

Why the Healthreats Newsletter?

Healthreats Newsletter (HTNews) is a short publication that contains specific information about the "Healthreats Project". HTNews is a communication tool of the "Healthreats Project" used to disseminate information to the members of the Healthreats Consortium and to institutions and scientific organizations interested in crisis management issues and in particular about pandemic influenza crisis management. It will re-

port on the recent project activities, on highlights about the Project Management Board (PMB) Meetings, on Project progress reports, etc. HTNews is also meant to be a forum of discussion and a space for a cultural exchange among all the professionals interested in this field.

Sources of information presented in HTNews are from PMB Meetings, public deliverables of the Project, papers from Work Packages leaders

and experts selected by the Editorial Board on specific topics.



Dr. Carmelo Scarcella - Project Coordinator

Summary

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The Healthreats Project

The World Health Organisation has launched a clear alarm within its 2007 report on "A safer future: the global public health security in the 21st century": now more than ever in human history the global public health security depends from the international cooperation and the availability of all nations to act efficiently in facing new emerging threats. The report highlights the necessity

that every nation builds public health infrastructures to reach the highest level of health security. Under this framework emerges the crises management of health threats problem faced by the Healthreats project.

A crisis, understood as an event putting at risk the functioning of an organization interfering with its normal activities and

putting at risk the well-being and the safety of a community, represents a relevant problem for every activity sector, but is particularly relevant for health organizations that should ensure citizens' health preservation. Studying in deep the reasons and analysing, under an organizational and available resources point of view, the different organization environments, could allow to identify



intervention routes, suitable to face unpredicted events, for which the health organization should demonstrate fast and competent reaction capacity.

HEALTHREATS is a project promoted by an international consortium, coordinated by ASL Brescia, and partly-financed by the European Commission, within the Public Health programme. HEALTHREATS addresses solutions to enhance the capability of health institutions in Europe of responding efficiently and in a co-ordinated manner to threats to health. The result of the project will be a package including Processes, DSS (a Decision Support System) and Training, in short PDT, that will be tested in Italy, Slovenia, Romania and Spain.

A support system is understood within Healthreats as a software system able to assist the managers in charge of strategic decisions for launching operational intervention facing health threats in particular influenza pandemic.

After this phase the diffusion of PDT will be programmed in other European Regions.

The objectives

- Developing an integrated PDT package combining processes with decision support and training for health threats management;
- optimising crisis management and health emergencies reaction;
- supporting strategic as well as operational decision making for facing health threats;

- ensuring integrated and intersectorial health strategies granting high level human health protection;
- a wide geographic covering by a real cooperation between the organizations in the Health and informatic sectors.

The Work plan

The HEALTHREATS project work plan includes the following main phases:

- a through analysis of the normative and methodological state-of-the-art, in terms of best practice in health and crises management procedures and DSS system. The major international systems will be addressed, identifying which best practices can be transferred applied and replicated;
- the definition and generalization of requirements, through the description of the application scenarios, the identification and analysis of the needs and of the potential system application;
- the mapping, revision and re-engineering of detailed procedures including communications and decisional processes for the health threats management. Definition of procedures for the leading chain and for the recovery of the normal state;

- the design and development of the DSS, including architecture design, detailed design, software development, knowledge acquisition and construction of the knowledge bases, testing and evaluation;
- the design and development of a learning programme for training the personnel (top managers, crises managers, operative units' responsible) on the HEALTHREATS procedural and system aspects, including the production of training materials and tools, the creation of a Virtual Learning Community and the actual training of a selected set of persons at the site of HEALTHREATS partners health authorities;
- the HEALTHREATS system performance assessment, including success appreciation of each component, activity, objective, in a quantitative and objective manner, defining specific parameters to be measured against targets.

