Narrative Summary

Lena XXXX was an 82-year-old female with a significant medical history of arthritis, atrial fibrillation, brain aneurysm, CAD - Coronary Artery Disease, carotid artery stenosis, cataract, moderate COPD, GERD - Gastro-Esophageal Reflux Disease, glaucoma, hepatitis C, hiatal hernia, IBS (Irritable Bowel Syndrome), myocardial infarction, and sleep apnea. Her surgical history included carotid artery stent, cataract surgery, hysterectomy, pacemaker, sinus surgery twice, stent placement, and TNF. Her family history is significant for chronic obstructive pulmonary disease.

On February 27, YYYY, Ms. XXXX was attended by EMT personnel from Phoenix Fire Department. She complained of difficulty breathing. She stated that she woke up with an aching chest pain that radiated to her back. She also report difficulty breathing. Her vitals times two all were within normal range with the exception of being hypertensive. She also reported a history of stroke. Hospital staff was notified upon arrival to hospital that she might be a STEMI. She was transferred to Emergency Department at St Joseph's Hospital for further management.

AB Medical Center
February 27, YYYY to January 03, YYYY

Ms. XXXX was subsequently received in the Emergency Department of St. Joseph's Hospital and Medical Center. He was evaluated by XXXX, RN and XXXX, M.D. She complained of acute onset of chest pain with breathing difficulty that started around 0700 hours. Per EMS, 324 Aspirin was administered en route. She stated that she used 2L of oxygen at home at night. She also stated that her blood pressure was lower than usual in the morning. Her SpO2 was noted to be 87. Her pulse oximetry was hypoxic on room air. On cardiovascular exam, she was noted to be tachycardiac. On respiratory exam she was noted to be tachypneic, with diminished breath sounds in bilateral bases, and symmetrical chest wall expansion. She was assessed with congestive heart failure, hypertensive emergency, hypoxia, COPD exacerbation, pulmonary edema, and lactic acidosis. She was admitted to Medical Surgical with Telemetry in stable condition for further management.

EKG report obtained by XXXX, M.D. at 1108 hours showed sinus rhythm with occasional ectopic premature complexes, borderline right axis deviation, possible anterior myocardial infarction, ST deviation and Moderate T-wave abnormality suggestive of inferior ischemia.

Lab report obtained at 1136 hours showed elevated levels of hemoglobin at 14.5, PT at 15.9, INR at 1.3, glucose at 154, BUN/creatinine ratio at 26, B-Natriuretic peptide at 691.6, decreased levels of EGFR at 71, and normal levels of WBC at 9.5, RBC at 4.78, and hematocrit at 44.3

X-ray of chest obtained by XXXX, M.D. at 1145 hours for evaluation of shortness of breath showed patchy opacity at the left lung base suggestive of pneumonia or focal pulmonary edema, pulmonary vascular congestion, right upper lobe calcified granuloma, Pacemaker, normal sized heart, aortic calcifications, and degenerative changes of the shoulders. No significant pleural effusion or pneumothorax were noted.

At 1212 hours, Ms. XXXX was reevaluated by Kevin O'Mara, M.D. She was noted to be hypertensive and refused IV medications for blood pressure control.

1642 hours, Ms. XXXX was examined by XXXX, M.D. for history and physical evaluation of shortness of breath. She presented for evaluation of lower right-sided "achy" chest pain and shortness of breath since she woke up in the morning around 0700 AM. She reported increased cough and sputum production. Chest exam showed reduced air entry bilaterally, and crepitations to the bilateral lung bases. She was assessed with COPD with exacerbation, acute on chronic congestive heart failure, hypertensive emergency, acute on chronic hypoxemia, lactic acidosis, pulmonary edema, atrial fibrillation, and community-acquired pneumonia. She was admitted to telemetry bed and was started on Zithromax and Rocephin. IV Lasix, IV Solu-Medrol, restarting of Eliquis, and electrolytes replacement were recommended.

