Improving Patient Safety in Critical Care/Disaster/Surge

BACKGROUND

Missed vital sign alarms in the CCU or ER can be fatal. Sometimes vital sign alarms go unattended in a busy central nursing station. Sometimes the alarms are lost in the ambient noise. Sometimes wired alarm systems fail because they have a fatal flaw: they are wired. Wires can be detached, degraded or defective and they limit mobility. This can add up to a serious of problems in ordinary critical care, but lack of mobility added to these wire-related issues can be even more of a problem in a disaster/surge environment.

INVENTION

CUNY’s new system can wirelessly collect data from various wired and wireless monitors, analyze data according to predefined criteria, and then create and deliver specific and individualized alarms wirelessly to designated remote communicators. This new proprietary universal protocol adapter system is designed to integrate various installed hospital equipment having diverse, proprietary, and even incompatible protocols into a single seamless integrated remote monitoring system, with real-time remote audit functions. Alarms can be delivered via LAN, WAN, telephone, computer, SMS, e-mail, twitter, or voice messages.

APPLICATIONS

- Hospital critical care operations, both normal and surge.
- Disaster / surge emergencies.
- System upgrade can be adapted to existing inventory used by military, police, fire and even on our national grid.

ADVANTAGES

- HIPAA-compliant, secure data transmission.
- Major entre for medical informatics and culling of patient data
- Reduced-cost reuse of existing inventory
- Easy integration of dissimilar data streams
- Flexibility to add new and old devices under a single protocol
- Reduced clutter in critical care
- Centralized patient data analysis & alert generation for critical care.

DEVELOPMENTAL STAGE

First generation system successfully in commercial use at local hospital; currently in partnering discussions with local hospitals for second generation demonstration in critical care and emergency department venues.

MARKET

A multibillion-dollar market combining unit sales and service fees worldwide. In US alone, there are about 6000 registered hospitals and 5000 community hospitals.

TEAM

Dr. Saad and team are in planning stage with local hospitals for second critical care demo.