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The partners of the Project

The presence of health authorities, universities, research institutes, private specialised companies both in re-engineering procedures as well as in DSS IT tools development and training institutions allow for a balanced consortium, both in terms of competences as well as in terms of geographical international coverage including:



ASL Brescia: among the most important city and provincial health authority in North Italy.



RSDM (Romanian Society for Disaster and Emergency Medicine), a major non governmental organisation aiming at improving quality of life for people living and working in Romania by supporting the development of the emergency medicine and first aid integrated system.



SPEDALI CIVILI: the biggest public hospital in the Lombardy Region, with the most

advanced infrastructures and experience in the North of Italy.



AGILUS I+D, a skilled Portuguese applied research centre, part of an European group supporting innovation and technology transfer, at EU and world level, having specific competences in ICT for health. (<http://www.iaiti.pt>)



LASER an outstanding training institution with extensive experience in knowledge and information management, in particular for the health sector.



UNIBS: a leading technical university in the North of Italy, with a deep track of research and development achievements and competences, especially in the IT field.



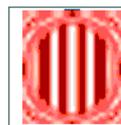
Jozef Srefan Institute is the leading Slovenian scientific research institute. The staff from its Department of Knowledge Technologies is highly skilled in evaluation and assessment, decision support and training.



ACB, Società

ACB SERVIZI S.R.L.

dell'Associazione Comuni Bresciani is among the most active Italian local authorities associations, grouping hundreds of municipalities .



SEC (Strategy and Coordination Secretary) has the highest responsibility, within the Ministry of Health of the Catalan Government, in establishing planning strategies on healthcare policy in order to reach the highest efficiency possible in all actions.



ARGONET, a leading software house and IT solution development company, at high security and technical requirements level.



IVZ (Institute of Public Health of the Republic of Slovenia) is the central Slovenian institution for public health practice, research and education. Its 100 academic staff works on various tasks covering the areas of social medicine, epidemiology of communicable diseases, hygiene and environmental health.

I am the new project officer at the Executive Agency for Health and Consumers (EAHC). The Agency is situated in Luxembourg. The Agency's tasks include the implementation of the following Programmes: Health Programme (2003-2008 and 2008-2013), Consumer Policy Programme (2007-2013) and the Initiative of Better Training for Safer Food. The organisation manages over 280 public health projects, operating grants, conferences, joint actions and international agreement and administers relationships involving more than 2,400 partners with total of 153 million euro of Community contribution.

Jurgita Kaminskaite



Where have we got to?

In the next pages we report some activities scheduled in the Project that the partners have carried out. On the web site you can find further information, documents, deliverables and training sessions.

Requirements specification

This phase is aimed at analyzing and defining the requirements of the three components of the PDT Package (Processes, Decision support, Training) representing the object of the project, in order to provide a precise specification to be used in modelling the emergency management processes, designing the DSS and identifying appropriate training methodologies.

To this purpose, a first context analysis has been carried out on technical documents related to the application domain, and different scenarios in the nations involved in the experimental phase of the project have been analyzed, also by

means of questionnaires. Specific attention has been devoted to the Italian case, by means of the following activities: i) three questionnaires have been prepared to be submitted to experts in emergency management, in order to identify the user classes involved as well as the relevant tasks and needs; ii) individual interviews with all experts have been carried out, with the purpose of eliciting expert knowledge expanding the previous analysis in depth; iii) several focus groups have been organized to discuss the responses to questionnaires and the results of individual interviews.

As for the DSS, these activities

have led to the definition of functional requirements, user interface requirements and operational and technical requirements. According to these requirements, a first architectural proposal has been devised, including the organization of the system into different levels, the functional, informative and interaction components, as well as the databases. Finally, the most significant use case and activity diagrams have been defined.

As for processes, a set of working procedures have been identified and specified, regarding the most significant steps of the management of pandemic emergency events.

Process modelling and improvement

This activity aims at analysing, modelling and representing the mid level decision processes related to the management of pandemic emergency events. On the one hand, this activity is oriented to a revision of such processes yielding an improvement of their efficiency and effectiveness; on the other hand, it is a prerequisite to the design of a DSS that can be properly integrated within the organization where it will be deployed.

