What is claimed is:

1. A vascular access device (VAD) delivery device comprising:

a manually deformable liquid container defining an inner chamber, the container having a distal end, a proximal end, and an outlet on the distal end;

a male luer connector projecting from the outlet on the distal end of the container, the male luer connector in fluid communication with the inner chamber of the container and engageable with a luer connector of a VAD; and

a one-way valve engaged with the male luer connector, the one-way valve in fluid communication with the inner chamber of the container, the one-way valve preventing fluid flow in the direction outside the inner chamber to inside the inner chamber when the container is manually deformed and released.

2. The VAD delivery device as claimed in claim 1, further comprising a molded cap releasably connected to the container, the molded cap configured to encase the male luer connector and seal the inner chamber of the container.

3. The VAD delivery device as claimed in claim 1, wherein the one-way valve comprises a duckbill valve, umbrella valve, combination duckbill-umbrella valve, ball-check valve, diaphragm-check valve, swing-check valve, tilting-disk check valve, stop-check valve, poppet-check valve, or lift-check valve.

4. The VAD delivery device as claimed in claim 1, wherein the inner chamber of the container has a volume in the range of about 0.5mL to 10mL.

5. The VAD delivery device as claimed in claim 1, wherein the container comprises a thermoplastic elastomer.

6. The VAD delivery device as claimed in claim 2, wherein the container and molded cap are adapted to create an aseptic or sterile barrier.

7. The VAD delivery device as claimed in claim 1, wherein the container is pre-filled with solution.

8. The VAD delivery device as claimed in claim 1, wherein the male luer connector is molded directly using the blow, fill, seal process.

9. The VAD delivery device as claimed in claim 1, wherein the male luer connector is a separately molded part that is inserted into the distal outlet during the blow, fill, seal process.

What is claimed is:

1. A vascular access device (VAD) delivery device comprising:

a manually deformable liquid container defining an inner chamber, the container having a distal end, a proximal end, and an outlet on the distal end;

a male luer connector projecting from the outlet on the distal end of the container, the male luer connector in fluid communication with the inner chamber of the container and engageable with a luer connector of a VAD; and

a one-way valve engaged with the male luer connector, the one-way valve in fluid communication with the inner chamber of the container, the one-way valve preventing fluid flow in the direction outside the inner chamber to inside the inner chamber when the container is manually deformed and released.

2. The VAD delivery device as claimed in claim 1, further comprising a molded cap releasably connected to the container, the molded cap configured to encase the male luer connector and seal the inner chamber of the container.

3. The VAD delivery device as claimed in claim 1, wherein the one-way valve comprises a duckbill valve, umbrella valve, combination duckbill-umbrella valve, ball-check valve, diaphragm-check valve, swing-check valve, tilting-disk check valve, stop-check valve, poppet-check valve, or lift-check valve.

4. The VAD delivery device as claimed in claim 1, wherein the inner chamber of the container has a volume in the range of about 0.5 mL to 10 mL.

5. The VAD delivery device as claimed in claim 1, wherein the container comprises a thermoplastic elastomer.

6. The VAD delivery device as claimed in claim 2, wherein the container and molded cap are adapted to create an aseptic or sterile barrier.

7. The VAD delivery device as claimed in claim 1, wherein the container is pre-filled with solution.

8. The VAD delivery device as claimed in claim 1, wherein the male luer connector is molded directly using the blow, fill, seal process.

9. The VAD delivery device as claimed in claim 1, wherein the male luer connector is a separately molded part that is inserted into the distal outlet during the blow, fill, seal process.

10. A method of flushing a VAD comprising:

providing a vascular access delivery device having a manually deformable liquid container defining an inner chamber, the container having a distal end, a proximal end, and an outlet on the distal end, a male luer connector projecting from the outlet on the distal end of the container, the male luer connector in fluid communication with the inner chamber of the container and engageable with a luer connector of a VAD, and a one-way valve engaged with the male luer connector, the one-way valve in fluid communication with the inner chamber of the container, the one-way valve preventing fluid flow in the direction outside the inner chamber to inside the inner chamber when the container is manually deformed and released;

providing a VAD having a proximal end, a distal end, and a passageway therethrough, the proximal end having a female luer tip in fluid communication with the passageway;

placing the distal end of the VAD in a blood vessel of a patient;

engaging the male luer connector of the container with the female luer of the VAD;

applying force to deform the container so that a flush solution located in the chamber flows through the one-way valve into the VAD; and

disengaging the male luer connector of the container from the female luer of the VAD.