OMB # 0925-0491
Expiration Date.XX/XXXX

HOSPITAL ABSTRACTION FORM

ID NUMBER: [ ][ ][ ][ ][ ][ ][ ] E: H R A [ ][ ][ ] VERSION: F DATE: 02/06/2007

LAST NAME: [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ] INITIALS: [ ][ ]

INSTRUCTIONS: The Hospital Record Abstraction Form is completed for each eligible hospitalized event as determined by the Surveillance Event Eligibility Form, and for all eligible Cohort hospitalizations as determined by the Cohort Eligibility Form. Event ID, Name (or Soundex code) must be entered above. Refer to this form's Q by Q instructions for information on entering numerical responses. For multiple choice and "yes/no" questions, record the letter corresponding to the most appropriate response.

0.a. Hospital code number: [ ][ ]

0.b. Medical Record Number:
[ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

0.c. Date of discharge (for nonfatal case) or death:
[ ][ ]–[ ][ ]–[ ][ ][ ][ ]
Month Day Year

17. What was the disposition of the patient on discharge?
Deceased D
Discharged alive A — Go to item 20

18. Was an autopsy performed? ..... Yes Y
No N

19.a. Was the patient either dead on arrival or did he/she die in the emergency room? ……..... Yes Y

No N

Go to Item 19e.

19.b. First recorded Systolic BP: ☐☐☐ mmHg

If zero or not recorded, and patient died within 24 hours, record 000 and go to item 19e. If zero or not recorded and patient lived at least 24 hours, enter 001.

19.c. First recorded Diastolic BP: ☐☐☐ mmHg

d. First recorded Pulse Rate: ☐☐☐ bpm

If pulse rate is greater than 0, go to Item 21d, If 0 or not recorded, and patient lived at least 24 hours, enter 001 and go to Item 21d. If 0 or not recorded and patient died within 24 hours, enter 000 and continue with Item 19e.

e. Was there (an) acute episode(s) of pain or discomfort anywhere in the chest, left arm or shoulder or jaw either just before death or within 72 hours of death? ..... Yes Y

No N

Unknown U

19.f. Is there a history of myocardial infarction prior to onset of this event? ..... Yes Y

No N

Unknown U

Go to Item 19h.

g. Did a myocardial infarction occur within four weeks of this event? ..... Yes Y

No N

Unknown U

h. Is there any history of angina pectoris or coronary insufficiency? ..... Yes Y

No N

Unknown U

19.i. Is there any history of any other chronic ischemic heart disease? ..... Yes Y

No N

Unknown U

Skip to Item 97, and treat as as an out-of-hospital death.

20. Answer the following:

a. Do the Discharge Diagnoses include any 410 or 411 codes? ... Yes Y

No N

Go to Item 21a

b. *Item deleted*

c. *Item deleted*

d. Is there mention of acute MI in the discharge summary? …. Yes Y

No N

Go to Item 21a

20.e. The following apply to this chart:

1. Is this person a cohort participant? ..... Yes Y
   No N

2. Is there more than one ECG? .... Yes Y
   No N
   Go to Item 21a.

3. Is any Cardiac Enzyme above the normal limit? ..... Yes Y
   No N
   Go to Item 21a.

4. Was there a transfer (in or out)? ..... Yes Y
   No N

If **all** of Items 20.e.2 - 20.e.4 are answered No, go to Item 97.

21. First recorded blood pressure and pulse rate (not during CPR).

a. Systolic BP: ..... ☐☐☐ mmHg

b. Diastolic BP: ..... ☐☐☐ mmHg

c. Pulse Rate: ..... ☐☐☐ bpm

d. Smoking Status: .....Current smoker C
   Past smoker P
   Smoker NOS S
   Never smoker N
   Unknown U

22. Has the Discharge Summary been transcribed or attached (include symptom onset, timing, hospital course, etc.)?

Yes (Y)* or No (N)
[If Yes, specify on notelog]

ID Label

23.a. Did acute cardiac symptoms begin prior to arrival at this hospital?

Yes ..... Y
—No, after arrival ..... N
—No acute cardiac symptoms .... A
—Unknown ..... U

Go to Item 24a.

23.b. Estimated time from onset of acute cardiac symptoms to arrival at this hospital.

<1 hour ..... A
≥1 hour and <2 hours ..... B
≥2 hours and <4 hours C
≥4 hours and <6 hours ..... D
≥6 hours and <12 hours ..... E
≥12 hours and <24 hours ..... F
≥1 day and <3 days ..... G
≥3 days ..... H
Not recorded ..... U

Go to Item 24b.

