**Notes**: **Optimal cardiac output in sepsis**

Background

* Super-physiologic is damaging

Outcomes:

* How to measure to cardiac output?
* Clearance of lactic acid (variable sampling)
* Renal function
* Urine output

Cardiac Output = Stroke volume (pulse pressure) x HR

Investigate echo ejection fraction relationship with pulse pressure

* Model over time
* Variation of cardiac output over time
* Urine output vs lactate

*Previous project: Predict ejection fraction using response to fluids, vasopressors*

Cohort

* First 6 hours
* Echos ~ 1500 patients
* Sepsis on vasopressors

Confounders

* Vasopressors (Y/N) – there are different types
* Beta-blockers prior to ICU
* Sedation
* A-line or non-invasive pulse pressure
* Sepsis effect on myocardium (?)

Exclude

* Cardiac assault between echo and pulse pressure (stroke volume)

Action Items

1. (Evaluate relationship between steady-state pulse pressure and echo EF)
2. Dynamics of Cardiac Output over time within subsets echo EF (vasopressors Y/N, normal/abnormal EF, survivors/died)

**Next meeting: T.B.D**