#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
		Enable if age >= 65 and catnum = 10, 29, 41, 42, 53, or 55		
		History of Impairment		
1	delidone	**Delirium Risk review was previously completed for this case for the same episode of care.**	**If checked, disable Delirium Risk Module.** If not checked, enable Delirium Risk Module.	
2	hxcogimp1 hxcogimp2 hxcogimp3 hxcogimp4 hxcogimp6 hxcogimp7 hxcogimp8 hxcogimp10 hxcogimp11 hxcogimp99	During the first 24 hours after arrival, does the record document a history of cognitive impairment? **Indicate all that apply:** 1. Dementia or demented 2. Memory loss 3. Alzheimer's Disease 4. Poor historian 6. Unarousable 7. Uncooperative 8. Change in mental status (from baseline) 10. Confused 11. Lethargic or obtunded 99. None of the above	1, 2, 3, 4, 6, 7, 8, 10, 11, 99 Cannot enter 99 with any other number	**The intent of the question is to determine if there is historical evidence of cognitive impairment documented during the first 24 hours after arrival.** Do NOT include documentation of a new problem of cognitive impairment. Do NOT use the assessment and plan (A/P) section of the History & Physical as a data source for this question. **Suggested data sources:** ED notes, History and Physical (History of Present Illness, Past Medical History, Physical Exam), Nursing assessment/admission notes, problem list
3	demedrx1 demedrx2 demedrx3 demedrx4 demedrx99	Upon admission, were any of the following medications listed as home (current) medications for the patient? **Indicate all that apply:** 1. donepezil (Aricept) 2. galantamine (Razadyne) 3. memantine (Namenda) 4. rivastigmine (Excelon) 99. None of the above	1, 2, 3, 4, 99	**The purpose of the question is to identify patients who are on a medication for dementia prior to hospital admission.** **Suggested data sources: Admission H&P, Medication Reconciliation note, ED notes**

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
4	benzorx1 benzorx2 benzorx3 benzorx4 benzorx5 benzorx6 benzorx99	Upon admission, were any of the following medications listed as home (current) medications for the patient? **Indicate all that apply:** 1. alprazolam (Xanax) 2. chlordiazepoxide (Librium) 3. clonazepam (Klonopin) 4. diazepam (Valium) 5. lorazepam (Ativan) 6. temazepam (Restoril) 99. None of the above	1, 2, 3, 4, 5, 6, 99	**The purpose of the question is to identify patients who are on a benzodiazepine prior to hospital admission.** **Suggested data sources: Admission H&P, Medication Reconciliation note, ED notes**
5	visimpair	During the first 24 hours after arrival, does the record document a history of vision impairment as evidenced by documentation of one of the following? • Visual Loss • Vision abnormal • Low vision • Cataract • Vision impairment • Decreased vision • Blindness • Blurred vision • Wears glasses 1. Yes 2. No	1, 2	**The intent of the question is to determine if there is historical evidence of vision impairment documented during the first 24 hours after arrival.** Do NOT include documentation of a new problem of vision impairment. Do NOT use the assessment and plan (A/P) section of the History & Physical as a data source for this question. **Review suggested data sources for documentation of history of Vision Impairment as evidenced by any of the following:** • Visual Loss • Vision abnormal • Low vision • Cataract • Vision impairment • Decreased vision • Blindness • Blurred vision • Wears glasses **Suggested data sources:** ED notes, History and Physical (History of Present Illness, Past Medical History, Physical Exam), Nursing assessment/admission notes, problem list

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
6	hearimp	During the first 24 hours after arrival, does the record document a history of hearing impairment as evidenced by documentation of one of the following? • Hearing Loss (Partial, Bilateral, or severe) • Sensorineural hearing loss • Conductive hearing loss • Problems with hearing • Mixed hearing loss • Central hearing loss • Deafness • Meinere's Disease • Hard of hearing • Wears hearing aids • Presbycussis 1. Yes 2. No	1, 2	**The intent of the question is to determine if there is historical evidence of hearing impairment documented during the first 24 hours after arrival.** Do NOT include documentation of a new problem of hearing impairment. Do NOT use the assessment and plan (A/P) section of the History & Physical as a data source for this question. **Review suggested data sources for documentation of history of Hearing Impairment as evidenced by any of the following:** • Hearing Loss (Partial, Bilateral, or severe) • Sensorineural hearing loss • Conductive hearing loss • Problems with hearing • Mixed hearing loss • Central hearing loss • Deafness • Meinere's Disease • Hard of hearing • Wears hearing aids • Presbycussis **Suggested data sources:** ED notes, History and Physical (History of Present Illness, Past Medical History, Physical Exam), Nursing assessment/admission notes, problem list

