

# Emergency Ultrasound Standard Reporting Guidelines

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*(This version replaces the October 2011 version)*

**Emergency Ultrasound Standard Reporting Guidelines: Introduction and Statement of Purpose***Developed by members of the ACEP Emergency Ultrasound Section*

These guidelines represent the product of a working group that was formed based on discussions at the Industry Roundtable subcommittee of the American College of Emergency Physicians (ACEP) Emergency Ultrasound Section. The impetus for these guidelines emerged from discussions with emergency ultrasound leaders and industry, both ultrasound manufacturers and electronic medical record (EMR) companies that indicated a need for a more structured method to report and communicate the findings of point-of-care emergency ultrasound (POCUS).

This document serves as a resource to clinicians with a wide range of experience, and as such may contain fields or terms that may not be appropriate in all situations or by all clinicians. It is important to note that these guidelines in no way represent required elements of reporting. In fact, in general these guidelines err on the side of including more fields than may be used by most emergency physicians, and it is expected that many fields may remain unused depending on the situations. The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

The purpose of these guidelines is to define fields that may be helpful for POCUS in a consistent order, with consistent definitions, and in a method that may be easily coded into electronic communications and computer databases. The goal of this document is to accurately report the findings that commonly result from an ultrasound performed by a clinician in the emergency department and to avoid confusion with reports generated by other specialties. These guidelines may be used to work with existing reporting structures such as DICOM and initiatives through the Integrated Health Enterprise (IHE) to develop consistent non-proprietary methods of reporting and communicating POCUS examination findings.

Exams delineated in prior editions:

eFAST	Focused Biliary
Focused Abdominal Aorta	Focused Ocular
Focused Cardiac (Echocardiography)	Focused Pelvic Ultrasound <ul style="list-style-type: none"> <li>• Obstetrical</li> <li>• Non-obstetrical</li> </ul>
Focused Thoracic	Focused Soft Tissue/MSK
Focused Renal/Urinary Tract	Focused Lower Extremity Venous

For guidelines related to Ultrasound-Guided Procedures, please refer to the ACEP document: Standard Reporting Guidelines: Ultrasound for Procedure Guidance, published May 2015.

In this 2018 version, the following examinations were added:

- Bowel
- Symptom-based hybrid evaluations (hypotension, chest pain & dyspnea, abdominal pain)
- Testicular
- Transesophageal Echocardiography

**FORMAT**

All diagnostic examinations should include:

- Patient/exam demographics
- Indications for examination
- Views
- Findings
- Interpretation
- Quality assurance

**SAMPLE COMMON REPORT FORMAT**

The first and last portions should be consistent across exam types and are presented here.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (i.e., CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

**EXTENDED FAST (EFAST) EXAM**

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

blunt trauma

penetrating trauma

abdominal pain

chest pain

hypotension

other: \_\_\_\_\_

tachycardia

dyspnea

altered mental status

pregnancy

educational

**Views:**

Hepatorenal &lt; adequate &lt; limited &lt; not obtained

Perisplenic &lt; adequate &lt; limited &lt; not obtained

Suprapubic &lt; adequate &lt; limited &lt; not obtained

Pericardial &lt; adequate &lt; limited &lt; not obtained

R thorax for fluid &lt; adequate &lt; limited &lt; not obtained

R thorax for lung sliding &lt; adequate &lt; limited &lt; not obtained

L thorax for fluid &lt; adequate &lt; limited &lt; not obtained

L thorax for lung sliding &lt; adequate &lt; limited &lt; not obtained

other: \_\_\_\_\_

**Findings:**

Hepatorenal free fluid: &lt; absent &lt; present &lt; indeterminate

Perisplenic free fluid: &lt; absent &lt; present &lt; indeterminate

Suprapubic free fluid: &lt; absent &lt; present &lt; indeterminate

Right thoracic fluid: &lt; present &lt; absent &lt; indeterminate

**Right lung sliding:** < present < absent < indeterminate  
     lung point sign < yes < no  
**Left thoracic fluid:** < present < absent < indeterminate  
**Left lung sliding:** < present < absent < indeterminate  
     lung point sign < yes < no  
**Pericardial effusion:** < present < absent < indeterminate  
     size if present < small < moderate < large < present size not specified

other: \_\_\_\_\_

**Interpretation:**

**Peritoneal free fluid:** < present < absent < indeterminate  
**Pericardial effusion:** < present < absent < indeterminate  
**Right thoracic fluid:** < present < absent < indeterminate  
**Left thoracic fluid:** < present < absent < indeterminate  
**Right lung pneumothorax:** < present < absent < indeterminate  
**Left lung pneumothorax:** < present < absent < indeterminate

other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable structures, no objective data can be gathered	Minimally recognizable structures but insufficient for diagnosis	Minimal criteria met for diagnosis, recognizable structures but with some technical or other flaws	Minimal criteria met for diagnosis, all structures imaged well and diagnosis easily supported	Minimal criteria met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

**FOCUSED ABDOMINAL AORTA**

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

abdominal pain	syncope
chest pain	hypotension
back pain	tachycardia
flank pain	educational
pulsatile abdominal mass	
other: _____	

