewish World	General public	World	http://www.tellmeproject.eu/sites/default/files/sdjewishworld.com-Health%20workers%20may%20become%20less%20objective%20if%20threat%20near.pdf

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
Health workers too close to make vaccination call: study	News website		26/08/2014	The Times of Israel	General public	World	http://www.tellmeproject.eu/sites/default/files/Health%20workers%20too%20close%20to%20make%20vaccination%20call%3A%20study%20%7C%20The%20Times%20of%20Israel.pdf
Influenza A, l'eccessivo allarmismo di chi aveva interessi (economici) in gioco	News website		20/11/2013	CORRIERE.IT, Corriere della Sera, main Italian newspaper Mainstream press	General public	World	http://www.corriere.it/salute/13_novembre_18/influenza-a-chi-gridava-al-lupo-lupo-aveva-troppi-conflitti-d-interesse-34351a12-5067-11e3-b334-d2851a3631e3.shtml
Rimosso divieto utilizzo vaccini. Dall'Aifa il via libera a Novartis	News website		09/11/2012	La Repubblica.it, main Italian newspaper Mainstream press	General public	World	http://www.repubblica.it/salute/prevenzione/2012/11/09/news/influenza_vaccini_novartis-46249511/
Vaccini, il 14% degli italiani ha dubbi sulla loro utilità. E il 5% ha deciso di non vaccinarsi	News website		05/11/2012	Corriere della Sera, main Italian newspaper Mainstream press	General public	World	http://www.corriere.it/salute/12_novembre_05/vaccini-sondaggio_302aacf6-2698-11e2-8015-d7b141f471a2.shtml
Ministry urges taking preventive measures against West Nile virus	News website		10/08/2014	The Jerusalem Post, Israel main newspaper Mainstream press	General public	World	http://www.jpost.com/Health-and-Science/Ministry-urges-taking-preventive-measures-against-West-Nile-virus-370691

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
L'"astensionismo" nelle vaccinazioni	newspaper		04/11/2012	Corriere della Sera, main Italian newspaper Mainstream press	General public	World	http://www.scribd.com/doc/112158874/Riccardo-Renzi-L-Astensionismo-Nella-Salute-Corriere-Salute
A new framework model for outbreak communication	Oral presentation	Anat Gesser-Edelsburg	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 2 Anat Gesser-Edelsburg.pdf
A prototype simulation model for communication during major influenza epidemics	Oral presentation	Jennifer Badham	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 2 Jennifer Badham.pdf
Are risk and trust related in a public health emergency? Who will you trust?	Oral presentation	Simon Langdon	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 1 Simon Langdon.pdf
ASSET: A way ahead?	Oral presentation	Valentina Possenti	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 3 Valentina Possenti.pdf
Beyond information transmission to behavioural influence: An update from the EU WP7 Project ECOM	Oral presentation	Jeff French	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 3 Jeff French.pdf
Ebola home and away: Risk communication challenges	Oral presentation	Brian McCloskey	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 4 Brian McCloskey.pdf
Ebola: Global aviation and public health working together?	Oral presentation	Nigel Dowdall	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 4 Nigel Dowdall.pdf

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
Figures of fear and empathy: Perception of epidemics and representation of the behavioural responses to them in literature, art and music	Oral presentation	Bernardino Fantini	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 1 Bernardino Fantini.pdf
How bad communication can destroy a well-planned vaccination programme	Oral presentation	Pier Luigi Lopalco	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 5 Pier Luigi Lopalco.pdf
Online course for healthcare professionals for communications in epidemics	Oral presentation	Roberta Villa	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 2 Roberta Villa.pdf
Overview of the Framework Model for Outbreak Communication	Oral presentation	AnatGesser-Edelsburg, Nathan Walter and Manfred S. Green	2013	The TELL ME Workshop New Framework Model for Outbreak Communication WP3 Validation WP4 Simulation model, Haifa, Israel	Experts in risk and health communication	Israel, World	http://www.tellmeproject.eu/content/d31-new-framework-model-outbreak-communication
Practical applications of the Framework Model	Oral presentation	AnatGesser-Edelsburg, Nathan Walter, YaffaShir-Raz, Emilio Mordini, DimitrisDimitriou and Manfred S. Green	2015	Final TELL ME Workshop, London, England	Experts in risk and health communication	UK, Europe	
Social media platforms and clinical records in PHEME: Trend detection and intervention for mental health	Oral presentation	Anna Kolliakou	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Anna Kolliakou.pdf

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
Stigmatisation and discrimination: The inevitable social companions of public health crises	Oral presentation	Paul Quinn	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 1 Paul Quinn.pdf
The role of risk communication and education and training in building resilient communities	Oral presentation	Kåre Harald Drager	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 1 Kare Harald Drager.pdf
The role of social media in risk communication for healthcare professionals	Oral presentation	Alexander Talbott	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 2 Alex Talbott.pdf
The US domestic response to Ebola: Risk communication and new lessons learned	Oral presentation	Toby Merlin	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Session 4 Toby Merlin.pdf
Welcome speech by the Chair and Scientific Coordinator of the TELL ME project	Oral presentation	Manfred Green	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Manfred%20Green%20-%20Final%20conference%20-%20Introduction%206-1-15%202.pdf
Come aumentare la consapevolezza dell'importanza della vaccinazione tra gli operatori sanitari (ITA)	Oral presentation	Barbara De Mei	2014	Workshop "La promozione della vaccinazione negli operatori sanitari: National info day del progetto HProImmune", Roma, Italy	Experts in risk and health communication	Italy, Europe	

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
Comunicare la pandemia (ITA)	Oral presentation	Roberta Villa	2014	Convegno ISDE Comunicazione: salute e ambiente, Verona, Italy	Experts in risk and health communication	Italy, Europe	
Implementation of communication strategies during pandemics: The case of the 2009 H1N1 influenza	Oral presentation	Gesser-Edelsburg, A & Green, M.S.	2013	141st American Public Health Association (APHA) Annual Meeting, Boston, MA, USA	Experts in risk and health communication	USA, World	
New framework model for outbreak communication	Oral presentation	Gesser-Edelsburg, A. Walter, N. Shir-Raz, Y., Mordini, E., Dimitriou, D. & Green, M.S.	2014	12th International Conference on Communication, Medicine & Ethics (COMET), Lugano, Switzerland	Experts in risk and health communication	Switzerland, Europe	
Pandemia 2.0 L'uso dei social media nell'informazione scientifica (ITA)	Oral presentation	Luca Carra	2013	Seminar "Come raccontare l'epidemiologia in un mondo 2.0", Bologna, Italy	Experts in risk and health communication	Italy, Europe	
TELL ME Possible cooperation with E-COM@Eu	Oral presentation	Roberta Villa	2014	EU-COM meeting, London, England	Experts in risk and health communication	UK, Europe	
TELL ME Project (Transparent communication in Epidemics: Learning Lessons from experience, delivering effective Messages, providing Evidence)	Oral presentation	Manfred S Green	2014	HrpoImmune EU Info Day, Athens, Greece	Experts in risk and health communication	Greece, Europe	
Vaccinazioni e social network (ITA)	Oral presentation	Roberta Villa	2014	Seminar "Il rifiuto vaccinale: ragioniamo insieme?", Bologna, Italy	Experts in risk and health communication	Italy, Europe	

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
Evaluate data streams by means of Markov Chains models, a computational approach.	Oral presentation	Riccardo Scalco	21/05/2015	3rd International Digital Disease Detection Conference (DDD3), Florence, Italy	Experts in risk and health communication	Italy, Europe	
In press	Pharmaceutical industry journal			AboutPharma	Experts in risk and health communication	World	
Are informal digital surveillance systems currently capable of detection disease outbreaks in real-time?	Poster	Magid, A., Gesser-Edelsburg, A., Green, M.S.	2013	International Meeting on Emerging Diseases and Surveillance (IMED), Vienna, Austria	Experts in risk and health communication	Austria, Europe	http://tellmeproject.eu/sites/default/files/AviMagidViennaPoster_February2013.pdf
Compliance with influenza vaccination among healthcare workers - tailoring risk communication according to the factors affecting compliance	Poster	Manfred S Green MD, Noemie Groag Pri-or, Emilio Mordini, Anat Geser-Edelsberg	2013	6th European Public Health Conference, Brussels, Belgium	Experts in risk and health communication	Belgium, Europe	http://tellmeproject.eu/sites/default/files/Poster - flu vaccination compliance and factors in HCWs final.pdf
Discover Twitter influential user by means of Markov chains models, a computational approach	Poster	Riccardo Scalco, Sergio Cima	01/12/2014	TELL ME Conference, Venice, Italy	Experts in risk and health communication	Italy, Europe	http://www.tellmeproject.eu/sites/default/files/Zadig_MarkovTwitter_research.jpg
E-Learning: how to tackle infectious disease outbreaks	Poster	Anat Gesser-Edelsburg (School of Public Health, University of Haifa), Roberta Villa (Zadig) and Mitali Wroczynski (BMJ) on behalf of the TELL ME Consortium	2014	IMED conference, Vienna, Austria	Experts in risk and health communication	Austria, Europe	http://tellmeproject.eu/sites/default/files/elearning poster for Vienna_final.pdf

