HCHS/SOL PULMONARY ABSTRACTION FORM (PUL)

PARTICIPANT ID NUMBER:									FORM CODE: PUL VERSION: B 06/05/2015	Contact Occasion		OCC #	

ADMINISTRATIVE INFORMATION

0a. Completion Date: ☐☐/☐☐/☐☐☐☐ (Month / Day / Year)

0b. Staff ID: ☐☐☐

0c. Event ID: ☐☐☐☐☐☐☐☐☐☐☐☐

0d. Event Date: ☐☐/☐☐/☐☐☐☐

Instructions: Answers are derived from the medical records received. Do not complete this form until all records are received (or classified as unobtainable) as indicated on the Verification of ICD Discharge Codes Form

A. GENERAL INFORMATION

1. Was the event (choose one): ..... ☐ →***if response is "2" skip to Item 3***
   1= In hospital only
   2= Emergency Dept. visit only(ED)
   3= Both ED and in hospital
   4= Observation care only
   5= Both ED and observation care

2. Was the hospital stay less than 24 hours? ..... No/NR 0 ☐ Yes 1 ☐

3. a. Date of arrival: (mm/dd/yyyy) ..... ☐☐/☐☐/☐☐☐☐

   b. Time of arrival: ☐☐:☐☐ *1 = A.M., 2 = P.M.* ☐

   c. Date of admission: ☐☐/☐☐/☐☐☐☐

4. a. Date of discharge: (mm/dd/yyyy)..... ☐☐/☐☐/☐☐☐☐

   b. Time of discharge: ☐☐:☐☐ *1 = A.M., 2 = P.M.* ☐

5. What was the primary admitting diagnosis code? ☐☐☐☐☐.☐☐

6. What was the primary discharge diagnosis code? ☐☐☐☐☐.☐☐

	No/NR	Yes
7. Did an emergency medical service unit transport the patient to this hospital?	0 ☐	1 ☐
8. Was the patient transferred to this hospital from another hospital?	0 ☐	1 ☐
9. Was the patient's code status ever "no-code" or "DNR" (do not resuscitate)?	0 ☐	1 ☐
10. Was the patient alive at discharge?	0 ☐	1 ☐

B. SIGNS AND SYMPTOMS

I. Signs and Symptoms

11. Did the patient have any of the following signs or symptoms at the time of the event?

	No	Yes	Not Recorded
a. New onset or increase in cough?	0 ☐	1 ☐	9 ☐
b. New onset or increase in sputum production?	0 ☐	1 ☐	9 ☐
c. New onset or increase in sputum purulence?	0 ☐	1 ☐	9 ☐
d. New onset or increase in wheezing?	0 ☐	1 ☐	9 ☐
e. New onset or increase in chest tightness or chest pain?	0 ☐	1 ☐	9 ☐
f. New onset or increase in leg edema (unilateral or bilateral)?	0 ☐	1 ☐	9 ☐
g. New onset or increase in use of rescue bronchodilator?	0 ☐	1 ☐	9 ☐
h. New onset or increase in dyspnea?	0 ☐	1 ☐	9 ☐
i. Dyspnea (at rest)?	0 ☐	1 ☐	9 ☐
j. Dyspnea (walking or on exertion)?	0 ☐	1 ☐	9 ☐
k. Woken up at night by shortness of breath?	0 ☐	1 ☐	9 ☐
l. Fever?	0 ☐	1 ☐	9 ☐
m. Delirium or altered mental status (AMS)?	0 ☐	1 ☐	9 ☐

II. Evidence in Physicians' Notes of Reason for Event

	No/NR	Yes
12. Was there evidence in the doctor's notes that the reason for this event may be an exacerbation of COPD, chronic bronchitis, or emphysema?	0 ☐	1 ☐
13. Was there evidence in the doctor's notes that the reason for this event may be an exacerbation of asthma?	0 ☐	1 ☐
14. Did the patient have new onset or progressive signs/symptoms of this exacerbation prior to presentation in ED or hospital?	0 ☐	1 ☐

C. MEDICAL HISTORY

15. Prior to this event was there a history of any of the following:	No/NR	Yes
a. Asthma	0 ☐	1 ☐
b. Chronic bronchitis	0 ☐	1 ☐
c. Emphysema	0 ☐	1 ☐
d. Chronic obstructive pulmonary disease (COPD)	0 ☐	1 ☐
e. Pulmonary fibrosis	0 ☐	1 ☐
f. Sarcoidosis	0 ☐	1 ☐
g. Lung cancer	0 ☐	1 ☐
h. Lung resection or lobectomy	0 ☐	1 ☐

