CLAIMS

What is claimed is:

1. An extended dwell catheter assembly (100) comprising:

a housing (102) comprising a first frame (193) attached to a second frame (194) and having an interior space (104), said housing (102) having a distal opening (342) and a proximal opening (101);

a catheter assembly (108) located in the interior space (104) of the housing (102), said catheter assembly (108) comprising a catheter tube (110) attached to a catheter hub (130) and a needle (112) attached to a needle hub (122), wherein the needle (112) and the catheter tube (110) project out the distal opening (342) of the housing (102) and the needle hub (122) projects out the proximal opening (101) of the housing (102), and wherein the catheter hub (130) is slidable within the interior space (104) of the housing (102) from a proximal position to a distal position within the interior space (104);

an upper seam (276) located between the first frame (193) and the second frame (194) along a first side of the housing (102) and a lower seam (232) located between the first frame (193) and the second frame (194) along a second side of the housing, the upper seam (276) located above, elevation-wise, the lower seam (232); and

wherein the first frame (193) and the second frame (194) are held together by clamp-shaft coupling and are separable from one another along the upper seam (276) and the lower seam (232); and

wherein the first frame (193) is a left frame and the second frame (194) is a right frame.

2. The extended dwell catheter assembly (100) of claim 1, wherein the catheter hub (130) comprises an interior cavity (148) and wherein a needle guard (140) comprising a proximal wall and two arms is located in the interior cavity (148) of the catheter hub (130).

3. The extended dwell catheter assembly (100) of claim 1 or claim 2, wherein the first frame (193) or the second frame (194) comprises a plurality of tabs (250, 394) and the other one of the first frame (193) or the second frame (194) comprises a plurality of receiving slots (288, 354) engaging the plurality of tabs (250, 394).

4. The extended dwell catheter assembly (100) of any preceding claim, wherein the housing (102) comprises a base end (190) comprising a plurality of side walls (200, 202, 204, 206).

5. The extended dwell catheter assembly (100) of claim 4, further comprising a first lever (214) and a second lever (216), the first and second levers (214, 216) projecting from different surfaces of base end (190) of the housing (102).

6. The extended dwell catheter assembly (100) of claim 5, wherein the first lever (214) is attached to a three-sided cut-out (254) on the second frame (194).

7. The extended dwell catheter assembly (100) of claim 6, wherein the second lever (216) comprises a curved proximally facing surface (216a).

8. The extended dwell catheter assembly (100) of any preceding claim, wherein the housing (102) comprises a body opening (196) and wherein a push tab (176) on the catheter hub (130) is located in the body opening (196).

9. The extended dwell catheter assembly (100) of claim 5, wherein the first lever (214) and the second lever (216) move relative to one another to separate the first frame (193) and the second frame (194).

10. The extended dwell catheter assembly (100) of claim 1, wherein the first frame (193) comprises a gate (340, 606a) having a living hinge (346, 618) and the second frame (194) comprises gate (340, 606b) having a living hinge (346, 618).

11. The extended dwell catheter assembly (100) of claim 10, wherein a tab (398) engages a recess (378) to engage the two end cap components (340).

12. The extended dwell catheter assembly (100) of claim 1, wherein the first frame (193) has an activation structure (328) and the second frame (194) has an activation structure (328) and wherein a gap defined by the two activation structures (328, 328) are sized and shaped to be pushed by the catheter hub (130) to separate the first frame (193) from the second frame (194).

13. The extended dwell catheter assembly (100) of any preceding claim, further comprising a tab adapter (404) fitted around the catheter hub (130).

14. The extended dwell catheter assembly (100) of any preceding claim, further comprising a guidewire extending through the needle (112).

15. A method of manufacturing an extended dwell catheter assembly (100) comprising:

forming a housing (102), the housing (102) comprising a first frame (193) attached to a second frame (194) and having an interior space (104), said housing (102) having a distal opening (342) and a proximal opening (101), an upper seam (276) located between the first frame (193) and the second frame (194) along a first side of the housing (102) and a lower seam (232) located between the first frame (193) and the second frame (194) along a second side of the housing, the upper seam (276) located above, elevation-wise, the lower seam (232);

placing a catheter assembly (108) in the interior space (104) of the housing (102), said catheter assembly (108) comprising a catheter tube (110) attached to a catheter hub (130) and a needle (112) attached to a needle hub (122), wherein the needle (112) and the catheter tube (110) project out the distal opening (342) of the housing (102) and the needle hub (122) projects out the proximal opening (102) of the housing (102), and wherein the catheter hub (130) is slidable within the interior space (104) of the housing (102) from a proximal position to a distal position within the interior space (104); and

wherein the first frame (193) and the second frame (194) are held together by clamp-shaft coupling and are separable from one another along the upper seam (276) and the lower seam (232); and

wherein the first frame (193) is a left frame and the second frame (194) is a right frame.

16. The method of claim 15, wherein the first frame (193) and the second frame (194) are separable by moving the first frame (193) in a first direction and the second frame (194) in a second direction.

17. The method of claim 15, wherein the first frame (193) and the second frame (194) are separable by advancing the catheter hub (130) in a distal direction to push apart two activation structures (328) located inside the interior space (104) of the housing (102).

18. The method of claim 15, wherein the catheter hub (130) is separable from the housing (102) by displacing two end cap components (340) about two living hinges (346).