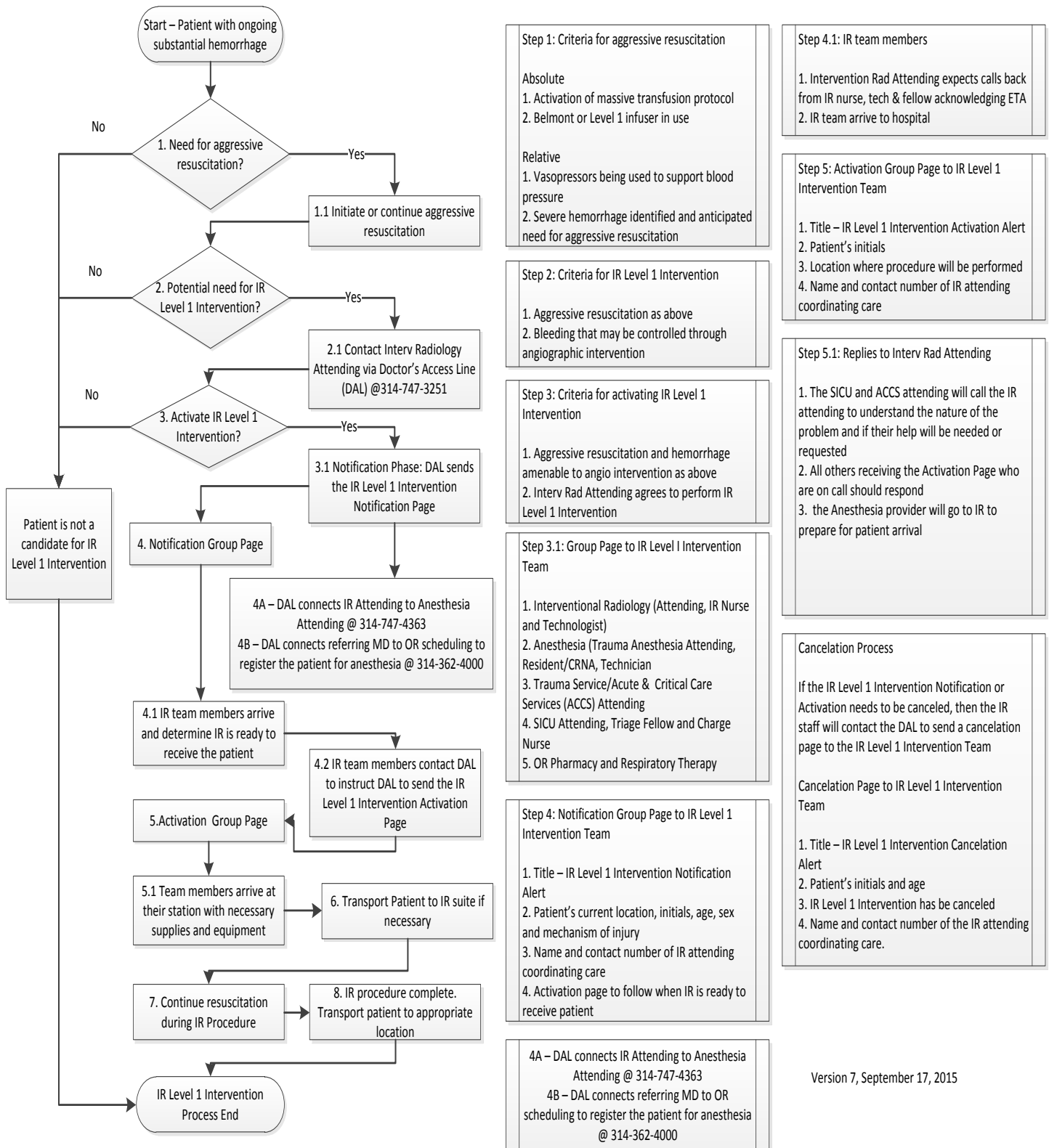


Interventional Radiology (IR) Level 1 Intervention Team: Communication Strategy



Step 1: Criteria for aggressive resuscitation

Absolute

1. Activation of massive transfusion protocol
2. Belmont or Level 1 infuser in use

Relative

1. Vasopressors being used to support blood pressure
2. Severe hemorrhage identified and anticipated need for aggressive resuscitation

Step 2: Criteria for IR Level 1 Intervention

1. Aggressive resuscitation as above
2. Bleeding that may be controlled through angiographic intervention

Step 3: Criteria for activating IR Level 1 Intervention

1. Aggressive resuscitation and hemorrhage amenable to angio intervention as above
2. Interv Rad Attending agrees to perform IR Level 1 Intervention

Step 3.1: Group Page to IR Level 1 Intervention Team

1. Interventional Radiology (Attending, IR Nurse and Technologist)
2. Anesthesia (Trauma Anesthesia Attending, Resident/CRNA, Technician)
3. Trauma Service/Acute & Critical Care Services (ACCS) Attending
4. SICU Attending, Triage Fellow and Charge Nurse
5. OR Pharmacy and Respiratory Therapy

Step 4: Notification Group Page to IR Level 1 Intervention Team

1. Title - IR Level 1 Intervention Notification Alert
2. Patient's current location, initials, age, sex and mechanism of injury
3. Name and contact number of IR attending coordinating care
4. Activation page to follow when IR is ready to receive patient

4A - DAL connects IR Attending to Anesthesia Attending @ 314-747-4363

4B - DAL connects referring MD to OR scheduling to register the patient for anesthesia @ 314-362-4000