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
7	admicu	Was the patient admitted to an intensive care unit, coronary care unit, or intermediate care unit? 1. Yes 2. No	1, 2 If 1, go to arrvbun	The intent of this question is to identify patients that were admitted to an ICU, CCU, or other intermediate care unit. Admission to an intensive care unit is a sign that the patient is sicker and that their severity of illness will be higher and that they are at risk for delirium. **ONLY ACCEPTABLE DATA Source: Physician orders. Other data sources may be used to support admission or transfer to ICU or intermediate care unit.** Do not use abstractor judgment based on the type of care administered to the patient. The level of intensive care MUST be documented. Direct admits and admissions via the ED are included. **Intermediate care unit (IMCU)** Step down units include: • A post critical care unit for patients that are hemodynamically stable who can benefit from close supervision and monitoring such as frequent pulmonary toilet, vital signs, and/or neurological and neurovascular checks. • Inpatient units with telemetry monitoring that are not intensive care units • Post coronary care unit (PCCU) • Specialty Care Units (e.g, bone marrow transplant, inpatient solid organ transplant, acute inpatient dialysis, hematology/oncology, long term acute care **Exclude:** ED, OR, or procedure units as inpatient units

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
8	adminf1 adminf2 adminf3 adminf4 adminf5 adminf6 adminf7 adminf8 adminf9 adminf99	Was the patient admitted with an acute (new) infection? **Indicate all that apply:** 1. Pneumonia 2. Urinary tract infection (UTI) 3. Septicemia or sepsis 4. Cellulitis 5. Diverticulitis 6. Peritonitis 7. Appendicitis 8. Osteomyelitis 9. Meningitis 99. None of the above	1, 2, 3, 4, 5, 6, 7, 8, 9, 99 Cannot select 99 with any other number	**If there is documentation by a physician, APN, or PA that the patient was being admitted with an infection or a possible/suspected infection, select the applicable option(s).** Documentation of symptoms (such as fever, elevated white blood cells) should not be considered infections unless documented as an infection or possible/suspected infection. **Documentation in an H&P dated prior to arrival must indicate that the infection or possible/suspected infection is current.** If an infection is documented as "chronic," there must be additional documentation that the infection is current or still present upon admission. If an infection is only documented as "chronic" without other documentation that the infection is still present upon admission, select "99." Suggested data sources: Admission H&P, ED record
9	admfrac	Was the patient admitted with an acute (new) major bone fracture (hip, femur, leg, vertebra, spine, humerus, arm, and/or wrist)? 1. Yes 2. No	1, 2	**If there is documentation by a physician, APN, or PA that the patient was being admitted with an acute (new) major bone fracture, answer "1".** Suggested data sources: Admission H&P chief complaint (cc), admitting diagnosis, or history of present illness (HPI)
10	hxmets	During the first 24 hours after arrival, does the record document a history of metastatic cancer? 1. Yes 2. No	1, 2	**The intent of the question is to determine if there is historical evidence of metastatic cancer documented during the first 24 hours after arrival.** Do NOT include documentation of a new diagnosis of metastatic cancer. Do NOT use the assessment and plan (A/P) section of the History & Physical (or other data sources) to answer this question. **Suggested data sources:** ED notes, History and Physical (History of Present Illness, Past Medical History), problem list

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
11	hxcomp1 hxcomp2 hxcomp3 hxcomp99	During the first 24 hours after arrival, does the record document a history of any of the following diagnoses? **Indicate all that apply:** 1. Lymphoma 2. Leukemia 3. AIDS 99. None of the above	1, 2, 3, 99 Cannot enter 99 with any other number	**The intent of the question is to determine if there is historical evidence of a diagnosis of lymphoma, leukemia, or AIDS documented during the first 24 hours after arrival.** Do NOT include documentation of a new diagnosis of the specified condition. Do NOT use the assessment and plan (A/P) section of the History & Physical (or other data sources) to answer this question. **Suggested data sources:** ED notes, History and Physical (History of Present Illness, Past Medical History), problem list
		Vital Signs/Labs		
12	rradm	Enter the first respiratory rate documented after admission.	__ __ Must be > 0 Warning if < 12 or > 36	This is the first respiratory rate documented after admission. **Do NOT use vital signs obtained prior to admission.** Suggested data sources: Vital signs package, nursing assessment, H&P physical exam
13	pulsadm	Enter the first pulse rate documented after admission.	__ __ __ Must be > 0 Warning if < 50 or > 150	This is the first pulse rate documented after admission. **Do NOT use vital signs obtained prior to admission.** Suggested data sources: Vital signs package, nursing assessment, H&P physical exam