**Views:**

<b>Proximal Transverse view:</b>	< complete	< inadequate
<b>Distal Transverse view:</b>	< complete	< inadequate
<b>Sagittal view:</b>	< complete	< inadequate
Celiac artery:	< visualized	< not visualized
Superior mesenteric artery:	< visualized	< not visualized
Bifurcation:	< visualized	< not visualized

**Findings:**

<b>Aneurysm:</b>	< present	< absent	< indeterminate	
If present:	suprarenal	infrarenal	both	iliac
Maximal aortic diameter:	_____cm			
other:	_____			

**Interpretation:**

**Sonographic Evidence for Aneurysm: < present < absent < indeterminate**

**If present: \_\_\_\_\_cm transverse diameter**

**other: \_\_\_\_\_**

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

## FOCUSED OBSTETRICAL PELVIC ULTRASOUND

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender:    M    F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

    Diagnostic

    Educational

    Procedural

Clinical category:

    Resuscitative

    Symptom based

    Therapeutic

    Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

qualitative (urine) hCG positive

quantitative hCG positive

    Level: \_\_\_\_

pregnant by patient history

abdominal pain

pelvic pain

other: \_\_\_\_\_

back pain

vaginal bleeding

syncope

hypotension

trauma

educational

**Views obtained:**

<b>Transabdominal sagittal</b>	<b>&lt; adequate</b>	<b>&lt; limited</b>	<b>&lt; not obtained</b>
<b>Transabdominal transverse</b>	<b>&lt; adequate</b>	<b>&lt; limited</b>	<b>&lt; not obtained</b>
<b>Endovaginal sagittal</b>	<b>&lt; adequate</b>	<b>&lt; limited</b>	<b>&lt; not obtained</b>
<b>Endovaginal coronal</b>	<b>&lt; adequate</b>	<b>&lt; limited</b>	<b>&lt; not obtained</b>
Cul-de-sac	adequate	limited	not obtained
Left adnexa	adequate	limited	not obtained
Right adnexa	adequate	limited	not obtained
Hepatorenal space	adequate	limited	not obtained
other: _____			



**Findings:**

Uterus:	anteverted	retroverted	indeterminate
Cul-de-sac:	fluid present	no significant fluid	indeterminate
If fluid present:	small	moderate	large amount not specified

**Intrauterine Pregnancy:**      < present      < absent      < indeterminate

**If present:**

< **Yolk sac**                      Yolk sac diameter: \_\_\_mm  
 < **Fetal pole**                      **Measurement: \_\_\_mm**  
 < **Fetal heart**                      **FHR: \_\_\_bpm**  
 < **Fetal motion**  
     Double decidual sign  
     Gestational sac  
         Diameter: \_\_\_\_\_mm

For IUP:

Location:	fundus	eccentric	indeterminate
Myometrial mantle:	adequate	inadequate	indeterminate
Minimal thickness:	_____mm		
Crown-rump-length:	_____mm		
Biparietal diameter:	_____mm		
Gestational age:	_____w _____d		

other: \_\_\_\_\_

For No IUP

Intrauterine contents:      indeterminate  
    empty/endometrial stripe  
    non-specific endometrial fluid collection  
    heterogeneous endometrial material  
    molar pregnancy

other: \_\_\_\_\_

R adnexa:

no significant abnormality  
 ovarian cyst  
     Diameter: \_\_\_mm  
     Simple      complex  
 ovarian mass  
 indeterminate

other: \_\_\_\_\_

L adnexa:

no significant abnormality  
 ovarian cyst  
     Diameter: \_\_\_mm  
     Simple      complex  
 ovarian mass  
 indeterminate

other: \_\_\_\_\_

Hepatorenal space fluid:                      absent                      present                      indeterminate

other: \_\_\_\_\_

**Interpretation:**

- < **no definitive intrauterine pregnancy**
- < **intrauterine pregnancy**
- < **live intrauterine pregnancy**
- < **indeterminate**
- abnormal intrauterine pregnancy
- < **molar pregnancy**
- fetal demise
- definite ectopic
- simple ovarian cyst
- complex ovarian cyst
- adnexal mass
- free pelvic fluid
- free intraperitoneal fluid

other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_



Cul-de-sac: fluid present no significant fluid indeterminate  
 If fluid present: small moderate large amount not specified  
 simple complex

R adnexa:

ovarian size: normal enlarged indeterminate  
 length: \_\_\_ mm width: \_\_\_ mm height: \_\_\_ mm  
 volume: \_\_\_ ml  
 ovarian cyst  
 Diameter: \_\_\_ mm  
 simple complex  
 Color flow: present absent indeterminate not obtained  
 Spectral flow: present absent indeterminate not obtained  
 Resistive index: \_\_\_\_\_  
 ovarian mass  
 indeterminate

L adnexa:

ovarian size: normal enlarged indeterminate  
 length: \_\_\_ mm width: \_\_\_ mm height: \_\_\_ mm volume: \_\_\_ ml  
 ovarian cyst  
 Diameter: \_\_\_ mm  
 simple complex  
 Color flow: present absent indeterminate not obtained  
 Spectral flow: present absent indeterminate not obtained  
 Resistive index: \_\_\_\_\_  
 ovarian mass  
 indeterminate

other: \_\_\_\_\_

**Interpretation:**

No sonographic evidence of gynecological pathology.  
 ovarian cyst: simple complex  
 sonographic evidence suggestive of ovarian torsion  
 adnexal mass  
 fibroid(s)  
 sonographic evidence of abnormal free fluid in the pelvis  
 other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality            1            2            3            4            5

