CLAIMS

1. A system, comprising a dispensing device, the dispensing device comprising:

a plurality of compartments located in the dispensing device, each for storing one or more medicines, wherein each of the plurality of compartments is individually_lockable and comprises a respective temperature sensor;

a lockable door for controlling access to the plurality of compartments;

a refrigeration unit for regulating an ambient temperature provided to the plurality of compartments; and

a processor configured to:

authorize a user seeking access to at least one of the plurality of compartments;

unlock the lockable door responsive to authorizing the user;

receive, from a medication dispensing console via a communication interface, an access command for a selected compartment of the plurality of compartments;

identifying, responsive to receiving the access command, one or more medications in the selected compartment;

determine, responsive to the access command and identifying the one or more medications, a first safe temperature range of the identified one or more medications in the selected compartment, the first safe temperature range being different than a second safe temperature range of a medication in a different compartment of the plurality of compartments;

obtain, responsive to the access command and before the selected compartment is unlocked or opened, a temperature of the selected compartment;

determine, responsive to the received access command and before the selected compartment is unlocked or opened, whether the temperature reading of the selected compartment is within the first safe temperature range of the identified one or more medications; and

prevent access to the selected compartment, while the lockable door is unlocked, when the temperature sensor of the selected compartment measures a temperature outside of the safe temperature range of the identified one or more medications, and providing access to the selected compartment by unlocking the selected compartment when the temperature sensor measures a temperature within the safe temperature range.

2. The system of claim 1, wherein the processor is configured to determine, based on the temperature of the selected compartment, whether the one or more medications in the selected compartment of the plurality of compartments is safe and effective to use.

3. The system of claim 2, wherein the processor is configured to:

set an access state of one or more other components in a path to the selected compartment to unlocked;

confirm a retrieval of at least one of the one or more medications in the selected compartment; and

set the access state of the selected compartment and the one or more other components to locked.

4. The system of claim 2, wherein the processor is configured to maintain an access state of the lockable door to unlocked when the access command is not a final command in an ordered list of access commands received from the medication dispensing console.

5. The system of claim 1, wherein the processor is configured to:

determine, responsive to receiving the access command, respective temperatures of each of the plurality of compartments;

determine, for each of the plurality of compartments, a respective safe temperature range of the respective compartment based on a respective medication stored within the respective compartment, a first respective safe temperature range of a first compartment of the plurality of compartments being different than a second respective temperature range of a second compartment of the plurality of compartments based on the respective medication stored in the first compartment being different than the respective medication stored in the second compartment;

determine, responsive to determining the respective temperatures, for each of the plurality of compartments, an access state of the respective compartment based on whether a temperature of the respective compartment is within the respective safe temperature range of the respective compartment, wherein the access state indicates that access to the respective compartment is permitted when the temperature of the respective compartment is within the safe temperature range and the access state indicates that access to the respective

compartment is prevented when the temperature of the respective compartment is not within the safe temperature range;

provide access to the first compartment while preventing access to the second compartment based on the determined access states of the plurality of compartments.

6. The system of claim 4, wherein the plurality of compartments include a plurality of nested compartments, a first nested compartment comprising a tray compartment and a second nested compartment comprising a pocket compartment, wherein the second compartment is within the first nested compartment,

wherein providing access to the first compartment while preventing access to the second compartment comprises:

unlocking the first nested compartment and the second nested compartment; and

maintaining a locked state of at least one other nested compartment of the plurality of nested compartments.

7. The system of claim 1, wherein the processor is further configured to:

report at least one of an access state and the condition of the selected compartment to the medication dispensing console via the communication interface to generate an alert or notification; and

prevent closing and locking of the lockable door until an access state of each of the plurality of compartments is confirmed to be locked.

8. The system of claim 1, wherein the access command comprises an indication that one or more new medications are being deposited into the selected compartment, and wherein the processor is configured to identify, responsive to receiving the access command, the one or more medications in the selected compartment as including the one or more new medications.

