

SEP-1 Additional Notes for Abstraction for Version 5.0b

| Data Element | Additional Guidance |
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| Administrative Contraindication to Care | <ul style="list-style-type: none"> Documentation of patient or surrogate decision-maker refusal of blood draws, IV fluid administration, or IV antibiotic administration is acceptable. Documentation of refusal of care, refusal of medications, or refusal of treatment is acceptable. |
| Blood Culture Collection Date | <ul style="list-style-type: none"> If there is an attempt, or multiple attempts to collect a blood culture in the time window 48 hours prior to or 3 hours following presentation of severe sepsis, use the date of the earliest attempt regardless of whether or not it was successful. |
| Blood Culture Collection Time | <ul style="list-style-type: none"> If there is an attempt, or multiple attempts to collect a blood culture in the time window 48 hours prior to or 3 hours following presentation of severe sepsis, use the time of the earliest attempt regardless of whether or not it was successful. |
| Broad Spectrum or Other Antibiotic Administration | <ul style="list-style-type: none"> Documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record can be used. |
| Broad Spectrum or Other Antibiotic Administration Date | <ul style="list-style-type: none"> Documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record can be used. |
| Broad Spectrum or Other Antibiotic Administration Time | <ul style="list-style-type: none"> Documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record can be used. |
| Capillary Refill Examination Performed | <ul style="list-style-type: none"> Assessment of circulatory adequacy may include or make reference to peripheral perfusion. |
| Central Venous Oxygen Measurement | <ul style="list-style-type: none"> The timeframe for this data element is within 6 hours after the presentation of septic shock. If there are multiple central venous oxygen measurements, abstract the first one that occurs after the time and date of septic shock presentation. Documentation such as via “central catheter,” “CVP catheter,” or “central venous oximetry catheter” with an oxygen reading or the oxygen reading recorded on a flow sheet, in an area designated for central venous catheter readings, is acceptable. |
| Central Venous Oxygen Measurement Date | <ul style="list-style-type: none"> The timeframe for this data element is within 6 hours after the presentation of septic shock. Documentation such as via “central catheter,” “CVP catheter,” or “central venous oximetry catheter” with an oxygen reading or the oxygen reading recorded on a flow sheet, in an area designated for central venous catheter readings, is acceptable. |
| Central Venous Oxygen Measurement Time | <ul style="list-style-type: none"> The timeframe for this data element is within 6 hours after the presentation of septic shock. Documentation such as via “central catheter,” “CVP catheter,” or “central venous oximetry catheter” with an oxygen reading or the oxygen reading recorded on a flow sheet, in an area designated for central venous catheter readings, is acceptable. A vital signs flow sheet is an acceptable data source. |

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| Crystalloid Fluid Administration | <ul style="list-style-type: none"> • Crystalloid fluids given based on physician/APN/PA documentation of severe sepsis or septic shock is acceptable. • Physician/APN/PA orders are required for the fluids. The order must include the type of fluid, the volume of fluid, and a rate or time over which the fluids are to be given. If the type of fluid, the volume of fluid, rate or time over which to give the fluids is missing, choose Value “2.” • The volume of crystalloid fluids ordered may be in a single order or a series of multiple orders. If the total volume of crystalloid fluids ordered is less than 30 mL/kg, choose Value “2.” • Use the weight documented closest and prior to the order for crystalloid fluids. If a weight is not documented prior to the crystalloid fluid order, use the weight recorded closest to and after the crystalloid fluid order. • Use the patient’s actual weight. Use estimated weight only if actual weight is not available. Do not use ideal weight. • Documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record can be used. |
| Crystalloid Fluid Administration Date | <ul style="list-style-type: none"> • If a single order is written for the entire 30 mL/kg volume, use the date the crystalloid solution was started as an IV infusion. • If a single order for the equivalent of 30 mL/kg is written and the infusion is given over multiple infusions, use the start date of the first crystalloid fluid infusion. • If multiple orders are written that total 30 mL/kg or more, use the start date of the crystalloid fluid infusion that completes the 30 mL/kg volume. • If a crystalloid infusion is running at a maintenance rate (125 mL/hour or less) and the rate is increased to administer the 30 mL/kg, use the date the infusion rate is increased. • In some cases, the crystalloid fluid will be infusing prior to the time of presentation of septic shock; if so, use the date the unit of fluid was started or hung. <p>Example: Septic Shock presentation date and time was 08-15-20xx at 01:00. The patient needs to receive 3000 mL (30 mL/kg). An order for 3000 mL of 0.9% Normal Saline over 2 hours is written. The total volume is given as 3 separate infusions of 1000 mL each. The first of the three infusions is on 08-14-20xx at 22:00. The Crystalloid Fluid Administration Date was 08-14-20xx.</p> <p>Example: Septic Shock presentation date and time was 08-15-20xx at 01:00. The patient needs to receive 3000 mL (30 mL/kg). An order for 1000 mL of 0.9% Normal Saline over 60 minutes is written and started on 08-14-20xx at 22:00. An order for another 1000 mL of Normal Saline is written and started on 08-14-20xx at 23:15. A third order for 1000 mL of Normal Saline is written and started on 08-15-20xx at 00:30. The Crystalloid Fluid Administration Date was 08-15-20xx.</p> |