Accuracy of interpretation of images as presented

TP      TN    FP      FN

Accuracy of interpretation of images as compared to  
gold standard (ie, CT, operative report)

TP      TN    FP      FN

Comments: \_\_\_\_\_

**FOCUSED BILIARY**

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

abnormal labs	pancreatitis
abdominal pain	fever
jaundice	educational
other: _____	

**Views obtained:**

<b>Gallbladder long axis:</b>	< <b>adequate</b>	< <b>limited</b>	< <b>not obtained</b>
<b>Gallbladder short axis:</b>	< <b>adequate</b>	< <b>limited</b>	< <b>not obtained</b>
Common bile duct:	adequate	limited	not obtained
Main lobar fissure:	visualized	not visualized	
Portal vein:	visualized	not visualized	

**Findings:**

<b>Gallstone(s):</b>	< <b>present</b>	< <b>absent</b>	< <b>indeterminate</b>
If stones present:	single		
	multiple		
	largest measured: _____mm		
	mobile		
	non-mobile		
	in fundus		
	in body		
	in neck		



**FOCUSED RENAL/URINARY TRACT**

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

abdominal pain

flank pain

back pain

hematuria

urinary retention

other: \_\_\_\_\_

dysuria

acute renal failure

anuria

post-void

educational

**Views obtained:****Right kidney long axis (coronal):**

&lt; adequate

&lt; limited

&lt; not obtained

**Right kidney short axis:**

&lt; adequate

&lt; limited

&lt; not obtained

**Left kidney long axis (coronal):**

&lt; adequate

&lt; limited

&lt; not obtained

**Left kidney short axis:**

&lt; adequate

&lt; limited

&lt; not obtained

**Transverse bladder:**

&lt; adequate

&lt; limited

&lt; not obtained

**Sagittal bladder:**

&lt; adequate

&lt; limited

&lt; not obtained

other: \_\_\_\_\_

**Findings:****Right kidney****Hydronephrosis:**

&lt; present

&lt; absent

&lt; indeterminate

**If present: < mild**

&lt; moderate

&lt; severe

&lt; present degree unspecified

Hydroureter:

present

absent

indeterminate

Kidney stones:

present

absent

indeterminate



If present: size of largest stone: \_\_\_\_\_ mm  
 stone location(s):  
 parenchyma  
 renal pelvis  
 UPJ  
 Ureter  
 UVJ

Renal Cyst present absent indeterminate  
 If present: < mild < moderate < severe  
 Diameter: \_\_\_\_\_ mm

Extra-renal Pelvis present absent indeterminate  
 Duplicated Ureteral System present absent indeterminate

other: \_\_\_\_\_

**Left kidney**

**Hydronephrosis:** < present < absent < indeterminate  
**If present:** < mild < moderate < severe < present degree unspecified  
 Hydroureter: present absent indeterminate  
 Kidney stones: present absent indeterminate  
 If present: size of largest stone: \_\_\_\_\_ mm

stone location(s):  
 parenchyma  
 renal pelvis  
 UPJ  
 Ureter  
 UVJ

Renal Cyst present absent indeterminate  
 If present: < mild < moderate < severe  
 Diameter: \_\_\_\_\_ mm

Extra-renal Pelvis present absent indeterminate  
 Duplicated Ureteral System present absent indeterminate

other: \_\_\_\_\_

**Bladder Dimensions**

**width:** \_\_\_\_\_ mm    **Height:** \_\_\_\_\_ mm    **depth:** \_\_\_\_\_ mm    **volume:** \_\_\_\_\_ mL  
 Right ureteral jet: present absent indeterminate not assessed  
 Left ureteral jet: present absent indeterminate not assessed

other: \_\_\_\_\_

**Interpretation:**

< No sonographic evidence of renal tract obstruction  
 < Hydronephrosis present < left < right < bilateral  
     < mild < moderate < severe < present, degree not specified  
 Hydroureter present left right bilateral  
 Nephrolithiasis left right bilateral  
 parenchyma  
 UPJ  
 UVJ  
 Renal Cyst left right bilateral  
     Simple complex  
 < Bladder Size < distended < collapsed < normal

other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable structures, no objective data can be gathered	Minimally recognizable structures but insufficient for diagnosis	Minimal criteria met for diagnosis, recognizable structures but with some technical or other flaws	Minimal criteria met for diagnosis, all structures imaged well and diagnosis easily supported	Minimal criteria met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