On December 28, YYYY, lab report obtained at 0126 hours showed elevated levels of absolute neutrophils at 8.6, glucose at 156, BUN at 26, BUN/creatinine ratio at 33, decreased levels of EGFR at 75, total protein at 6.1, albumin at 3.4, and normal levels of WBC at 9.5, RBC at 4.03, hemoglobin at 12.3, and hematocrit at 36.9

At 1407 hours, Ms. XXXX was examined by XXXX, AGACNP and XXXX, M.D. (Cardiology) for evaluation and management of dyspnea and CHF. She reported intermitted left sided chest pain. She was assessed with elevated BNP, dyspnea, chest pain, HTN, lactic acidosis, pulmonary edema, CAD, PAF, CAS, SS s/p DPPM, and history of CVA. She had no overt CHF symptoms but repeat echocardiogram was recommended for BNP elevation and pulmonary edema. GDMT was held in the setting hypotension and was recommended to resume low dose Coreg when able. She was also recommended to continue with Dig, Eliquis, and Plavix for management of rate controlled AF. First troponin was negative. She was noted with prior PCI, residual 50-60% RCA on LHC last year.

At 1419 hours, Ms. XXXX was examined by XXXX, M.D. for follow-up evaluation. In the morning, she reported that she was feeling much better and her breathing was a lot easier. However towards the afternoon she reported having difficulty breathing. She also reported chest pain. Her blood pressure had dropped to systolic in the 80s but responded with IV fluids. On chest exam, she exhibited reduced air entry bilaterally. She was assessed with severe sepsis present on admission, COPD with exacerbation, pneumonia, volume overload, lactic acidosis, acute on chronic hypoxemic respiratory failure, and hypotension. She was started on Rocephin and Zithromax. ID consult and Cardiology consult were recommended. She was started on supplemental oxygen and was recommended to wean as tolerated. Antihypertensives were held and gentle rehydration was recommended. She was also recommended to continue with other home medications.

On December 29, YYYY, lab report obtained at 0348 hours showed elevated levels of potassium at 5.5, glucose at 136, BUN at 28, BUN/creatinine ratio at 35, decreased levels of CO2 at 18, EGFR at 75, calcium at 8.4, albumin at 3.3, and normal levels of WBC at 8.7, RBC at 4.20, hemoglobin at 13.0, and hematocrit at 39.6

At 0822 hours, Ms. XXXX was examined by XXXX, M.D. (Infectious Disease) for antibiotic recommendations. She was assessed with possible community acquired left basilar pneumonia, and COPD with possible exacerbation. She was recommended to check Streptococcus pneumoniae urine antigen along with Legionella urine antigen, and respiratory multiplex along with a swallow evaluation. She was continued on Ceftriaxone and Azithromycin, and was recommended to be monitored for antibiotic side effects.

At 0859 hours, Ms. XXXX was examined by XXXX, AGACNP (Cardiology). Her echocardiogram was pending and her low dose Coreg was resumed in the morning as her BP was elevated

At 1229 hours, Ms. XXXX was examined by XXXX, M.D. She was assessed with resolved hypotension and chronic hypertension. Echocardiogram was ordered by cardiology and Lasix 20 mg PO was restarted.

At 1500 hours, transthoracic echocardiogram report was obtained by XXXX, M.D. for evaluation of dyspnea. Left ventricle cavity size was normal. Wall thickness was increased in a pattern of mild LVH. The estimated ejection fraction was in the range of 40% to 45%. She was also noted with mild diffuse hypokinesis. Doppler parameters were consistent with a reversible restrictive pattern, indicative of decreased left ventricular diastolic compliance and/or increased left atrial pressure (grade 3 diastolic dysfunction). The posterior annulus and leaflet was moderately calcified in the mitral valve, and there was mild regurgitation. Pacer wire or catheter was noted in right ventricle. Systolic function was normal. Systolic pressure was within the normal range. The estimated peak pressure was 26mm Hg.

