POLICY: COMMUNICATION RESOLUTIONS

PURPOSE

To establish an institutional policy regarding communication between residents/fellows and attendings for all graduate medical education training programs within the institution.

POLICY

1. The Surgeon or Medical Attending of record or the Designated covering attending is responsible for the welfare of the patient.
2. The Attending-on-call is responsible for assuring that the residents-on-call are aware of the overall patient-care plan and the parameters for notification on each patient.
3. Residents-on-call are required to notify the Attending-on-call (or Surgeon or Medical Attending of record, if so directed) of any changes in any designated clinical or diagnostic parameters using the following criteria:
   a. Utilize the criteria from the Rapid Response Team or age appropriate acute changes.
      1) Staff member is worried about the patient
      2) Acute change in heart rate to <40 or >130 bpm
      3) Acute change in systolic blood pressure to <90 mmHg
      4) Acute change in respiratory rate to <8 or >28 per min
      5) Acute change in saturation to <90% despite O2
      6) Acute change in level of consciousness
      7) Acute change in urinary output to <50 ml in 4 hours
   b. The resident must notify the attending in the event of acute mental status changes and/or new episodes of restraint.
   c. Utilize general Department or Division specific criteria developed by each residency program of the top 8-10 diagnoses.
   d. Utilize specific order sets developed by each residency program based on specific cases that are not covered by the first two criteria. These should then be part of the orders for that particular case/diagnosis (i.e., in a neurosurgical post-op case, the order may include "call attending if intracranial pressure exceeds >20cm H2O").
4. The Attending-on-call, Surgeon and/or Medical Attending of record must always treat residents with proper respect and dignity. The Attending-on-call must never criticize residents for calls. Residents are directed to make notification of attending actions that discourage supervision to the Program Director, Chief Resident, Chief of Service, Designated Institutional Official (DIO) or Patient Safety Network (PSN).
5. The Graduate Medical Education Committee will collaborate with the Medical Staff QA Committee to perform regularly scheduled audits to evaluate compliance with resolutions 2, 3, and 4 and will report these data to the relevant department QA committees.
6. The Chiefs of Service will be responsible for the implementation of and assuring compliance with resolutions 1, 2, 3 and 4.
7. Stony Brook University Hospital will provide resources to the Graduate Medical Education Committee and the Chiefs of Service for the implementation and monitoring of resolutions 3, 4 and 5.
8. The Graduate Medical Education Committee will monitor that each service has structured hand-off of patient information between Housestaff upon transfer of care via the program internal review process.

Reviewed: November 20, 2006
Revised and approved: January 29, 2007
Revised to conform with regulations – September 2008
Revised and approved: November 17, 2008

Attached are the Program Specific Criteria for Communications Resolutions
Program-Specific Criteria for Communication

Anesthesiology
There are no additional special order sets.
The PACU follows the Rapid Response criteria with the following additions:
1. Any airway manipulation (i.e., changing an ETT, extubation, intubation)
2. Prior to transporting patients to SICU
3. When paged for codes or intubations on the floor

Dermatology
Specific criteria for notification of attending
1. New onset of blisters or loss of skin (diagnoses include toxic epidermal necrolysis, Stevens Johnson, pemphigus)
2. Palpable purpura with systemic symptoms or evidence of sepsis
3. Patients on isotretinoin (Accutane) onset of severe headache (possible pseudotumor cerebri)
4. Erythroderma
5. Necrotizing fasciitis
6. Neonatal herpes simplex
7. Disseminated herpes simplex

Emergency Medicine
Residents working in the ED are directly supervised by attending physicians 24 hours/ day.
They are required to notify the attending physician of any change in the patient’s status in any disease process, immediately.