**FOCUSED THORACIC**

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

dyspnea

chest pain

pleurisy

hypoxia

other: \_\_\_\_\_

hypotension

blunt thoracic trauma

penetrating thoracic trauma

educational

**Views:****Right anterior/ superior thorax:** < adequate < limited < not obtained**Right lateral/ inferior thorax:** < adequate < limited < not obtained**Left anterior/ superior thorax:** < adequate < limited < not obtained**Left lateral/ inferior thorax:** < adequate < limited < not obtained

other: \_\_\_\_\_

**Findings:****Right thorax****lung sliding:** < present < absent < indeterminate

lung point sign: present absent indeterminate

Interstitium:

a-lines: present absent indeterminate

b-lines: present absent indeterminate

anterior/ superior region: present (greater than 3 per view) absent

inferior/ lateral region: present (greater than 3 per view) absent

**pleural effusion:** < present < absent < indeterminate

<b>If present:</b>	<b>&lt; small</b>	<b>&lt; large</b>	<b>&lt; anechoic</b>	<b>&lt; complex</b>
Lung consolidation:		present	absent	indeterminate
Air bronchograms:		present	absent	indeterminate

**Left thorax**

<b>lung sliding:</b>		<b>&lt; present</b>	<b>&lt; absent</b>	<b>&lt; indeterminate</b>
lung point sign:		present	absent	indeterminate
Interstitium:				
a-lines:		present	absent	indeterminate
b-lines:		present	absent	indeterminate
anterior/ superior region:		present (greater than 3 per view)		absent
inferior/ lateral region:		present (greater than 3 per view)		absent
<b>pleural effusion:</b>		<b>&lt; present</b>	<b>&lt; absent</b>	<b>&lt; indeterminate</b>
<b>If present:</b>	<b>&lt; small</b>	<b>&lt; large</b>	<b>&lt; anechoic</b>	<b>&lt; complex</b>
Lung consolidation:		present	absent	indeterminate
Air bronchograms:		present	absent	indeterminate

other: \_\_\_\_\_

**Interpretation:**

<b>&lt; No sonographic evidence of acute pulmonary disease</b>				
<b>&lt; Pneumothorax</b>	<b>&lt; left</b>	<b>&lt; right</b>	<b>&lt; bilateral</b>	
<b>&lt; Pleural effusion</b>	<b>&lt; left</b>	<b>&lt; right</b>	<b>&lt; bilateral</b>	
Alveolar interstitial syndrome (focal)				
Alveolar interstitial syndrome (diffuse)				
Lung consolidation	left	right	bilateral	
other:	_____			

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

**FOCUSED LOWER EXTREMITY VENOUS**

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

leg pain: left right bilateral

leg swelling: left right bilateral

leg erythema: left right bilateral

dyspnea

tachypnea

pleurisy

educational

other: \_\_\_\_\_

**Views:****Right saphenofemoral junction:** <adequate <limited < not obtained**Right common femoral vein:** <adequate <limited < not obtained**Right femoral vein:** <adequate <limited < not obtained**Right popliteal vein:** <adequate <limited < not obtained**Right popliteal trifurcation:** <adequate <limited < not obtained**Left saphenofemoral junction:** <adequate <limited < not obtained**Left common femoral vein:** <adequate <limited < not obtained**Left femoral vein:** <adequate <limited < not obtained**Left popliteal vein:** <adequate <limited < not obtained**Left popliteal trifurcation:** <adequate <limited < not obtained

other: \_\_\_\_\_

**Findings:**

**Right leg**

- Saphenofemoral junction:** < compressible < NOT compressible < indeterminate
- Common femoral vein:** < compressible < NOT compressible < indeterminate
- Femoral vein:** < compressible < NOT compressible < indeterminate
- Popliteal vein:** < compressible < NOT compressible < indeterminate
- Popliteal trifurcation:** < compressible < NOT compressible < indeterminate

other: \_\_\_\_\_

**Left leg**

- Saphenofemoral junction:** < compressible < NOT compressible < indeterminate
- Common femoral vein:** < compressible < NOT compressible < indeterminate
- Femoral vein:** < compressible < NOT compressible < indeterminate
- Popliteal vein:** < compressible < NOT compressible < indeterminate
- Popliteal trifurcation:** < compressible < NOT compressible < indeterminate

other: \_\_\_\_\_

**Interpretation:**

- < no sonographic evidence of deep vein thrombosis
- < DVT present
  - Location(s):**
    - < R saphenofemoral junction
    - < R CFV
    - < R FV
    - < R popliteal
    - < R popliteal trifurcation
  - < L saphenofemoral junction
  - < L CFV
  - < L FV
  - < L popliteal
  - < L popliteal trifurcation
- < indeterminate for DVT

other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
<b>Grading Scale</b>	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
<b>Definitions</b>	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_