The results obtained so far can be summarized as follows:

1) definition of a dictionary of con-

cepts on the management of pandemic emergency, in order to establish a common language shared by the different actors involved in the emergency management;

2) characterization of the organizational structure in which the DSS will operate, in order to obtain a correct integration of the DSS;

3) identification of the main events that may occur in the event of pandemic flu and that require a response through the implementation of specific plans;

4) selection of a graphical language (BPMN - Business Process Modeling Notation) for a precise representation of plans that will be processed by the system and to support their acquisition and validation by end users;

5) acquisition of plans from the experts in emergency management and representation of these plans through the selected language.



About the training

The training of health workers represents an essential activity to be organised and carried out before the onset of a possible pandemic. The training is aimed not only at acquiring cognitive elements and skills pertinent to the activities and to the tasks to be carried out, but also for their practical, continuous and verified use, above all to allow for rapid and correct responses to simple everyday requests, but also to cope with more complicated interventions in unusual or complex operative events on the professional front as in a scenario of pandemic spread. Therefore, training activities are aimed at developing the motivation and involvement of workers with respect to their roles and responsibilities, to increase technical-scientific and communications-interrelationship skills in order to encourage participation in the intervention plans of one's facility. Planned in advanced, training activities can contribute to establishing integrated cooperation between health workers and between these latter and other members of society involved in the management of health crisis. Between its activities, Healththreats Project attempts the development of a training planning in order to ensure the full achievements of the Project's objectives. The primary aim of the training is to develop competences and skills being such as to make the organization of the Health facilities capable of answering effectively and efficiently a situation of health crisis. This training course will be ad-

ressed to the partners involved in the experimentation phase included in the project through a series of training sessions which will involve the health-care staff of the facilities concerned in Italy, Romania, Slovenia and Spain at different levels. Three levels of professional figures have been identified:

1. The strategic level
2. The managerial level
3. The operational level

As regard these levels, the training course must improve the following technical competences:

- Knowledge of the characteristics of the pandemic situation and of the related needs;
- Knowledge and application of the organization model of the health facility in reply to the pandemic situation;
- Knowledge of the requirements of the DSS, including through simulations;
- Health risk reduction associated to the safety of the health-care staff (PPE);
- Specific technical competences relevant to all positions involved.

Besides, the development of the following general competences has been provided for:

- Communication within the organization;
- Communication from the organization towards the exterior;
- Team working;
- Coaching;
- Data processing procedures connected to the organization model of the health facility.

Along with the general competences, the development of specific

competences according to the different positions involved in the training course is being taken into consideration as well.

The lessons of the training units can be characterized by active methodology. It is also worth stressing the importance of an integration of the training relevant to the definition of emergency and flu pandemic with the model developed in the project and its integration with the emergency plan of the involved structure. The training plan on the basis of an analysis of the requirements has been carried out, including different channels useful for the survey of the training needs of the specific health facilities involved in the experimental phase of the project, in Italy, Romania, Slovenia and Spain. Every partner adapts this plan on the basis of the training needs of each local facility.



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Healththreats dissemination

Healththreats Project has been illustrated in some European Conferences:

28-30 April 2008

Presentation of a poster at the 6th European Conference on Travel Medicine in Rome;

13 June 2008

Round Table on Vaccination Policies in Europe in Stockholm.

1-4 October 2008

Illustration of the Project at the 43th National Conference of the Società Italiana di Medicina Preventiva e Sanità Pubblica (SITI) in Bari;

6-8 November 2008

Presentation of the Project at the 16th European Public Health Association Conference in Lisbon.

The partners are going to meet, for the next HEALTHREATS Project Management Board , in Oporto the 23 November 2009.

Registration to the Court of Brescia, number 35/2009 of the 30/06/2009