Claims~~*WHAT IS CLAIMED IS:*~~

~~1. A maintenance system for a medical device, the maintenance system comprising:~~

~~a user device, the user device including a processor and a user interface; and~~

~~a server comprising a processor; wherein the processor of the server is configured to:~~

~~establish a connection between a processor of the medical device and the processor of the user device;~~

~~generate user interface information to cause one or more user interface elements to be displayed by the user interface of the user device, the one or more interface elements prompting a user at the user device to perform an action;~~

~~in response to the performed action, receive status information from the processor of the medical device;~~

~~using the received status information, determine a status of a component of the medical device;~~

~~based upon the determined status, determine whether the component is in need of replacement; and~~

~~in response to a determination that the component is in need of replacement, automatically initiate an order for a replacement component for the medical device.~~

~~2. The maintenance system of Claim 1, wherein the processor of the server is configured to automatically initiate an order for a replacement component for the medical device by 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.~~

~~3. The maintenance system of any of Claims 1-2, wherein the processor of the server is further configured to generate user interface information to cause the user to input one or more values at the user interface of the user device, the one or more values used to perform one or more diagnostic procedures on the medical device.~~

~~4. The maintenance system of any of Claims 1-3, wherein the user device is remote from the medical device.~~

~~5. The maintenance system of any of Claims 1-4, wherein the status of the component comprises a remaining operational life of the component.~~

~~6. The maintenance system of Claim 5, 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.~~

~~7. The maintenance system of any of Claims 1-6, wherein the processor of the server is further configured to determine whether the medical device is associated with account information.~~

~~8. A maintenance system that provides automated maintenance for a medical device, the maintenance system comprising:~~

~~a processor configured to execute one or more maintenance tasks for the medical device and communicate with a user via a user interface.~~

~~9. The maintenance system of Claim 8, wherein the processor is housed within the medical device.~~

~~10. The maintenance system of Claim 8, wherein the processor is housed within a user device that is separate from the medical device, the user device comprising a user interface, and wherein the medical device comprises a separate processor.~~

~~11. The maintenance system of Claim 10, comprising a server, the server comprising a server processor, the server processor configured to communicate with the processor of the medical device.~~

~~12. The maintenance system of Claim 10, comprising a server, the server comprising a server processor, the server processor configured to communicate with one or both of the processor housed in the user device and the processor housed in the medical device.~~

~~13. The maintenance system of any of Claims 8-12, wherein each of the one or more maintenance tasks comprises one of an electrical safety check, a physical check, a performance check, or a functional check.~~

~~14. The maintenance system of Claim 13, wherein a said the electrical safety check comprises evaluating the electrical functionality of the medical device.~~

~~15. The maintenance system of Claim 13 or 14, wherein a said the physical check comprises evaluating one or more physical aspects of the medical device.~~

~~16. The maintenance system of Claim 15, wherein the one or more physical aspects of the medical device include a power cable, a heater wire adapter, a housing, a front panel, a sensor cartridge, or a general condition.~~

~~17. The maintenance system of any of Claims 13-16, wherein a said the performance check comprises validating an operation of a system health protection component of the medical device, the system health protection component configured to respond to an unexpected condition.~~

~~18. The maintenance system of any of Claims 10-17, wherein at least one of the user device and the medical device is configured to generate or simulate an unexpected condition as part of validating the operation of the system health protection component.~~

19. The maintenance system of any of Claims 17-18, wherein the system health protection component comprises a transient current detector.

20. The maintenance system of any of Claims 17-19, wherein the system health protection component comprises a thermal cutout.

21. The maintenance system of any of Claims 13-20, wherein a said the functional check comprises validating an operation of one or more mechanical components of the medical device.

22. The maintenance system of Claim 21, wherein the one or more mechanical components comprise a touch screen, a button, a color display, a speaker, and a light-emitting diode.

23. The maintenance system of any of Claims 8-22, wherein the maintenance system is configured to execute multiple maintenance tasks in sequence, multiple maintenance tasks in synchrony, or any combination thereof.

24. A maintenance system for a medical device, the medical device comprising:

a user interface; and

a processor configured to execute one or more maintenance tasks on or for the medical device and receive information from or provide information to a user via the user interface.

25. The maintenance system of Claim 24, comprising a server, the server comprising a processor, the processor of the server configured to communicate with the processor of the medical device.

26. The maintenance system of any of Claims 24-25, wherein each of the one or more maintenance tasks comprises one of an electrical safety check, a physical check, a performance check, or a functional check.

~~27. The maintenance system of Claim 26, wherein the electrical safety check comprises evaluating the electrical functionality of the medical device.~~

~~28. The maintenance system of Claim 26, wherein the physical check comprises evaluating one or more physical aspects of the medical device.~~

~~29. The method of Claim 28, wherein the one or more physical aspects of the medical device include a power cable, a heater wire adapter, a housing, a front panel, a sensor cartridge, or a general condition.~~

~~30. The maintenance system of Claim 26, wherein the performance check comprises validating an operation of a system health protection component of the medical device, the system health protection component configured to respond to an unexpected condition.~~

~~31. The maintenance system of Claim 30, wherein at least one of the user device and the medical device is configured to generate or simulate an unexpected condition as part of validating the operation of the system health protection component.~~