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
14	dbpadm sbpadm	Enter the first blood pressure documented after admission.	__ __ __ /__ __ __ Warning if sbpadm <= 80 or > = 250 Warning if dbpadm < = 44 or > = 135 Hard edit: sbpadm and dbpadm must be > 0 Hard edit: sbpadm must be > than dbpadm	This is the first blood pressure documented after admission. **Do NOT use vital signs obtained prior to admission.** Suggested data sources: Vital signs package, nursing assessment, H&P physical exam
15	mapadm	Computer to calculate mean arterial blood pressure.	____ 1/3(SBPADM-DBPADM)+DBPADM	Computer will calculate mean arterial blood pressure.
16	sodadm	Was a sodium level obtained during this hospitalization?	1, 2 If 2, go to glucadm	A sodium level obtained anytime during the hospitalization is acceptable. The sodium is a critical element for brain and heart function. Low and high sodium can contribute to delirium Suggested data source: Lab package
17	sodrslt	Enter the value of the first sodium obtained following hospital admission.	_ _ _ Must be >0 Warning if < 100 or > 150	This is the first sodium value documented after admission. If the only sodium value obtained and reported was in the Emergency Department and no other sodium test was obtained following hospital admission, enter the sodium value obtained in the ED. Normal values 135 -145 mg/dL Possibly critical values < 130 or > 148 mg/dL Suggested data source: Lab package
18	glucadm	Was a glucose level obtained during this hospitalization?	1, 2 If 2, go to arrvbun	A glucose level obtained anytime during the hospitalization is acceptable. The glucose is the blood sugar level. Glucose levels (high and low) are a marker of severe illness and can cause mental status changes Suggested data source: Lab package

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
19	glucrslt	Enter the value of the first glucose obtained following hospital admission.	_ _ _ Must be >0 Warning if < 40 or > 500	This is the first glucose value documented after admission. If the only glucose value obtained and reported was in the Emergency Department and no other glucose test was obtained following hospital admission, enter the glucose value obtained in the ED. Normal Values 60-110 mg/dL Possibly critical values < 50 or > 300 mg/dL
20	arrvbun	Was a blood urea nitrogen (BUN) obtained during this hospitalization?	1, 2 If 2, auto-fill firstbun as zzz, and go to arrvcr	A BUN obtained anytime during the hospitalization is acceptable. A BUN test is a measure of the amount of nitrogen in the blood in the form of urea. Suggested data source: Lab package
21	firstbun	Enter the value of the first BUN obtained following hospital admission?	__ __ __ Will be auto-filled as zzz if arrvbun = 2 Must be > 0 and < 125 Warning if > 99	This is the first BUN value documented after admission. If the only BUN value obtained and reported was in the Emergency Department and no other BUN was obtained following hospital admission, enter the BUN value obtained in the ED. Normal values may range from 7 - 20 mg/dL and may vary among different laboratories. Suggested data source: Lab package
22	arrvcr	Was a serum creatinine obtained during this hospitalization? 1. Yes 2. No	1, 2 If 2 and admicu = 1, auto-fill firstcr as zz.z, and go to docdel; else if 2, auto-fill firstcr as zz.z, and go to admalb2	A serum creatinine obtained anytime during the hospitalization is acceptable. The serum creatinine test is used to diagnose impaired renal function. Suggested data source: Lab package
23	firstcr	Enter the value of the first serum creatinine obtained following hospital admission.	_ _. _ Will be auto-filled as zz.z if arrvcr = 2 Must be > 00.0 Warning if > 4 mg/dL	This is the first serum creatinine value documented after admission. If the only serum creatinine obtained and reported was in the Emergency Department and no other serum creatinine was obtained following hospital admission, enter the serum creatinine value obtained in the ED. Normal values: Male: 0.6-1.2 mg/dl; Female: 0.5-1.1 mg/dl. Possible critical values: >4mg/dl. Suggested data source: Lab package