Family Medicine
In addition to calling the attending based on the criteria developed for the rapid response team, residents are required to notify the Attending on call of any changes related to patients for the following top 10 diagnosis seen on the inpatient service.
1. Pneumonia- increasing acidosis/CO2 level on blood gas
2. CHF- new positive troponin/new arrhythmia
3. Chest pain – new positive troponin/new arrhythmia/new EKG changes
4. Syncope - recurrent episode syncope after admission, new arrhythmia, new positive troponin
5. Acute Renal failure – new potassium level >6
6. UTI/sepsis- no additional criteria
7. Cellulitis- no additional criteria
8. COPD exacerbation – increasing acidosis/CO2 level on blood gas
9. Dehydration- no additional criteria
10. Asthma exacerbation- increasing acidosis/CO2 level on blood gas

Internal Medicine
The Department of Internal Medicine and all Fellowship programs follow the Rapid Response Team guidelines. There are no additional communication guidelines or specific order sets.

Neurology
To enhance communications between resident/fellows and their supervising attending, regarding changes in patient status, criteria have been established to prompt notification of the attending by the resident/fellow. These criteria have been agreed upon by the Dept of Neurology teaching faculty. Residents/fellows in the Neurology Residency training program and the Child Neurology Training program, as well as the Medicine/Neurology residents rotating on neurology services are expected to contact their supervising attending for any of the following patient criteria:
1. Change in MAP of more than 30 mmHg
2. New or significant change in focal deficits, new objective neurologic deficit
3. Hemorrhagic conversion of bland infarct
4. Development of depressed level of consciousness
5. Urgent consult is requested
6. Unexpected major laboratory/imaging test abnormality
7. New onset or unexpected seizure
8. Status epilepticus or seizure that doesn’t stop with Ativan and Dilantin load (or another second agent)
9. Abnormal spinal tap
10. Unexpected significant allergic or other reaction to a medication
11. Changes in VC to <20mg/kg, NIF , -60

These criteria are in addition to any criteria for notification established during the hand off process, written in the patient orders or part of order sets. These criteria do not replace routine contact with the supervising attending to discuss patient care issues. The supervising attending is identified as the assigned service attending or on-call attending responsible for that patient.

**OB/GYN**
The Ob/Gyn dept has developed specific order sets for each of the following:

1. Ob/Gyn Vaginal Delivery Transfer
2. Ob/Gyn Cesarean Delivery transfer
3. Ob/Gyn Obstetrical Hemorrhage
4. Ob/Gyn Wound infection
5. Labor and delivery pre-epidural
6. Labor and delivery immediate post partum
7. Labor and delivery premature rupture of membranes
8. Labor and delivery OB triage
9. Labor and delivery newborn immediate post partum
10. Hysterectomy preoperative admission day of surgery
11. Hysterectomy preadmission testing
12. Hysterectomy immediate postoperative
13. Hysterectomy postoperative (daily orders)
14. Gyn postoperative orders
15. Gyn pelvic inflammatory disease
16. Antepartum pyelonephritis
17. Antepartum preterm labor
18. Antepartum hypertension
19. Antepartum hyperemesis
20. Antepartum admission orders
21. Anesthesiology postoperative orders for patients receiving epidural or subarachnoid morphine
22. Admission to labor and delivery

**Orthopaedics**
1) Deficit on physical exam not signed out as ‘attending aware’ or previously directly observed by the examining clinician.
2) Change/Discrepancy in physical exam findings from chart documentation, sign out or prior observation.
3) Pain uncontrolled by traditional pain control interventions
4) Evidence of urinary retention not signed out as ‘attending aware’ or previously directly observed by the examining clinician.
5) Observed or reported neurologic/cognitive change in a patient not signed out as ‘attending aware’ or previously directly observed by the examining clinician.
6) Any concern or perceived uncertainty about patient’s condition or change in condition
7) Scripted contact parameters contained within preprinted postoperative order sets

Pathology
Anatomic Pathology communication resolutions

1. Residents-on-call are required to notify the attending-on-call of any request for frozen sections. Residents cannot deny or delay a frozen section without consulting with the pathology attending. The pathology attending will then discuss the case directly with the requesting attending on the clinical/surgical service.

2. Residents on the surgical pathology rotation will notify the attending-on-call of any mislabeled specimens as soon as the error is noted. This includes incorrect patient name or any significant discrepancy in designation of specimen type.

