

a second transmitter capable of wirelessly transmitting the medical device data over an internet-accessible wireless communication network;

a ~~controller~~processor coupled to the first and second transmitters, the ~~controller~~processor capable of analyzing the medical device data to determine if an emergency condition exists and to assign a priority to the emergency based on a type of the emergency condition, controlling the wireless relay module to select one of said first or said second transmitter for transmitting the medical device data received by the receiver and the ~~controller~~processor capable of establishing a connection via the first or second transmitter with an emergency responder when ~~an~~ the emergency condition exists;

a phone device coupled to the ~~controller~~processor, the phone device capable of initiating the connection with the emergency responder; and

a signal generator coupled to the phone device, the signal generator capable of producing a signal indicative of the emergency condition for transmission over the connection with the emergency responder.

[008b] According to a second aspect of the present invention, there is provided a computerized method comprising the steps of:

receiving medical device data at a wireless relay module wirelessly transmitted from one or more medical devices;

determining at the wireless relay module that at least a portion of the received data is indicative of an emergency condition;

assigning a priority to the emergency based on a type of the emergency condition;

generating an emergency signal at the wireless relay module indicative of the emergency condition;

selecting by the wireless relay module one of a first transmitter capable of transmitting the emergency signal over a wireless relay network and a second transmitter capable of transmitting the emergency signal over an internet-accessible wireless communication network;

establishing a wireless connection with an emergency responder by the selected one of the first transmitter or the second transmitter; and

transmitting the generated emergency signal to the emergency responder by the selected one of the first transmitter or the second transmitter.

[008c] According to a third aspect of the present invention, there is provided a wireless relay network comprising:

at least a first wireless relay module and a second wireless relay module, wherein each wireless relay module comprises a receiver capable of receiving a signal comprising medical device data from one or more medical devices over a wireless relay network, a first transmitter capable of transmitting the medical device data over an internet-accessible wireless communication network, and a second transmitter capable of transmitting the medical device data over a wireless relay network;

said first and second wireless relay modules including respective ~~controller~~processors, wherein each ~~controller~~processor is capable of analyzing the medical device data to determine if an emergency condition exists and to assign a priority to the medical condition based on a type of the emergency condition, processing the received medical device data to detect information associated with the location of said one or more medical devices and of generating location information data for the one or more medical devices; and

said ~~controller~~processor further being capable of selecting one of the first or second transmitter for transmitting said location information data to a remote monitoring device.

[008d] According to a fourth aspect of the present invention, there is provided a wireless relay module comprising:

a receiver capable of wirelessly receiving medical device data over a wireless relay network from at least one medical device;

a first transmitter capable of wirelessly transmitting medical device data over the wireless relay network;

a second transmitter capable of wirelessly transmitting data over an internet-accessible wireless communication network;

a location device capable of generating a location signal;

a ~~controller~~processor coupled to the first and second transmitters, the ~~controller~~processor capable of analyzing the medical device data to determine if an emergency condition exists and to assign a priority to the emergency based on a type of the emergency condition, selecting one of said first or second transmitter for transmitting medical device data received by the receiver, and establishing a connection using the first or second transmitter with an emergency responder when ~~an~~ the emergency condition exists;

a phone device coupled to the ~~controller~~processor, the phone device capable of initiating the connection with the emergency responder; and

a signal generator coupled to the phone device, the signal generator capable of producing a signal indicative of the emergency condition and including the location signal, for transmission by the first or second transmitter to the emergency responder.

We claim:

1. A wireless relay module comprising:
 - a receiver capable of wirelessly receiving medical device data over a wireless relay network from at least one medical device;
 - a first transmitter capable of wirelessly transmitting medical device data to a second wireless relay module over the wireless relay network;
 - a second transmitter capable of wirelessly transmitting the medical device data over an internet-accessible wireless communication network;
 - a ~~controller~~processor coupled to the first and second transmitters, the ~~controller~~processor capable of analyzing the medical device data to determine if an emergency condition exists and to assign a priority to the emergency based on a type of the emergency condition, controlling the wireless relay module to select one of said first or said second transmitter for transmitting the medical device data received by the receiver and the ~~controller~~processor capable of establishing a connection via the first or second transmitter with an emergency responder when ~~an~~ the emergency condition exists;
 - a phone device coupled to the ~~controller~~processor, the phone device capable of initiating the connection with the emergency responder; and
 - a signal generator coupled to the phone device, the signal generator capable of producing a signal indicative of the emergency condition for transmission over the connection with the emergency responder.
2. The wireless relay module of claim 1, wherein the ~~controller~~processor is capable of determining whether the emergency condition exists based on at least one of:

comparing the medical device data to emergency condition data stored in a memory associated with the ~~controller~~processor;

emergency condition data received or relayed from an internet-accessible source; and
emergency condition data received by the receiver from a wireless relay network source.

