

**5801****Prehospital
Ultrasound
(POCUS)****Treatment Policy LOSOP**Last Reviewed: **May 16, 2024**Last Revised: **January 16, 2025****PURPOSE**

Paramedics approved by REMSA may, while on duty with a participating provider agency, use agency provided portable ultrasound devices as an additional means of patient assessment. Ultrasound exams will be focused and limited to identification of findings of concern (FOC) as specified.

General Considerations

1. FOCs are specific ultrasonographic findings that give rise to suspicion for an active pathologic process warranting further assessment and evaluation.
2. FOCs indicate suspicion of a condition, not confirmation, unless verified by a physician on review of the exam images and/or patient evaluation.
 - Paramedics may make use of ultrasound FOC to improve resuscitative efforts and as a means of verifying absent cardiac activity when terminating resuscitation in the field.
 - Paramedics should communicate FOC to patients and the receiving emergency department to facilitate FOC verification and ongoing care.
 - Patients will be informed that if an exam does not reveal a FOC that the paramedic is unable to exclude underlying illness or injury.
 - Required reporting and documentation shall be completed for all ultrasound exams performed or attempted.
3. Perform primary and secondary assessments as clinically indicated.
 - If patient meets specialty destination criteria for STEMI care, proceed with treatment(s) and transport in accordance with REMSA Policy 4401 (*Suspected Acute Coronary Syndrome*).
 - If patient meets specialty destination criteria for stroke care, proceed with treatment(s) and transport in accordance with REMSA Policy 4502 (*Suspected Stroke*).
 - If patient meets specialty destination criteria for trauma care, proceed with treatment(s) and transport in accordance with REMSA Policy 5301 (*Trauma Triage Indicators and Destination*).
4. **Do not delay transport while attempting to complete an ultrasound; it may be performed during transit.**
5. For patients meeting indications for exams as follows, inform patient of intended use of ultrasound as an additional assessment tool. Paramedics must explain that the exam will evaluate for FOC and that the exam will not be used to confirm the absence of a medical condition.
6. The only REMSA approved POCUS device is the Butterfly IQ (<https://www.butterflynetwork.com/education>)

Inclusion Criteria

1. **Cardiac: Adult and Pediatric** patients in cardiac arrest
 - Adjunct assessment for cardiac activity during scheduled pulse checks
 - Use as adjunct in termination of resuscitation is limited to **adult patients only**
2. **Abdominal Right Upper Quadrant:** Adult (15 yrs or greater) blunt or penetrating trauma to chest and/or abdomen
 - Adjunct for detection of intra-abdominal bleeding
3. **Pulmonary:** Adult (15 yrs or greater) Presentation concerning for tension pneumothorax
 - Absent or decreased breath sounds **AND**
 - Signs of hemodynamic compromise (shock)

Refusal of Treatment and Transport

Ultrasound may be used as an adjunct tool for assessment in patients refusing treatment and transport to evaluate for FOC.

- A release of liability, or refusal of treatment, is not required when patients refuse an ultrasound exam.
- Base hospital personnel may not order an ultrasound exam as a required element of evaluation prior to supporting a patient's request to refuse treatment and/or transport.

Use of REMSA Policy 4107 (*Refusal of Treatment and/or Transport*) will not be affected by patient's who refuse an ultrasound exam.

Base Hospital

- Base Hospitals may consider reported ultrasound findings for decision making in consultation with the Base Hospital Physician. For transported patients, visual presentation of acquired images to receiving emergency department physician upon arrival is strongly encouraged. This shall be documented in the patient care record.
- MICNs/Base Hospital Physicians may confirm if paramedic is trained and equipped with ultrasound. If confirmed, they may request use of ultrasound under this policy.
- MICN will document paramedic ultrasound status of EMS crew and if ultrasound was or was not attempted if indicated.

Documentation/CQI

- All use of paramedic ultrasound will be recorded in the Actions Panel of the patient care record.
- EMS crews shall record the performing paramedic, patient complaint, exam type and findings for QI review.
- The EMS Coordinator for participating agencies shall utilize REMSIS ImageTrend and review 100% of cases and participate with quarterly scheduled case review sessions.
- CQI of Ultrasound usage must be included in the agency CQI plan.
- All scans must be loaded to the Butterfly Cloud and labeled appropriately for QI review
- Participating agencies shall log all ultrasound use cases and maintain internal records for individual performing paramedics along with the type of exam, exam FOC identified and whether these were validated on physician review.
- Logs shall be provided to REMSA upon request and as scheduled in coordination with REMSA.