3. Resident on the surgical pathology rotation will notify the attending-on-call of any lost specimen (including empty containers received from any clinical site or specimens/cassettes/blocks lost in the lab) as soon as the problem is noted.

4. Residents on the surgical pathology rotation will notify the attending-on-call of any cases with an unexpected diagnosis or a significant problem that needs to be communicated to the clinical STAT as soon as the resident becomes aware of the problem or diagnosis. A list of such cases is attached.

5. Hand off policies
Whenever a resident is changing rotations or going on vacation and has pending cases, the resident must give these cases to the attending to whom the cases have been assigned without delay.
Whenever a resident or PA is finishing a period of coverage and there are cases pending for frozen section, or requiring other special handling, this person will contact the resident who will replace him/her and make the resident aware of the issues pertaining to pending cases.

Cases that require physician notification:

1. Specimen problems
   - Missing specimen
   - Irresolvable labeling error
   - Improper submission which precludes diagnostic evaluation

2. Significant positive diagnosis
   - Unexpected malignancy
   - Significant disagreement between outside slide diagnosis and ours
   - Significant disagreement between frozen section diagnosis and permanent diagnosis
   - Evidence of complication of surgical procedure
   - Necrotic bowel margin
   - Preliminary result and notification of final report delayed
   - Specific or life threatening infection (includes, but not limited to: TB, Pneumocystis, significant fungal process, endocarditis, and meningitis)
   - Reportable infection according to Infection Control guidelines. Notify Infection Control at 4-2239, fax 4-8875. This applies to autopsy, surgical and cytology cases.

3. Significant negative
   - No products of conception (possible ectopic)
   - No fallopian tubes or vas deferens in sterilization procedures
   - No biopsy site in breast resections with prior cores
   - No tumor in resections done for a neoplasia (unless preoperative therapy)
   In any of the above mentioned situations:
   Notify the clinician that sent the specimen by email, telephone or both if necessary
   In addition a copy of the final pathology report has to be faxed to the clinician’s office
   Please mention in the final pathology report that the diagnosis was discussed with Dr. X on date X. this is important and may be helpful in legal cases
   If the clinician cannot be located and the case is discussed with a nurse, please be sure to get his/her name and mention that in the report.
Reportable infections: Amebiasis, Anthrax, Babesiosis, Botulism, Brucellosis, Campylobacteriosis, Chancroid, Cholera, Diphtheria, Encephalitis, Giardiasis, Gonococcal infection, Granuloma inguinale, Hantavirus disease, Haemophilus influenzae, invasive disease, Hepatitis, Histoplasmosis, Hospital associated infections, Invasive antibiotic resistant streptococcus pneumonia, Kawasaki syndrome, Legionellosis, Leprosy, Leptospirosis, Lyme disease, Lymphogranuloma venereum, Malaria, Measles, Meningitis, Meningococcemia, Mumps, Pertussis, Plague, Poliomyelitis, Psittacosis, Rabies, Reye’s syndrome, Rocky Mountain spotted fever, Rebbella (including congenital), Salmonellosis, Shigellosis, Streptococcal invasive disease, Group A, Syphilis, Tetanus, Toxic shock syndrome, Trichinosis, Tularemia, Tuberculosis, Typhoid, Typhus, Yellow fever, Yersiniosis

Clinical Pathology communication resolutions
1. Unresolvable specimen labeling errors: the resident should contact the attending if the problem has not been resolved after discussing the situation with the ordering physician and/or lab personnel
2. Request for test that are not routinely available on evenings, nights or weekends: the resident should not deny a request for a test without first contacting the lab and the attending.
3. Calling critical values: contact the attending if you are unable to communicate critical value results
4. Other on call questions: contact the attending for any question that is not addressed in the Lab User’s manual or the ARUP users manual (the primary reference lab, www.aruplab.com)

