What is claimed is:

1. A system for electronic patient care, the system comprising:

a network;

a facility gateway configured to provide a publish-subscribe service for applications executed within the facility gateway for communication among the applications; a device gateway application configured for execution by the facility gateway, the device gateway is configured to communicate via the network by providing a web service; and

a medical device in operative communication with the network, wherein the medical device is configured to communicate with the device gateway using the web service.

2. The system according to claim 1, further comprising a publish-subscribe engine configured to provide the publish-subscribe service.

3. The system according to claim 1, wherein the network is a TCP/IP-based network.

4. The system according to claim 1, wherein the device gateway application is a web server of the web service and the medical device is a client of the web service.

5. The system according to claim 1, wherein the device gateway application is configured to register a topic using the publish-subscribe service.

6. The system according to claim 5, further comprising an integration API configured for execution by the facility gateway, wherein the integration API is configured to subscribe to the topic and communicate an event received by the subscription to the topic to at least one external server.

7. The system according to claim 6, wherein the topic is at least one of a reportable biomed events topic and a reportable clinical events topic.

8. The system according to claim 5, wherein the topic is a reportable biomed event topic and the device gateway reformats a medical device event received via the web service into a reportable biomed event receivable by a subscriber to the topic via the publish-subscribe engine.

9. The system according to claim 8, wherein the medical device communicates the medical device event via the network using the web service

10. The system according to claim 5, wherein the topic is a reportable clinical event topic and the device gateway reformats a medical device event received via the web service into a reportable clinical event receivable by a subscriber to the topic via the publish-subscribe engine.

11. The system according to claim 10, wherein the medical device communicates the medical device event via the network using the web service

12. The system according to claim 5, wherein the topic corresponds to at least one class of pump events.

13. The system according to claim 12, wherein the at least one class of pump events includes at least one of an infusion event regarding an alarm, alert or notification, an infusion event regarding infusing, an infusion event regarding programming, a device event regarding communication, a device event regarding an access request, a device event regarding configuration updates, a device event regarding logging, and a device event regarding power consumption.

14. The system according to claim 1, further comprising a continuous quality improvement listener configured for execution by the facility gateway, wherein:

the continuous quality improvement listener subscribes to a reportable biomed event topic and to a reportable clinical even topic,

the continuous quality improvement is configured to communicate a reportable biomed event received by the subscription to the reportable biomed event topic to an external database, and

the continuous quality improvement is configured to communicate a reportable clinical event received by the subscription to the reportable clinical event topic to an external database.

15. The system according to claim 14, wherein the external database records at least one of the reportable biomed event and the reportable clinical event.

16. The system according to claim 1, further comprising a device manager executable on the facility gateway, wherein the device manager is configured to maintain a list of medical devices including the medical device.

17. The system according to claim 16, wherein the list of the medical devices includes a list of serial numbers corresponding to the list of medical devices.

18. The system according to claim 1, further comprising a monitoring client in operative communication with the medical device through the network to receive status information therefrom.

19. A system for electronic patient care, the system comprising:

a network;

a facility gateway configured to provide a publish-subscribe service for applications executed within the facility gateway for communication among the applications;

a device gateway application configured for execution by the facility gateway, the device gateway is configured to communicate via the network by providing a web service, wherein the device gateway publishes a medical device event topic;

a device application configured for execution on the facility gateway and configured to subscribe to the medical device event topic, wherein the device application publishes a CQI-message topic, and wherein the device application is configured to receive an event from

the subscription to the medical device event topic and publish the event as a CQI message through the CQI-message topic; and

a medical device in operative communication with the network, wherein the medical device is configured to communicate with the device gateway using the web service and to generate the event using a web method of the web service.

20. The system according to claim 19, wherein the device gateway subscribes to the CQI-message topic to receive the CQI-message.

21. The system according to claim 20, further comprising a CQI listener configured for execution by the facility gateway, wherein the CQI listener is subscribed to the CQI-message topic to receive the CQI message.

22. The system according to claim 21, wherein the CQI listener communicates the CQI-message to an external database.

23. The system according to claim 19, wherein the CQI message is one of a reportable biomed event and a reportable clinical event.

24. The system according to claim 19, further comprising a monitoring client configured to operatively communicate with the medical device.

25. The system according to claim 24, wherein the monitoring client communicate with the medical device by subscribing to the CQI-message topic.

26. A system for electronic patient care, comprising

a server having patient-related information include drug metabolism information; and

a pump configured to adjust the flow of a drug into a patient based upon respective patient-related information using the drug metabolism information, the pump receiving the patient-related information from the server.

What is claimed is:

1. A system for electronic patient care, the system comprising:

a network;

a facility gateway configured to provide a publish-subscribe service for applications executed within the facility gateway for communication among the applications;

a device gateway application configured for execution by the facility gateway, the device gateway is configured to communicate via the network by providing a web service; and

a medical device in operative communication with the network, wherein:

the medical device is configured to communicate with the device gateway using the web service,

only the medical device initiates communications with the device gateway using the web method and the device gateway cannot initiate communications with the medical device,

the medical device initiates communications with the device gateway using the web service in accordance with a predetermined periodicity to request a response payload,

in response to the medical device initiated communication, the device gateway formats the response payload comprising an availability of a software update, an availability of a queryable data type, and a plurality of current request statuses, wherein each current request status is a request for the medical device to transmit a data type of a plurality of data types to the device gateway,

the device gateway communicates the response payload to the medical device in response to the medical device initiated communication, and

the medical device communicates all data types of the plurality of data types where a respective current request status of the current request statutes indicates a request of a respective data type; and

a publish-subscribe engine configured to provide the publish-subscribe service for communication between a plurality of applications including the device gateway application, the plurality of applications being executed within the facility gateway.