15. Prior to this event was there a history of any of the following:

		No/NR	Yes
i.	Home oxygen (do not include CPAP)	0 ☐	1 ☐
j.	Pulmonary embolus	0 ☐	1 ☐
k.	Pulmonary hypertension	0 ☐	1 ☐
l.	Cor pulmonale	0 ☐	1 ☐
m.	Obstructive Sleep Apnea (OSA)	0 ☐	1 ☐
n.	Coronary artery disease	0 ☐	1 ☐
o.	Heart failure	0 ☐	1 ☐
p.	Atrial fibrillation/atrial flutter	0 ☐	1 ☐
q.	Diabetes	0 ☐	1 ☐
r.	Pulmonary Tuberculosis	0 ☐	1 ☐
s.	Bronchiectasis	0 ☐	1 ☐

16. If prior PFT results were provided, what is percent predicted FEV1?

16.a. Pre-bronchodilator ☐☐☐.% 16.b.Post-bronchodilator ☐☐☐.%

17. What is FEV_1/FVC ratio? ☐☐☐.☐☐ 17.a. units ☐

1=proportion or decimal
2=percent (If percent, then assure not percent predicted for the ratio)

D. HOSPITAL COURSE

18. Current or active problems anytime during this visit

		No/NR	Yes
a.	Upper Respiratory Infection (sinusitis, nasopharyngitis, pharyngitis, epiglottitis, laryngitis, laryngotracheitis, acute bronchitis)	0 ☐	1 ☐
b.	Pneumonia	0 ☐	1 ☐
c.	Pulmonary embolus	0 ☐	1 ☐
d.	Myocardial infarction	0 ☐	1 ☐
e.	Heart failure exacerbation	0 ☐	1 ☐
f.	Atrial fibrillation/atrial flutter	0 ☐	1 ☐
g.	Supraventricular Tachycardia (SVT) or multifocal atrial tachycardia (MAT)	0 ☐	1 ☐
h.	Cardiac Surgery – CABG or Valvular Surgery	0 ☐	1 ☐
i.	Non-cardiac surgery	0 ☐	1 ☐

E. PHYSICAL EXAM

19. Vital Signs at arrival to hospital or ED (or at onset of event if began after arrival)

a. heart rate ☐☐☐ bpm

b. respiration rate ☐☐ per minute

c. Oxygen Saturation (SpO_2/pulse oximetry) ☐☐☐.%

c.1. Oxygen Sats on room air? No 0 ☐ Yes 1 ☐ ***Skip to 19d*** Unknown 9 ☐ ***Skip to 19d***

c.2. If not on room air, what level oxygen? ☐☐☐.☐ ☐ 1= Liters, 2=Percent

d. Weight ☐☐☐.☐ ☐ 1= Lbs, 2=Kg

20. Did the patient have any of the following signs (at the time of the event)?

	No	Yes	NR
a. Use of accessory muscles	0 ☐	1 ☐	9 ☐
b. Cyanosis	0 ☐	1 ☐	9 ☐
c. Clubbing	0 ☐	1 ☐	9 ☐
d. Jugular venous distention (JVD) or distended neck veins	0 ☐	1 ☐	9 ☐
e. Crackles/rales	0 ☐	1 ☐	9 ☐
f. Wheezing or rhonchi	0 ☐	1 ☐	9 ☐
g. Decreased unilateral breath sounds	0 ☐	1 ☐	9 ☐
h. Decreased bilateral breath sounds	0 ☐	1 ☐	9 ☐
i. Prolonged expiratory time	0 ☐	1 ☐	9 ☐
j. Egophony	0 ☐	1 ☐	9 ☐
k. Lower extremity edema (unilateral or bilateral)	0 ☐	1 ☐	9 ☐

F. DIAGNOSTIC TESTS

21. Was a chest X-ray performed during this event? No/NR 0 ☐ ***skip to 23*** Yes 1 ☐

22. Did the patient have any of the following signs on chest x-ray at any time during this event?

	No/NR	Yes
a. Hyperinflation	0 ☐	1 ☐
b. Flattened diaphragms	0 ☐	1 ☐
c. Consolidation or infiltrate	0 ☐	1 ☐
d. Scarring	0 ☐	1 ☐
e. Nodule(s) > 8mm	0 ☐	1 ☐
f. Mass(es) > 3cm	0 ☐	1 ☐
g. Pulmonary edema, pulmonary vascular congestion (alveolar, interstitial)	0 ☐	1 ☐
h. Bilateral pleural effusion	0 ☐	1 ☐
i. Unilateral pleural effusion	0 ☐	1 ☐
j. Emphysema	0 ☐	1 ☐
k. Cardiomegaly	0 ☐	1 ☐

