CLAIMS:

1. A patency checking system, comprising:

a fluid path comprising a distal end configured to be coupled to an intravenous (IV) device ~~at a distal end of the fluid path~~;

a patency port formed along a length of the fluid path and comprising a barrel; ~~and~~

a plunger fluidically coupled to the fluid path at the patency port and configured to be drawn proximally out of the barrel to ~~selectively~~ draw blood from the IV device into the fluid path to confirm patency of the fluid path; and

a spring coupled to the plunger, wherein the spring is configured to pull the plunger distally into the barrel.

~~2. The patency checking system of claim 1, wherein the plunger further comprises a spring biased to pull the plunger to a non-drawn state.~~

2~~3~~. The patency checking system of claim 1, wherein the plunger is formed within ~~a~~ the barrel to form a syringe that is fluidically coupled to the fluidic path ~~via a fluid path adapter~~.

3~~4~~. The patency checking system of claim 1, further comprising a valve formed along the fluid path and intermediate to the distal end of the fluid path and the plunger.

4~~5~~. The patency checking system of claim 3~~4~~, further comprising a fluid flush reservoir fluidically coupled to the plunger wherein the valve selectively allows for patency checking at ~~an~~ the IV device and a drawing of fluid from the fluid flush reservoir to flush the IV device.

5~~6~~. The patency checking system of claim 1, further comprising a locking device to lock the plunger in a ~~non-draw~~ non-drawn state.

6~~7~~. The patency checking system of claim 1, further comprising a linear motor to automatically advance the plunger upon actuation by a clinician of a button.

7~~8~~. The patency checking system of claim 6~~7~~, wherein the linear motor advances the plunger a set distance based on a length of the fluid path.

8~~9~~. The patency checking system of claim 1, further comprising a force sensor to detect a force used to pull the plunger ~~back~~ out of the barrel.

9~~10~~. The patency checking system of claim 8~~9~~, wherein the force sensor further comprises a notification module to present to a clinician a notification descriptive of when a detected force by the force sensor indicates that the force used to pull the plunger back indicates non-patency of the IV device.

10~~11~~. A method of manufacturing a patency checking system, comprising:

forming a patency port on a fluid path, wherein the patency port comprises a barrel;

forming an intravenous (IV) coupler on a distal end of the fluid path and configured to couple to an IV device; ~~and~~

coupling a syringe at the patency port, the syringe comprising a plunger, wherein the plunger is configured to be drawn proximally out of the barrel to draw blood from the IV device into the fluid path to confirm patency of the fluid path; and

forming a spring coupled to the plunger, wherein the spring is configured to pull the plunger distally into the barrel.

11~~12~~. ~~A~~ The method of claim 10~~11~~, ~~further comprising forming a spring within the syringe~~ wherein the spring is configured to bias the plunger to a non-drawn state.

12~~13~~. The method of claim 10~~11~~, further comprising forming a valve intermediate to the patency port and distal end of the fluid path.

13~~14~~. The method of claim 11~~12~~, further comprising fluidically coupling a fluid flush reservoir to the syringe to selectively allow for:

patency checking at an IV device coupled at the intravenous (IV) coupler and; and

drawing of fluid from the fluid flush reservoir to flush the IV device.

14~~15~~. The method of claim 10~~11~~, further comprising forming a locking device on the syringe to lock the plunger in a ~~non-draw~~ non-drawn state.

15~~16~~. The method of claim 10~~11~~, further comprising mechanically coupling a linear motor and motor actuation button to the plunger to automatically advance the plunger upon actuation by a clinician of the motor actuation button.

16~~17~~. A blood infusion system, comprising:

an intravenous (IV) device;

a fluid path comprising a distal end configured to be coupled to the intravenous (IV) device ~~at a distal end of the fluid path~~;

a patency port formed along a length of the fluid path and comprising a barrel; ~~and~~

~~a syringe fluidically coupled to the fluid path at the patency port to, with a plunger of the syringe, selectively draw blood into the fluid path to confirm patency of the fluid path~~

a plunger fluidically coupled to the fluid path at the patency port and configured to be drawn proximally out of the barrel to draw blood from the IV device into the fluid path to confirm patency of the fluid path; and

a spring coupled to the plunger, wherein the spring is configured to pull the plunger distally into the barrel.

17~~18~~. The blood infusion system of claim 16~~17~~, wherein the ~~syringe further comprises a~~ spring wherein the spring is configured to pull the plunger distally into the barrel ~~biased to pull the plunger~~ to a non-drawn state.

18~~19~~. The blood infusion system of claim 16~~17~~, further comprising:

a valve formed along the fluid path and intermediate to the distal end of the fluid path and the plunger; and

a fluid flush reservoir fluidically coupled to the plunger wherein the valve selectively allows for patency checking at the IV device and a drawing of fluid from the fluid flush reservoir to flush the IV device.

19~~20~~. The blood infusion system of claim 16~~17~~, further comprising a locking device to lock the plunger in a ~~non-draw~~ non-drawn state.