SAINT JOSEPH MERCY HEALTH SYSTEM
A Member of Trinity Health

ST. JOSEPH MERCY ANN ARBOR
ST. JOSEPH MERCY LIVINGSTON
ST. JOSEPH MERCY SALINE

SEVERE SEPSIS CLINICAL PATHWAY

Room # ___________ ICU admission Date: ___________ Time: ___________

32011-011 R 12/09 (M)D

Please complete the following:

- **Severe sepsis or septic shock* diagnosis: Date:** ______________________ **Time:** __________________________
- Patient transferred from (unit or hospital): ____
- Patient was identified as having severe sepsis or septic shock: ❏ ED ❏ Floor ❏ ICU Admission ❏ During ICU Stay
- Decision to move to comfort care in first 24 hours after diagnosis Yes No
- ICU discharge: Date: ________________ Time: ________________
- Discharge status: Alive Expired

***Septic Shock defined as:**
SBP less than 90mmHg or 40mmHg decrease from baseline or MAP less than 65mmHg after 20ml/kg fluid bolus

****Vasopressor unresponsive defined as:**
Requiring vasopressors after fluid resuscitation completed.

Sepsis Daily Goals	Date______________________ __________ to __________ **0-1 Hours**	Date______________________ __________ to __________ **1-6 Hours**	Date______________________ __________ to __________ **6-24 Hours**	Date______________________ __________ to __________ **24-72 Hours**
1. Goal directed therapy to achieve increased O2 delivery: CVP 8-12mmHg on vent 12-15mmHg MAP greater than 65mmHg ScvO2 greater than or equal to 70% 2. Blood Glucose 90-140 mg/dl 3. Urine output greater than 0.5 ml/kg/hour 4. In patients with acute lung injury or ARDS; Yes No Patient on mechanical ventilator _______ PaO2 / FiO2 ratio Yes No Is tidal volume 6ml/kg of ideal body weight in first 24 hours? Yes No Are the static or plateau inspiratory pressures less than 30cmH2O in first 24 hours? 5.	______ Initial Labs: serum lactate, additional labs as ordered by physician Yes No Serum lactate drawn within 6 hours? Yes No Blood Cultures X 2 Time 1: __________ Time 2: __________ ______ Other Cultures: ______ Establish IV access ______ Volume resuscitate: initial 20ml/kg over 30 minutes then additional boluses as needed per order ______ Time 20 ml/kg bolus infused ______ Broad Spectrum Antibiotic-start after obtain blood culture (see Infonet under Pharmacy Guide to Antimicrobial Therapy) ______ Time antibiotic hung ______ Source Control	Refer to Severe Sepsis Resuscitation Algorithm Yes No Was initial lactate greater than 4mmol/L? Yes No Was patient hypotensive after initial fluid bolus? Yes No CVP placed If no, why? ________ ______________ _______ Time CVP placed (record first CVP reading prior to x-ray confirmation) Record the **FIRST TIME** the following is achieved: ______ CVP 8-12 mmHg on vent 12-15 mmHg ______ Optimized stroke volume (optional) ______ MAP greater than or equal to 65 mmHg ______ $SCVO_2$ greater than 70%: mixed venous greater than or equal to 65% ______ StO_2 greater than or equal to 75% (optional) Yes No Assess for risk factors for abdominal compartment syndrome	Yes No Is patient on vasopressor at greater than 6 hours Yes No Was patient assessed for Eligibility for Activated Protein C (Xigris) – (see Infonet under Pharmacy-Drug Information or speak to pharmacist) Yes No Was patient eligible for Activated Protein C? ______ If Xigris administered, Start Time: _________ Yes No Considered Hydrocortisone if vasopressor unresponsive** ______ If hydrocortisone administered, provide 50mg every 6 hours Start Time: _________ ______ Consider Vasopressin for refractory septic shock	______ Confirm Infectious Source ______ Re-assess need for broad spectrum antibiotics based on culture reports. Yes No NA Was the organism that was identified sensitive to the initial antibiotic? ______ Discontinue Vancomycin if appropriate ______ D/C or taper steriods if vasopressors off ______ Re-evaluate need for invasive lines and tubes ______ Nutrition Therapy
Signature, Date & Time — Nurse				
Nurse				
Physician				

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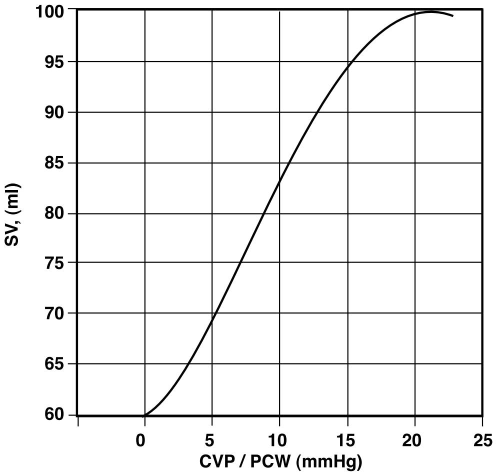