On December 30, YYYY, lab report obtained at 0611 hours showed elevated levels of glucose at 139, BUN at 31, BUN/creatinine ratio at 42, and decreased levels of CO2 at 17, EGFR at 81, and calcium at 8.3

X-ray of chest obtained by XXXX, M.D. at 0731 hours for evaluation of CHF showed granuloma involving the right upper lobe, calcified mediastinal lymph nodes, no acute infiltrate, no pneumothorax, normal appearing cardiac silhouette with atrial biventricular pacemaker leads in place, and small right pleural effusion.

At 0846 hours, Ms. XXXX was examined by XXXX, AGACNP and Bonifasiyo Ssennyamantono, M.D. (Cardiology). She reported intermittent chest pain. She was assessed with worsening LVEF and ongoing diuresis. She was started on Lovenox due to anticipated LHC.

At 1419 hours, Ms. XXXX was examined by XXXX, M.D. (Infectious Disease). She was assessed with possible community acquired left basilar pneumonia. She was continued on Ceftriaxone and Azithromycin, and was monitored for antibiotic side effects. Her HIV test was noted to be positive and confirmatory test was recommended.

At 1512 hours, Ms. XXXX was examined by XXXX, M.D. (Internal Medicine). She reported persistent shortness of breath. On respiratory exam, her respirations were non-labored with mild coarse BS bilaterally. She was assessed with sepsis secondary to pneumonia and CAP. She was continued on Ceftriaxone and Azithromycin, and ID consult was recommended. She was also assessed with COPD with exacerbation, and Duonebs PRN and steroids were recommended. She was also assessed with acute on chronic hypoxemic respiratory failure and was recommended to continue NC and to wean as tolerated. She was assessed with chronic hypertension and was recommended to continue Carvedilol. She was also assessed with PAF and was recommended to continue with Dig/Plavix and Lovenox.

At December 31, YYYY, lab reports obtained at 0449 hours showed elevated levels of glucose at 193, BUN at 38, BUN/creatinine ratio at 51, and decreased levels of anion gap at 6, EGFR at 79, and calcium at 8.4

At 0953 hours, Ms. XXXX was examined by XXXX, AGACNP and Bonifasiyo Ssennyamantono, M.D. (Cardiology). She was recommended to continue with her current treatment including diuresis. She was planned for LHC on Monday/Tuesday.

At 1321 hours, Ms. XXXX was examined by XXXX, M.D. Chest exam showed reduced air entry bilaterally. She was assessed with pulmonary vascular congestion. She was continued on gentle diuresis and was scheduled for left heart catheterization.

At 1411 hours, Ms. XXXX was examined by XXXX, M.D. (Infectious Disease). Chest exam showed crackles in the lower zones. She was recommended to continue with her current treatment.

On January 01, YYYY, lab report obtained at 0640 hours showed elevated levels of glucose at 144, BUN at 28, BUN/creatinine ratio at 44, and decreased levels of anion gap at 6, EGFR at 88, and calcium at 8.4

At 1213 hours, Ms. XXXX was examined by XXXX, AGACNP and Bonifasiyo Ssennyamantono, M.D. (Cardiology). She was noted with intermittent chest pain and was continued on diuresis. She was made NPO after midnight for LHC in morning.

At 1229 hours, blood culture report for the specimens collected on December 27, YYYY at 1136 hours and 1142 hours was unremarkable with no growth at 5 days.

At 1302 hours, Ms. XXXX was examined by XXXX, M.D. She continued to complain of mild dyspnea. However she was able to speak in full sentences. On lung exam, she exhibited decreased breath sounds bilaterally with no crackles or wheezes.

At 1530 hours, Ms. XXXX was examined by XXXX, M.D. (Infectious Disease). On exam, she was noted with trace lower extremity edema. She was assessed with possible community acquired left basilar pneumonia. Streptococcus pneumoniae urine antigen along with Legionella urine antigen,

respiratory multiplex were negative. She was continued on Ceftriaxone and Azithromycin and was monitored for antibiotic side effects.