9. The system of claim 1, wherein the processor is further configured to at least one of:

regulate the ambient temperature of the plurality of compartments via the refrigeration unit such that the temperature of a compartment conforms to the safe temperature range; and

identify the selected compartment by performing one or more of: illuminating the selected compartment, opening the selected compartment, or moving the selected compartment.

10. The system of claim 1, wherein the selected compartment comprises at least one of a light sensor and a timer for determining a period of time when the lockable door is open, and wherein the processor is further configured to determine, responsive to the received access command whether a light exposure of the one or more medications in the selected compartment is within a safe light exposure of the one or more medications.

11. A method for providing secure access to refrigerated bins, comprising:

receiving, from a medication dispensing console via a communication interface, an access command for a selected compartment of a plurality of compartments within a dispensing device, each compartment configured to store one or more medicines, wherein each of the plurality of compartments is individually lockable and comprises a respective temperature sensor;

authorizing a user associated with the access command;

unlocking a lockable door of the dispensing device responsive to authorizing the user, the lockable door controlling access to the plurality of compartments;

identifying, responsive to receiving the access command, one or more medications in the selected compartment;

determining, responsive to the access command and identifying the one or more medications, a first safe temperature range of the identified one or more medications in the selected compartment, the first safe temperature range being different than a second safe temperature range of a medication in a different compartment of the plurality of compartments;

obtaining, responsive to the access command and before the selected compartment is unlocked or opened, a temperature of the selected compartment;

determining, responsive to the received access command and before the selected compartment is unlocked or opened, whether the determined temperature of the selected compartment is within the first safe temperature range of the identified one or more medications; and

preventing access to the selected compartment, while the lockable door is unlocked, when the temperature sensor of the selected compartment measures a temperature outside of the safe temperature range of the identified one or more medications, and providing access to the selected compartment by unlocking the selected compartment when the temperature sensor measures a temperature within the safe temperature range.

12. The method of claim 11, further comprising:

determining, based on the temperature of the selected compartment, whether the one or more medications in the selected compartment of the plurality of compartments is safe and effective to use, causing the selected compartment to be unlocked when the one or more medications in the selected compartment is determined to be safe and effective to use, and cause the selected compartment to be locked when the one or more medications in the selected compartment are not determined to be safe and effective to use. safe and effective to use.

13. The method of claim 11, wherein the access command comprises an indication that one or more new medications are being deposited into the selected compartment, and wherein identifying, responsive to receiving the access command, the one or more medications in the selected compartment further includes the one or more new medications.

14. The method of claim 12, further comprising:

determining, responsive to receiving the access command, respective temperatures of each of the plurality of compartments;

determining, for each of the plurality of compartments, a respective safe temperature range of the respective compartment based on a respective medication stored within the respective compartment, a first respective safe temperature range of a first compartment of the plurality of compartments being different than a second respective temperature range of a second compartment of the plurality of compartments based on the respective medication stored in the first compartment being different than the respective medication stored in the second compartment;

determining, responsive to determining the respective temperatures, for each of the plurality of compartments, an access state of the respective compartment based on whether a temperature of the respective compartment is within the respective safe temperature range of the respective compartment, wherein the access state indicates that access to the respective

compartment is prevented when the temperature of the respective compartment is within the safe temperature range and the access state indicates that access to the respective compartment is prevented when the temperature of the respective compartment is not within the safe temperature range; and

providing access to the first compartment while preventing access to the second compartment based on the determined access states of the plurality of compartments.

15. The method of claim 14, wherein the dispensing device comprises a plurality of nested compartments, a first nested compartment comprising a tray compartment a second nested compartment comprising a pocket compartment, wherein the second compartment is within the first nested compartment,

wherein providing access to the first compartment while preventing access to the second compartment comprises:

unlocking the first nested compartment and the second nested compartment; and

maintaining a locked state of at least one other nested compartment of the plurality of nested compartments.