24.a. What was the primary diagnosis or reason for admission to this hospital?

Elective cardiac catheterization ..... A

Elective coronary bypass surgery ..... B

Other non-acute CHD evaluation C

Cancer ..... D

Diabetes mellitus ..... E

Stroke ..... F

Chronic obstructive pulmonary disease ..... G

Peripheral vascular disease .... H

Gallbladder disease I

Other ..... O

24.b. Was there mention of an acute CHD event with onset after arrival at this hospital? ..... Yes Y

Go to Item 25.a. ——— No N

c. Date of in-hospital CHD event:

		–			–				

Month Day Year

[NOTE: If patient had both CHD event present on admission (Item 23=Y) and after admission (Item 24b=Y), you must decide which event is more important (see Instructions). Answer subsequent questions for the more important event.]

25.a. Was there an acute episode(s) of pain or discomfort anywhere in the chest, left arm or shoulder or jaw, either within 72 hours prior to arrival to this hospital, or in conjunction with the in-hospital CHD event defined in Item 24b? ....……..... Yes Y

No N

Unknown U

Go to Item 26.a.

b. Date of onset of pain:

		–			–				

Month Day Year

25.c. Did this pain or discomfort specifically involve the chest? ..... Yes Y

No N

Unknown U

d. Was the discomfort or pain diagnosed as having a non-cardiac origin? ..... Yes Y

No N

Go to Item 25f.

Unknown U

e. If Yes, specify:

_____

f. Did the patient die? .....……..... Yes Y

No N

Go to Item 26.a.

25.g. Approximately how long was it from the onset of this event to death?

<1 hour .....…….. A

≥1 hour and <6 hours …. B

≥6 hours and <24 hours … C

24 hrs or more ...…….. D

Unknown .....…….. U

26.a. Was coronary reperfusion (coronary angioplasty, coronary atherectomy, bypass, intravenous or intracoronary thrombolysis) attempted in the first 24 hours after onset of this event? ...…….... Yes Y

No N

Go to Item 27.

26.b. Approximately how long was it between event onset and attempt at reperfusion?

< 1 hour .....……..... A

≥ 1 hour and <2 hours ... B

≥2 hours and <4 hours ... C

≥4 hours and <6 hours ... D

≥6 hours and <8 hours ... E

≥8 hours ....……..... F

Unknown .....……..... U

27. Was the patient ever in a CCU/ICU or telemetry bed during this hospitalization? .....Yes Y

No N

Unknown U

28. Were any of the following mentioned as being present during this hospital stay?

a. Shock or cardiogenic shock (pump failure) ..... Yes Y

Go to Item 28b. — No N

1. Did shock occur within the first 24 hours after onset of this event? ..... Yes Y

No N

Unknown U

b. Congestive heart failure or pulmonary edema ..... Yes Y

Go to Item 28c. — No N

1. Did CHF or pulmonary edema occur within the first 24 hours after onset of this event? ..... Yes Y

No N

Unknown U

c. S3 Gallop (third heart sound) ..... Yes Y

No N

28.d. Rales (not just basilar) ..... Yes Y

No N

e. Ventricular fibrillation or cardiac arrest or asystole ..... Yes Y

Go to Item 28f. — No N

1. Did ventricular fibrillation or cardiac arrest occur within the first 24 hours after onset of this event? ... Yes Y

No N

Unknown U

f. Pulmonary embolus ..... Yes Y

No N

g. Stroke ..... Yes Y

No N

h. Pneumonia ..... Yes Y

No N

29. Were the following special procedures or operations performed during this hospital stay?

	Yes	No
a. Cardiac catheterization	Y	N
b. Coronary angiography	Y	N
c. Coronary angioplasty	Y	N

29.c.1. Approximately how long after the onset of this event was the performance of the coronary angioplasty?

Before onset ..... A

< 1 hour ..... B

≥ 1 hour and <2 hours C

≥2 hours and <4 hours .... D

≥4 hours and <6 hours .... E

Go to Item 29c2.	≥6 hours and <8 hours .... F ≥8 hours and <24 hours ... G ≥24 hours .....……..... H Unknown .....……..... U

29.c.2 Coronary atherectomy .....…...Yes Y

Go to Item 29.d. ——— No N

c.3. Approximately how long after the onset of this event was the performance of the coronary atherectomy?

