

EUREKA PROJECT

CELTIC HIPERMED



IN TIME OF GLOBAL EPIDEMICS DOCTORS COULD FIND HELP IN NEW TECHNOLOGIES

A Spanish-led consortium has found a way to help health care workers treat more patients, more efficiently - whether they are in a developed country or in a field hospital in Africa.

When Spanish nurse Teresa Romero contracted Ebola in a Madrid hospital, she became the first person to catch the deadly disease outside West Africa. When European citizens worried the virus could spread quickly on this continent, health workers had to prepare to recognise symptoms and treat patients for a virus for which there is no known cure and on which most of the empiric data comes from another continent.

While developed countries have to face increased pressure on cash-strapped public health services, as was pointed out in the Romero case in Spain, developing countries need the talents of specialist doctors to reach poorly served rural communities. The Ebola virus has shown that both developed and developing nations can benefit when doctors get their knowhow to those who need care, wherever they live.

If faced with a suspected Ebola case, doctors could seek fast advice and support from colleagues anywhere in the world using IT tools like high quality video conferencing. But new technologies are still underexploited, even in most EU hospitals and health centres, says Oscar Chabrera. He has coordinated a consortium of hospitals, IT

product developers and internet connection providers, which has developed a system, called HIPERMED, now ready to be deployed affordably worldwide. The consortium was supported by the European platform for telecom technologies CELTIC, a EUREKA Cluster.

New international standards

"There are all kinds of technologies out there for clinics and hospitals - but they often don't work together and are too expensive to be used by smaller hospitals," explains Chabrera, EU manager of video summarising and indexing specialist ViLynx Spain. Research project HIPERMED took three-and-a-half years to design and test an open platform on which all kinds of media and network services can run. It is now already being used in Spain, France, Poland, Sweden and Turkey.

“ **HIPERMED brought together a consortium of hospitals, IT product developers and internet connection providers.** ”

HIPERMED's partners have submitted several proposals to the International Telecommunications Union's (ITU) expert group, especially on the standards that should be adopted for compressing video to make it lighter to send while offering a safe

enough quality of image on which doctors can base clinical decisions.

A case like a suspected Ebola patient is just one example of a situation where health care workers may want to use new technologies to contact consultants at specialist wards. As Europe's population ages, doctors also need to regularly monitor patients with long-term health problems or those needing rehabilitation after a stroke or a heart attack. If doctors can see fewer patients in their surgeries, they can treat 20 times more of them, cutting costs by 83%, according to specialists involved in the HIPERMED project.

A dozen of products were also developed during the research. One of them was a tool that allows patients to receive speech therapy on their smart phones using voice recognition software. The product proved so successful that Turk Telecom, whose subsidiary INNOVA developed it during the project, has now started selling the product and thinks up to 150.000 customers in Turkey alone could benefit from it.



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BUDGET € 6.4 M

DURATION 33 months

COUNTRIES INVOLVED



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