~~32. The maintenance system of any of Claims 30-31, wherein the system health protection component comprises a transient current detector.~~

~~33. The maintenance system of any of Claims 30-31, wherein the system health protection component comprises a thermal cutout.~~

~~34. The maintenance system of Claim 26, wherein the functional check comprises validating an operation of one or more mechanical components of the medical device.~~

~~35. The maintenance system of Claim 34, wherein the one or more mechanical components comprise a touch screen, a button, a color display, a speaker, and a light-emitting diode.~~

~~36. The maintenance system of any of Claims 24-35, wherein the maintenance system is configured to execute multiple maintenance tasks in sequence, multiple maintenance tasks in synchrony, or any combination thereof.~~

~~37.~~1. A method of executing one or more maintenance tasks for one or more ~~a~~ medical devices comprising a system health protection component configured to respond to an unexpected condition~~, the medical device comprising a processor and a user interface~~, the method comprising executing the maintenance task by:

~~establishing a connection with the processor of the medical device;~~

~~generating user interface information to cause one or more user interface elements to be displayed by a user interface of a user device, the one or more interface elements prompting a user of the user device to perform an action;~~

generating or simulating, by a processor (115, 215, 120, 220, 222), an unexpected condition~~receiving status information from the processor of the medical device in response to the action~~;

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~~recording the received status information~~.

~~38.~~2. The method of Claim 1~~2~~4, 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~~comprising determining if the one or more maintenance tasks has recently been performed~~.

~~39.~~3. The method of ~~any of~~ Claim~~s~~ 1 or 2~~24-25~~, 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~~wherein the one or more maintenance tasks comprises one of an electrical safety check, a physical check, a performance check, or a functional check~~.

~~40. The method of Claim 26, wherein a said the physical check comprises evaluating one or more physical aspects of the medical device.~~

~~41. The method of Claim 27, comprising:~~

~~instructing the user to inspect the medical device for one or more issues with one or more physical aspects of the medical device; and~~

~~prompting the user to input a result or a description of the one or more issues.~~

~~42. The method of any of Claims 27-28, wherein the one or more physical aspects of the medical device include a power cable, a heater wire adapter, a housing, a front panel, a sensor cartridge, or a general condition.~~

~~43.~~4. The method of Claim~~s~~ 3~~26-29~~, 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).

~~44.~~5. The method of ~~any of~~ Claim~~s~~ 3 or 4~~26 or- 30~~, wherein ~~a~~ said ~~the~~ electrical safety check comprises evaluating the electrical functionality of the medical device~~s~~, the method comprising:~~.~~

~~45. The method of Claim 31, comprising:~~

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

presenting the user with one or more troubleshooting suggestions via a~~the~~ 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.

~~46.~~ 6. The method of any one of Claims 3-5~~26 or 30~~, wherein ~~a~~ 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: ~~.~~

~~47. The method of Claim 33, wherein the one or more mechanical components comprises~~ a touch screen, a button, a color display, a speaker, and a light-emitting diode.

~~48.~~7. The method of ~~any of~~ Claim~~s~~ 6~~33-34~~, 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.

~~49.~~8. The method of any one of Claims 3-7~~26 or 30~~, wherein ~~a~~ said ~~the~~ performance check comprises validating an operation of ~~a~~the system health protection component of the one or more medical devices~~, the system health protection component configured to respond to an unexpected condition~~.

~~50. The method of Claim 36, wherein at least one of the user device and the medical device is configured to generate the unexpected condition.~~

~~51.~~9. The method of ~~any of~~ Claim~~s~~ ~~836-37~~, wherein the system health protection component comprises a transient current detector~~.~~ and

~~52. T~~ the method ~~of Claim 38, comprising~~further comprises ~~:~~

in response to the generated or simulated ~~generating an u~~nexpected 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.

~~53.~~10. The method of ~~any of~~ Claim~~s~~ ~~836-37~~, wherein the system health protection ~~component~~ comprises a thermal cutout~~.~~ and the method comprises in response to the generated or simulated unexpected condition:

~~54. The method of Claim 40, comprising:~~

supplying power to a heating element; and

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

~~55.~~11. The method of Claim 10~~41~~, 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.

~~56.~~12. The method of Claim 10~~41~~, 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.

~~57.~~13. The method of any one of the preceding Claims ~~24-43~~, 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.

~~58.~~14. The method of Claim 13~~44~~, wherein the status of the component comprises a remaining operational life of the component~~.~~

~~59. The method of Claim 45~~, 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.

~~60.~~15. The method of ~~any of~~ Claim~~s~~ 13 or 14~~44-46~~, comprising determining whether ~~wherein~~ the one or more medical de~~vi~~ces are~~is~~ associated with an account information.

~~61.~~16. The method of any one of Claims 13-15~~44-47~~, 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~~.~~

~~62. The method of any of Claims 44-47, comprising~~ 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.

~~63.~~17. The method of Claim 16~~49~~, wherein automatically initiating an order for a replacement component for the one or more medical devices comprises generating ~~a~~ 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.

~~64.~~18. The method of any one of the preceding Claims ~~24-50~~, wherein the action comprises the user ~~to~~ 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.

~~65. The method of any of Claims 24-51, wherein the user device is remote from the medical device.~~

~~66.~~19. The method of any one of the preceding Claims ~~24-52~~, 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.