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
24	buncratio	**Computer will calculate and display the BUN/CR ratio.**	**__ __. __: 1** **Calculate if firstbun and firstcr are valid values** If admicu = 1, go to docdel Must be > 0	BUN/creatinine is the ratio of two serum laboratory values, the blood urea nitrogen (BUN) and serum creatinine.
25	admalb2	Was a serum albumin obtained during this hospitalization?	1, 2 If 2, go to admbili2	A serum albumin obtained anytime during the hospitalization is acceptable. Suggested data source: Lab package
26	albrslt	Enter the value of the first serum albumin obtained following hospital admission.	_._ Must be > 0 Warning if < 2 or > 5.0	This is the first serum albumin value documented after admission. If the only serum albumin obtained and reported was in the Emergency Department and no other serum albumin was obtained following hospital admission, enter the serum albumin value obtained in the ED. Normal values 3.2-5.0 Possible critical value <2.5 Suggested data source: Lab package
27	admbili2	Was a total serum bilirubin obtained during this hospitalization?	1, 2 If 2, go to wbcadm	A total serum bilirubin obtained anytime during the hospitalization is acceptable. Suggested data source: Lab package
28	bilirslt	Enter the value of the first total serum bilirubin obtained after hospital admission.	__ __. __ Must be > 0 Warning if > 3.0	This is the first total serum bilirubin value documented after admission. If the only total serum bilirubin obtained and reported was in the Emergency Department and no other total serum bilirubin was obtained following hospital admission, enter the total serum bilirubin value obtained in the ED. Normal values <1.5 Possible critical value >=2.0
29	wbcadm	Was a white blood cell count (WBC) obtained during this hospitalization?	1, 2 If 2, go to hctadm	A WBC count is part of a Complete Blood Cell (CBC) test. A WBC count obtained anytime during the hospitalization is acceptable. The WBC count is elevated in response to infection or inflammation. Suggested data source: Lab package

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
30	wbcrslt	Enter the value of the first white blood cell count obtained following hospital admission.	_ _. _ Must be > 0 Warning if < 2 or > 15	This is the first WBC count documented after admission. If the only WBC obtained and reported was in the Emergency Department and no other WBC was obtained following hospital admission, enter the WBC value obtained in the ED. Normal Values 4.5-10.0 (thousand per mL) Possible critical values < 2.0 or > 11.5 Suggested data source: Lab package
31	hctadm	Was a hematocrit obtained during this hospitalization?	1, 2 If 2, go to docdel	A hematocrit obtained anytime during the hospitalization is acceptable. The hematocrit is a measure of red blood cell. This is important in bleeding, sepsis, and overall health status. Red blood cells carry oxygen Suggested data source: Lab package
32	hctrslt	Enter the value of the first hematocrit obtained following hospital admission.	_ _ Must be > 0 Warning if < 30 or > 50	This is the first hematocrit documented after admission. If the only hematocrit obtained and reported was in the Emergency Department and no other hematocrit was obtained following hospital admission, enter the hematocrit value obtained in the ED. Normal values 38% - 45% Possible critical values < 30% or > 48% If reported as volume fraction, enter as percentage (e.g., 0.42 enter 42). Suggested data source: Lab package
		Assessment of Delirium Risk		
33	docdel	Did the physician/APN/PA document a current problem of delirium in the History and Physical? 1. Yes 2. No	1, 2	**Delirium is a mental disturbance characterized by confusion, disordered speech, and hallucinations.** **The intent of this question is to look for physician/APN/PA documentation of a current problem of delirium in the assessment/plan section of the History and Physical.** Physician/APN/PA documentation of delirium in the assessment/plan of an ED note (e.g. 1010M) or admission note is acceptable.

#	Name	QUESTION	Field Format	DEFINITION/DECISION RULES
34	dochgms	Did the physician/APN/PA document a current change in the patient's mental status in the History and Physical? 1. Yes 2. No	1, 2	**The intent of this question is to look for physician/APN/PA documentation of a current change in mental status in the assessment/plan section of the History and Physical.** Physician/APN/PA documentation of a change in mental status in the assessment/plan of an ED note (e.g. 1010M) or admission note is acceptable. **Documentation of a change in mental status, altered mental status, or other similar wording is acceptable.**
35	doconf	Did the physician/APN/PA document a current problem of confusion in the History and Physical? 1. Yes 2. No	1, 2	**The intent of this question is to look for physician/APN/PA documentation of a current problem of confusion (or confused) in the assessment/plan section of the History and Physical.** Physician/APN/PA documentation of confusion in the assessment/plan of an ED note (e.g. 1010M) or admission note is acceptable.
36	docorient	Did the physician/APN/PA document a current problem of disorientation in the History and Physical? 1. Yes 2. No	1, 2	**Disorientation = patient is not oriented to person, place, and time.** **The intent of this question is to look for physician/APN/PA documentation of a current problem of disorientation (or similar wording such as disoriented) in the assessment/plan section of the History and Physical.** Physician/APN/PA documentation of disorientation in the assessment/plan of an ED note (e.g. 1010M) or admission note is acceptable.
37	rskdeli	In the admission History and Physical, did the physician/APN/PA document the patient was at risk for delirium?	1, 2	**The intent of this question is to look for physician/APN/PA documentation in the assessment/plan section of the H&P that the patient was at risk for delirium.** Physician/APN/PA documentation of delirium risk in the assessment/plan of an ED note (e.g. 1010M) or admission note is acceptable. For example, in the admission H&P assessment, the physician documented, "Patient is dehydrated and tachycardic --at risk for delirium;" answer "1."