**Global Ventricular Function:** < hyperdynamic < normal < reduced < severely reduced  
 < asystole < indeterminate

**Right Ventricular Size:** < normal < dilated < indeterminate

Signs of RV strain

RV hypokinesis

Paradoxical septal motion

McConnell’s Sign

Tricuspid regurgitation

Max velocity: \_\_\_\_\_ m/s RV hypertrophy

Thoracic aorta: normal dilated indeterminate

Aortic root: \_\_\_\_\_ mm

Thoracic aorta diameter: \_\_\_\_\_ mm

**IVC:** < normal < dilated < collapsed < indeterminate

Maximum diameter: \_\_\_\_\_ mm

Minimum diameter: \_\_\_\_\_ mm

**Collapse:** >50% <50%

other: \_\_\_\_\_

**Interpretation:**

- < No sonographic evidence of significant cardiac dysfunction
- < No sonographic evidence of significant pericardial effusion
- < Pericardial effusion
  - < small < moderate < large < present size not specified
- < Pericardial effusion with evidence of pericardial tamponade
- < Global ventricular function:
  - < hyperdynamic < normal < reduced < severely reduced
- < No cardiac activity/ Cardiac standstill
- < No sonographic evidence of RV size dilation
- < RV dilation
- < No sonographic evidence of volume depletion
- < Sonographic findings suggestive of volume depletion
- < Dilated IVC
- < No evidence of sonographic aortic root dilation
- < Dilated Aortic Root

other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported



Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

## FOCUSED TRANSESOPHAGEAL CARDIAC ULTRASOUND

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

cardiac arrest

hypotension

shock

chest pain

shortness of breath

arrhythmia

other: \_\_\_\_\_

chest wall injury

dyspnea

syncope

tachypnea

fever

**Views:**

**Mid-esophageal 4-chamber:** <adequate <limited < not obtained

**Mid-esophageal long axis:** <adequate <limited < not obtained

**Mid-esophageal bicaval:** <adequate <limited < not obtained

**Transgastric short axis:** <adequate <limited < not obtained

other: \_\_\_\_\_

**Findings:**

**Pericardial effusion:** < present < absent < indeterminate size  
 if present < small < moderate < large < present size not specified

**Evidence of tamponade**  
 < SVC plethoric  
 < R atrial collapse  
 < R ventricular collapse  
 < Excessive mitral inflow variation

**Global Ventricular Function:** < hyperdynamic < normal < reduced < severely reduced  
 < asystole < indeterminate

**Right Ventricular Size:** < normal < dilated < indeterminate

Signs of RV strain

- RV hypokinesis
- Paradoxical septal motion
- McConnell's Sign
- Tricuspid regurgitation
- Max velocity: \_\_\_\_\_m/s
- RV hypertrophy

Thoracic aorta: normal dilated indeterminate

Aortic root: \_\_\_\_\_mm  
 Thoracic aorta diameter: \_\_\_\_\_mm

Cardiac Thrombus absent present indeterminate

Location:

**SVC:** < normal < dilated < collapsed < indeterminate

Maximum diameter: \_\_\_\_\_mm  
 Minimum diameter: \_\_\_\_\_mm  
 Collapse: >50% <50%

other: \_\_\_\_\_

**Interpretation:**

- < No sonographic evidence of significant cardiac dysfunction
- < No sonographic evidence of significant pericardial effusion
- < Pericardial effusion
  - < small < moderate < large < present size not specified
- < Pericardial effusion with evidence of pericardial tamponade
- < Global ventricular function:
  - < hyperdynamic < normal < reduced < severely reduced
- < No cardiac activity/ Cardiac standstill
- < No sonographic evidence of RV size dilation
- < RV dilation
- < Cardiac Thrombus
- < No sonographic evidence of volume depletion
- < Sonographic findings suggestive of volume depletion
- < Dilated SVC
- < No evidence of sonographic aortic root dilation
- < Dilated Aortic Root

other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale Definitions	No recognizable structures, no objective data can be gathered	Minimally recognizable structures but insufficient for diagnosis	Minimal criteria met for diagnosis, recognizable structures but with some technical or other flaws	Minimal criteria met for diagnosis, all structures imaged well and diagnosis easily supported	Minimal criteria met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

**SOFT TISSUE/MUSCULOSKELETAL**

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

Swelling	Mass	Decreased Range of Motion
Redness	Fever	Deformity
Pain	Foreign Body	Educational
other: _____		

**Views:**

<b>Skin and subcutaneous tissue:</b>	< <b>adequate</b>	< <b>limited</b>	< <b>not obtained</b>
Muscle:	adequate	limited	not obtained
Tendon:	adequate	limited	not obtained
Joint:	adequate	limited	not obtained
Bone:	adequate	limited	not obtained
other: _____			

**Findings:**

<b>Skin and subcutaneous tissue:</b>			
Tissue thickness	normal	thickened	indeterminate
Thickness_____mm			
Tissue Echogenicity	normal	increased	indeterminate
<b>Cobblestoning</b>	< <b>normal</b>	< <b>increased</b>	< <b>indeterminate</b>
<b>Subcutaneous Collection</b>	< <b>present</b>	< <b>absent</b>	< <b>indeterminate</b>
If present	Diameter_____mm		

Muscle:

Appearance	normal	irregular	indeterminate
Echogenicity	normal	increased	indeterminate
Collection	present	absent	indeterminate

Tendon:

Appearance	normal	irregular	indeterminate
Defect	present	absent	indeterminate

Joint:        fluid                    no fluid                    indeterminate

Bone:

Cortex Appearance	normal	irregular	indeterminate
If irregular	aligned	angulated/misaligned	

other: \_\_\_\_\_

**Interpretation:**

< **No sonographic evidence of soft tissue abnormality**

No sonographic evidence of musculoskeletal abnormality

< **Cellulitis**                    < **location:** \_\_\_\_\_

< **Abscess**                    < **location:** \_\_\_\_\_

Joint Effusion                    location: \_\_\_\_\_

Tendon Injury                    complete                    partial                    indeterminate

Fractured Bone                    location: \_\_\_\_\_

other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

**OCULAR**

The elements that are **BOLDED** represent the core emergency ACEP views, findings and interpretations for each application.