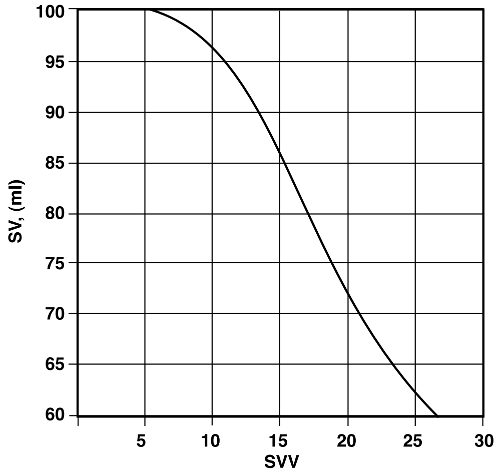

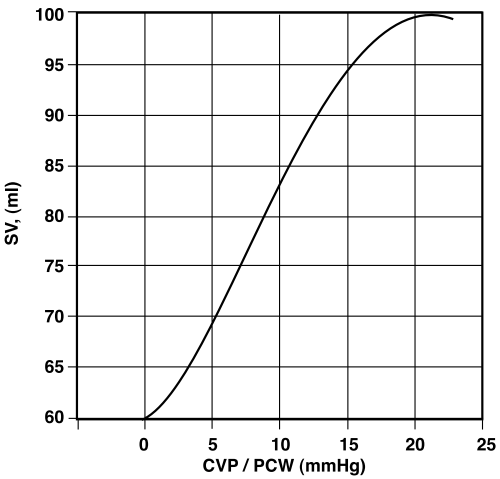

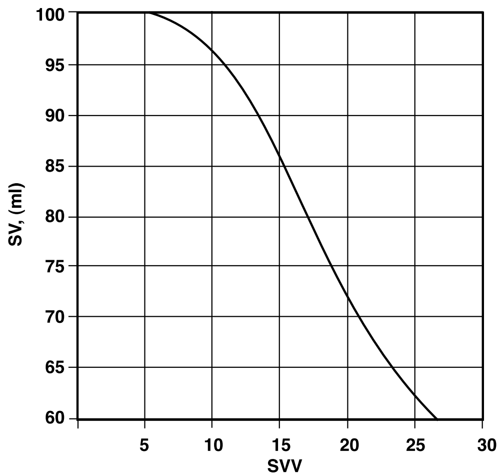

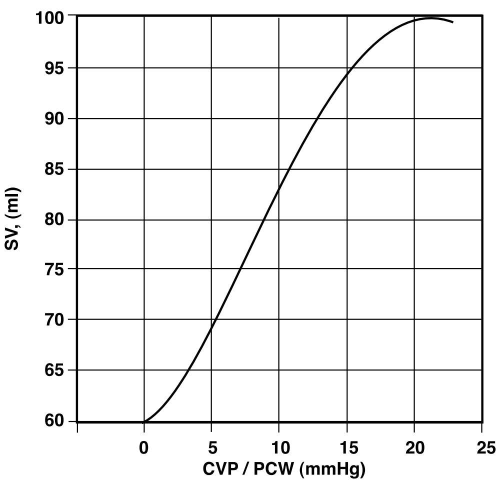

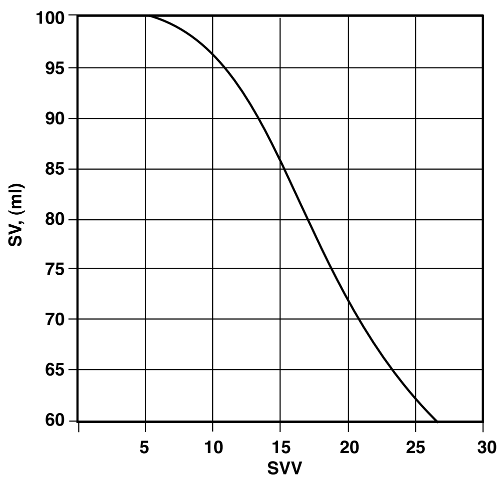

NORMALS

SV = 60-100 ml / beat
SVI = 25-45 ml / M^2
SVV = less than 15%
CI = 2.5-4.0 L / min / m^2
CO = 4-8 L / min

SV Optimized =

200-500 ml bolus over 10 minutes
with SV / SVI / CI less than 15% change

How to Optimize SV / SVI / CI

1) Plot initial SV and (CVP or SVV)
2) Give 200-500 ml isotonic fluid bolus over 10 minutes
3) Plot post bolus SV and (CVP or SVV)
4) If greater than 15% change, repeat step 2 until no longer see a greater than 15% change in SV / SVI / CI

A central line should be placed if a patient requires vasopressors for greater than 2 hours and/or a dose of greater than 10 mcq / min of Levophed
or
100 mcq / min of phenylephrine