Pathology/Blood Services
1. The Blood Service attending of record or designated covering attending is responsible for the welfare of the patient during apheresis or other transfusion therapy events taking place at the Blood Bank Apheresis station and during apheresis at other sites.
2. The attending on call is responsible for assuring the resident and/or fellow on call is aware of the overall care plan for therapeutic apheresis or other transfusion therapy requiring patients.
3. the fellow and/or pathology resident on call is required to notify the attending on call of any changes in the treatment plan, patient status or request for physician action from blood service or other hospital personnel or any physicians. This includes but is not limited to:
   a. New requests for therapeutic apheresis and the tentative treatment schedule
   b. Change in the patient status as it relates to the treatment
   c. New requests for products requiring physician approval
   d. Consultation requests on blood and component use and complications
   e. Requests for physician input on blood supply and availability related problem solving
   f. Writing orders for apheresis procedures and medications. This encompasses usual orders for apheresis, volume of the planned exchange, volume of replacement such as 5% albumin, FFP, RBCs as appropriate, volume and concentration of IV calcium gluconate solution (if needed) and flow rate, heparin units in citrate solution (if needed), premedication dose and route of administration (if needed, such as Benadryl, Tylenol, solumedrol), target hematocrit for RBC exchange, and use of blood warmer (if needed).
   g. Counseling donors, patient and/or their family members on matters of blood donation, transfusion and testing
   h. Availability of on call physician on demand to the nurse performing apheresis
Pneumonia:
- RR > 20 above normal for age
- Requiring Oxygen at > 40% FIO\textsubscript{2} or > 4 liters per minute
- Requiring Albuterol nebulizer treatments more often than q 2 hrs

Bronchiolitis:
- RR > 20 above normal for age
- Requiring Oxygen at > 40% FIO\textsubscript{2} or > 4 liters per minute
- Requiring Albuterol nebulizer treatments more often than q 2 hrs

Asthma:
- RR > 20 above normal for age
- Requiring Oxygen at > 40% FIO\textsubscript{2} or > 4 liters per minute
- Requiring Albuterol nebulizer treatments more often than q 2 hrs

Croup:
- RR > 20 above normal for age
- Requiring Oxygen at > 40% FIO\textsubscript{2} or > 4 liters per minute
- Requiring Racemic epinephrine nebulizer treatments more often than q 2 hrs
- Increasing stridor

Diabetes Mellitus:
- Symptomatic Hypoglycemia
- Change in Neurologic status
- New onset Headache
- Unexpected Ketones in urine
- Vomiting > 1 episode

Seizure (febrile or afebrile):
- Seizure lasting > 15 minutes unresponsive to antiepileptic breakthrough medication (Diastat, Ativan)
- Neurologic state different from baseline > 1 hour after seizure

Jaundice/Hyperbilirubinemia:
- Rising bilirubin level despite appropriate phototherapy

Fever/Rule-out sepsis:
- Hypotension defined by age based normal values (see chart)
- HR > 20 above normal for age
- Capillary refill ≥ 4 seconds
- Urine output < 1 cc/kg/hr not improved after fluid bolus
- Urine output > 5 cc/kg/hr

Acute Gastroenteritis/Dehydration:
- Hypotension defined by age based normal values (see chart)
- HR > 20 above normal for age
- Capillary refill ≥ 4 seconds
- Urine output < 1 cc/kg/hr not improved after fluid bolus
- Edema

Urinary Tract Infection:
- Hypertension defined by age based normal values
- Hypotension defined by age based normal values (see chart)
- Urine output < 1 cc/kg/hr
- Edema

Scoliosis repair:
- Acute change in neurologic status
- Decreased lower extremity perfusion

VP Shunt Malfunction/Infection:
- Acute change in neurologic status
Meningitis:
- Acute change in neurologic status
- HR > 20 above normal for age
- Capillary refill ≥ 4 seconds
- Urine output < 1 cc/kg/hr not improved after fluid bolus
- Urine output > 5 cc/kg/hr

Head Injury:
- Acute change in neurologic status
- Urine output < 0.5 cc/kg/hr or > 5 cc/kg/hr

Appendicitis:
- Evidence of peritonitis
- Hypotension defined by age based normal values (see chart)
- HR > 20 above normal for age
- Capillary refill ≥ 4 seconds
- Urine output < 1 cc/kg/hr not improved after fluid bolus

Extremity Fracture:
- Acute change in neurologic status
- Capillary refill ≥ 4 seconds