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
For an effective communication during infectious outbreaks	Poster	Emilio Mordini, Manfred Green, Donato Greco, Barbara De Mei, Roberto Satolli, Nigel Gilbert	2013	XVth International Congress of Immunology, Milan, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Tellme poster ici 2013.pdf
La vaccinazione tra diritto e dovere (ITA)	Poster	Barbara De Mei (Centro nazionale di Epidemiologia, Sorveglianza Promozione della Salute, Istituto Superiore di Sanità)	2014	Meeting regionale sulle vaccinazioni, Pescara, Italy	Experts in risk and health communication	Italy, Europe	http://tellmeproject.eu/sites/default/files/Pescara 28 ottobre 2014.pdf
Risk Communication. The Power of Social Media	Poster	Mitali Wroczynski (BMJ) and Roberta Villa (Zadig) on behalf of the TELL ME Consortium	2014	World Conference on Disaster Management, Toronto, Canada	Experts in risk and health communication	Canada, World	http://tellmeproject.eu/sites/default/files/Tell Me Poster non artwork_FINAL.pdf
Risk Communication. The Power of Social Media	Poster	Anat Gesser-Edelsburg (School of Public Health, University of Haifa), Roberta Villa (Zadig) and Mitali Wroczynski (BMJ) on behalf of the TELL ME Consortium	2014	IMED conference, Vienna, Austria	Experts in risk and health communication	Austria, Europe	http://tellmeproject.eu/sites/default/files/social media poster amended_final for Vienna.pdf
Transforming the dynamics of Emerging Infectious Disease (EID) communication: An innovative integrative framework	Poster	Anat Gesser-Edelsburg (School of Public Health, University of Haifa), Roberta Villa (Zadig) and Mitali Wroczynski (BMJ) on behalf of the TELL ME Consortium	2014	IMED conference, Vienna, Austria	Experts in risk and health communication	Austria, Europe	http://tellmeproject.eu/sites/default/files/Vienna1.pdf

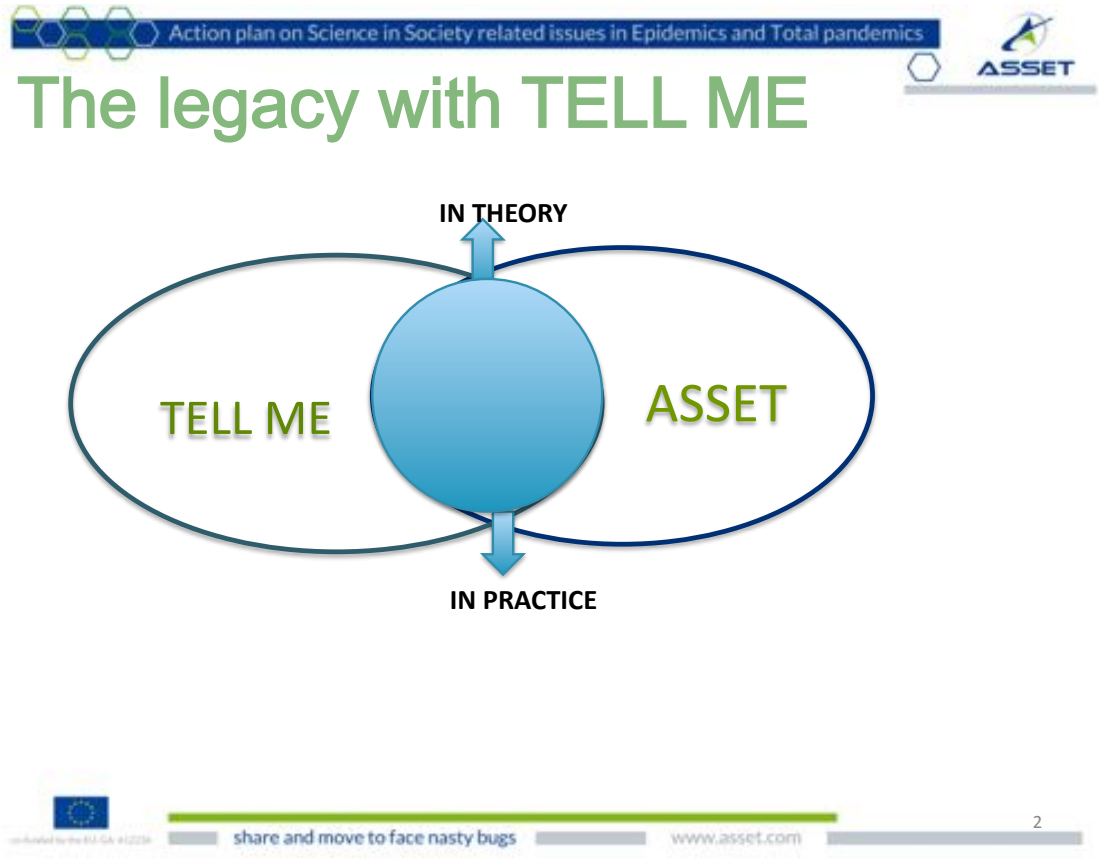
Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
Modelling Individual Decision Protective Decisions within an Influenza Epidemic	Presentation	Jennifer Badham (University of Surrey) and Nigel Gilbert (University of Surrey) on behalf of the TELL ME Consortium	5-7 November 2014	ESCAIDE (European Scientific Conference on Applied Infectious Diseases Epidemiology), Stockholm	Experts in risk and health communication	Sweden, Europe	http://tellmeproject.eu/sites/default/files/Session 1 Bernardino Fantini.pdf
Personal Protective Behaviour During an Epidemic	Presentation	Jennifer Badham and Nigel Gilbert	1-5 September 2014	Social Simulation Conference – SSC 2014, Barcelona	Experts in risk and health communication	Spain, Europe	
Protective behaviour during an epidemic: Feedback between social and viral contagion	Presentation	Jennifer Badham and Nigel Gilbert	22-26 September 2014	Computational Social Science (satellite conference of European Conference on Complex Systems), Lucca	Experts in risk and health communication	Italy, Europe	
Newsletter TELL ME	Press releases		25/09/2012	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/pressreview
Newsletter TELL ME	Press releases		24/04/2013	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/pressreview
Newsletter TELL ME	Press releases		31/10/2013	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/pressreview
Newsletter TELL ME	Press releases		22/05/2014	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/pressreview
Newsletter TELL ME	Press releases		04/07/2014	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/pressreview
Newsletter TELL ME	Press releases		20/10/2014	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/pressreview

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
Newsletter TELL ME	Press releases		20/11/2014	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/pressreview
Newsletter TELL ME	Press releases		20/02/2015	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/pressreview
When a health risk is close to home, health care professionals base their positions on vaccines on their own emotions, personal experiences	Science news website		24/08/2014	Science Daily	Scientists, healthcare professional, science journalists	World	http://www.sciencedaily.com/releases/2014/08/140824213151.htm
Healthcare Workers Base Their Positions on Vaccines on Their Own Emotions and Personal Experiences	Specialized website		26/08/2014	International Biosecurity Intelligence System, Centre of Excellence for Biosecurity Risk Analysis at the University of Melbourne	Security, environment, biology, climate, sociology, epidemiology experts	World	http://www.infectioncontroltoday.com/news/2014/08/healthcare-workers-base-their-positions-on-vaccines-on-their-own-emotions-and-personal-experiences.aspx
Are we prepared for pandemics? Pete Doherty and Rolf Zinkernagel	video		28/10/2013	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/content/peter-doherty-rolf-zinkernagel-nobel-prize-physiology-or-medicine-pandemic-preparedness
Karl Ekdahl interview in Venice	video		16/12/2014	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/content/karl-ekdahl-ecdc-ebola-crisis-can-only-be-solved-africa

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
MERS is a threat. Not only for the Middle East: Manfred Green	video		30/06/2014	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/content/manfred-green-university-haifa-mers-threat-not-only-middle-east
Pier Luigi Lopalco interview in Venice	video		16/12/2014	TELL ME web site	Experts in risk and health communication	World	https://www.youtube.com/watch?v=Lu7C90-GmO4
Protect Europe from polio without stigma: Agoritsa Baka	video		15/07/2014	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/content/agoritsa-baka-hcdcp-protect-europe-polio-without-stigma
TELL ME PROJECT	video		04/04/2013	TELL ME web site	Experts in risk and health communication	World	https://www.youtube.com/watch?v=oSpZ5IDmWts
TELL ME Project: Donato Greco	video		19/06/2012	TELL ME web site	Experts in risk and health communication	World	http://www.tellmeproject.eu/content/donato-greco-cssc-we-must-learn-previous-mistakes-outbreak-communication
TELL ME Project: Emilio Mordini	video		20/06/2012	TELL ME web site	Experts in risk and health communication	World	https://www.youtube.com/watch?v=XyZsNLvmK8g
TELL ME Project: Manfred Green	video		20/06/2012	TELL ME web site	Experts in risk and health communication	World	https://www.youtube.com/watch?v=1gu8-wq_i_Y
TELL ME Project: Nigel Gilbert	video		18/06/2012	TELL ME web site	Experts in risk and health communication	World	https://www.youtube.com/watch?v=VTTIM96q3UU

Title	Type of activities	Main leader	Date/Period	Place	Type of audience	Countries addressed	Link of document
TELL ME Project: Simon Langdon	video		20/06/2012	TELL ME web site	Experts in risk and health communication	World	https://www.youtube.com/watch?v=PqyztcXLH4A
TELL ME Project: Valentina Possenti	video		20/06/2012	TELL ME web site	Experts in risk and health communication	World	https://www.youtube.com/watch?v=W8kFAYeXIXI
Toby L Merlin interview in Venice	video		16/12/2014	TELL ME web site	Experts in risk and health communication	World	https://www.youtube.com/watch?v=-NBmGwWfILM
Vaccination is also a matter of communication: Stefania Salmaso	video		15/07/2014	TELL ME web site	Experts in risk and health communication	World	https://www.youtube.com/watch?v=UlV83FdvGQA
TELL ME, Tell You: Bridging theory and practice for effective communications during infectious disease crises	website		05/11/2014	CORDIS (Community Research and Development Information Service), EU Commission	Policy makers, experts, other projects' members, journalists	World	http://tellmeproject.eu/content/tell-me-tell-you-bridging-theory-and-practice-effective-communications-during-infectious
Are informal digital surveillance systems currently capable of detection disease outbreaks in real-time?	Poster	AviMagid, AnatGesser-Edelsburg and Manfred S. Green	2013	International Meeting on Emerging Diseases and Surveillance, Vienna, Austria	Experts in risk and health communication	Austria, Europe	http://tellmeproject.eu/content/are-informal-digital-surveillance-systems-currently-capable-detection-disease-outbreaks-real
Factors associated with compliance to immunization against influenza among healthcare workers	Presentation	European Public Health Association. Brussels, Belgium	01/11/2013		Experts in risk and health communication	Belgium, Europe	
Presentation of TELL ME	Presentation	Manfred S. Green	2014	USA Centers for Disease Control. Atlanta, USA	Experts in risk and health communication	USA, World	