23. Was a chest/lung CT scan or CT angiogram (CTA) performed during this event?

No/NR 0 ☐ ***skip to 25*** Yes 1 ☐

24. Did the patient have any of the following signs on CT scan at any time during this event?

		No/NR	Yes
a.	Emphysema	0 ☐	1 ☐
b.	Nodule(s) > 8mm	0 ☐	1 ☐
c.	Mass(es) > 3cm	0 ☐	1 ☐
d.	Lymphadenopathy	0 ☐	1 ☐
e.	Ground glass changes	0 ☐	1 ☐
f.	Pneumonia	0 ☐	1 ☐
g.	Fibrosis or honeycombing	0 ☐	1 ☐
h.	Filling defect—vascular (PE)	0 ☐	1 ☐
i.	Filling defect—mucus plug	0 ☐	1 ☐
j.	Cysts or blebs	0 ☐	1 ☐
k.	Atelectasis	0 ☐	1 ☐
l.	Calcifications	0 ☐	1 ☐
m.	Pulmonary embolus	0 ☐	1 ☐
n.	Enlarged pulmonary artery	0 ☐	1 ☐
o.	Bronchiectasis	0 ☐	1 ☐
p.	Pulmonary edema or pulmonary vascular congestion	0 ☐	1 ☐
q.	Cardiomegaly	0 ☐	1 ☐
r.	Bilateral pleural effusion	0 ☐	1 ☐
s.	Unilateral pleural effusion	0 ☐	1 ☐
t.	Airway wall thickening	0 ☐	1 ☐

25. Was spirometry (lung function testing) performed during this hospitalization?

No/NR 0 ☐ ***Skip to 26*** Yes 1 ☐

a1. FEV_1 ☐☐.☐☐ L

a2. FEV_1 Percent Predicted ☐☐☐%

b1. FVC ☐☐.☐☐ L

b2. FVC Percent Predicted ☐☐☐%

c1. FEV_1/FVC ratio ☐☐☐.☐☐

c2.units ☐ **1=**proportion or decimal
2=percent (If percent, then assure not percent predicted for the ratio)

26. Was post-bronchodilator spirometry measured? No/NR 0 ☐ ***Skip to 27*** Yes 1 ☐

a1. FEV_1 ☐☐.☐☐ L a2. FEV_1 Percent Predicted ☐☐☐%

b1. FVC ☐☐.☐☐ L b2. FVC Percent Predicted ☐☐☐%

c1. FEV_1/FVC ratio ☐☐☐.☐☐ units ☐ **1=**proportion or decimal **2=**percent (If percent, then assure not percent predicted for the ratio)

27. Was peak expiratory flow rate (PEFR or PEF) obtained at the time of event?

No/NR 0 ☐ ***Skip to 28*** Yes 1 ☐

a. Date of first PEF(R) taken at time of event: (mm/dd/yyyy) ☐☐/☐☐/☐☐☐☐

b. First PEF recording ☐☐☐

c. Worst or lowest PEF recording (anytime during hospitalization) ☐☐☐

28. Was peak expiratory flow rate (PEFR or PEF) obtained at discharge?

No/NR 0 ☐ ***Skip to 29*** Yes 1 ☐

a. Date of last PEF(R) taken at discharge: (mm/dd/yyyy) ☐☐/☐☐/☐☐☐☐

b. Last PEF recording ☐☐☐

29. Was a ventilation perfusion scan (VQ Scan) done? No/NR 0 ☐ ***Skip to 30*** Yes 1 ☐

a. Ventilation perfusion scan results (record number of answer) ☐

1. High probability
2. Intermediate probability
3. Low probability
4. No evidence of Pulmonary Embolus
5. Indeterminate

30. Was an echocardiogram (TTE or TEE) performed? No/NR 0 ☐ ***Skip to 31*** Yes 1 ☐

If more than one ECHO performed, then use the worst value for each question

a. Ejection fraction: ☐☐% b. RVSP (right ventricular systolic pressure) ☐☐☐.☐☐mmHg

Record the following if present on echocardiogram:	None	Present	Mild	Mod	Severe	NR
c. Right Ventricular Hypertrophy	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	9 ☐
d. Impaired RV systolic function	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	9 ☐
e. Pulmonary hypertension	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	9 ☐
f. Tricuspid Regurgitation	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	9 ☐

g. Diastolic dysfunction ..... No/Unknown/NR 0 ☐ Yes 1 ☐

G. BIOCHEMICAL TESTS

31. White Blood Cell Count ☐☐.☐

a. First (at event)

