

# Assessing Fluid Responsiveness in the MICU

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# Overview

## Scenario

Middle of the night in IVC. Patient who has been in the ICU for several days with shock has increasing vasopressors requirements. Senior (or fellow?) tells you to “go ultrasound the IVC”. Why?

# Overview

## The Goal

- Increase  $DO_2$  and tissue perfusion / oxygenation
  - $DO_2 = CO * CaO_2$
  - $DO_2 = (HR)(SV) * (1.34 * [Hgb] * SpO_2)$
- if we increase SV, we (may) increase CO and (maybe!)  $DO_2$
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# Overview

## Some Thoughts

Fluid responsiveness does not mean that a patient should be given fluids! However, if a patient has low CO and requires correction, fluid responsiveness means SV (and usually CO, unless HR falls) will improve if fluids are given