Donato Greco. TELL ME - ASSET network. London 2015



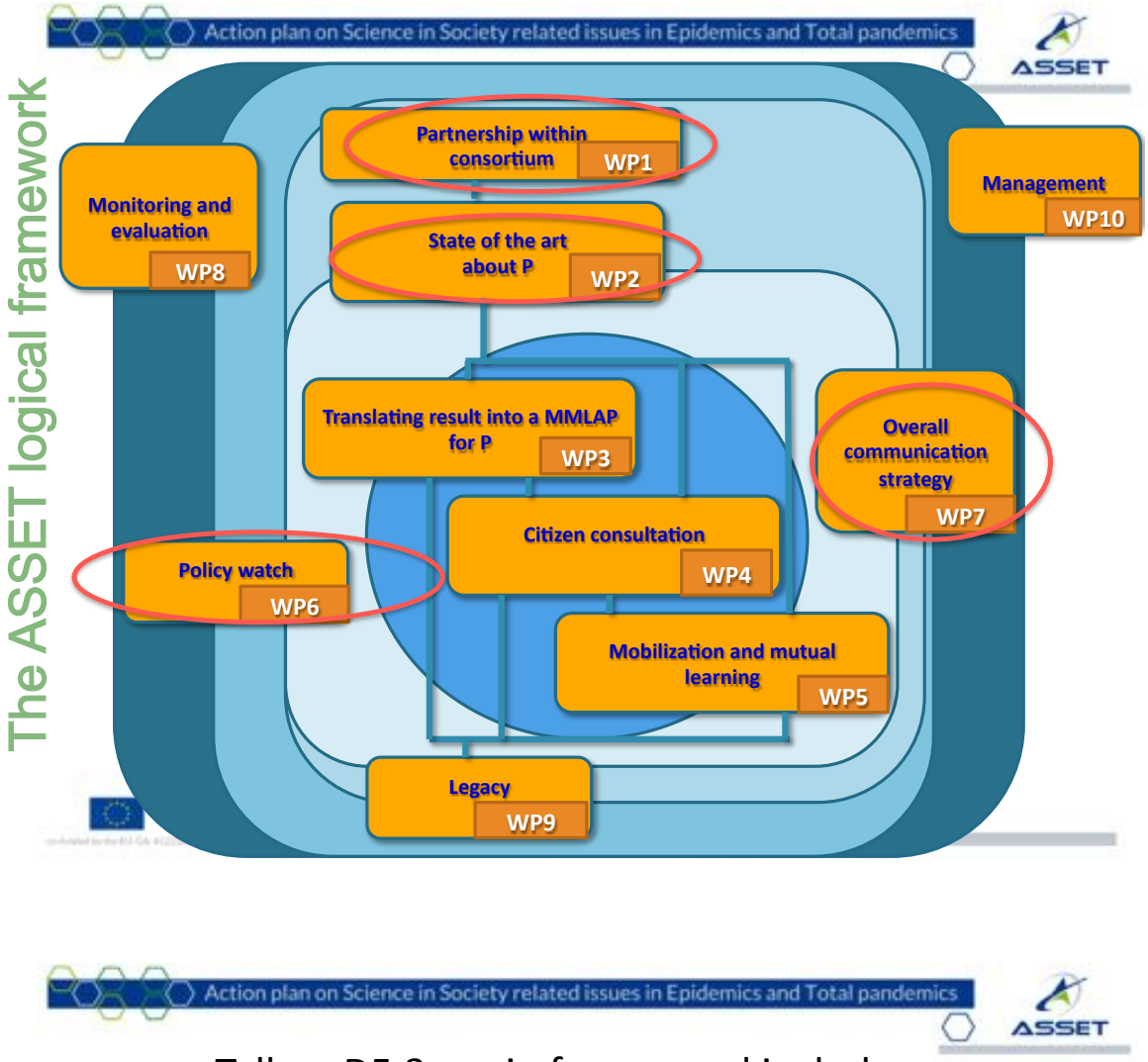
The legacy with TELL ME. In theory

ASSET will broaden the TELL ME information/communication aspect

- raising it to the **wider socio-political level**;
- entering several research issues related both to **mortality /morbidity and socio-economic elements which** pandemics and other infectious disease (ID) crises impact on (such as: flu pandemics governance; unsolved scientific questions regarding influenza/ pandemics; ethical, legal and societal implications of pandemics; gender issues – vulnerability, vaccines; research & innovation; risk of intentionally caused outbreaks);
- producing **practical tools**, both aimed at enhancing partnership with policy makers & health professionals and upholding compliance & resilience in the public;
- validating the main TELL ME outputs and establishing international and local infrastructure for **communication among stakeholders** according to a **communication strategy/plan**.

… and the legacy with TELL ME. In practice

- TELL ME and ASSET share four **Partners** (ABSISKEY, HU, ISS, ZADIG)
- Mutual sharing between the two Consortia, participation to physical **meetings**
- Many TELL ME **deliverables** can be ASSET utilities: from communication strategy, to literature reviews to vaccine story to myths, etc.
  - We have developed a sort of template stressing what can be bridged between TELL ME and ASSET.
  - A set of WPs is a peculiarity of ASSET (#3, #4, #5) and other WPs could be defined as “admnistrative” (#8, 9, 10)



Tellme D5.3: main foreground includes :

- The Practical Guide (Zadig, Haifa University, ISS, Cedar Three, BMJ)
- The Simulation Model (University of Surrey)
- The Prototype online course (Zadig)
- The Framework Model (Haifa University)
- The Threat Index (Haifa University)
- The Book of TellMe (Haifa University and all parties)
- The Internet website (Zadig)

D5.3: European Commission "general obligation to exploit"

- Using the results in further research activities (outside the action);
- Developing, creating or marketing a product or process;
- Creating and providing a service, or
- Using the results in standardisation activities

D5.3: The basic route for exploitations can be:

- Use for further research
- Developing and selling own products/services
- Spin-Off activities
- Cooperation agreement/Joint Ventures
- Selling IP rights/Selling the (IP based) business
- Licensing IP rights (out-licensing)
- Standardisation activities (new standards/on-going procedures)

How to continue

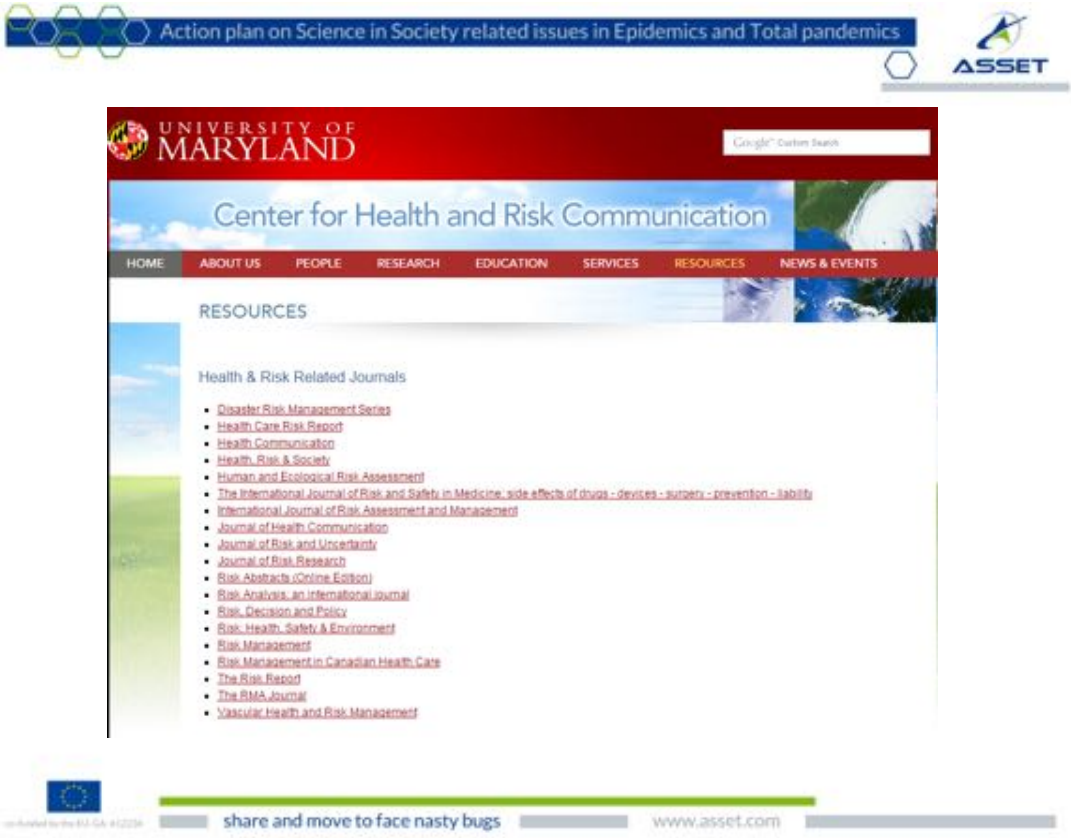
- A scientist and interested people network
- A on line scientific journal
- A scientific society
- A Chat email network

Some resourses from ASSET Action plan !!

