How it works

1. PPE protected medics are equipped with a portable ruggedized tablet PC loaded with the Safe Triage System. Control Centre have a web based portal interface to receive casualty data. The hand held tablet and monitoring system allows the patient to be monitored wirelessly in an isolation tent. The system can capture and transmit all vital signs using low cost Bluetooth enabled sensors from the isolation tent without direct contact with the medical team reducing risk of contamination. The tablet has a GPS tracking and camera system to aid location tracking and recording of the incident as it evolves. This allows real time updating of casualties allowing more efficient deployment of resources.

2. At the incident scene, medics collect vital casualty data using a simple touch screen interface. Data captured includes:
   - Location, casualty & incident data;
   - Casualty demographics (can be pre loaded);
   - Presenting complaint (incl. medical history);
   - Diagrams/images of the injuries and the site;
   - Casualty monitored vital signs;
   - Treatment and medication administered;
   - Geo tracking location;
   - Digital images / video;
   - Triage status
   - Number and location of casualties

The system can handle multiple casualties and facilitate electronic handover of cases at the scene. The fully integrated software solution can be seamlessly scaled up to support Mass Casualty Incidents using the same hardware.

3. Data is transmitted ‘live’ by radio (UHF, GPRS, 3G, TETRA or satellite) in a secure encrypted form to a web server for onward transmission to the Evacuation Control Centre. The system can be integrated into existing Command and Control Systems and Hospital Information Systems using HL7 messaging.

4. The MCI function allows rapid triage of multiple patients using the inbuilt Triage Sieve algorithm.

The designated Control Centre receives full patient details, including location. Clinicians can then advise on interventions whilst receiving real time information. In an MCI, the triage status and specialty requirements are transmitted to the Control Centre and receiving hospitals. This enables better resource management and avoids ‘surge capacity’ problems. The wireless scanner integrates data onto a triage card.

5. The comprehensive data store allows a customisable reporting framework to deliver reports as required. It facilitates robust clinical governance, critical incident analysis as well as post incident forensic reconstruction.

‘One Device – Multiple Scenarios’
Essential Features & Benefits

Fast, consistent data collection
- Standardises the patient data collection process at the scene
- Customisable data collection to service needs
- Intuitive patient triage input speeds data collection and allows real time assessment of incident, casualties and injuries

Fast connectivity between device and peripherals
- Pre-paired wireless peripheral devices for automatic biometric data capture
- Low cost peripherals allow disposal to be cost effective if contaminated

Real-time data relay
- Supports secure UHF, GPRS, TETRA and satellite links with Control Centre
- Data sent to the Control Centre allows real time assessment and allocation of resources
- Integration with existing Command and Control
- The system captures and relays Geo tagged still and video images of the incident to support decision making in the event of a ‘rolling storm’ MCI
- GPS allows tracking of casualties and crew
- Allows remote monitoring in an isolation tent

Enhanced clinical governance
- Reporting and analysis functionality
- Monitoring of outcomes and interventions
- Data for forensic reconstruction/identification

Scalable
- Can support and monitor casualties simultaneously
- Integrated wireless scanner links to triage card allowing transfer of data and synchronisation
- Scalable to monitor simultaneous MCIs
- Surge protection using secondary Control Centre

Safe Triage - Core Components
- Ruggedized tablet PC with Safe Triage System Pro application
- Wireless 12 channel ECG (5 pad sets)
- Wireless Blood Pressure Monitor (XS, S, M, L, XL cuff)
- Wireless Blood Glucometer
- Wireless Pulse Oximeter
- Wireless Peak Flow Meter
- Wireless bar code/RFID scanner
- Extended life battery pack
- Optional wireless radioactive dosimeter

Core Functions
- Real-time vital sign capture and transmission
- Real-time photo and video capture
- Triage sieve algorithm
- Blood Pressure Monitoring
- Full diagnostic 12 channel ECG
- Blood Oxygen Saturation Monitoring
- Blood Glucose Level Monitoring
- Lung Function Monitoring
- Geo tagging and GIS functionality
- Optional Video Conferencing

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