components may reduce the number of data entry steps entailed for user configuration of a patient care device (e.g., reduce the number of key presses), thus reducing the potential for data entry errors, thereby improving man machine interaction.

In some implementations, regardless of whether the code is used to verify the accuracy of one or more entered configuration data components or is indicative of one or more configuration data components, the code may be checked to validate the accuracy of entry of the code. In this regard, a check code may be provided in the configuration output for use in validating the correct entry of the code. The check code may be integral to the code used to verify or indicate configuration data components (e.g., the code may be a self checking code including an integral check code feature) or may be a separate check code that is generated for use to validate the input accuracy of another code. Advantageously, man machine interaction is improved, since a machine based verification of input data is provided. In other words, the user is relieved from and/or assisted in the mental task of verifying the input data. Therefore, configuration mistakes and/or incompatibilities can be reduced and/or detected.

In view of the foregoing, in a first aspect, a method is provided for generation of a configuration output for a therapy order corresponding with a therapy to be administered to a patient using a patient care device. The method may include receiving a therapy order that includes a therapy description corresponding to a therapy to be administered to a patient and generating a configuration output for the therapy order at a configuration output generator, separate from the patient care device, for use by the patient care device in configuration of the patient care device for administration of the therapy. At least a first portion of the configuration output may include a first part that is at least partially generated based on a portion of the therapy description and is provided for use by the patient care device in said configuration of the patient care device for said administration of the therapy. Additionally, a second portion of the configuration output may include a first code that is at least partially generated based on the first portion and is provided for use by the patient care device for at least one of the following: to verify one or more configuration data components of a pre-stored therapy set received by the patient care device in said configuration of the patient care device for said administration of the therapy; or, to indicate one or more configuration data components for use by the patient care device in said configuration of the patient care device for said administration of the therapy.

A number of feature refinements and additional features are applicable to the first aspect. These feature refinements and additional features may be used individually or in any combination also with features of the second aspect described below. As such, each of the following features that will be discussed may be, but are not required to be, used with any other feature or combination of features of the first aspect.

In one embodiment, the first portion may be at least partially based on at least a portion of a configuration protocol of the patient care device. The configuration protocol comprises one or more configuration data input components (i.e., data values to be entered at the patient care

device to configure the patient care device). The first portion may include data corresponding to one or more configuration data components to be used in the configuration of the patient care device. In this regard, the first portion may include plain text values corresponding to the configuration protocol of the patient care device. The plain text

characters. For instance, the first code and the second code may include alpha-numeric codes.

According to an aspect, a computer program product is provided that can be stored on a computer readable medium and/or can be implemented as computer processable data stream, wherein the computer program product comprises computer processable instructions, which instructions when read in the memory of a computer and executed by the computer cause the computer to carry out the method(s) as described in general above, and in more specific examples below.

A second aspect includes a system for generation of a configuration output that includes an order entry interface that is operable to receive a therapy order that includes at least a portion of a therapy description corresponding to a therapy to be administered to a patient using a patient care device. The system also includes a configuration output generator in operative communication with the order entry interface and separate from the patient care device and a configuration output that is generated by the configuration output generator. The configuration output includes a first portion that comprises a first part that is at least partially generated based on a portion of the therapy description and is provided for use by the patient care device in said configuration of the patient care device for said administration of the therapy, and a second portion that comprises a second part that is at least partially generated based on the first portion and is provided for use by the patient care device for at least one of the following: to verify one or more configuration data components of a pre-stored therapy set received by the patient care device in said configuration of the patient care device for said administration of the therapy; or, to indicate one or more configuration data components for use by the patient care device in said configuration of the patient care device for said administration of the therapy.

A number of feature refinements and additional features are applicable to the second aspect. These feature refinements and additional features may be used individually or in any combination also with features of the first aspect described above. As such, each of the following features that will be discussed may be, but are not required to be, used with any other feature or combination of features of the second aspect.

In an embodiment, the system may include a patient care device having a user interface for receipt of the first portion and the second portion by way of manual entry by a user. Furthermore, the therapy may include administration of an IV fluid to a patient using the patient care device. The patient care device may be an infusion pump. The therapy order may include a dose order including a dose description corresponding to the IV fluid to be administered using the infusion pump. Additionally, the configuration output may be a label. In turn, the label may be applied to a receptacle containing the IV fluid.

In various embodiments, a patient care device may be configurable and/or otherwise provided with logic to determine whether or not a code as described herein is required to configure the patient care device for a given intended operation. For example, a patient care

device may be provided so that input of a code, as discussed herein, is required in some uses, and not required in other uses, of the patient care device.