Step 4.1: IR team members

1. Intervention Rad Attending expects calls back from IR nurse, tech & fellow acknowledging ETA
2. IR team arrive to hospital

Step 5: Activation Group Page to IR Level 1 Intervention Team

1. Title - IR Level 1 Intervention Activation Alert
2. Patient's initials
3. Location where procedure will be performed
4. Name and contact number of IR attending coordinating care

Step 5.1: Replies to Interv Rad Attending

1. The SICU and ACCS attending will call the IR attending to understand the nature of the problem and if their help will be needed or requested
2. All others receiving the Activation Page who are on call should respond
3. the Anesthesia provider will go to IR to prepare for patient arrival

Cancellation Process

If the IR Level 1 Intervention Notification or Activation needs to be canceled, then the IR staff will contact the DAL to send a cancellation page to the IR Level 1 Intervention Team

Cancellation Page to IR Level 1 Intervention Team

1. Title - IR Level 1 Intervention Cancellation Alert
2. Patient's initials and age
3. IR Level 1 Intervention has been canceled
4. Name and contact number of the IR attending coordinating care.

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Step 1: Patient identification and initial evaluation

1.1 Patient with ongoing substantial hemorrhage is encountered. Such hemorrhage can be identified by the need for aggressive resuscitation. Aggressive resuscitation is defined using the following criteria.

Indicator	Absolute or Relative	Comment
Activation of massive transfusion protocol	Absolute	Expect that only a small fraction of these cases will require Interventional Radiology (IR) Level 1 Intervention.
Ongoing transfusion using Level 1 Infuser or Belmont	Absolute	
Vasopressors being used to support blood pressure	Relative	Since vasopressors are often used to support blood pressure in patients with hypotension due to other causes (cardiogenic or septic shock) vasopressor use by itself is usually not sufficient to trigger an IR Level 1 Intervention
Severe hemorrhage identified and anticipate need for aggressive resuscitation	Relative	Since the degree of hemorrhage may be difficult to gauge even with direct visualization during endoscopy, surgery or imaging, ongoing hemorrhage by itself, is usually not sufficient to trigger an IR Level 1 Intervention.

Step 2: Potential need for IR Level 1 Intervention

Bedside team has a reasonable expectation that patient would benefit from IR Level 1 Intervention which consists of emergent angiography with Intervention. Aggressive resuscitation continues while making the decision whether or not to activate the IR Level 1 Intervention process.

2.1 Bedside team calls Doctor's Access Line (314-747-3251) and conveys potential need for IR Level 1 Intervention.

2.2 Doctor's Access Line contacts IR Attending (314-747-3738) and conveys need, connecting Bedside Team and IR Attending, while gathering pertinent patient information for activation communication. Activation of the IR Level 1 Intervention protocol is at the discretion of the Interventional Radiology Attending.

Step 3: Activation of the IR Level 1 Intervention protocol

3.1. Doctor's Access Line contacts members of the IR Level 1 Intervention Team using a group page. This group page will reach the following

Service	Personnel	Comment
Interventional Radiology	Nurse, Technologist, Fellow/Resident	During working hours - charge nurse and charge tech will respond to the level 1 notification. After hours, the call nurse and tech will respond to the level 1 notification Note: IR Attending must be immediately available 24/7 since these calls will bypass the IR Fellow.
Anesthesia	Trauma Attending, Resident or CRNA, Technician	The Anesthesia provider will go to IR to prepare for patient arrival.
Trauma Service/Acute & Critical Care Service (ACCS) Attending	Attending	
SICU	Attending, Triage Fellow and Charge Nurse	
OR Pharmacy		Perioperative Pharmacists
Respiratory		Lead Respiratory Therapist

Step 4: Notification Page from Doctor's Access Line includes the following information

Item	Comment
Title: IR Level I Intervention Notification Alert	
Patient's current location	In some cases this may be different than the rally point
Patient initials, age, and sex	
Mechanism of injury or diagnosis	
Contact information for IR Attending coordinating the IR Level 1 Intervention	While the IR Attending will serve as point of contact for overall coordination of the response, many steps will be managed by communicating along normal lines
Next Step – "Activation Page to follow when IR is ready to receive patient."	
4A – DAL connects IR Attending to Anesthesia Attending @ 314-747-4363	
4B – DAL connects referring MD to OR scheduling to register the patient for anesthesia @ 314-362-4000	

4.1 IR Team members

- IR Attending expects calls back from IR nurse, tech and fellow acknowledging receipt of page and ETA.
- During call hours: IR team arrives to the hospital and determines IR is ready to receive the patient
- During normal working hours: IR team arranges for available resources to manage the procedure
- IR team member will then contact the DAL (314-747-3251)

Step 5: Activation Page to IR Level 1 Intervention Team

Item	Comment
Title: IR Level I Intervention Activation Alert	
Patient initials	
Location where procedure will be performed	
Contact information for IR Attending coordinating the IR Level 1 Intervention	While the IR Attending will serve as point of contact for overall coordination of the response, many steps will be managed by communicating along normal lines

5.1 Team members arrive at their station with necessary supplies and equipment

- The SICU Attending and Trauma Service/ACCS Attending will call the IR Attending to understand the nature of the problem and if their help will be needed or requested. All others receiving the group page who are on call for the team should respond.
- The immediate Anesthesiology provider responds to the patients identified location. If Anesthesia's management of the resuscitation is not necessary, then the Anesthesia provider will go to IR to prepare for patient arrival.

Step 6: If necessary, the resuscitation team transports the patient to the IR suite

Step 7: Resuscitation continues during IR procedure

Step 8: Following the IR procedure, the patient may be transported to ICU, OR or another post procedure location.