Claims

1. A method of executing one or more maintenance tasks for one or more medical devices comprising a system health protection component configured to respond to an unexpected condition, the method comprising executing the maintenance task by:

generating or simulating, by a processor (115, 215, 120, 220, 222), an unexpected condition;

providing, by the processor (115, 215, 120, 220, 222), a signal associated with the unexpected condition to the system health protection component;

determining, by the processor (115, 215, 120, 220, 222), a response of the system health protection component to the unexpected condition; and

providing, by the processor (115, 215, 120, 220, 222), a result that the system health protection component does not successfully recognize an unexpected condition, incorrectly identifies an unexpected condition, or is too slow to recognize an unexpected condition.

2. The method of Claim 1, wherein some or all of the steps are performed at a server in communication with the one or more medical devices and/or at a user device in communication with a/the server and/or the one or more medical devices, and/or at the one or more medical devices.

3. The method of Claim 1 or 2, comprising determining if the one or more maintenance tasks has recently been performed, the one or more maintenance tasks comprising one or more of: an electrical safety check, a system health protection check, a performance check, and a functional check.

4. The method of Claim 3, further comprising:

prompting a user to set up the maintenance task via a user interface (125, 225, 130, 230, 232);

determining whether the user properly set up the maintenance task;

executing the maintenance task; and

displaying one or more results of the maintenance task to the user via the user interface (125, 225, 130, 230, 232).

5. The method of Claim 3 or 4, wherein said electrical safety check comprises evaluating the electrical functionality of the medical devices, the method comprising:

determining, by the processor, whether the electrical safety check passed;

presenting the user with one or more troubleshooting suggestions via a user interface of the medical devices or a/the user interface of a/the user device in response to an electrical safety check failure; and

prompting the user to indicate whether the one or more troubleshooting suggestions identified the reason for the electrical safety check failure.

6. The method of any one of Claims 3-5, wherein said functional check comprises validating an operation of one or more mechanical components of the one or more medical devices, the one or more mechanical components comprising: a touch screen, a button, a color display, a speaker, and a light-emitting diode.

7. The method of Claim 6, comprising:

executing a speaker test;

executing a therapy touch screen test;

determining whether the therapy touch screen test passed;

executing a mute touch screen test in response to passing the therapy touch test;

executing a color display test; and

executing a light-emitting diode test.

8. The method of any one of Claims 3-7, wherein said performance check comprises validating an operation of the system health protection component of the one or more medical devices.

9. The method of Claim 8, wherein the system health protection component comprises a transient current detector and the method further comprises in response to the generated or simulated unexpected condition:

determining whether the transient current detector recognized the unexpected condition; and

displaying one or more results of the performance check to the user via a/the user interface of the one or more medical devices or a/the user interface of the user device.

10. The method of Claim 8, wherein the system health protection comprises a thermal cutout and the method comprises in response to the generated or simulated unexpected condition:

supplying power to a heating element; and

determining whether the thermal cutout tripped in response to supplying power to the heating element.

11. The method of Claim 10, comprising:

resetting the thermal cutout in response to the thermal cutout being tripped;

resupplying power to the heating element;

determining whether the thermal cutout reset; and

displaying one or more results of the performance check to the user via a/the user interface of the one or more medical devices or a/the user interface of the user device.

12. The method of Claim 10, comprising:

determining whether the thermal cutout failed to trip; and

displaying one or more results of the performance check to the user via a/the user interface of the one or more medical devices or a/the user interface of the user device, in response to the thermal cutout failing to trip.

13. The method of any one of the preceding Claims, comprising:

using the received status information to determine a status of a component of the one or more medical devices; and

determining whether the component is in need of replacement based upon the determined status.

14. The method of Claim 13, wherein the status of the component comprises a remaining operational life of the component, and wherein determining whether the component is in need of replacement comprises determining if the remaining operational life of the component is under a threshold value.

15. The method of Claim 13 or 14, comprising determining whether the one or more medical devices are associated with an account information.

16. The method of any one of Claims 13-15, comprising prompting the user to order a replacement component for the one or more medical devices in response to a determination that the component is in need of replacement, or automatically initiating an order for a replacement component for the one or more medical devices in response to a determination that the component is in need of replacement.

17. The method of Claim 16, wherein automatically initiating an order for a replacement component for the one or more medical devices comprises generating user interface information to cause one or more user interface elements to be displayed by a user interface of a second user device associated with a second user, the one or more user interface elements prompting the second user to confirm the order.

18. The method of any one of the preceding Claims, wherein the action comprises the user inputting one or more parameters at the user interface of the user device, the one or more parameters used to perform one or more diagnostic procedures on the one or more medical devices.

19. The method of any one of the preceding Claims, comprising executing multiple maintenance tasks in sequence, multiple maintenance tasks in synchrony, or any combination thereof.

20. The method of any one of Claims 3-19, wherein the unexpected condition associated with a functional check comprises providing the system health protection component with a signal that the system health protection component would be expected to detect as unexpected.

21. The method of any one of Claims 3-20, wherein the system health protection check includes: comparing, by the processor (115, 215, 120, 220, 222) an elapsed time between the generation of the unexpected condition and the triggering of the system health protection component to a predetermined threshold.

22. A maintenance system for one of more medical devices having a system health protection component configured to respond to an unexpected condition, the maintenance system comprising a processor (115, 215, 120, 220, 222), wherein the processor is arranged to:

generate or simulate an unexpected condition;

provide a signal associated with the unexpected condition to the system health protection component,

determine a response of the system health protection component to the unexpected condition, and

provide a result that the system health protection component does not successfully recognize an unexpected condition, incorrectly identifies an unexpected condition, or is too slow to recognize an unexpected condition.