Others from new EU SiS projects or defco UE

The health risk communication world

- Journals
- Societies
- Networks
- Sections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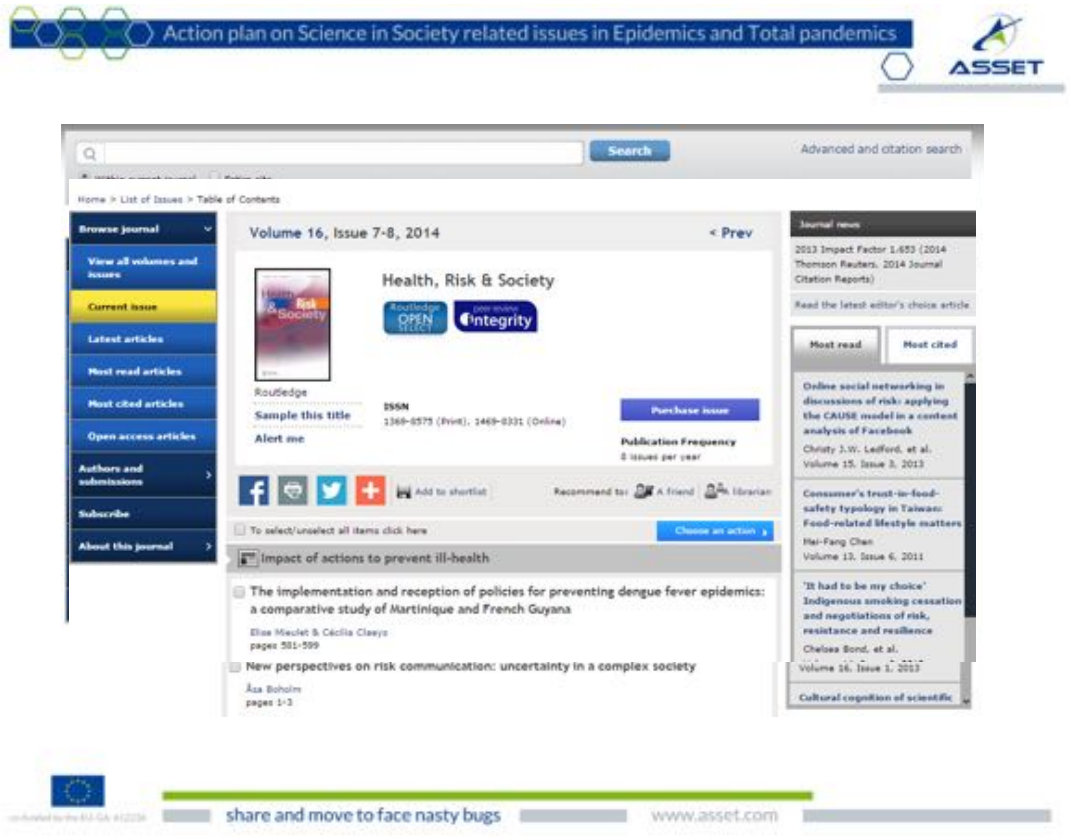
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Åsa Boholm
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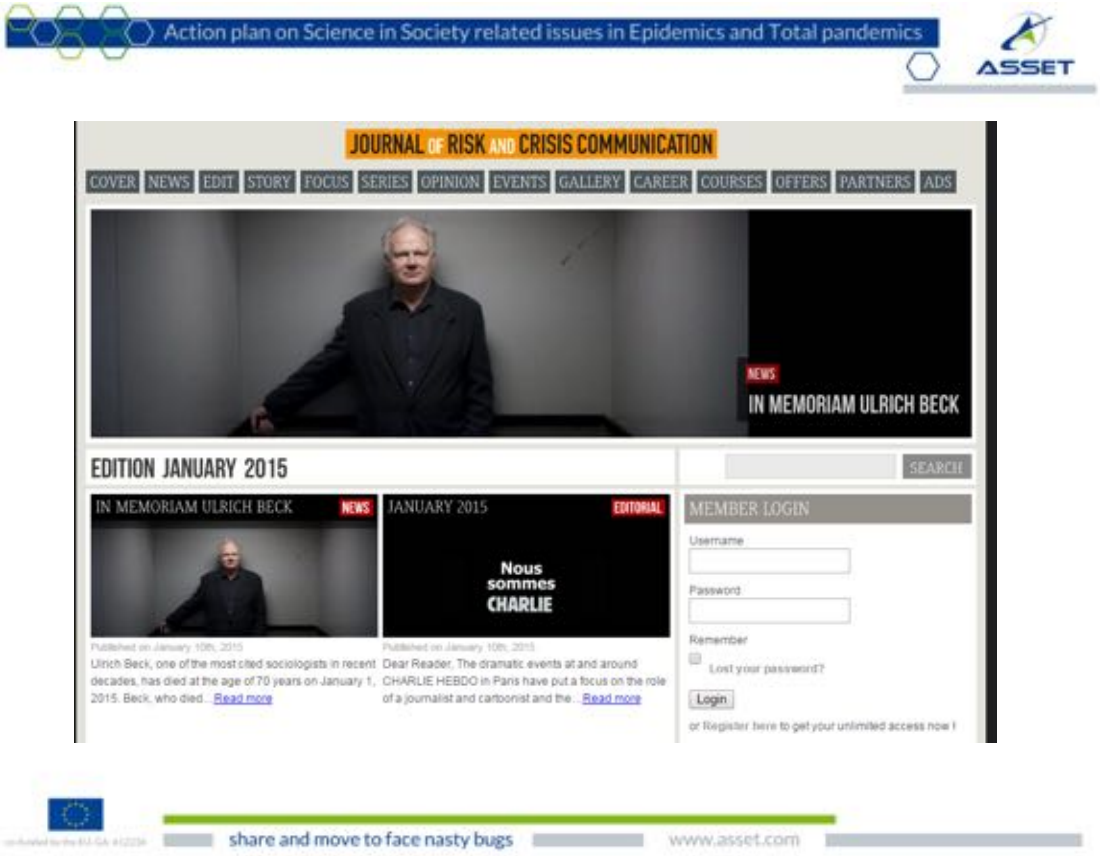
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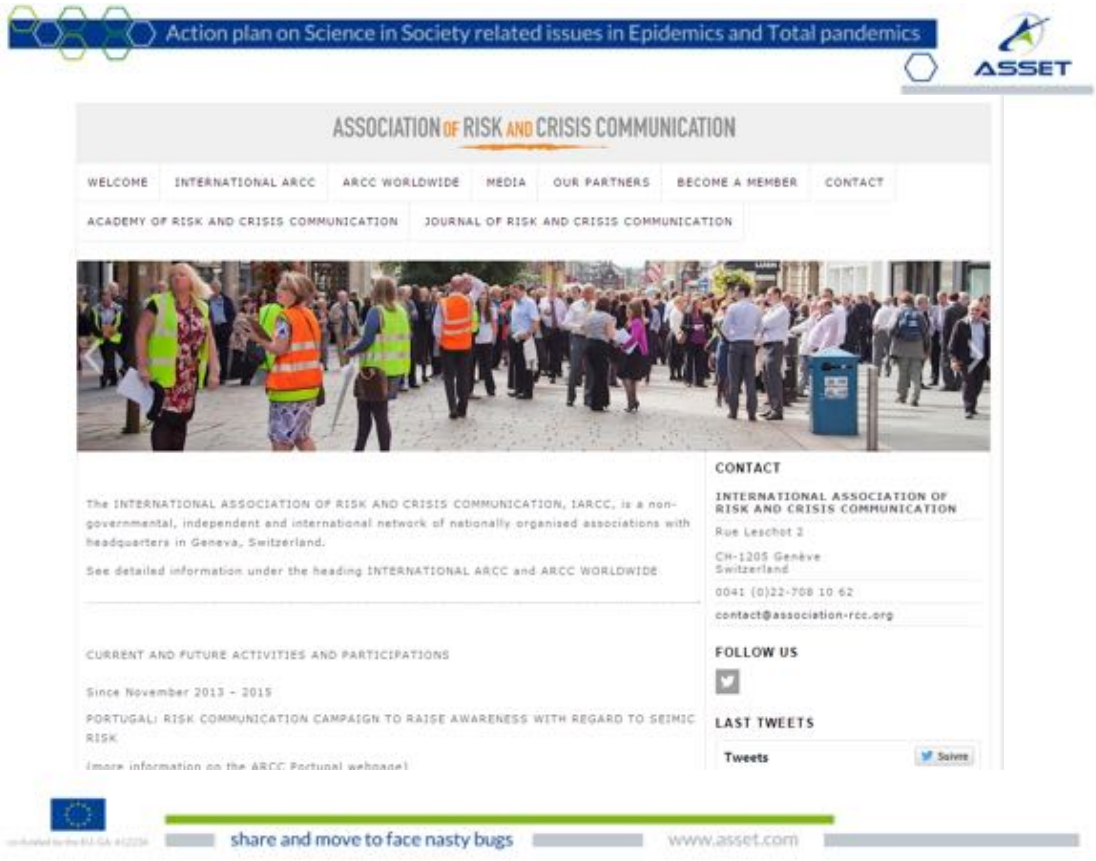
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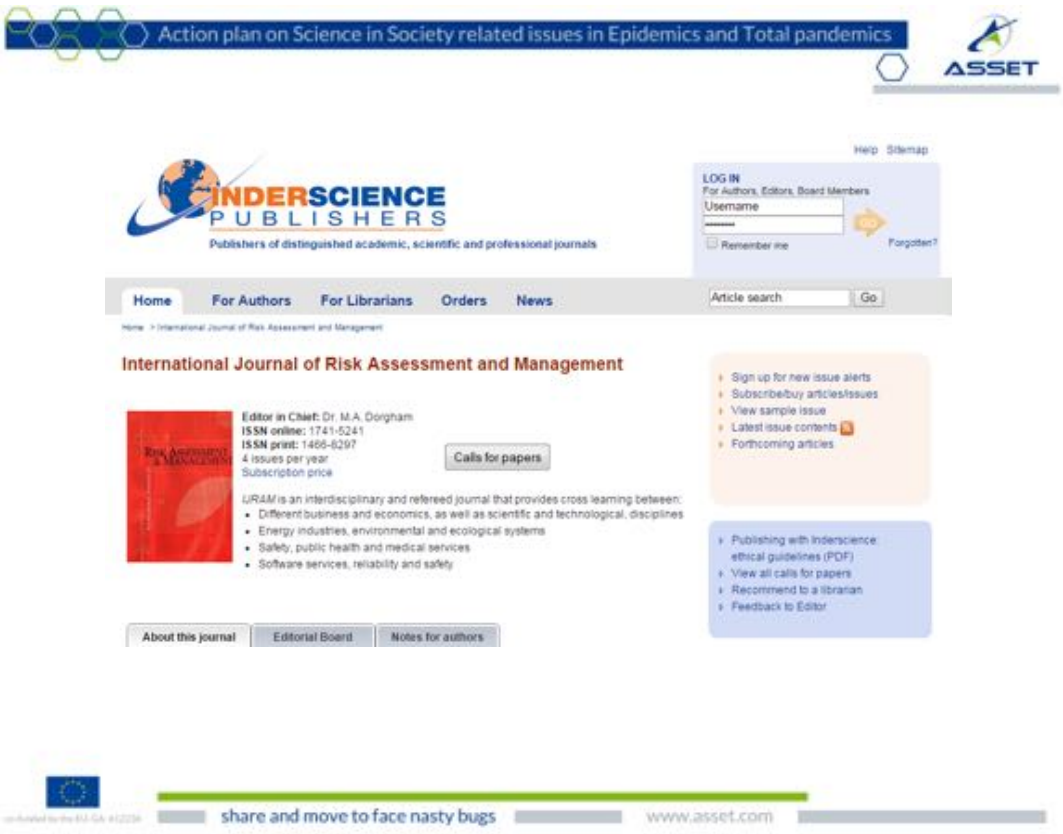
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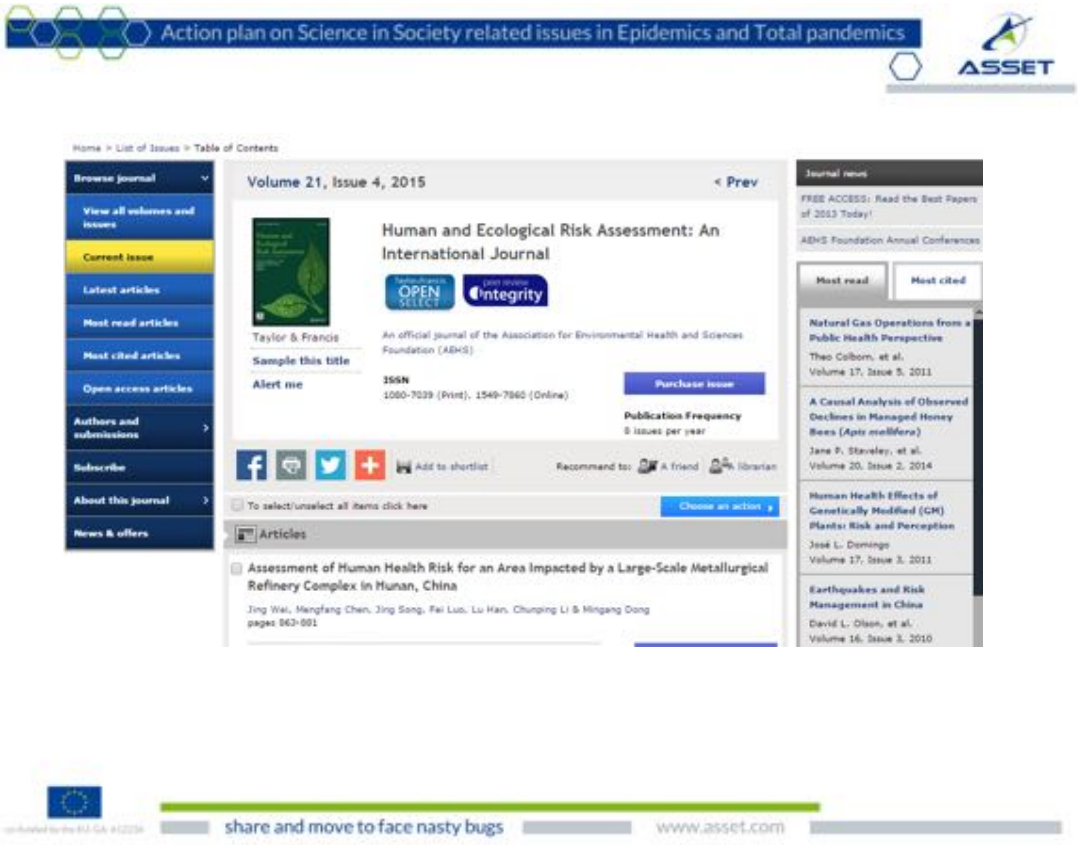
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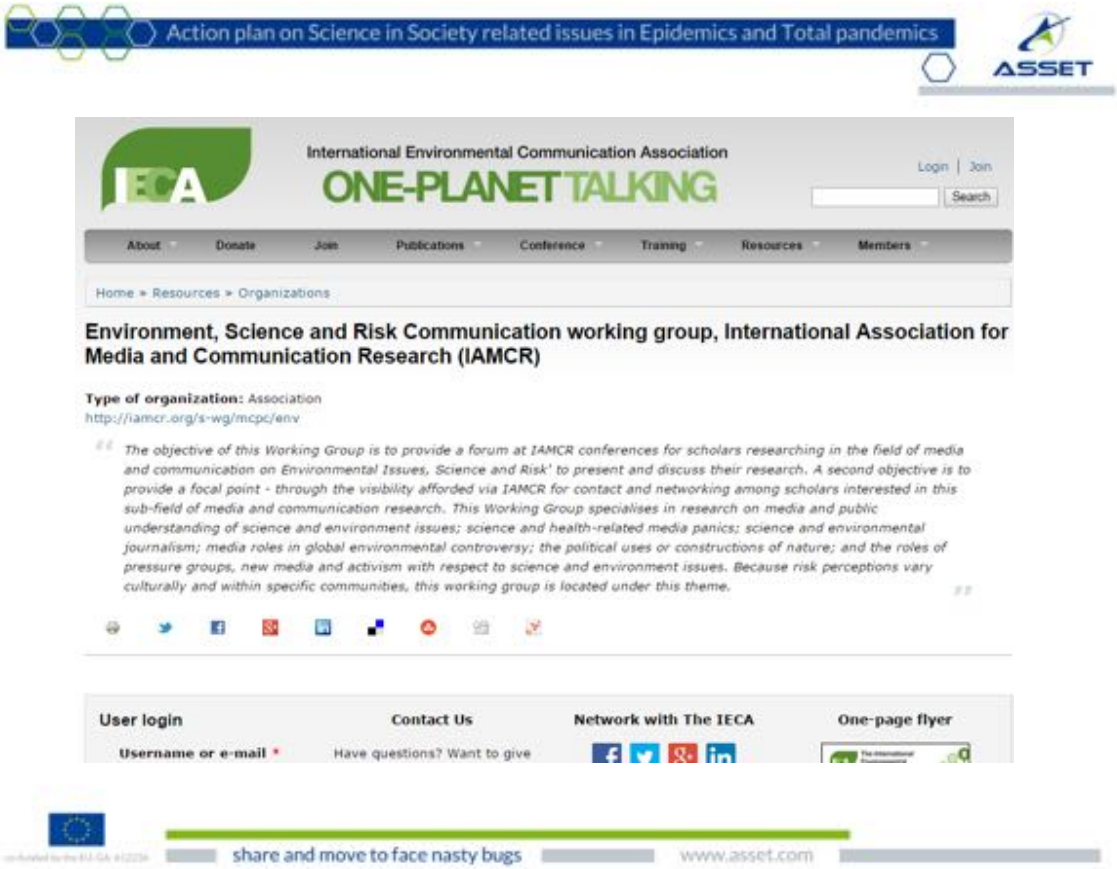
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Czech Republic	Czech Medical Chamber (CMC)	http://www.lkcr.cz/; e-learnign: http://www.eclk.cz/		Y	All medical doctors	Y	Czech Medical Association	http://www.cls.cz/english-info	MS Eva PONOCNA (English): evaponocna@cls.cz
Cyprus	Cyprus Medical Association	http://www.cyma.org.cy/	cyma@cytanet.com.cy	Y	All medical doctors	N	Cyprus Medical Association		Dr. DEMETRIOU, Andreas (President) - cyma@cytanet.com.cy (English)
Denmark	Danish Medical Association	http://www.laeger.dk/	Dr. Eva RABEK, Secretariat (English): er@dadl.dk	Y	All medical doctors	N	Danish Medical Association - Dr. HANSEN, Mads Koch - President		Dr. Eva RABEK, Secretariat (English): er@dadl.dk