The configuration output generator, the patient care device, and/or other portions of the system according to the first aspect may be operable to perform functionality associated

CLAIMS

What is claimed is:

1. A method for generation of a configuration output for a therapy order corresponding with a therapy to be administered to a patient using a patient care device, comprising:

receiving a therapy order that includes a therapy description corresponding to a therapy to be administered to a patient;

generating a configuration output for the therapy order at a configuration output generator, separate from the patient care device, for use by the patient care device in configuration of the patient care device for administration of the therapy;

wherein at least a first portion of the configuration output comprises a first part that is at least partially generated based on a portion of the therapy description and is provided for use by the patient care device in said configuration of the patient care device for said administration of the therapy; and

wherein a second portion of the configuration output comprises a first code that is at least partially generated based on the first portion and is provided for use by the patient care device for at least one of the following:

to verify one or more configuration data components of a pre-stored therapy set received by the patient care device in said configuration of the patient care device for said administration of the therapy; or,

to indicate one or more configuration data components for use by the patient care device in said configuration of the patient care device for said administration of the therapy.

2. The method of Claim 1, wherein the generating step is at least partially completed in a computer-automated manner.

3. The method of Claim 1 or Claim 2, wherein the therapy comprises administration of an IV fluid to a patient using an infusion device.

4. The method of Claim 3, wherein the therapy order comprises a dose order including a dose description corresponding to the IV fluid to be administered.

5. The method of Claim 4, wherein the dose description includes one or more attributes of the IV fluid to be administered.

6. The method of any one of Claims 1-5, wherein the first portion is at least partially based on at least a portion of a configuration protocol of the patient care device.

7. The method of any one of Claims 1-6, wherein the first portion comprises a second code.

8. The method of Claim 7, wherein the second code is at least partially generated based on a portion of the therapy description.

to the patient and data regarding the patient care device used to administer the therapy to the patient is stored in corresponding relation with the patient.

27. The method of any one of Claims 1-6, wherein the first portion and the first code are entered at the patient care device by a user.

28. The method of Claim 27, wherein the first portion corresponds to a configuration protocol of the patient care device, and wherein the first code is used at the patient care device to verify the first portion entered by the user.

29. The method of Claim 27 or Claim 28, wherein the first portion comprises a second code, and wherein the first code is used at the patient care device to validate the second code entered by the user.

30. The method of Claim 29, wherein the first code and the second code comprise one or more ASCII printable characters.

31. The method of Claim 30, wherein the first code and the second code comprise alpha-numeric codes.

32. The method of any one of Claims 3-5, further comprising:
generating a label comprising the configuration output; and
affixing the label to a receptacle containing the IV fluid.

33. The method of any one of Claims 1-32, wherein data corresponding to the therapy description comprise an input for an algorithm utilized to generate the first code.

34. The method of Claim 33, wherein a corresponding algorithm is stored at the patient care device.

35. The method of Claim 34, wherein the corresponding algorithm is operable to produce a comparison code for comparison to the first code for analysis of the first portion.

36. The method of Claim 34, wherein the corresponding algorithm is operable to decipher the first code for analysis of the first portion.

37. A system for generation of a configuration output, comprising:

an order entry interface operable to receive a therapy order that includes at least a portion of a therapy description corresponding to a therapy to be administered to a patient using a patient care device; and

a configuration output generator, in operative communication with the order entry interface and separate from the patient care device; and

a configuration output that is generated by the configuration output generator that comprises:

a first portion that comprises a first part that is at least partially generated based on a portion of the therapy description and is provided for use by the patient care device in said configuration of the patient care device for said administration of the therapy, and

a second portion that comprises a second part that is at least partially generated based on the first portion and is provided for use by the patient care device for at least one of the following:

to verify one or more configuration data components of a pre-stored therapy set received by the patient care device in said configuration of the patient care device for said administration of the therapy; or,

to indicate one or more configuration data components for use by the patient care device in said configuration of the patient care device for said administration of the therapy.

38. The system of Claim 37, further comprising:

the patient care device having a user interface for receipt of the first portion and the second portion by way of manual entry by a user.

39. The system of Claim 37 or Claim 38, wherein the therapy comprises administration of an IV fluid to a patient using the patient care device.

40. The system of Claim 39, wherein the patient care device comprises an infusion pump.

41. The system of Claim 40, wherein the therapy order comprises a dose order including a dose description corresponding to the IV fluid to be administered using the infusion pump.

42. The system of any one of Claims 39-41, wherein the configuration output comprises a label.

43. The system of Claim 42, wherein the label is applied to a receptacle containing the IV fluid.

44. The system of any one of Claims 38-43, wherein the patient care device is operable to verify the entry of the first portion based on the second portion.