**Patient/exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

eye pain	head injury
eye/orbital trauma	suspected foreign body
vision change	headache
visual loss	educational
other: _____	

**Views:**

<b>Right eye transverse:</b>	< <b>adequate</b>	< <b>limited</b>	< <b>not obtained</b>
<b>Right eye longitudinal:</b>	< <b>adequate</b>	< <b>limited</b>	< <b>not obtained</b>
<b>Left eye transverse:</b>	< <b>adequate</b>	< <b>limited</b>	< <b>not obtained</b>
<b>Left eye longitudinal:</b>	< <b>adequate</b>	< <b>limited</b>	< <b>not obtained</b>
other: _____			

**Findings:**

Right eye

<b>Retinal contour:</b>	< <b>normal</b>	< <b>abnormal/ detached</b>	< <b>indeterminate</b>
Lens:	normally located	dislodged	indeterminate
<b>Vitreous body:</b>	< <b>anechoic</b>	< <b>hyperechoic density</b>	< <b>indeterminate</b>
Optic nerve sheath:	enlarged	normal	indeterminate
ONSD: ____mm			

other: \_\_\_\_\_

Left eye

<b>Retinal contour:</b>	< normal	< abnormal/ detached	< indeterminate
Lens:	normally located	dislodged	indeterminate
<b>Vitreous body:</b>	< anechoic	< hyperechoic density	< indeterminate
Optic nerve sheath:	enlarged	normal	indeterminate
ONSD: ____mm			

other: \_\_\_\_\_

**Interpretation:**

<No acute abnormalities identified			
<Retinal Detachment	< left	< right	< bilateral
Lens dislocation	left	right	bilateral
<Vitreous Hemorrhage	< left	< right	< bilateral
Intraocular Foreign body	left	right	bilateral
Increased ONSD	left	right	bilateral
other: _____			

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

\_\_\_\_\_



## FOCUSED BOWEL EXAMINATION

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

abdominal pain	
abdominal tenderness	vomiting
abdominal bruising	diarrhea
abdominal distension	fever
abdominal mass	GI bleeding
other: _____	

**Views:**

Concerns for appendicitis:

Right lower quadrant	< adequate	< limited	< not obtained
Appendix short axis	< adequate	< limited	< not obtained
Appendix long axis	< adequate	< limited	< not obtained
Blind end	< adequate	< limited	< not obtained
Psoas / Iliac landmarks	< adequate	< limited	< not obtained

Other: \_\_\_\_\_

Concern for bowel obstruction or intussusception:

Right upper quadrant	< adequate	< limited	< not obtained
Left upper quadrant	< adequate	< limited	< not obtained
Right lower quadrant	< adequate	< limited	< not obtained
Left lower quadrant	< adequate	< limited	< not obtained
Periumbilical area	< adequate	< limited	< not obtained

Other: \_\_\_\_\_

Concern for pyloric stenosis:

Epigastrium	< adequate	< limited	< not obtained
Pylorus short axis	< adequate	< limited	< not obtained
Pylorus long axis	< adequate	< limited	< not obtained

Other: \_\_\_\_\_

Concern for diverticulitis:

Right lower quadrant	< adequate	< limited	< not obtained
Periumbilical area	< adequate	< limited	< not obtained
Suprapubic	< adequate	< limited	< not obtained
Left lower quadrant	< adequate	< limited	< not obtained

Other: \_\_\_\_\_

Concern for GI Bleed:

Left upper quadrant	< adequate	< limited	< not obtained
Stomach	< adequate	< limited	< not obtained
Left lower quadrant	< adequate	< limited	< not obtained
Right upper quadrant	< adequate	< limited	< not obtained
Right lower quadrant	< adequate	< limited	< not obtained

Other: \_\_\_\_\_

**Findings:**

Appendicitis:

<b>Appendix diameter (&gt; 6mm):</b>	< absent	< present	< indeterminate
Measurement: _____			
<b>Appendix Compressibility:</b>	< absent	< present	< indeterminate
Target sign (short axis):	< absent	< present	< indeterminate
Appendicolith:	< absent	< present	< indeterminate
Doppler findings:	< ischemia	< normal	< hyperemia indeterminate

Bowel Obstruction:

<b>Bowel loop diameter:</b>	<b>Location:</b> _____	<b>Measurement:</b> _____
Wall edema or fluid	< absent	< present < indeterminate
<b>Peristalsis:</b>	< absent	< present < indeterminate
<b>“To-and-fro” of contents:</b>	< present	< absent < indeterminate

Intussusception:

Bowel loop diameter (> 4 cm):	< absent	< present	< indeterminate
Location: _____	Measurement: _____		
<b>Telescoping appearance:</b>	< absent	< present	< indeterminate
<b>Target sign:</b>	< absent	< present	< indeterminate
<b>Pseudokidney/sandwich sign:</b>	< absent	< present	< indeterminate
Hayfork sign:	< absent	< present	< indeterminate
Doppler findings:	< ischemia	< normal	< hyperemia < indeterminate

