

Intended Usage of Medical Cell Sensors

We are looking for units that can be mounted inside jail/holding cells with the ability to detect heart rate, respiratory rate, and motion via micro vibrations. These units will not be body worn devices and will be securely mounted to a wall or ceiling. The data from the sensors will be available on a web-based platform for viewing and documentation of data collected.

Physical Characteristics

- Wall/Ceiling mounted device, no contact needed.
- Roughly the size of a smoke detector.
- Operates on a 6.5-8.5 GHz frequency
- White in color.

Standard Features

- Unit will be able to detect heart rate.
- Unit will be able to detect respiratory rate.
- Unit will be able to detect motion.
- Unit will be able to take the above readings through blankets, clothing, and furniture.
- Unit will have a 130-degree field of view.

Additional Specifications

- These units will be FDA approved.
- Web-based software will be able to provide trends in vital readings.
- Software will be able to alert to drastic changes in vital readings either high or low relative to normal for that patient or patients.

Warranty

- Product Warranty and software support is covered by the annual subscription for services.

1. Summary

The purpose of this solicitation is to procure (X sensors or equivalent) advanced medical cell sensor monitoring units designed for use in correctional facilities. These units will provide vital signs monitoring, including heart rate, respiratory rate, and motion detection through micro-vibrations. This is also to ensure compliance with the health regulations set forth by the state and federal government. The devices will be permanently mounted to walls or ceilings and will operate without direct contact with individuals located in the holding areas. Data collected by the units will be hosted on a secure web-based platform for real-time access and documentation.

The successful vendor will provide medical cell sensors along with related services, including installation, training, and ongoing support. All responsive bidders must be prepared to provide an onsite demonstration if requested.

2. Detailed Specifications

The Medical Cell Sensors must adhere to the following specifications:

- A. **Device Type:** Non-invasive biometric and health monitoring sensors. A wall or ceiling mounted device. If color options are available, selection will be made with the awarded vendor.
- B. **Parameters Monitored:**
 - A. Heart rate
 - B. Respiratory rate
 - C. Motion
 - D. Capability to perform readings through barriers such as blankets, clothing, and furniture.
 - E. A minimum field of view of 130 degrees for effective monitoring.
- C. **Technology Standards:**
 - A. Units must meet FCC regulations for electromagnetic compatibility.
 - B. Devices must be certified under regulatory entities such as FDA for health monitoring devices.
 - C. Compliance with HIPAA (Health Insurance Portability and Accountability Act) regarding data security and patient privacy must be demonstrated.

- D. Web-based software must provide real-time monitoring and visual trends for vital readings over time.
 - E. The system should be equipped to alert staff of drastic changes in vital readings, indicating values that are significantly high or low compared to the established normal range for inmates.
- D. **Data Transmission:** Secure, real-time data transmission to the facility's health management team. Must provide bandwidth capabilities with submittal.
- E. **Durability:** Waterproof and shock-resistant housing suitable for correctional environments.

3. Service Requirements

The successful vendor will be required to provide the following services:

A. **Installation Services:**

- A. Installation of sensors in designated areas of the center as specified by Iredell County personnel.
- B. Provide testing and configuration of devices to ensure proper functionality.

B. **Training Services:**

- A. Onsite training for jail medical staff on how to operate the sensors and interpret data.
- B. Onsite training for correctional officers on monitoring procedures and emergency protocols related to sensor alerts.

C. **Maintenance and Support:**

- A. Provide an annual maintenance agreement for the system.
- B. Provide ongoing customer and technical support for troubleshooting and repairs.
- C. Proactively offer software updates and device calibration as necessary.

Bid Response

Name of Bidder_____

Representing Company_____

Address of Bidder_____

Phone Number_____

Mailing Address_____

E-Mail Address_____ Federal Tax ID#_____

Brand Bid_____

Do the product(s) meet stated specifications? Yes_____ No_____

TOTAL BID PRICE PER UNIT: \$_____

Note any deviations from specifications (if none write “None” / Also include any specifications that may exceed listed specifications:

☐ Check here if additional sheets are attached; otherwise, it is understood that no other documentation is relevant.