

## June 2018 Audience Q&A Crisis Management: The Evolving Role of HIE, Part 2

Below is a list of responses to questions that could not be answered within the time allotted the recent presentation "[Crisis Management: The Evolving, Part 2](#)".

Responses from the following panelists included below:

**Robert Cothren**, Executive Director, California Association of Health Information Exchanges

**Q:** How are these programs addressing [issues with patient matching], through initiatives and proposals that promotes 100% patient matching within the HIE's, so that especially in an emergency the patient is being treated with the most up to date, clean patient record?

**A:** [PULSE](#) uses national standards for exchange, including IHE's [Cross-Community Patient Discovery \(XCPD\)](#) for patient matching, when querying HIEs and other healthcare systems for individuals corresponding to victims or evacuees. Therefore, PULSE is limited to locating health information for individuals for which the demographics available (first name, last name, gender, and DOB are required, address, SSN, phone number are optional) using matching criteria established by each HIE or other health system participant. It simply displays what is retrieved, so yes, it is dependent upon participating systems to return the most up-to-date information each has available, as clean as is available. The user is presented with document dates to aid them in selected the most recent document(s) if information is returned by more than one system.

**Q:** How do you get providers to contribute data to PULSE?

**A:** PULSE maintains no health information, either during activation or between disasters. Therefore, providers do not "contribute data". Instead, PULSE queries other systems across the state, including HIEs and hospital systems, for health information for a specific victim or evacuee in real time as requested by the user. HIEs and health systems participate in PULSE – that is, make their systems available to query – as part of statewide information sharing. In California, PULSE, most of the regional HIEs, and many of the large hospital systems are part of the California Trusted Exchange Network, a framework for inter-organizational trust to support statewide HIE, which facilitates those connections.

**Q:** How is consent handled with PULSE and disasters in general?

**A:** In California, PULSE leverages a multiparty data sharing agreement and the trust framework of the California Trusted Exchange Network (CTEN). Like many national networks, the CTEN uses the concept of local autonomy, where each local HIE or health system being queried makes disclosure decisions based on its local policies and procedures. PULSE makes queries for treatment purposes. In most cases, HIEs and health systems will respond to a query with a matching patient and health information only if the victim or evacuee question has previously consented to the exchange of their health information electronically for treatment purposes. Other restrictions may also apply. In California, more than 90% of individuals consent to electronic exchange of their health information.

**Q:** As paper is generated during use of PULSE, are there capabilities to reintegrate that digital information in the HIE? As in Puerto Rico, use of paper systems during emergency creates a backlog to data entry to digital systems.

**A:** PULSE does not create paper by default, and is new enough that users are still learning the best way to incorporate it into existing emergency workflow. However, during the last exercise, many users chose to print records rather than view them on the PULSE application. PULSE maintains the results of every search and every document retrieval for no more than 30 minutes beyond it last viewing. Therefore, printed records may no longer be available in PULSE. However, a new query for the same victim or evacuee can be placed at any time. In most cases, it will retrieve the same information since the health information in participants is unlikely to change significantly if a victim or evacuee is at an emergency evacuation shelter or other alternative care facility. Exceptions would be in the unlikely event that a responding organization went off line or was otherwise not available to query. In California, though unlikely in Puerto Rico, most health information is maintained in data centers far from their users, usually out of state, and unlikely to be affected by even a large-scale disaster that might otherwise interrupt power or local connectivity to the data center.

**Q:** Are there any clear operation definitions on what the most essential set of information should be included in the scope of PULSE?

**A:** Not at this time. That is, in fact, one of the next steps. Today, users can use PULSE to retrieve many document types, including care summaries or other CCD documents, encounter summaries, discharge summaries, etc., as they are available on participating systems. While the user can select what document to view, it may still be too much information to comb through for an emergency situation. Our continued development will look to identifying the most critical information for most emergencies and potentially adding filters to PULSE that the user can use to highlight that critical information – such as medications, allergies, problems, perhaps immunizations (for tetanus) – for easy review.

**Q:** Are you concerned about privacy at all with PULSE? What if protected information is received by someone who is not permitted to see it?

**A:** Privacy is a concern with PULSE, as with any electronic system that accesses Protected Health Information (PHI). PULSE is accessible only by individuals registered as disaster healthcare volunteers corresponding to specified licensed health care professionals within [California's ESAR-VHP system](#), and uses single sign-on through ESAR-VHP for authentication. It is deployed only within controlled areas, providing medical services by disaster healthcare volunteers. It uses security standards and procedures typical of other health systems, such as EHR or HIE portals, which provide a means of remote access.