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| Crystalloid Fluid Administration Time | <ul style="list-style-type: none"> • If a single order is written for the entire 30 mL/kg volume, use the time the crystalloid solution was started as an IV infusion. • If a single order for the equivalent of 30 mL/kg is written and the infusion is given over multiple infusions, use the start time of the first crystalloid fluid infusion. • If multiple orders are written that total 30 mL/kg or more, use the start time of the crystalloid fluid infusion that completes the 30 mL/kg volume. • If a crystalloid infusion is running at a maintenance rate (125 mL/hour or less) and the rate is increased to administer the 30 mL/kg, use the time the infusion rate is increased. • In some cases, the crystalloid fluid will be infusing prior to the time of presentation of septic shock; if so, use the time the unit of fluid was started or hung. <p>Example: Septic Shock presentation date and time was 08-15-20xx at 01:00. The patient needs to receive 3000 mL (30 mL/kg). An order for 3000 mL of 0.9% Normal Saline over 2 hours is written. The total volume is given as 3 separate infusions of 1000 mL each. The first of the three infusions is on 08-14-20xx at 22:00. The Crystalloid Fluid Administration Time was at 22:00.</p> <p>Example: Septic Shock presentation date and time was 08-15-20xx at 01:00. The patient needs to receive 3000 mL (30 mL/kg). An order for 1000 mL of 0.9% Normal Saline over 60 minutes is written and started on 08-14-20xx at 22:00. An order for another 1000 mL of Normal Saline is written and started on 08-14-20xx at 23:15. A third order for 1000 mL of Normal Saline is written and started on 08-15-20xx at 00:30. The Crystalloid Fluid Administration Time was at 00:30.</p> |
| Discharge Time | <ul style="list-style-type: none"> • If the patient was transferred out to another facility or to home, use the time the patient actually left, not the time the order was written. • If there are multiple times documented when the patient left, use the earliest time. |
| Fluid Challenge Performed | <ul style="list-style-type: none"> • A fluid challenge is separate from the crystalloid fluid administration. • A fluid challenge uses crystalloid fluid volumes between 500 mL to 1000 mL given over 15 to 30 minutes. |
| Initial Lactate Level Collection | <ul style="list-style-type: none"> • Lactic acid drawn is acceptable. |
| Initial Lactate Level Date | <ul style="list-style-type: none"> • Use documentation specifying the date lactate was actually drawn or collected. • Lactic acid drawn is acceptable. |
| Initial Lactate Level Result | <ul style="list-style-type: none"> • Lactate results are acceptable. • Lactic acid results are acceptable. |
| Initial Lactate Level Time | <ul style="list-style-type: none"> • Use documentation specifying the time lactate was actually drawn or collected. • Lactic acid drawn is acceptable. |

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| Persistent Hypotension | <ul style="list-style-type: none"> • Determine the completion time of crystalloid fluids: Example: Based on the patient's weight, the target volume of 30 mL/kg to be infused is 1800 mL. The physician order is for 2000 mL over 2 hours. The infusion is started at 10:30. To determine how long it will take to infuse 1800 mL: <ol style="list-style-type: none"> 1. Divide the total volume ordered by the infusion duration ordered to determine the infusion rate. 2000 mL/120 minutes = 16.67 mL/min. 2. Divide the volume to be infused by the infusion rate to determine how long it will take to infuse. 1800 mL/16.67 mL/min = 108 minutes. 3. Add 108 minutes to the start time to determine when 1800 mL was infused. 10:30 + 108 minutes = 12:18. The time window for determining if persistent hypotension is present is from 12:18 to 13:18. • If there is only one blood pressure reading recorded in the hour following conclusion of 30 mL/kg of crystalloid fluids, and it is either a SBP \geq 90 or a MAP \geq 65, select Allowable Value "2." • If there is only one blood pressure reading recorded in the hour following conclusion of 30 mL/kg of crystalloid fluids, and it is either a SBP $<$ 90 or a MAP $<$ 65, select Allowable Value "3." • If there is more than one SBP reading recorded in the hour following conclusion of 30 mL/kg of crystalloid fluids, and only one is $<$ 90, OR if there is more than one MAP reading recorded and only one is $<$ 65, select Allowable Value "3." • Physician/APN/PA documentation must be present in the medical record indicating a $>$40 mmHg decrease in SBP has occurred and is related to infection, severe sepsis or septic shock and not other causes. |
| Repeat Lactate Level Collection | <ul style="list-style-type: none"> • A repeat lactate level is indicated if the initial lactate level is elevated ($>$ 2.0 mmol/L). • Lactic acid drawn is acceptable. |
| Repeat Lactate Level Date | <ul style="list-style-type: none"> • A repeat lactate level is indicated if the initial lactate level is elevated ($>$ 2.0 mmol/L). • Lactic acid drawn is acceptable. |
| Repeat Lactate Level Time | <ul style="list-style-type: none"> • A repeat lactate level is indicated if the initial lactate level is elevated ($>$ 2.0 mmol/L). • Lactic acid drawn is acceptable |
| Septic Shock Present | <ul style="list-style-type: none"> • In order to determine if hypotension persists in the hour after the conclusion of the 30 mL/kg Crystalloid Fluid Administration, there must be two or more consecutive blood pressure readings. • In order to determine if there was a decrease in SBP of $>$40 mmHg, there must be Physician/APN/PA documentation in the medical record indicating a $>$40 mmHg decrease in SBP has occurred and is related to infection, severe sepsis or septic shock and not other causes. • Documentation of Severe Sepsis with Septic Shock is acceptable. |
| Septic Shock Presentation Date | <ul style="list-style-type: none"> • In order to determine if hypotension persists in the hour after the conclusion of the 30 mL/kg Crystalloid Fluid Administration, there must be two or more consecutive blood pressure readings. • In order to determine if there was a decrease in SBP of $>$40 mmHg, there must be Physician/APN/PA documentation in the medical record indicating a $>$40 mmHg decrease in SBP has occurred and is related to infection, severe sepsis or septic shock and not other causes. |

