The invention claimed is:

1. A catheter assembly, comprising:

a catheter adapter, wherein the catheter adapter comprises a distal end, a proximal end, an inner wall extending between the distal end and the proximal end, and a lumen formed by the inner wall;

a septum housing disposed within the lumen of the catheter adapter, wherein the septum housing comprises one or more protrusions, wherein the one or more protrusions comprise a lip that extends around an outer circumference of the septum housing, wherein the septum housing is secured to the inner wall by bonding between the one or more protrusions and the inner wall, wherein the bonding between the one or more protrusions and the inner wall comprises adhesive bonding, wherein the inner wall comprises a ring that contacts an exterior of the septum housing and is spaced apart from the lip such that a cavity is formed between the ring and the lip, wherein the adhesive bonding contacts the ring, wherein a venting pathway provides access to the cavity; and

a septum at least partially disposed within the septum housing and configured to at least substantially seal the lumen.

2. The catheter assembly of claim **1**, wherein the inner wall comprises a groove, wherein in response to the one or more protrusions aligning with the groove, the septum housing resiliently moves outwardly to retain the one or more protrusions within the groove in the snap fit.

3. The catheter assembly of claim **1**, wherein the catheter adapter further comprises a vent hole that provides the venting pathway between an exterior of the catheter assembly and the adhesive bonding.

4. The catheter assembly of claim **1**, wherein the cavity comprises an angled proximal surface.

5. The catheter assembly of claim **1**, wherein the bonding between the one or more protrusions and the inner wall comprises chemical bonding, wherein the chemical bonding is disposed where the inner wall contacts the septum and the septum housing.

6. A catheter assembly, comprising:

a catheter adapter, wherein the catheter adapter comprises a distal end, a proximal end, an inner wall extending between the distal end and the proximal end, a lumen formed by the inner wall, and a side port, wherein the inner wall comprises a groove or opening;

a septum housing disposed within the lumen of the catheter adapter, wherein the septum housing comprises one or more protrusions, wherein in response to the septum housing being inserted into the distal end of the catheter adapter, the one or more protrusions are biased inwardly, wherein in response to the one or more protrusions being further inserted into the distal end and aligning with the groove or opening, the one or more protrusions move resiliently outward such that the one or more protrusions are retained in the groove or opening, wherein the one or more protrusions comprise a lip that extends around an outer circumference of the septum housing, wherein the septum housing is secured to the inner wall by bonding between the one or more protrusions and the inner wall, wherein the inner wall comprises a ring that contacts an exterior of the septum housing and is spaced apart from the lip such that a cavity is formed between the ring and the lip, wherein the bonding contacts the ring;

a vent hole disposed within the inner wall of the catheter adapter, wherein the vent hole provides a venting pathway between an exterior of the catheter assembly and the bonding; and

a septum at least partially disposed within the septum housing and proximal to the side port, wherein the septum is configured to at least substantially seal the lumen.

7. The catheter assembly of claim **6**, wherein the septum housing is secured to the inner wall by bonding between the one or more protrusions and the inner wall.

8. The catheter assembly of claim **7**, wherein the bonding between the one or more protrusions and the inner wall comprises chemical bonding, wherein the chemical bonding is disposed where the inner wall contacts the septum and the septum housing.

9. The catheter assembly of claim **7**, wherein the groove or opening is a groove, wherein the bonding between the one or more protrusions and the inner wall comprises adhesive bonding, wherein the adhesive bonding extends along the

exterior of the septum housing proximal to the one or more protrusions, wherein the catheter adapter.

10. The catheter assembly of claim **9**, wherein the vent hole is disposed proximate to a proximal edge of the lip.