

MONITOR AND CONTROL EPIDEMICS VIA NO-CONTACT POPULATION SORTING

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he Ebola outbreaks, flu epidemics, and recently the Middle East Respiratory Syndrome (MERS) are all examples of rapidly spreading, highly contagious diseases which have not been stopped by the quick treatments available, but, rather, thanks to rapid and efficient triage procedures.

If we take Ebola, it has had disastrous human and economic consequences, with long-lasting detrimental effects on health, as one of the most affected population groups were the health-care professional staff who contained the initial outbreaks. Critics have pointed out that it was weak or absent infection prevention and control which caused the catastrophe, confirming the idea that the spread could have been contained at the beginning of the epidemic by well-structured population sorting and the use of non-contaminating testing methods. It is still the case today as sporadic Ebola cases need absolute control and contact tracing to stop future outbreaks.

ThermoFlash®, launched in 2007 by the Visiomed Group, a patented, unique, no-contact, instant medical thermometer has gradually become a key acknowledged tool in the sorting procedure: first for flu, then for Ebola. Starting in summer 2014, ThermoFlash® has been progressively and extensively used by NGOs, central governments and populations themselves, for measuring body temperature without physical contact and sorting out potentially ill and contagious people.

Of course, as with any crisis, lucrative black markets have arisen. Many copies of this unique patented ThermoFlash® technology have been purchased from various sources in China, without really testing their accuracy, letting contagious people get through the triage network.

Recent studies of effective temperature measurements on these copies, carried out by the highly respected and independent French Engineering High School: the Ecole Centrale Supelec France, showed the lack of accurate temperature control, especially in warm and humid environments, and the instability of their measurements.

After 15 years of research, Visiomed has developed an

array of ThermoFlash® instruments connected via low energy Bluetooth to an android telephone or a tablet, where the data is automatically transmitted to a mobile phone or tablet and then centralized on a server, which allows for regular monitoring and control of entire territories.

This solution, when used on a regular basis, helps governments to prevent new epidemics through regular control at central hubs such as airports, as well as in far away villages or schools. By giving instant results for large territories that are controlled, it allows health entities with limited resources to send dedicated teams to wherever a small population is showing a sudden fever outbreak, so avoiding the rapid spread of dangerous epidemics. In fact, ThermoFlash® Control Solution carries three benefits:

- ➤ instant and centralized reporting of infectious levels for a better response over an entire territory;
- immediate and day-to-day information (SMS messaging) on the triage procedure and capacities for training health-care teams, when facing an infection site, via the deployed phones and tablets;
- ➤ a low-cost epidemiological monitoring solution.

As countries have better phone network coverage, ThermoFlash® Control Solution only requires SMS coverage, and therefore can be deployed anywhere.

Prevention comes first and is the strongest response when viruses and bacteria have no therapeutic response! In the era of AMR, preparedness is the key and new technologies are bringing safe and low-cost solutions fit for any country. •

For more information

Visiomed Group, established in 2007, is the French-based leader in a new generation of electronic medical devices. It has just launched the largest ecosystem of services and products dedicated to connected health for homecare and telemedicine: BewellConnect. www.visiomed-lab.com

Thermo*Flash*®

EPIDEMIC FEVER CONTROL SOLUTION