On January 02, YYYY, at 0902 hours, Ms. XXXX underwent left heart catheterization, selective coronary angiography, and left ventriculography for the diagnosis and management of new onset systolic congestive heart failure with known coronary artery disease. The procedure was performed by XXXX, M.D. under local anesthesia with Moderate conscious sedation. Vascular access hemostasis was obtained with the help of manual pressure. She had no angiographic evidence of obstructive coronary artery disease with patent LAD and RCA stents. No change in anatomy was noted since prior angiogram. She was recommended to be continued on maximal directed medical therapy for systolic congestive heart failure.

At approximately 1050 hours, Ms. XXXX had arrived to unit. Right groin puncture site was assessed with Emily D, RN. No bleeding, no firm areas or protrusions were noted. At 1139 hours, call was received from Rilea, RN to assist with assessment. Ms. XXXX reported to RN that "I feel like I'm going to pass out! I can't breathe, I'm in pain". Right groin site was assessed and no bleeding was noted however right lower abdomen was firm and painful to touch. Ms. XXXX was noted with softball sized "hematoma" of right abdomen. Her eyelids and tongue were checked. Her eyelids were pale, and tongue was cyanotic. She was desaturated to 77 off oxygen. BP were attempted at multiple sites. Resource RN and Charge RN were contacted and rapid response was called. Attempt to contact MD was unsuccessful.

At 1212 hours, RRT was called for concern for left heart cath. House Manager, RRT came to bedside to assist. Ms. XXXX became increasingly drowsy and increasingly difficult to rouse. Dr. XXXX was contacted and findings were reported. Dr. XXXX stated "Why did you call a rapid response?!". It was reiterated that nobody was able to contact him directly and Ms. XXXX had changes in vitals, increasing pain and developing hematoma.

At 1222 hours, SWAT was at bedside. Pedal pulses were weak on palpation and capillary refill was <3. Her vitals were stable and patient complaints of 10/10 pain. She was also noted with difficulty finding pulses in her right LE. Doppler was used, and pulses were found on dorsal ped, and right popliteal.

At 1223 hours, Dr. XXXX had ordered that Ms. XXXX be brought to cath lab.

At 1225 hours, Ms. XXXX was transported to cath lab on portable monitor with RN x 3 and her daughter. SWAT RN escorted Ms. XXXX to cardiac catheterization lab.

At 1230 hours, Ms. XXXX underwent aortoiliac angiography with selective right iliac artery angiography for evaluation and management of low blood pressure and possible hematoma concern for retroperitoneal hematoma. The procedure was performed by XXXX, M.D. No contrast extravasation was noted either in the internal or external iliac artery or in the common femoral artery. She was hemodynamically stable. Left Femoral arterial access vascular access closure was done with the help of a 5/6-French Mynx device. No hematoma was noted as well. Her pain was noted to be likely from

distended urinary bladder. Noninvasive blood pressure reading in the left arm was recommended as she had left iliac artery stenosis, and would have falsely low BP in lower extremity.

At 1235 hours, Ms. XXXX was left stable in care of cath lab team RRT.

Later Anita RN called Rilea RN and overheard report. Anita stated "Ms. XXXX didn't have anything there, it was just urine. She will need to be straight cath and before any procedures, she should have gone to the bathroom." Anita RN was informed that Ms. XXXX had voided prior to cath lab. Cardiac RN contacted Rilea RN and reported that Ms. XXXX did have additional cath on right side and new cath on left side. There was a hematoma on right side. She remained in recovery for 2 hours prior to being transported back to unit.

At 1402 hours, Ms. XXXX was examined by XXXX, M.D. (Infectious Disease) status post cardiac catheterization. Basal crackles were noted on chest exam. She was also noted with trace lower extremity edema. Antibiotics were discontinued and was monitored for antibiotic side effects.

Lab report at 1635 hours showed elevated levels of WBC at 18.9, decreased levels of MCHC at 31.7, and normal levels of RBC at 4.25, hemoglobin at 12.3, hematocrit at 38.7, and platelet at 325.