**Pyloric Stenosis:**

**Pyloric muscle wall diameter (>3 mm):** < absent < present < indeterminate  
**Measurement:** \_\_\_\_\_  
**Pyloric Channel length (>15mm):** < absent < present < indeterminate  
**Measurement:** \_\_\_\_\_

**Diverticulitis:**

Bowel wall thickening (> 4 mm): < absent < present < indeterminate  
**Measurement:** \_\_\_\_\_  
**Hypochoic diverticulum:** < absent < present < indeterminate  
**Surrounding echogenic fat:** < present < absent < indeterminate  
**Noncompressible fat:** < present < absent < indeterminate  
**Target sign:** < absent < present < indeterminate  
**Pseudokidney sign:** < absent < present < indeterminate

**Upper GI Bleed:**

Heterogenous gastric content: < present < absent < indeterminate  
**Volume (mL):** \_\_\_\_\_

**Simple free fluid:** < present < absent < indeterminate  
**Complex fluid collection:** < present < absent < indeterminate  
 Extramural free air: < present < absent < indeterminate  
 Abdominal wall defect: < present < absent < indeterminate  
 Other: \_\_\_\_\_

**Interpretation:**

- No significant findings
- Bowel obstruction
- Upper GI bleed
- Hernia
- Inflammation – appendicitis
- Inflammation – diverticulitis
- Intussusception
- Intraabdominal abscess
- Perforation (free fluid or free air)
- Pyloric stenosis

Other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

**FOCUSED TESTICULAR EXAMINATION**

**Patient/ exam demographics:**

Patient name: \_\_\_\_\_  
 Patient gender: M F  
 DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_  
 MR#: \_\_\_\_\_  
 Bar Code/Patient Identifier: \_\_\_\_\_  
 Hospital Name: \_\_\_\_\_  
 Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Exam type:  
 Diagnostic  
 Educational  
 Procedural  
 Clinical category:  
 Resuscitative  
 Symptom based  
 Therapeutic  
 Unknown/other  
 Initial exam  
 Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_  
 Secondary person obtaining/ interpreting images: \_\_\_\_\_  
 Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

testicular pain	abnormal testicular lie
testicular swelling	testicular mass
testicular tenderness	hernia
groin pain	scrotal trauma
other: _____	

**Views obtained:**

Right testicle sagittal without Doppler	adequate	limited	not obtained
Right testicle transverse without Doppler	adequate	limited	not obtained
Right testicle with Doppler	adequate	limited	not obtained
Left testicle sagittal without Doppler	adequate	limited	not obtained
Left testicle transverse without Doppler	adequate	limited	not obtained
Left testicle with Doppler	adequate	limited	not obtained

other: \_\_\_\_\_

**Findings:**

<b>Right hydrocele:</b>	<b>absent</b>	<b>present</b>	<b>indeterminate</b>	
<b>Right testicular Color flow:</b>	<b>absent</b>	<b>present</b>	<b>indeterminate</b>	
Right testicular Spectral flow:	absent	present	indeterminate	
Resistive index:				
Right epidydimal flow:	normal	hyperemia	indeterminate	
<b>Right testicle appearance:</b>	<b>homogenous</b>	<b>heterogenous</b>	<b>indeterminate</b>	
<b>Right scrotal wall appearance:</b>	<b>normal</b>	<b>cobblestoning</b>	<b>abscess/swelling</b>	<b>indeterminate</b>

other: \_\_\_\_\_



**UNDIFFERENTIATED CHEST PAIN AND DYSPNEA****Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

chest pain	tachycardia
shortness of breath	palpitations
hypoxia	arrhythmia
hypotension	abnormal EKG
cardiomyopathy	prior MI
syncope	sepsis
COPD / Emphysema	chest bruising
new murmur	
other: _____	

**Views obtained:**

<b>Echo:</b>	<b>PSLA</b>	<b>PSSA</b>	<b>Apical 4 chamber</b>	<b>Subxiphoid</b>	<b>IVC</b>
<b>Thoracic:</b>	<b>Right Pleural Line</b>			<b>Right Thoracic Space for fluid</b>	
	<b>Left Pleural Line</b>			<b>Left Thoracic Space for fluid</b>	

other: \_\_\_\_\_

**Echo Findings:**

Pericardial Effusion:	None	significant	small	moderate-large	indeterminate	not assessed
Global Ventricular Function:		normal	hyperdynamic	mod depressed		severely depressed
		no cardiac activity	indeterminate			not assessed
Equality (RV:LV size):		normal	enlarged	indeterminate		not assessed
Exit (Aortic Root Diameter)		normal (<4.0 cm)		borderline (4-4.5 cm)		dilated (>4.5 cm)

	indeterminate	not assessed			
IVC qualitative size	normal	plethoric	flat	indeterminate	not assessed
IVC qualitative collapse	no collapse	minimal collapse	some collapse	significant collapse	
	indeterminate	not assessed			

Other echo findings:

### **Thoracic Findings:**

Right pleural line sliding:	normal	absent	lung point	indeterminate	not assessed
Right pulmonary fluid (B lines (>3):	present	absent	indeterminate	not assessed	
Right pleural space (effusion / consolidation):	none	small	moderate-large	consolidation	
	indeterminate	not assessed			
Left pleural line sliding:	normal	absent	lung point	indeterminate	not assessed
Left pulmonary fluid (B lines (>3):	present	absent	indeterminate	not assessed	
Left pleural space (effusion / consolidation):	none	small	moderate-large	consolidation	
	indeterminate	not assessed			

Other thoracic findings:

### **Interpretation Echo:**

**no significant abnormality**  
**significant pericardial effusion**  
**decreased ejection fraction**  
**right ventricle enlargement**  
**dilated aortic root**  
**dehydration**  
**fluid overload / pulmonary edema**

other: \_\_\_\_\_

### **Interpretation Thoracic:**

**no significant abnormality**  
**right pneumothorax**  
**left pneumothorax**  
**right alveolar interstitial fluid (B lines +)**  
**left alveolar interstitial fluid (B lines +)**  
**right pleural effusion**  
**left pleural effusion**  
**right lung consolidation**  
**left lung consolidation**

other: \_\_\_\_\_



**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
Accuracy of interpretation of images as presented						TP	TN	FP	FN
Accuracy of interpretation of images as compared to gold standard (ie, CT, operative report)						TP	TN	FP	FN

Comments: \_\_\_\_\_

**UNDIFFERENTIATED HYPOTENSION****Patient/ exam demographics:**

Patient name: \_\_\_\_\_

Patient gender: M F

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_

MR#: \_\_\_\_\_

Bar Code/Patient Identifier: \_\_\_\_\_

Hospital Name: \_\_\_\_\_

Date and time of exam: \_\_\_\_/\_\_\_\_/\_\_\_\_

Exam type:

Diagnostic

Educational

Procedural

Clinical category:

Resuscitative

Symptom based

Therapeutic

Unknown/other

Initial exam

Repeat exam

Primary person obtaining/ interpreting images: \_\_\_\_\_

Secondary person obtaining/ interpreting images: \_\_\_\_\_

Additional person(s) obtaining/ interpreting images: \_\_\_\_\_

**Indication(s) for exam:**

sBP &lt;100

Shock Index &gt; 1 (HR/SBP)

altered mental status

arrhythmia

abdominal/back pain

chest pain

diaphoresis

dyspnea

feeling of doom

fever

hypoxia

GI bleed

palpitations

pregnancy

unresponsiveness

syncope

vaginal bleeding

other: \_\_\_\_\_

**Views obtained (RUSH protocol):**

Echo

Thoracic

Abdominal

Aorta

other: \_\_\_\_\_

**Echo Findings:****Effusion**

no significant effusion

small effusion

mod-large effusion

indeterminate

not assessed

**Global Ventricular Function (EF):**

hyperdynamic (&gt;65%)

normal (60-65%)

moderately depressed (30-50%)

severely depressed (&lt;30%)

no myocardial activity

indeterminate

not assessed

**Chamber size**

- RV < LV**
- RV >= LV**
- indeterminate**
- not assessed**

**Thoracic Aortic Diameter:**

- dilation present (> 4.5 cm)
- dilation borderline (4 - 4.5 cm)
- dilation not present (< 4 cm)
- indeterminate
- not assessed

**IVC:**

- Full and No collapse**
- Normal collapse**
- Flat**
- Indeterminate**
- Not assessed**

**Other cardiac findings:**

**Thoracic Findings:**

**Right pleural line**

- Lung sliding**    present    absent    indeterminate    not assessed

**Left pleural line**

- Lung sliding**    present    absent    indeterminate    not assessed

**Right pleural fluid**

- present    absent    consolidation    indeterminate    not assessed

**Left pleural fluid**

- present    absent    consolidation    indeterminate    not assessed

**Alveolar Interstitial Syndrome:**

- present bilaterally    present unilaterally
- absent    indeterminate

**Other thoracic findings:**

**Abdominal Findings:**

- AAA > 3 cm:**    present    absent    indeterminate    not assessed
- Abdominal Free Fluid:**    present hepatorenal space    present perisplenic space
- present suprapubic space    no free fluid
- indeterminate    not assessed

**Other abdominal findings:**

**Interpretation:**

- acute coronary syndrome    tamponade    RH strain/pulmonary embolus
- dysrhythmia    LV failure    hypovolemia
- ectopic pregnancy rupture    hemothorax    hemoperitoneum
- ruptured AAA    tension pneumothorax    thoracic Aorta Pathology
- sepsis    no clear findings
- other: \_\_\_\_\_

**Quality assurance:**

**Suggested Quality Assurance Grading Scale**

	1	2	3	4	5
Grading Scale	No recognizable	Minimally	Minimal criteria	Minimal criteria	Minimal criteria
Definitions	structures, no objective data can be gathered	recognizable structures but insufficient for diagnosis	met for diagnosis, recognizable structures but with some technical or other flaws	met for diagnosis, all structures imaged well and diagnosis easily supported	met for diagnosis, all structures imaged with excellent image quality and diagnosis completely supported

Image quality	1	2	3	4	5				
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Comments: \_\_\_\_\_