32. Hemoglobin (g/dL) ☐☐.☐

33. Hematocrit (%) ☐☐.☐

34. Sodium (mEq/L) ☐☐☐

35. Serum creatinine (mg/dL) ☐☐.☐☐

36. BUN (mg/dL) ☐☐.☐

37. Bicarbonate (total CO2) ☐☐.☐

	a.First (at event)	**b.Upper limit normal**
38. BNP (pg/mL)	a. ☐☐☐☐☐.☐	b. ☐☐☐☐☐.☐
39. ProBNP (pg/mL)	a. ☐☐☐☐☐.☐	b. ☐☐☐☐☐.☐

40. Were Arterial Blood Gases (ABGs) obtained? No/NR 0 ☐ ***Skip to 41*** Yes 1 ☐

	a.First blood gas (at time of event)	**b. Last blood gas**
pH	1.☐☐.☐☐	1.☐☐.☐☐
PaCO2	2.☐☐.☐mmHg	2.☐☐.☐mmHg
PaO2	3.☐☐☐.☐mmHg	3.☐☐☐.☐mmHg
O_2 Saturation	4.☐☐☐.☐%	4.☐☐☐.☐%

c. Blood gas on room air? No 0 ☐ Yes 1 ☐ ***Skip to 41*** Not Recorded 9 ☐ ***Skip to 41***

c.1. If not on room air, what level oxygen? ☐☐☐.☐ ☐ 1= Liters, 2=Percent

41. Was a sputum culture done? No/NR 0 ☐ ***Skip to 42*** Yes 1 ☐

a. Culture Results Neg 0 ☐ ***Skip to 42*** Pos 1 ☐ Not Recorded 9 ☐ ***Skip to 42***

b. If yes, were any of the following reported in the sputum culture?

	No	Yes
1. Haemophilus Influenzae	0 ☐	1 ☐
2. Moraxella Catarrhalis	0 ☐	1 ☐
3. Streptococcus pneumoniae	0 ☐	1 ☐
4. Methicillin-resistant Staphylococcus Aureus (MRSA)	0 ☐	1 ☐
5. Staphylococcus aureus (not MRSA)	0 ☐	1 ☐
6. Mycoplasma pneumoniae	0 ☐	1 ☐
7. Pseudomonas Aureginosa	0 ☐	1 ☐
8. Chlamydophila (or Chlamydia) pneumoniae	0 ☐	1 ☐
9. Oropharyngeal flora	0 ☐	1 ☐

10. Other_____

42. Was a blood culture done? No/NR 0 ☐ ***Skip to 43*** Yes 1 ☐

a. Culture Results Neg 0 ☐ ***Skip to 43*** Pos 1 ☐ Not Recorded 9 ☐ ***Skip to 43***

b. If yes, were any of the following reported in the blood culture?

	No	Yes
1. Haemophilus Influenzae	0 ☐	1 ☐
2. Moraxella Catarrhalis	0 ☐	1 ☐
3. Streptococcus pneumoniae	0 ☐	1 ☐
4. Methicillin-resistant Staphylococcus Aureus (MRSA)	0 ☐	1 ☐
5. Staphylococcus aureus (not MRSA)	0 ☐	1 ☐

6. Other_____

43. Influenza swab Neg 0 ☐ Pos 1 ☐ Not Recorded 9 ☐

H. TREATMENTS / MEDICATIONS

	No/NR	Yes
44. CPAP or BiPap	0 ☐	1 ☐
45. Mechanical Ventilation	0 ☐	1 ☐
46. Inhaled short-acting beta-agonists (ie,albuterol, xopenex)	0 ☐	1 ☐
47. Inhaled short-acting anticholinergics (ie, atrovent, ipratropium)	0 ☐	1 ☐
48. Nebulized Bronchodilators	0 ☐	1 ☐
49. Magnesium injections in ED	0 ☐	1 ☐
50. Oxygen (continuous or prn)	0 ☐	1 ☐
51. IV Antibiotics	0 ☐	1 ☐
52. Systemic Corticosteroid (IV or PO)	0 ☐	1 ☐
53. IV Lasix or Furosemide	0 ☐	1 ☐

	At onset of time of event			At discharge	
	No/NR	Yes		No/NR	Yes
54. Antibiotics-oral	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐
55. Systemic corticosteroid (ie prednisone)	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐
56. Inhaled short acting beta-agonists (ie albuterol).....	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐
57. Inhaled long-acting beta-agonist (ie, serevent)	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐
58. Inhaled short-acting anticholinergics (ie, atrovent)	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐
59. Inhaled long-acting anticholinergics	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐
60. Inhaled corticosteroids	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐
61. Nebulized bronchodilators	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐
62. Leukotriene antagonist.....	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐
63. Home oxygen	a. 0 ☐	1 ☐	.....	b. 0 ☐	1 ☐