At 1826 hours, Ms. XXXX was examined by XXXX, M.D. Cardiology documentation was noted about no evidence of leak. She was concerned about carotid artery stenosis. She was assessed with pulmonary vascular congestion s/p LHC with no stent (LAD ?RCA) occlusion. She was recommended to be continued on gentle diuresis.

EKG report obtained by XXXX, M.D. at 2158 hours showed sinus rhythm, possible left atrial enlargement, left ventricular hypertrophy and ST-T change, and left ventricular hypertrophy now present

On January 03, YYYY at 0228 hours, Ms. XXXX was examined by Marteen Fowler, RN. She was unable to void, bladder scan showed 585ml, straight cath was placed and 600 mL urine was drained. She was uncomfortable all night but refused repositioning due to pain, and stayed laying on right side. New IV was placed by SWAT in morning. Ms. XXXX and her family continued to refuse blood pressure medication and stated that they'd rather be on home medications only. They were educated on the importance of mediations ordered and rationale behind giving ordered medications due to procedures. Ms. XXXX complained of chest pain in morning and stated that she needed a breathing treatment to help. Breathing treatment was completed, and chest pain had resolved.

At 0905 hours, Ms. XXXX had PT and OT evaluation with Emily Cline, PT, DPT and Amanda Blattman, OTD, OTR/L. PT and OT attempted to work with therapy but could not as she reported generalized pain.

At 1148 hours, Ms. XXXX was examined by XXXX, M.D. (Infectious Disease). She was assessed with leukocytosis and was recommended to follow CBC closely.

Lab report at 1330 hours showed elevated levels of WBC at 15.1, glucose at 133, BUN at 56, BUN/creatinine ratio at 56, decreased levels of RBC at 3.41, hemoglobin at 10.2, hematocrit at 31.1, sodium at 134, chloride at 87, EGFR at 56, and normal levels of platelet at 299

At 1340 hours, Ms. XXXX was examined by XXXX, M.D. Ms. XXXX underwent left heart cath yesterday with patent stents in the LAD and RCA. Post-procedure, she developed abdominal pain and discomfort at the right femoral access site. She was taken back to the Cath Lab and had a iliofemoral angiography done which did not show any active extravasation. She complained of severe pain in the abdomen in the morning, and was unable to move. On exam, she appeared distressed. Lung exam showed distant breath sounds at the bases bilaterally, abdominal exam showed diffuse tenderness to palpation, and felt tense in the lower abdomen. She was assessed with possible retroperitoneal bleed, heart failure with reduced EF, systemic hypertension, CAD, PAF, CAS, SSS s/p DPPM, and history of CVA. CT abdomen to evaluate for retroperitoneal bleed, stat CBC and BMP were ordered. Plavix and Eliquis were held, and was recommended to continue Coreg 6.25 PO twice daily. She was also recommended to continue Digoxin 125 daily, and Hydralazine 25 3 times daily.

CT of Abdomen and Pelvis with and without contrast obtained by XXXX, M.D. and Benjamin Weigman, PGY1 at 1532 hours for evaluation of retroperitoneal bleed showed large mixed density right retroperitoneal hematoma extending to the right pelvic sidewall/inguinal canal. The collection measured approximately 8.0 x 10.2 x 14.7 cm. Several small foci of contrast blush within the collection was noted on arterial phase imaging. The findings were compatible with active hemorrhage.

Around 1650 hours, XXXX, M.D. received a call from radiologist regarding his findings on Ms. XXXX's CT of the abdomen and pelvis. Apparently the phlebotomist had difficulty with blood draws so the repeat H&H was still pending. Cardiologist was called to discuss the CT findings and was planned to monitor H&H closely and transfuse as needed. Her condition was also discussed with interventional radiologist. His recommendation was to monitor H&H and call him back if there was any further drop.