Country	National CME Authority	CME Authority website	Contact	UEMS (Y/N)	CME	CME Compulsory (Y/N)	Association (ordini che hanno bisogno dei crediti CME)	Associations websites	Contact
Estonia	Estonian Medical Association	http://www.arstideliit.ee/	Dr. KORK, Andres, President	Y	All medical doctors	N	Estonian Medical Association		Dr. REHEMAA, K. Secretary General: eal@arstideliit.ee; Dr. VOLKE, Vallo, International Affairs (English)
Finland	Pro Medico	http://www.promedico.fi/english/	Topi Litmanen, Education specialist: topi.litmanen@promedico.fi	Y	All medical doctors	N	Finnish Medical Association	http://www.laakariliitto.fi/en/	Generic: suvi.koljonen@laakariliitto.fi; Dr. PÄLVE, Heikki - Chief Executive Officer: heikki.palve@fimnet.fi (English)

Country	National CME Authority	CME Authority website	Contact	UEMS (Y/N)	CME	CME Compulsory (Y/N)	Association (ordini che hanno bisogno dei crediti CME)	Associations websites	Contact
France	National Council for Continuing Medical Education (CNFMC)	www.cnfmc.fr	http://www.cnfmc.fr/ct-1.php	Y	Medical doctors, dentists and hospital pharmacists	Y	Conseil National de l'Ordre des Médecins (CNOM)	http://www.conseil-national.medecin.fr/	Generic: conseil-national@cn.medecin.fr; International relations: international@cn.medecin.fr; Dr. DEAU Xavier, deau.xavier@cn.medecin.fr (French)
Germany	The German Medicla Association	http://www.bundesaerztekammer.de/page.asp?his=4.3569	General enwuires: info@baek.de ; international affairs: international@baek.de	Y	All medical doctors	Y			General enwuires: info@baek.de ; international affairs: international@baek.de

Country	National CME Authority	CME Authority website	Contact	UEMS (Y/N)	CME	CME Compulsory (Y/N)	Association (ordini che hanno bisogno dei crediti CME)	Associations websites	Contact
Greece	The Panthellenic Medical Association (PHMA)	http:// www.pis.gr/ (only Greek)	pis@pis.gr	Y	All medical doctors	N	Local Athens representative for the Medical Association		Info: pis@pis.gr; General inquires: pisinfo@pis.gr ; isathens@isathens.gr (Athens Local representative of the Medical Association)
Hungary	The Association of Hungarian Medical Society	http:// www.motesz.hu/ (only Hungarian)	info@motesz.hu	Y	Medical doctors, dentists, pharmacists and clinical psychologists	Y	Hungarian Medical Chamber	http:// www.mok.hu/ (only Hungarian)	Generic: elnok@mok.hu; International affairs: Mr. FORGO Ariel Anos: forgo.ariel@mok.hu (English)

Country	National CME Authority	CME Authority website	Contact	UEMS (Y/N)	CME	CME Compulsory (Y/N)	Association (ordini che hanno bisogno dei crediti CME)	Associations websites	Contact
Ireland	Royal College of Physician of Ireland	http:// www.rcpi.ie/	college@rcpi.ie	Y	All medical doctors, all specialisations	Y	Irish Medical Association	http:// www.imo.ie/	Generic: imo@imo.ie; Ms. HETHERINGTON, Vanessa, InternationalAffairs: vhetherington@imo.ie
Italy	Agenas	www.agenas.it	ecm@agenas.it; helpdesk@agenas.it (solo per provider accreditati)	Y	All health professionals (not only medical doctors)	Y	FNOMCEO (Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri)	http:// www.fnomceo.it/	ecm@fnomceo.it
Latvia	The Association of Physicians of Latvia	http:// arstubiedriba.lv/	lab@arstubiedriba.lv	Y	All medical doctors	Y			International relations:Ms. POZNAKA, Velta, lma@arstubiedriba.lv (English)

Country	National CME Authority	CME Authority website	Contact	UEMS (Y/N)	CME	CME Compulsory (Y/N)	Association (ordini che hanno bisogno dei crediti CME)	Associations websites	Contact
Lithuania	Ministry of Health - State Health Care Accreditation Agency	http://www.sam.lt/; http://www.vaspvt.gov.lt/en/node/269	Nora Ribokienė (Director): vaspvt@vaspvt.gov.lt	Y	All medical doctors	Y	Lithuanian Medical Association	http://www.lgs.lt/	President: Dr. LABANAUSKAS, Liutauras, lgs@takas.lt (English)
Luxembourg	AMMD (The Association of Doctors and Dentists)	http://www.ammd.lu/	Dr. UHRIG, Jean (Presdient); Dr. SCHUMMER, Claude (General Secretary): secretariat@ammd.lu (French)	Y	All medical doctors	N			Dr. UHRIG, Jean (Presdient); Dr. SCHUMMER, Claude (General Secretary): secretariat@ammd.lu (French)
	Luxembourg Association for Continuing Medical Education (ALFORMEC)	http://www.alformec.lu/							

Country	National CME Authority	CME Authority website	Contact	UEMS (Y/N)	CME	CME Compulsory (Y/N)	Association (ordini che hanno bisogno dei crediti CME)	Associations websites	Contact
Malta	The Medical Association of Malta	http://www.mam.org.mt/	Dr. FAVA, Steven (President); Dr. BALZAN, Martin (General Secretary): martix@maltanet.net (English)	Y	General pratictioners	N			Dr. FAVA, Steven (President); Dr. BALZAN, Martin (General Secretary): martix@maltanet.net (English)
Netherlands	Royal Dutch Medical Association (KNMG); GAIA (Joint Accreditation Internet Application, e-learning)	http://knmg.artsennet.nl/	Dr. Van der Gaag, R.J. (President): r.vandergaag@fed.knmg.nl	Y	Physicians, pharmacists, physiotherapists, healthcare psychologists, psychotherapists, dentists, midwives and nurses	Y			Dr. Van der Gaag, R.J. (President): r.vandergaag@fed.knmg.nl (English)
Poland	Polish (Supreme) Chamber of Physicians and Dentists and Regional Chambers of Physicians and Dentists	http://www.nil.org.pl/english	Dr. RADZIWILL, Konstanty (President); General enquires: sekretariat@hipokrates.org	Y	All medical doctors and dentists	Y			Dr. MAREK, Szewczynski (Internatioonal cooperation dept.) m.szewczynski@hipokrates.org (English)

Country	National CME Authority	CME Authority website	Contact	UEMS (Y/N)	CME	CME Compulsory (Y/N)	Association (ordini che hanno bisogno dei crediti CME)	Associations websites	Contact
Portugal	Portuguese Medical Association (Ordem Dos Medicos)	https://www.ordemdosmedicos.pt	omcne@omcne.pt	Y	All medical doctors	Y			Ms. MARTINHO, Rita (International affairs): rita.martinho@omcne.pt (English)
Romania	Romanian College of Physicians	http://www.cmr.ro/ (only Romanian)	General secretariat: mihaela.ionica@cmr.ro	Y	Physicians	Y			
Slovakia	Slovak Accreditation Council for CME (SACCME)	http://www.saccme.sk/	Secretariat: Henrieta Havlíková - henrieta.havlikova@szu.sk; Marta Orelová - marta.orelova@szu.sk	Y	All medical doctors, dentists, nurses, midwives and assistants in learning activities	Yes, but voluntary for public physicians, compulsory for private physicians	Slovak Medical Association	http://sls.sk/new/english	Prof. KRISTÚFEK, Peter (President): Peter.kristufek@szu.sk; Dr. SEBOVA, Irina (Secretary): secretarysma@ba.telecom.sk (English)

Country	National CME Authority	CME Authority website	Contact	UEMS (Y/N)	CME	CME Compulsory (Y/N)	Association (ordini che hanno bisogno dei crediti CME)	Associations websites	Contact
Slovenia	Medical Chamber of Slovenia	http://www.zdravniskazbornica.si/en/default.asp	Medical Chamber of Slovenia - Department for legal and general procedures: Ms. Lidija Janškovec, lidija.janskovec@zzs-mcs.si	Y	All medical doctors and dentists	Y	Slovenian Medical Association	No website	President: Prof. Dr. POREDOS, Pavel, pavel.poredos@kclj.si; General enwuires: tajnistvo@szd.si (English)
Spain	Spanish Accreditation Council for CME (SACCME)	http://www.cgcom.es/	Contact for CME: http://www.ffomc.org/contacto_online (online format)	Y	All medical doctors, pharmacists, dentists, veterinaries, nurses	N			Contact for CME: http://www.ffomc.org/contacto_online (online format); International affairs: internacional@cgcom.es (English)

Country	National CME Authority	CME Authority website	Contact	UEMS (Y/N)	CME	CME Compulsory (Y/N)	Association (ordini che hanno bisogno dei crediti CME)	Associations websites	Contact
Sweden	Institute for Professional Development of Physicians in Sweden (IPULS)	http:// www.ipuls.se	No contact	Y	There is no system for CME accreditation of healthcare workers. IPULS certifies educational events and e-learning courses	N	Swedish medical association	http://slf.se/ Info-in-English/	info@slf.se; Ms. STENSMYREN, Heidi (President): Heidi.Stensmyren@slf.se
UK	Academy of Medical Royal Colleges	http:// www.rcplondon.ac.uk	enquiries@rcplondon.ac.uk	Y	All medical doctors with a licence to practise	Y	British Medical Association	http:// bma.org.uk/	Prof. NATHANSON, Vivienne (Director of Professional Activities): vnathanson@bma.org.uk

Mail online course

AGENZIA ZADIG
GIORNALISMO SCIENTIFICO

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Roma – Via Arezzo 21, 00161 Roma – tel. 06/8175644 – fax 06/45438710 – e-mail segreteriarm@zadig.it

Dear Sir / Madam,

Within the EU funded TELL ME Project, Zadig, an Italian scientific publisher, has developed an e-learning package for primary care health professionals, focusing on the needs and importance of **communication** between HCWs and the public during **pandemics or epidemics** (such as a flu pandemic or Ebola epidemic).

Under the auspices of the Italian National Medical Federation (FNOMCeO) and the Italian National Nurses Federation (IPASVI), 30,000 Italian doctors and nurses completed the course on Ebola, which was approved by the ECDC (European Center for Disease prevention and Control). Each participant received 5 CME credits from it (www.fadinmed.it). The course (updated to December 2014) is now online and will be available until the end of 2015.