Tonsillectomy/Adenoidectomy:
- Signs or symptoms of Airway obstruction
- Increased bleeding from surgical site
- Hypotension defined by age based normal values (see chart)
- HR > 20 above normal for age
- Capillary refill ≥ 4 seconds
- Urine output < 0.5 cc/kg/hr

* Any unplanned Surgical / Invasive Procedure
* Any unplanned CT scan or MRI study

### Pediatric Hypotension Guidelines
(Pediatric Advanced Life Support Guidelines)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Systolic Blood Pressure</th>
</tr>
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<tbody>
<tr>
<td>0 days – 1 month</td>
<td>&lt;60</td>
</tr>
<tr>
<td>1 month – 1 year</td>
<td>&lt;70</td>
</tr>
<tr>
<td>1-10 years</td>
<td>70 + (2 x yrs)</td>
</tr>
<tr>
<td>11-18 years</td>
<td>&lt;90</td>
</tr>
</tbody>
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### Age-Appropriate Vital Signs
(NIH Clinical Center Guidelines)

<table>
<thead>
<tr>
<th>Age</th>
<th>Pulse</th>
<th>Respirations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newborn</td>
<td>100-160</td>
<td>30-60</td>
</tr>
<tr>
<td>6 months</td>
<td>110-160</td>
<td>24-38</td>
</tr>
<tr>
<td>1 year</td>
<td>90-150</td>
<td>22-30</td>
</tr>
<tr>
<td>3 years</td>
<td>80-125</td>
<td>22-30</td>
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<tr>
<td>5 years</td>
<td>70-115</td>
<td>20-24</td>
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<tr>
<td>10 years</td>
<td>60-100</td>
<td>16-22</td>
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<tr>
<td>12 years</td>
<td>60-100</td>
<td>16-22</td>
</tr>
<tr>
<td>14 years</td>
<td>60-100</td>
<td>14-20</td>
</tr>
</tbody>
</table>
Division of Neonatology
Criteria for resident to call fellow
1. all x-rays
2. All blood gases
3. all abnormal critical labs
4. Bilirubin requiring phototherapy
5. Sodium less that 132 and more than 145
6. Glucose less than 50 more than 150
7. Potassium less than 3.5 more than 6
8. Calcium less than 8 more than 11
9. Deviations from the blood pressure protocol
10. All consults to well baby nursery
11. Feeding intolerance/abdominal distension
12. New medication orders
13. Temperature instability
14. Transfusions
15. any increase in F\textsubscript{I}O\textsubscript{2} greater than 10% over baseline
16. Significant, increasing or persistent apnea for bradycardia
17. Infants requiring positive pressure ventilation
18. Arrhythmias
19. Loss of IV access

Criteria for fellows to call attending
1. change of vent mode
2. CO\textsubscript{2} more than 80
3. Serial bad blood gases
4. Base deficit more than 8
5. Ph less than 7.20
6. Deviations from blood pressure protocol
7. Anything decided on lightening rounds
8. Pneumothorax: placement or replacement of chest tubes
9. Admission to NICU
10. Existing patient/initiation of antibiotics
11. transport calls
12. Deliveries (immediately) less than 32 weeks and/or less than a kilogram
13. NAS scores requiring ignition of morphine
14. Bilirubin requiring exchange transfusion
15. Prenatal consult

Need notes of anything that requires a call to attending

Psychiatry
There is 24 hour/day, 7 day/week Attending presence in the hospital. The residents contact the Attending to address any and all specific clinical situations that might arise.

Radiology
1. If you are notified of a complication from a special procedure that was performed by our IR radiologists, you must notify the IR attending-on-call.
2. If you are notified of a complication from a special procedure that was performed by our neuroradiologists, you must notify then neuroradiology attending-on-call.
3. If you receive a request for an emergent special procedure examination to be performed by our IR radiologists, you must notify the IR attending-on-call.
4. If you receive a request for an emergent special procedure examination to be performed by our neuroadiologists, you must notify the neuroradiology attending-on-call.
5. If you receive a request to perform an emergent enema exam on an infant or child to diagnose and/or reduce an intussusception, you must notify the general radiology attending-on-call.