At 1717 hours, Ms. XXXX was examined by XXXX, M.D. She reported generalized bodily pain. On exam, she was only partially cooperative. Her abdominal exam was incomplete as she would not allow to fully examine the groin and the lower abdomen. The abdomen was noted to be full, soft and mildly tender. Bowel sounds were present and normal. She was assessed with suspected retroperitoneal bleed complicating left heart catheterization. She was noted with approximately hemoglobin drop of about 2 units since yesterday. Stat CAT scan of the abdomen and pelvic was ordered for further evaluation. Repeat hemoglobin and hematocrit Q 2 hours, and IV fluid maintenance were recommended. She was also assessed with PAF and the rate was controlled. Plavix and Eliquis were held because of suspected bleed

Lab report at 1820 hours showed decreased levels of hemoglobin at 7.4, and hematocrit at 23.5

XXXX, M.D. subsequently received a call from Ms. XXXX's RN with report of hemoglobin 7.4 g/dL, and was instructed to transfuse 2 units of packed RBC. Arrangements were made to transfer Ms. XXXX to ICU. Follow-up call was made and cardiology stated that it was planned to send Ms. XXXX to

the cardiac lab for further interventions to attempt to stop the bleeding. A few minutes later a call was received from the cardiologist and reported that he had spoken to interventional radiologist and that Ms. XXXX would be going to the IR department for embolization. She was to be sent to the ICU after the procedure.

At 1836 hours, Ms. XXXX was examined by Cees XXXX, M.D. (Vascular Surgery) for evaluation of abdominal pain and surgical evaluation. On exam, her abdomen was soft, nondistended, mild TTP RLQ, and non-peritonitic. She was assessed with systolic congestive heart failure s/p LHC and return for iliofemoral angio due to postoperative abdominal/access site pain found to have R retroperitoneal hematoma with blush demonstrated on CT scan. Ms. XXXX's condition and imaging were discussed with Dr. Zomaya with no surgical intervention planned. IR consultation was recommended to address blush demonstrated on CT scan.

At 1830-1845 hours XXXX, M.D. had received a phone call from Dr. XXXX (the on call cardiologist) and stated that he had been notified by the nurse that the results of the CT showed a large right retroperitoneal hematoma with active extravasation. The case was briefly discussed. Ms. XXXX was noted to be stable per report. At the time of the phone call he notified that the hgb had only dropped 2 grams. He also informed that the patient had been receiving Aspirin, Plavix, and Lovenox, all of which were stopped. Upon chart review, it appeared that Ms. XXXX underwent a left heart catheterization by Dr. XXXX at roughly 0902 on January 02, YYYY with right groin arterial access. She then underwent a repeat pelvic angiogram via the left groin access roughly three hours later for hypotension and suspected hematoma. A CT scan was finally performed at 1522 the following day, almost 24 hours later. A repeat CBC was also ordered 24 hours later showing a 2 gram drop in hgb. The imaging was reviewed that showed a very large right retroperitoneal hematoma with what looked like active extravasation near the right flank, although the origin of the active extravasation was difficult to define.

After chart and imaging review, XXXX, M.D. called Dr. XXXX again and the case was further discussed. At this time the follow up H&H had resulted showing a further drop in hgb to 7.4 (initial was 12.3 on January 02, YYYY). Again, XXXX, M.D. was informed that the patient was stable, but given the drop in hgb, the size of the hematoma, and the active extravasation it was decided to proceed with pelvic angiogram. The IR team was paged at 1935 hours.

At 1942 hours, Hiva XXXX, M.D. was informed by the nurse with the result of abdominal CT which showed large retroperitoneal bleed with active possibly arterial bleeding. Her condition was first discussed with Vascular Surgery and then IR Dr. XXXX. Since there was a huge hemoglobin drop to 7, it was decided to proceed with angiography for possible embolization of the site of bleeding if possible. Her condition was discussed with hospitalist Dr. Owusu. She was planned to be transferred to ICU. PRBC transfusion was recommended to keep Hgb >8.0. All anticoagulants were held and Ms. XXXX was transferred to IR prior to ICU for embolization of bleed.