Our e-learning model, based on evidence-based information, provides a **practical approach** to continuing professional development, using clinical **case histories**. The participant has to deal with theoretical cases that may be encountered in real life and answer questions related to the case presentation. This is not a notionistic approach to continuing medical education, but requires **active participation**. In Italy, to date, we have provided training for more than 300,000 health professionals with this model, in collaboration with Public Health Authorities.

We have two complete, prototype online courses about epidemics and pandemics in English (they can be translated into other languages on request), and are compatible with SCORM standard:
- The first course focuses on influenza.
- The second course focuses on Ebola virus disease.

Both courses deal with the **risk of stigma and discrimination** related to infectious diseases, as well as giving advice on how to avoid it.

If you have some interest in using the courses in your country, as FNOMCeO has done in Italy, please do not hesitate to contact us to discuss the opportunity. We can provide you with a single course or the technological platform with one or two courses.

You are welcome to contact us for any further clarification

Best regards,

Luca Carra
TELL ME Project Manager for Zadig

lo stile della ragione

Partners of TELL ME project

Organisation	Website	Staff
School of Public Health at the University of Haifa (Israel)	http://hw.haifa.ac.il/index.php/facultydeps/publichealth	Manfred Green, Anat Gesser-Edelsberg, Charles T. Salmon
Centre for Research in social simulation - CRESS	http://cress.soc.surrey.ac.uk	CRESS Nigel Gilbert
National Centre for Epidemiology, Surveillance and Health Promotion, CNESPS (Italy)	www.iss.it	CNESP Barbara De Mei, Valentina Possenti, Chiara Cattaneo
Bmj Publishing Group Ltd	www.bmj.com	BMJ Matthew Billingsley, Luisa Dillner, Sabreena Malik
CEDARthree Ltd	www.cedarthree.co.uk	CEDARthree Simon Langdon
European Union of General Practitioners, UEMO	www.uemo.org	UEMO Ferenc Hajnal
Latvian Centre for Human Rights	www.humanrights.org.lv	LCHR Ilze Brands Kehris, Anhelita Kamenska
Vrije Universiteit Brussels, VUB	www.vub.ac.be/infovoor/onderzoekers/research/team.php?team_code=LSTS	VUB Serge Gutwirth, Paul De Hert
National Disaster Life Support Foundation, NDLSF (US)	www.ndlsf.org	NDLSF James J. James, Italo Subbarao,Jack Horner
Vitamib (France)	www.vitamib.com	Vitamib Olivier de Bardonneche, Gérard Brugal
Zadig ltd (Italy)	www.zadig.it	Zadig Roberto Satolli, Luca Carra, Roberta Villa, Pietro Dri, Giulia Candiani, Sergio Cima, Michele Bellone, Emanuela Clavarino

Members of TELL ME EAB

Organisation	Name	Role
British Red Cross Society & Red Cross European Union Office	Moya Wood-Heath	Emergency Planning and Civil Protection Advisor
European Centre for Disease Prevention and Control (ECDC)	Pier Luigi Lopalco	Head of Vaccine Preventable Disease Programme
European Centre for Disease Prevention and Control (ECDC)	Karl Ekdahl	Head of Public Health Capacity and Communication Unit
Indiana University – Department of Folklore and Ethnomusicology	Diane Goldstein	Professor and Chair of the Department
Institut d'Histoire de la Médecine et de la Santé – Université de Genève	Bernardino Fantini	Professeur Ordinaire / Directeur
Institute de Veille Sanitaire	Jean-Claude Desenclos	Director of Infectious Diseases Unit
Public Library of Science (PLoS)	Virginia Barbour	Medicine Editorial Director, Chief Editor, PLoS Medicine (UK)
Union Bank of Switzerland (UBS)	Mark Heywood	Managing Director, Global Head of BCM
World Health Organization (WHO)	Gaya M. Gamhewage	Coordinator Flagship Communications
World Tourism Organisation (UNWTO)	Dirk Glaesser	Coordinator - Risk and crisis management

A new integrated Pandemic Threat Index

policy briefs

EXECUTIVE SUMMARY

Efficient communication among different stakeholders, including the public, is essential to mitigate the spread of epidemics. In order to prevent or minimize harm from emerging infectious diseases in the future, a mutual language among various players is needed. The first point to agree with, in order to prepare for a pandemic, is therefore a shared threat index for establishing **what** a pandemic is and **when** it has to be declared.

Within EU funded **TELL ME Project**, experience from 2009 A (H1N1) has been studied and three alternative risk communication scales for pandemics have been analysed: WHO revised pandemic phases (2013), CDC Pandemic Severity Index (2007) and Sandman's risk Scale (2007). Though each threat index is comprehensive, considering the practical tools they offer, their alert phases are very much oriented to different aspects.

Namely, the WHO's risk assessment of influenza virus with pandemic potential is based on the **geographical spread** of the threat, CDC pandemic index is **severity-based** and Sandman's communicational phases emphasize **public perception** of the risk. Subsequently, these three phase systems do not overlap but rather complement each other. We therefore recommend integration of the pandemic communication phase's threat index. The **TELL ME integrated threat index** phases consider geographical threat, severity and public risk perception.

BACKGROUND

TELL ME (Transparent Communication in Epidemics: Learning Lessons from experience, delivering effective Messages, providing Evidence) was a 36 month EU-funded collaborative project within 7th Framework Programme (GA 2787233) headed by a consortium of multi-disciplinary experts from prestigious institutions in countries. The objective of TELL ME was to identify new communication strategies for improving the effectiveness of the preventive measures undertaken during epidemics.

Figure 1: WHO six phase threat index (2005)

TELL ME experts focused on the 2009 A(H1N1) influenza outbreak as a **case study**, both as the first 21st century pandemic and as the first pandemic since WHO produced pandemic preparedness guidance.

In such crisis the 2005 WHO Global pandemic six-phases threat index, set following H5N1 bird flu and SARS crisis, showed its own limits. Considering only the geographical spread of the outbreak and using a professional language, it contributed to produce misunderstanding among international organizations, the media and the general public, with a boomerang effect on public trust towards health authorities. The WHO declaration of a global flu pandemic on June 11, 2009, raising the alert level to phase 6, did not imply severity, only pertained to the wide geographic spread of the new strain of flu virus and was not meant to cause alarm, but was necessary to start the implementation of preparedness actions (like the production of vaccines). Media and the public, however, interpreted this as a declaration of an impending catastrophe. The milder than expected evolution of the pandemic was taken by many as a proof that the declaration had been driven by economic interests.

Most people discovered that the criteria by which WHO declares a phase 6 pandemic, has little relevance to their daily routine. In the end, the lack of accessibility and relevance of the six-phase index to the intensity of the level of public concern led growing mistrust towards health authorities at general and WHO particularly.

To better define when a pandemic should be declare is not therefore an academic issue, but a keypoint in order to rebuild trust and improve preparedness.

policy briefs

APPROACHES AND RESULTS

While developing a set of guidelines for actors involved in the outbreak communication process, TELL ME project outlined the concept of a threat index as a practical tool. We critically examined different revisions of the WHO threat index: what it means, how it is used, to what extent it can confuse, from its first version in 1999 until its most recent modification in 2013. Based on lessons learned from H1N1 2009 pandemic, we presented three alternative risk communication scales: WHO revised pandemic phases (2013), CDC Pandemic Severity Index (2007) and Sandman's risk Scale (2007).

WHO revised pandemic phases (2013)

In 2013, in direct response to lessons learnt from the 2009 pandemic, WHO introduced a new approach to the influenza threat index, as a part of a Pandemic Influenza Revised Risk Management interim guidance document.
The previous six-phase system, which relies solely on geographic spread without any acknowledgement to the severity of disease, had been criticized for being inflexible and confusing.
A new four-phase system was proposed, in order to encourage national authorities to develop tailored risk management plans, which consider the situation at a local level.
The new WHO pandemic phases work on two complementary axes - the global phases and the local risk-based phases. The global phases - interpandemic, alert, pandemic and transition, describe the spread of the new influenza subtype. Hence, this global risk assessment derives directly from WHO surveillance efforts. However, Member States are advised to develop their own national-level risk assessment which is based on local threat index.
An interesting element of the revised WHO threat index is its emphasis on communication as a tool to understand public perception and develop an appropriate risk assessment.

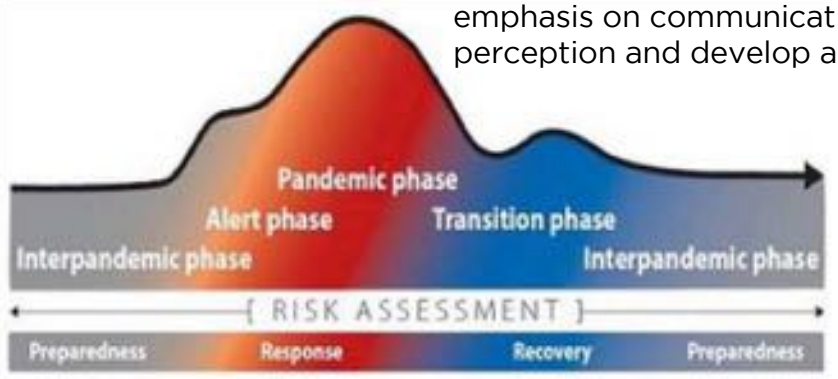

Figure 2: the 2013 WHO four-phase threat index

CDC Pandemic Severity Index (PSI)

To answer the need to communicate specific information to different level stakeholders (states, communities, businesses and schools), the CDC developed a Pandemic Severity Index (PSI). This threat index considers the **severity** of the potential pandemic and translates it to **specific guideline**s for individuals and communities. Adopted from an index that used to categorize hurricanes (the Saffir-Simpson Hurricane Scale), the PSI builds upon the knowledge of past pandemics to forecast the severity level of future pandemics based on mathematical models (Public Health Alert, n.d.) . Namely, this threat index focuses less on the geographical spread and more on the severity of the virus which is the fatality ratio, the percentage of deaths out of the total reported cases.