2. The system according to claim 1, wherein the network is a TCP/IP-based network.

3. The system according to claim 1, wherein the device gateway application is a web server of the web service and the medical device is a client of the web service.

4. The system according to claim 1, wherein the device gateway application is configured to register a topic using the publish-subscribe service.

5. The system according to claim 4, further comprising an integration API configured for execution by the facility gateway, wherein the integration API is configured to subscribe to the topic and communicate an event received by the subscription to the topic to at least one external server.

6. The system according to claim 5, wherein the topic is at least one of a reportable biomed events topic and a reportable clinical events topic.

7. The system according to claim 4, wherein the topic is a reportable biomed event topic and the device gateway reformats a medical device event received via the web service into a reportable biomed event receivable by a subscriber to the topic via the publish-subscribe engine.

8. The system according to claim 7, wherein the medical device communicates the medical device event via the network using the web service

9. The system according to claim 4, wherein the topic is a reportable clinical event topic and the device gateway reformats a medical device event received via the web service into a reportable clinical event receivable by a subscriber to the topic via the publish-subscribe engine.

10. The system according to claim 9, wherein the medical device communicates the medical device event via the network using the web service

11. The system according to claim 4, wherein the topic corresponds to at least one class of pump events.

12. The system according to claim 11, wherein the at least one class of pump events includes at least one of an infusion event regarding an alarm, alert or notification, an infusion event regarding infusing, an infusion event regarding programming, a device event regarding communication, a device event regarding an access request, a device event regarding configuration updates, a device event regarding logging, and a device event regarding power consumption.

13. The system according to claim 1, further comprising a continuous quality improvement listener configured for execution by the facility gateway, wherein:

the continuous quality improvement listener subscribes to a reportable biomed event topic and to a reportable clinical even topic,

the continuous quality improvement is configured to communicate a reportable biomed event received by the subscription to the reportable biomed event topic to an external database, and

the continuous quality improvement is configured to communicate a reportable clinical event received by the subscription to the reportable clinical event topic to an external database.

14. The system according to claim 13, wherein the external database records at least one of the reportable biomed event and the reportable clinical event.

15. The system according to claim 1, further comprising a device manager executable on the facility gateway, wherein the device manager is configured to maintain a list of medical devices including the medical device.

16. The system according to claim 15, wherein the list of the medical devices includes a list of serial numbers corresponding to the list of medical devices.

17. The system according to claim 1, further comprising a monitoring client in operative communication with the medical device through the network to receive status information therefrom.

18. A system for electronic patient care, the system comprising:

a network;

a facility gateway configured to provide a publish-subscribe service for applications executed within the facility gateway for communication among the applications;

a device gateway application configured for execution by the facility gateway, the device gateway is configured to communicate via the network by providing a web service, wherein the device gateway publishes a medical device event topic;

a device application configured for execution on the facility gateway and configured to subscribe to the medical device event topic, wherein the device application publishes a CQI-message topic, and wherein the device application is configured to receive an event from the subscription to the medical device event topic and publish the event as a CQI message through the CQI-message topic;

a medical device in operative communication with the network, wherein:

the medical device is configured to communicate with the device gateway using the web service and to generate the event using a web method of the web service, wherein:

the medical device is configured to communicate with the device gateway using the web service and to generate the event using a web method of the web service,

only the medical device initiates communications with the device gateway using the web method and the device gateway cannot initiate communications with the medical device,

the medical device initiates communications with the device gateway using the web service in accordance with a predetermined periodicity to request a response payload,

in response to the medical device initiated communication, the device gateway formats the response payload comprising an availability of a software update, an availability of a queryable data type, and a plurality of current request statuses, wherein each current request status is a request for the medical device to transmit a data type of a plurality of data types to the device gateway,

the device gateway communicates the response payload to the medical device in response to the medical device initiated communication, and

the medical device communicates all data types of the plurality of data types where a respective current request status of the current request statutes indicates a request of a respective data type; and

a publish-subscribe engine configured to provide the publish-subscribe service for communication between a plurality of applications including the device gateway application and the device application, the plurality of applications being executed within the facility gateway.

19. The system according to claim 18, wherein the device gateway subscribes to the CQI-message topic to receive the CQI-message.

20. The system according to claim 19, further comprising a CQI listener configured for execution by the facility gateway, wherein the CQI listener is subscribed to the CQI-message topic to receive the CQI message.

21. The system according to claim 20, wherein the CQI listener communicates the CQI-message to an external database.

22. The system according to claim 18, wherein the CQI message is one of a reportable biomed event and a reportable clinical event.

23. The system according to claim 18, further comprising a monitoring client configured to operatively communicate with the medical device.

24. The system according to claim 23, wherein the monitoring client communicate with the medical device by subscribing to the CQI-message topic