CLAIMS:

1. An intravenous therapy system, comprising:

a housing to house an actuation hub, the actuation hub comprising;

a needle hub operatively coupled to a needle to insert the needle into a body of a patient ~~patient's body~~; and

a catheter hub ~~operatively~~ fluidically coupled to a catheter to insert the catheter into the ~~a patient's~~ body, the catheter being formed coaxially with an outer surface of the needle; ~~and~~

an inflatable bladder formed along a length of the catheter to maintain the catheter in the ~~patient's~~ body; and

a fluidic channel in fluid communication with both the inflatable bladder and the catheter hub such that the fluidic channel is configured for inflation of the inflatable bladder with a fluid and infusion of a same fluid into a blood stream of the patient;

wherein after insertion of the needle into the body, the needle is configured to be retracted into the needle hub, thus maintaining a distal end of the needle within the needle hub, to coaxially remove the needle from within the catheter.

2. The intravenous therapy system of claim 1, wherein ~~upon~~ after insertion of the needle into the body, the needle hub and needle may be removed from the actuation hub.

3. The intravenous therapy system of claim 1, further comprising a bladder fluid injection port to couple a fluid reservoir to the inflatable bladder via a length of tubing, wherein the fluidic channel extends through the length of tubing.

~~4. The intravenous therapy system of claim 1, further comprising an infusion tube fluidically coupled to the catheter to provide an infusion through the catheter and into a blood vessel within the patient's body.~~

4.~~5.~~ The intravenous therapy system of claim 1, further comprising a visual indicator to indicate when the needle and catheter has accessed a blood vessel within the ~~patient's~~ body.

5.~~6.~~ The intravenous therapy system of claim 1, further comprising an adhesive formed on a bottom surface of the housing to secure the intravenous therapy system to a skin of the patient.

6.~~7.~~ The intravenous therapy system of claim 5~~6~~, further comprising an adhesive-defeating fluid port to receive an adhesive-defeating fluid to reduce the adhesive effects of the adhesive during removal of the intravenous therapy system from the ~~patient's~~ skin.

~~8. The intravenous therapy system of claim 1, wherein upon insertion of the needle, the needle hub and needle may be retracted into the housing to coaxially remove the needle from within the catheter.~~

7.~~9.~~ The intravenous therapy system of claim 1, further comprising a window to allow a clinician implementing the intravenous therapy system to see through the housing and to a ~~patient's~~ skin of the patient.

8.~~10.~~ The intravenous therapy system of claim 1, wherein the needle hub and catheter hub further comprise a ~~bistable~~ locking mechanism that selectively locks and unlocks the needle hub and catheter hub in an actuated position.

9.~~11.~~ A method of manufacturing an intravenous device, comprising:

forming a needle hub and a catheter hub within a housing, wherein the needle hub is operatively coupled to a needle to insert the needle into a body of a patient, and wherein the catheter hub is fluidically coupled to a catheter to insert the catheter into the body, the catheter being formed coaxially with an outer surface of the needle;

forming an inflatable bladder along a length of the catheter to maintain the catheter in the body; and

providing a fluidic channel in fluid communication with both the inflatable bladder and the catheter hub such that the fluidic channel is configured for inflation of the inflatable bladder with a fluid and infusion of a same fluid into a blood stream of the patient;

wherein the needle is configured to be retracted into the needle hub after being inserted into the body, thus maintaining a distal end of the needle within the needle hub, to coaxially remove the needle from within the catheter

~~mechanically coupling a catheter to the catheter hub;~~

~~mechanically coupling a needle to the needle hub;~~

~~mechanically coupling a bladder to the catheter; and~~

~~coupling an infusing fluidic tube to the needle and catheter~~.

10.~~12.~~ The method of claim 9~~11~~, further comprising mechanically coupling ~~an inflation~~ a fluid reservoir to the inflatable bladder via a bladder fluid injection port and a length of tubing, wherein the fluidic channel extends through the length of tubing.

11.~~13.~~ The method of claim 9~~11~~, further comprising forming a window through the housing to allow a clinician implementing the intravenous therapy system to see through the housing and to a ~~patient's~~ skin of the patient when the intravenous device is deployed on the skin of the patient.

12.~~14~~. The method of claim 9~~11~~, forming a visual indicator on the housing to receive a blood sample indicating when the needle and catheter has accessed a blood vessel within ~~a patient's~~ the body.

13.~~15.~~ The method of claim 9~~11~~, further comprising forming an adhesive on a bottom surface of the housing ~~used~~ to secure the intravenous device to a skin of a patient.

14.~~16.~~ The method of claim 9~~11~~, further comprising a ~~bistable~~ locking mechanism in the housing ~~to~~ that selectively locks and unlocks the needle hub and catheter hub in an actuated position.

15.~~17.~~ A peripheral intravenous catheter (PIVC), comprising:

a circular housing to house:

a needle hub operatively coupled to a needle to insert the needle into a body of a patient ~~patient's body~~; and

a catheter hub operatively coupled to a catheter to insert the catheter into ~~a patient's~~ the body, the catheter being formed coaxially with an outer surface of the needle, wherein after insertion of the needle into the body, the needle is configured to be retracted into the needle hub, thus maintaining a distal end of the needle within the needle hub, to coaxially remove the needle from within the catheter; ~~and~~

an inflatable bladder formed along a length of the catheter to maintain the catheter in the ~~patient's~~ body; and

a fluidic channel in fluid communication with both the inflatable bladder and the catheter hub such that the fluidic channel is configured for inflation of the inflatable bladder with a fluid and infusion of a same fluid into a blood stream of the patient

~~a bladder fluid injection port to couple a fluid reservoir to the bladder via a length of tubing~~.

~~18. The PIVC of claim 17, further comprising an infusion tube fluidically coupled to the catheter to provide an infusion through the catheter and into a blood vessel within the patient's body.~~

16.~~19.~~ The PIVC of claim 15~~17~~, further comprising a visual indicator to indicate when the needle and catheter ~~has~~ have accessed a blood vessel within the ~~patient's~~ body.

17.~~20.~~ The PIVC of claim 15~~17~~, further comprising a window to allow a clinician implementing the ~~intravenous therapy system~~PIVC to see through the housing and to a ~~patient's~~ skin of a patient.