

CLAIMS

1. A catheter system, comprising:

a catheter adapter having a proximal end, a distal end, and an interior extending therebetween;

an intravenous catheter coupled to the distal end of the catheter adapter and comprising a lumen;

a central pathway in fluid communication with the interior of the catheter adapter and the lumen of the intravenous catheter;

a wedge disposed within the catheter adapter and securing the intravenous catheter within the catheter adapter, wherein the wedge comprises an interface surface, wherein the central pathway extends through the interface surface;

an introducer needle positioned within the central pathway and having a distal end comprising a distal opening, a proximal end, a body extending therebetween, and a notch formed through a side wall of the body and in fluid communication with an interior lumen of the introducer needle, wherein the body comprises a uniform outer diameter, wherein a diameter of the central pathway at the interface surface is less than an inner diameter of the intravenous catheter, wherein the interface surface contacts the uniform outer diameter of the introducer needle; and

an indicator provided on an outer surface of the introducer needle and having a distal end spaced from the notch a distance that is greater than a distance between the proximal end of the catheter adapter and a proximal-most end of the interface surface, wherein when a distal end of the indicator is aligned with the proximal end of the catheter adapter and a proximal end of the indicator is proximal to the proximal end of the catheter adapter, the notch is disposed between a distal end of the wedge and a proximal end of the wedge and the distal opening is disposed distal to the wedge.

2. The system of claim 1, wherein the indicator comprises at least one of a color and a line.
3. The system of claim 1, wherein the indicator comprises a component of a safety mechanism.
4. The system of claim 2, wherein the line comprises a series of lines.
5. The system of claim 4, wherein the series of lines is a scale.
6. The system of claim 4, wherein the series of lines is crosshatching.

7. The system of claim 1, wherein the distal opening is a sharpened distal tip in fluid communication with an interior lumen of the introducer needle.
8. The system of claim 1, wherein the indicator is alphanumeric.
9. The system of claim 1, wherein the indicator comprises a texture.
10. The system of claim 1, wherein the indicator is configured to contact the interface surface and provide a tactile feedback.
11. The system of claim 1, further comprising a second indicator on the intravenous catheter and having a proximal end, wherein a distance between said proximal end of the indicator and a proximal-most end the interface surface is greater than a distance between the notch and a sharpened distal tip of the introducer needle.
12. A catheter system, comprising:
 - a catheter adapter having a proximal end and a distal end, and an interior extending therebetween;
 - an intravenous catheter having a proximal end coupled to the catheter adapter and comprising a lumen;
 - a central pathway in fluid communication with the interior of the catheter adapter and the lumen of the intravenous catheter;
 - a wedge disposed within the catheter adapter and securing the intravenous catheter within the catheter adapter, wherein the wedge comprises an interface surface, wherein the central pathway extends through the interface surface, wherein a diameter of the central pathway at the interface surface is less than an inner diameter of the intravenous catheter;
 - an introducer needle positioned within the central pathway and having a distal end comprising a sharpened distal tip comprising a distal opening, a proximal end, a body extending therebetween, and a notch formed through a side wall of the body and in fluid communication with an interior lumen of the introducer needle, wherein the body comprises a uniform outer diameter, wherein the interface surface contacts the uniform outer diameter of the introducer needle; and
 - an indicator provided on the intravenous catheter and having a proximal end, wherein when the sharpened distal tip is between a distal end of the indicator and the proximal end of the indicator, the notch is disposed distal to a proximal-most end of the interface surface and proximal to a distal end of the interface surface.