6. If a question arises regarding a chest tube placed by Dr. Moore, he requests that you call him. If Dr. Moore is not available and if intervention by radiology may be required because of a problem with the chest tube, you must contract the IR radiology attending-on-call.

7. If you receive a request by an attending in another service to speak to the radiology attending-on-call, you must notify the radiology attending-on-call.

8. If there is an emergency declared at Stony Brook, such as a massive number of incoming casualties, you must notify the attending-on-call.

9. If you and your senior resident are unsure of diagnosis in a patient who requires emergent treatment that depends on the correct diagnosis being made by the study, you must contract the attending-on-call.

10. If you are unable to complete your work in a timely manner (e.g. you become ill, or there are a massive number of backed up patients, or there is equipment failure) you must notify your radiology attending-on-call.

**General Surgery**

1. If you discover a complication from surgical procedures that was not previously noted.
2. If you are notified of a patient with an impending airway problem.
3. If you are present at or know of an impending mortality.
4. If you receive a request for an emergent surgical intervention.
5. If you receive a request to accept a transfer from another hospital.
6. If you are fatigued and resident back-up coverage is not available to you.
7. If you receive a request by an attending in another service to speak to the General Surgery attending on call.
8. If there is an emergency declared at Stony Brook, such as a massive number of incoming casualties, you must notify the attending on call.
9. If you and your senior resident are unsure of diagnosis in a patient who requires emergent treatment that depends on the correct diagnosis being made by the study.
10. If you are unable to complete your work in a timely manner (e.g. you become ill, or there are a massive number of backed up patients, or there is equipment failure) you must notify your General Surgery attending on call.

**Surgery/Critical Care**

The critical care fellow functions as the leader of the primary critical care team and is responsible for supervision of residents and students assigned to the SICU. Responsibilities include:

1. Direct management of all service patients in conjunction with the entire critical care team
2. Provide technical assistance to the critical care team
3. Consult on all critical care consults in a timely fashion
4. Serve as the liaison with the chief resident on the trauma service and the primary physician or designee for nontrauma patients.
5. Manage bed control for patient admitted and discharged from the SICU
6. Didactic presentations

The SICU attending or fellow will be notified of any clinically significant changes in patient status including but not limited to

1. Episode of hypotension
2. Respiratory insufficiency
3. Emergent intubation
4. Any other condition that is felt to necessitate contact
Vascular Surgery
1. If you discover a complication from surgical procedures that was not previously noted.
2. If you are notified of a patient with an impending airway problem.
3. If you are present at or know of an impending mortality.
4. If you receive a request for an emergent surgical intervention.
5. If you receive a request to accept a transfer from another hospital.
6. If you are fatigued and resident back-up coverage is not available to you
7. If you receive a request by an attending in another service to speak to the Vascular Surgery attending on call.
8. If there is an emergency declared at Stony Brook, such as a massive number of incoming casualties, you must notify the attending on call.
9. If you and your senior resident are unsure of diagnosis in a patient who requires emergent treatment that depends on the correct diagnosis being made by the study.
10. If you are unable to complete your work in a timely manner (e.g. you become ill, or there are a massive number of backed up patients, or there is equipment failure) you must notify your General Surgery attending on call.

Urology
Additional diagnoses:
Renal Stone:
- Temp > 101 in untreated stone
Nephrectomy:
- Suspect bleeding
- Need Transfusion
- Hematocrit < 27%
Partial Nephrectomy:
- Suspect bleeding
- Need for Transfusion
- Hematocrit < 27%
TURP:
- Bleeding Refractory to CBI
- Catheter malfunctions; unable to fix at bedside.
Simple Prostatectomy:
- Hematocrit < 27
- Drain output > urinary cath output
- Cath malfunction
Transplant Recipient:
- Hematocrit < 27
- Abrupt < in urine output
- Leg Ischemia
Radical Cystectomy:
- Hematocrit < 27
- Signs of Acute Abdomen

Submitted: January 29, 2007
Reviewed: November 17, 2008