3. The wireless relay module of claim 1, wherein the medical device data includes emergency condition data indicating that an emergency condition is present.

4. The wireless relay module of claim 1, wherein the ~~controller~~processor is capable of controlling at least one of the first transmitter or the second transmitter to transmit a message containing information about the emergency condition to a remote location.

5. The wireless relay module of claim 1, wherein the ~~controller~~processor is further capable of determining that the connection with the emergency responder is not established and controlling at least one of the first transmitter or the second transmitter to transmit a non-response message.

6. The wireless relay module of claim 1 further comprising:
a memory for storing emergency condition data representing the emergency condition and one or more of a timestamp, an identifier for each of the one or more medical devices transmitting the emergency condition, a location of the one or more medical devices; and
a monitoring unit associated with the ~~controller~~processor for analyzing the data stored in the memory to identify trends in the stored emergency condition data.

7. The wireless relay module of claim 1, wherein the signal generator is configured to generate an electronic text message containing information about the emergency condition to be transmitted to the emergency responder.

8. The wireless relay ~~network~~module of claim 1, wherein the medical device data comprises a serial number used to uniquely identify the wireless relay module.

9. The wireless relay ~~network~~module of claim 1, wherein the receiver and at least one of the first transmitter and the second transmitter are implemented as a transceiver device.

10. A computerized method comprising the steps of:

receiving medical device data at a wireless relay module wirelessly transmitted from one or more medical devices;

determining at the wireless relay module that at least a portion of the received data is indicative of an emergency condition;

assigning a priority to the emergency based on a type of the emergency condition;

generating an emergency signal at the wireless relay module indicative of the emergency condition;

selecting by the wireless relay module one of a first transmitter capable of transmitting the emergency signal over a wireless relay network and a second transmitter capable of transmitting the emergency signal over an internet-accessible wireless communication network;

establishing a wireless connection with an emergency responder by the selected one of the first transmitter or the second transmitter; and

14. The method of claim 10, wherein the signal comprises a serial number used to uniquely identify the wireless relay module.

15. A wireless relay network comprising:
at least a first wireless relay module and a second wireless relay module, wherein each wireless relay module comprises a receiver capable of receiving a signal comprising medical device data from one or more medical devices over a wireless relay network, a first transmitter capable of transmitting the medical device data over an internet-accessible wireless communication network, and a second transmitter capable of transmitting the medical device data over a wireless relay network;
said first and second wireless relay modules including respective ~~controller~~processors, wherein each ~~controller~~processor is capable of analyzing the medical device data to determine if an emergency condition exists and to assign a priority to the medical condition based on a type of the emergency condition, processing the received medical device data to detect information associated with the location of said one or more medical devices and of generating location information data for the one or more medical devices; and
said ~~controller~~processor further being capable of selecting one of the first or second transmitter for transmitting said location information data to a remote monitoring device.

16. A wireless relay module comprising:
a receiver capable of wirelessly receiving medical device data over a wireless relay network from at least one medical device;
a first transmitter capable of wirelessly transmitting medical device data over the wireless relay network;

a second transmitter capable of wirelessly transmitting data over an internet-accessible wireless communication network;

a location device capable of generating a location signal;

a ~~controller~~processor coupled to the first and second transmitters, the ~~controller~~processor capable of analyzing the medical device data to determine if an emergency condition exists and to assign a priority to the emergency based on a type of the emergency condition, selecting one of said first or second transmitter for transmitting medical device data received by the receiver, and establishing a connection using the first or second transmitter with an emergency responder when ~~the~~an emergency condition exists;

a phone device coupled to the ~~controller~~processor, the phone device capable of initiating the connection with the emergency responder; and

a signal generator coupled to the phone device, the signal generator capable of producing a signal indicative of the emergency condition and including the location signal, for transmission by the first or second transmitter to the emergency responder.

17. The wireless relay ~~network~~module of claim 16, where the location signal is based on a global positioning system ("GPS") signal.

18. The wireless relay ~~network~~module of claim 16, wherein the location signal is based on a mobile device position signal generated by the internet-accessible wireless communication network.