Ms. XXXX was in the room at 2006. XXXX, M.D. arrived and spoke with Ms. XXXX's daughter, and consent was obtained. When XXXX, M.D. came into the fluoro suite Ms. XXXX was on the procedure table already, she was curled on her right side, somewhat combative, and was difficult to

direct. She appeared to be very pale, clearly uncomfortable and in distress. Due to persistent low BP and in order to get her in proper position 0.5mg Versed and 25mcg Fentanyl was administered at 2015 hours.

Given that her blood pressure was still low normal at this I gave the OK for a small amount of sedation to make her more comfortable. I believe the IR nurse gave her 0.5 mg of versed and 25 mg of Fent to calm her. Over the next 20-30 min while prepping she was noted to have a very large protrusion on her right abdomen, which was clearly the hematoma. There was marker on her skin from where the nurses had been tracking the size. I evaluated her left arm for radial access because I was hoping to avoid re-accessing her groins as they had both recently been accessed. CT showed severe stenosis of the left common iliac artery, and the right groin was compromised by the large hematoma. Evaluation of the left wrist showed extensive ecchymosis. Both the radial and ulnar arteries were extremely small and was difficult to follow given the hematomas and flow was difficult to detect with US. The decision was then made to access the left groin for the pelvic angiogram.

While Ms. XXXX was being prepped for the angiogram the nurse noted that they were having great difficulty with getting a blood pressure reading. Time out was noted at YYYY. Her vitals were difficult to monitor, and was started on Levophed at 4 at YYYY per Dr. XXXX for suspected hypotension. The nurses started a Levophed drip. PRBC infusion was recommended as fast as possible. XXXX, M.D. was then informed that Ms. XXXX had one small peripheral IV. XXXX, M.D. had decided to place a triple lumen central venous catheter in the right neck so that they could infuse pressors and blood products. The nurses and techs spent the next 15 minutes or so searching for supplies only to find that many of the necessary equipment was either not stocked, in another room, or no longer in the location it was supposed to be. Due to supply chain issues not all necessary equipment was in the room and was out of stock in the department so staff was running around to put a central line tray together due to limited IV Access. In the time they spent looking for supplies, Ms. XXXX had stopped breathing and was not arousable. She had a weak pulse but likely only because she had a pace maker. Once all supplies were gathered, Dr. XXXX started to prep the Right IJ for a central line when it was observed the Ms. XXXX had stopped breathing, CPR was immediately started. A code was called at 2041 hours and CPR was initiated. MICU team presented at approx 2043 hours where at that time first round of chest compression was already started by IR team. The code team arrived roughly 5 minutes later at around 2046 hours. Code blue was conducted by XXXX, D.O. On presentation, Ms. XXXX was in a paced rhythm and was apneic and required to be bagged. Ms. XXXX was intubated emergently during the code blue for management of cardiac arrest. Ms. XXXX was intubated by XXXX, M.D. After roughly 45 minutes of running the code, Ms. XXXX was pronounced dead. The procedure had never even started. Dr. XXXX called time of death at 2109. Pt was taken out of IR Room 15 at aprox. 2120.

**Reviewer's Comments: The corresponding code sheet is not available for review.*

XXXX, M.D. reported that, "it was still very unclear why a repeat angiogram was performed and not a CT to evaluate for a bleed as CTA is the standard of care, and was far more sensitive for active bleeding, and would have allowed visualization of the presence/location of the bleed. I also don't know why the hgb was not trended q4h or q6h at the very least? And finally, why anticoagulation still being given to Ms. XXXX with a suspected bleed and hypotension? It was almost 34 hours after the initial

event that the IR team was finally consulted. I do believe that earlier intervention could have potentially saved her."

XXXX, M.D. also reported that, "In the IR department, there were clearly issues with supplies, location, and overall preparedness for such a case. All of which are unacceptable and could have been avoided. The issues in IR will be addressed in a department meeting/debriefing tomorrow. Although unable to alter the care and decision making on the floor prior to IR team being consulted, we will make the changes and training necessary in the IR department to avoid any further issues in the future."

Preliminary cause of death was noted to be hemorrhage, bacterial pneumonia, and respiratory failure.

*****