Unlike WHO's threat index, the PSI is ***relevant only to a situation of a pandemic***, the equivalent of phase 6 in the current phase system (or phase 4 in the revised index 2013). The scale introduces a classification of pandemics based on their severity, meaning that category 1 is the mildest (something like a seasonal flu) and category 5 is the most severe pandemic (equivalent to the 1918 influenza). However, the most significant feature of this threat index, is the guidance that follow each category, framing specific actions individuals and community should consider during a pandemic. The tool takes into account the fact that the amount of harm caused by pandemics can vary greatly, with that variability having an impact on recommended public health, school and business actions.
The biggest advantage of these guidelines is their simplification. Focus on potentially life-saving details is evidently missing from WHO threat index. Nevertheless, the real test for such guidelines is their level of implementation at an early stage of the pandemic: PSI's emphasis on pandemic phase highlights its dependence on external threat scales (such as WHO's index) to declare the pandemic by monitoring also the earlier stages.
This sort of specification could have been beneficial also during the preparedness stages.

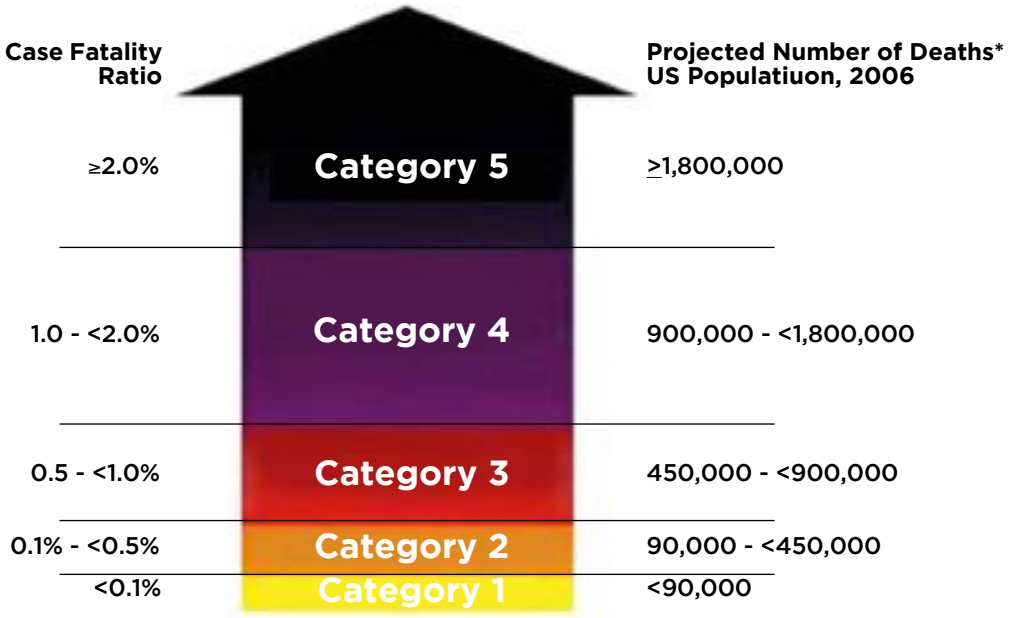

Figure 3: CDC pandemic severity index

*Assumes 30% illness rate and unmitigated pandemic without interventions

	Pandemic Severity Index		
Interventions by Setting	**1**	**2 and 3**	**4 and 5**
Home			
Voluntary isolation of ill at home (adults and children); combine with use of antiviral treatment as available and indicated	Recommend	Recommend	Recommend
Voluntary quarantine of household members in homes with ill persons (adults and children); consider combining with antiviral prophylaxis if effective, feasible, and quantities sufficient	Generally not recommended	Consider	Recommend
School			
Child social distancing –dismissal of students from schools and school-based activities, and closure of child care programs	Generally not recommended	Consider: ≤ 4 weeks	Recommend: ≤ 12 weeks
–reduce out-of-school contacts and community mixing	Generally not recommended	Consider: ≤ 4 weeks	Recommend: ≤ 12 weeks
Workplace/Community **Adult social distancing**			
–decrease number of social contacts (e.g., encourage teleconferences, alternatives to face-to-face meetings)	Generally not recommended	Consider	Recommend
–increase distance between persons (e.g., reduce density in public transit, workplace)	Generally not recommended	Consider	Recommend
–modify, postpone, or cancel selected public gatherings to promote social distance (e.g., stadium events, theater performances)	Generally not recommended	Consider	Recommend
–modify workplace schedules and practices (e.g., telework, staggered shifts)	Generally not recommended	Consider	Recommend

Figure 4: PSI intervention guidelines

Sandman's Risk Communication Phases

Neither WHO revised pandemic phases (2013) and CDC influenza severity index take into an account public concern, a keypoint in the complementary phase system proposed by Peter Sandman, an expert in risk communication, in 2007, who consider the impact of the location of the outbreak as well.
Unlike other public health risk systems that use colour coding to connote the risk assessment, Sandman's threat index uses a temperature code, highlighting the importance of teachable moments as a vehicle to focus public attention towards effective messages.
This approach is especially important if we consider outbreaks not merely as an immediate threat but also as an opportunity to educate people, and maybe help prevent or mitigate the next potential pandemic.

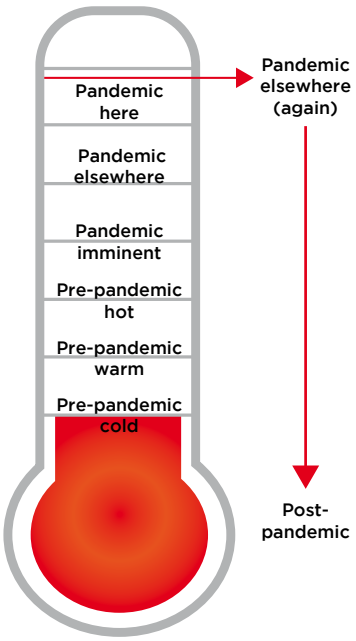

Figure 5:
Sandman's risk communication index (2007)

LEGENDA

- **Pre-pandemic cold** - is a quiet phase when the risk perception and the level of interest is so low that there is no possibility of communication on the issue.
- **Pre-pandemic warm** - communication about a potential risk, stressing the human-to-human infection or the new subtype virus danger, can be started in order to raise pandemic preparedness (posters, ads, ...).
- **Pre-pandemic hot** - official declarations or special media events with healthcare authorities (such as TV interviews) can educate people and initiate involvement in the potential emergency.
- **Pandemic imminent** - people are paying great attention in this time of great uncertainty, with the pendulum moving from a severe pandemic to a mild one. Preparedness messages have to be issued, shifting from arousing concern to validating people's rising fear, and guiding them through it.
- **Pandemic elsewhere** - more data are available and the severity of the pandemic can be better predicted. Optionally, it could be a good time to integrate CDC PSI so that different level of pandemics could be addressed with different messages.
- **Pandemic here** - overwhelming information should be translated into specific instruction for different level stakeholders. At this stage, the messages should emphasis on the heroes of the crisis but also on the victims.
- **Pandemic elsewhere (again)** - the pandemic wave moves away and it is a time to regroup .
- **Post-pandemic** - it is the phase when communication becomes crucial to help recover. Messages should illustrate different scenarios regarding the development of the next pandemic (that might arrive sooner than expected).

TELL ME INTEGRATIVE WHO THREAT INDEX

Alert phases in the three considered indexes rely on different aspects, each of them relevant for preparedness and response to pandemics: geographical spread of the threat, severity of the disease (and how to counteract it) and communication issues. These three phase systems do not overlap but rather complement each other, having unique objectives but different targets.

The immediate recipients of the WHO threat index are the Member States that under the revised IHR 2005 are affected by these phases in terms of border closures, trade restrictions and other global regulations. The global phases (inter-pandemic, alert, pandemic and transition) describe the spread of the disease around the world, but, as pandemic emerges, countries and communities face different risks at different times. In other words, by their definition, WHO's phases are global thus they cannot account for the local circumstances. This gap should be filled with CDC pandemic severity guidelines which constitute for the local and individual alert levels. These are more flexible phases that call for actions that could save lives by taking measured preventive steps.

Finally, Sandman's communication phases are directed towards media. This index is a practical tool to establish a channel with the public as it distances itself from professional definitions of threat and risk, to adopt a more common language which addresses different types of risk perception. Moreover, it is not merely a guideline that helps to construct effective messages but also an important tool that tries to predict the most suitable episodes during a crisis, which can serve as teachable moments. This approach is especially important if we consider outbreaks not merely as an immediate threat but also as an opportunity to educate people, and maybe help prevent or mitigate the next potential pandemic.

TELL ME INTEGRATIVE WHO THREAT INDEX

PANDEMIC COMMUNICATION PHASES		
Communication phase	WHO pandemic phase	CDC pandemic severity
1. Pre-pandemic cold	1 or 2	
2. Pre-pandemic warm (little public attention)	3	1
3. Pre-pandemic hot (teachable moment)	3 or 4	1
4. Pandemic imminent	4 or	2 or 3
	5	2 or 3
5. Pandemic elsewhere	6	4
6. Pandemic here	6	5
7. Pandemic elsewhere (again)	6	4
8. Post- pandemic	1 or 2 or	1
	3 or even 4 (for different strain)	

Figure 6:
Integrated TELL ME Threat Index

RECOMMENDATION

In summary, we recommend to connecting the three scales into a united and integrated pandemic communication phase's threat index. The integrated threat index phases will be designed to consider geographical threat, severity and public risk perception. This comprehensive index might be the solution for the shortcomings of the current WHO threat index, without missing its many advantages. It could offer the most practical tools for outbreak communication with different stakeholders, takes into account international, national and local risk assessments.