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| Septic Shock Presentation Time | <ul style="list-style-type: none"> In order to determine if hypotension persists in the hour after the conclusion of the 30 mL/kg Crystalloid Fluid Administration, there must be two or more consecutive blood pressure readings. In order to determine if there was a decrease in SBP of >40 mmHg, there must be Physician/APN/PA documentation in the medical record indicating a >40 mmHg decrease in SBP has occurred and is related to infection, severe sepsis or septic shock and not other causes. |
| Severe Sepsis Present | <p><i>All Criteria:</i></p> <ul style="list-style-type: none"> Clinical criteria for severe sepsis do not need to be met in any particular order. <p><i>Organ Dysfunction:</i></p> <ul style="list-style-type: none"> Physician/APN/PA documentation must be present in the medical record indicating a >40 mmHg decrease in SBP has occurred and is related to infection, severe sepsis or septic shock and not other causes. For acute respiratory failure as a sign of organ dysfunction: <ul style="list-style-type: none"> There must be documentation of “acute respiratory failure.” There must be documentation the patient is on mechanical ventilation. BiPAP and CPAP are both acceptable for non-invasive ventilation. If the patient is on BiPAP, CPAP or mechanical ventilation at home, it cannot be used for a sign of organ dysfunction. Do not calculate a mean arterial pressure (MAP) that was not recorded as a MAP in the medical record. <p><i>Documentation of suspected source of clinical infection:</i></p> <ul style="list-style-type: none"> Documentation of sepsis can be used as a sign of infection, because sepsis is caused by an infection. Conditions or diseases that are an infection, could be an infection, are caused by an infection, or could be caused by an infection are acceptable as a suspected infection. <p><i>Physician documentation of Severe Sepsis:</i></p> <ul style="list-style-type: none"> Documentation of sepsis is not an acceptable alternative for documentation of severe sepsis. Documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record is acceptable for determining presence of severe sepsis. |
| Severe Sepsis Presentation Date | <ul style="list-style-type: none"> Documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record is acceptable for determining presence of severe sepsis. |
| Severe Sepsis Presentation Time | <ul style="list-style-type: none"> Documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record is acceptable for determining presence of severe sepsis. |
| Transfer From Another Hospital or ASC | <ul style="list-style-type: none"> Select “No” in the following types of transfers: <ul style="list-style-type: none"> Assisted living facilities and nursing homes |
| Vasopressor Administration | <ul style="list-style-type: none"> The time frame for this data element begins at septic shock presentation and ends 6 hours after the presentation of septic shock. Acceptable examples of vasopressor administration include: “vasopressor running” and “vasopressor given.” Dobutrex is not an acceptable vasopressor, as it is not on the list of acceptable vasopressors contained in Appendix C, Table 5.2. |

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| Vasopressor Administration Date | <ul style="list-style-type: none"> • The time frame for this data element begins at septic shock presentation and ends 6 hours after the presentation of septic shock. • Acceptable examples of vasopressor administration include: “vasopressor running” and “vasopressor given.” • Dobutrex is not an acceptable vasopressor, as it is not on the list of acceptable vasopressors contained in Appendix C, Table 5.2. |
| Vasopressor Administration Time | <ul style="list-style-type: none"> • The time frame for this data element begins at septic shock presentation and ends 6 hours after the presentation of septic shock. • Acceptable examples of vasopressor administration include: “vasopressor running” and “vasopressor given.” • Dobutrex is not an acceptable vasopressor, as it is not on the list of acceptable vasopressors contained in Appendix C, Table 5.2. |
| Vital Signs Review Performed | <p>The last bullet point in the Notes for Abstraction references the time frame as “after conclusion of the crystalloid fluid infusion and within six hours after the septic shock presentation date and time.” This is in error and inconsistent with the time frame in the definition and Allowable Values.</p> <ul style="list-style-type: none"> • The time frame for this data element is from the <i>Crystalloid Fluid Administration Date and Time</i> and ending six hours after <i>Septic Shock Presentation Date and Time</i>. |