Before onset .....……..... A

< 1 hour .....…… B

≥ 1 hour and <2 hours ..…. C

≥2 hours and <4 hours ..…. D

≥4 hours and <6 hours ..…. E

≥6 hours and <8 hours ..…. F

≥8 hours and <24 hours ….. G

≥24 hours .....…….… H

Unknown .....…...….. U

	Yes	No
29.d. Swan-Ganz catheterization	Y	N
e. Echocardiography	Y	N
f. Coronary bypass surgery	Y	N

Go to Item 29g.

f.1. Approximately how long after the onset of this event was the performance of the coronary bypass surgery?

Before onset ....…….... A

< 1 hour .....…….... B

≥ 1 hour and <2 hours C

≥2 hours and <4 hours .... D

≥4 hours and <6 hours .... E

≥6 hours and <8 hours .... F

≥8 hours and <24 hours.. ... G

≥24 hours .....…….... H

Unknown .....…….... U

29.g. Intracoronary streptokinase, urokinase, anistreplase, APSAC, or TPA reperfusion ..... Yes Y

No N

h. Intravenous streptokinase, urokinase, anistreplase APSAC, or TPA reperfusion ..... Yes Y

No N

If 29g and 29h were answered "No", Go to Item 29i.

29.h.1. Approximately how long after the onset of this event was the performance of the intracoronary or intravenous reperfusion?

Before onset .....……..... A

< 1 hour .....……. B

≥ 1 hour and <2 hours C

≥2 hours and <4 hours ..... D

≥4 hours and <6 hours ..... E

≥6 hours and <8 hours ..... F

≥8 hours and <24 hours .... G

≥24 hours .....…….... H

	Unknown .....……..... U

	Yes	No
29.i. Aortic balloon pump	Y	N
j. Radionucleide scan of heart	Y	N

Go to Item 29m.

k. If yes, specify type:

_____

l. *Item deleted*

m. MRI scan of heart	Y	N
n. Exercise stress test	Y	N

	Yes	No
29.o. Holter monitoring	Y	N
p. Pacemaker (temporary, wires)	Y	N
1. Coronary stent	Y	N

Go to Item 29p2.

a. Approximately how long after the onset of this event was the placement of the coronary stent?

Before onset ..... A
< 1 hour ..... B
≥ 1 hour and <2 hours C
≥2 hours and <4 hours ..... D
≥4 hours and <6 hours ..... E
≥6 hours and <8 hours ..... F
≥8 hours and <24 hours .... G
≥24 hours ..... H
Unknown ..... U

	Yes	No
29.p.2. Implanted defibrillator	Y	N

Go to Item 29p2c

a. Approximately how long after the onset of this event was the defibrillator implanted?

Before onset ..... A
< 1 hour ..... B
≥ 1 hour and <2 hours C
≥2 hours and <4 hours ..... D
≥4 hours and <6 hours ..... E
≥6 hours and <8 hours ..... F
≥8 hours and <24 hours ... G

	Yes	No
29.p.2. c. Coronary CT	Y	N
d. MRI Stress Test	Y	N

29.q. Other (specify):

1._____

_____

2._____

_____

≥24 hours ..... H Unknown ..... U	

30a.. Was closed chest massage (CPR) and/or cardioversion attempted within 24 hours prior to arrival at this hospital or anytime during this hospitalization? ..... Yes Y

No N

Go to Item 31.a.

b. Date of first onset of attempted CPR and/or cardioversion:

		–			–				

Month Day Year

30.c. Where was first CPR and/or cardioversion started?

(Circle one)

Private residence ..….. R
Work .....…….. W
Public place .....……. P
Emergency vehicle ….. V
Emergency room .....…E
Hospital .....…… H
Other .....……. O
Not recorded .....…… U

31. Were any of the following drugs given during this hospitalization or at discharge?

	Yes	No
a. Nitrates	Y	N
b. Calcium channel blockers	Y	N
c. Beta-blockers	Y	N
d. Digitalis	Y	N
e. Lidocaine (xylocaine) I.V. or I.M. only	Y	N
f. Coumadin (Warfarin, Panwarfin, Dicumarol)	Y	N
g. Aspirin - on regular basis (not PRN)	Y	N
h. ACE or Angiotensin II inhibitors	Y	N
i. Intravenous heparin infusion	Y	N
j. Antiplatelet agents (non-aspirin)	Y	N
k. Glucose, insulin, potassium infusion (GIK)	Y	N
l. Lipid lowering medications (Statins, Niacin, Other)	Y	N

32. Is there a history of myocardial infarction prior to the onset of this event? .....…….. Yes Y

No N

Unknown U

[If U, also review previous discharge diagnoses.]

33. Is there any history of angina pectoris or coronary insufficiency? .....…….. Yes Y

No N

Unknown U

If Item 32 or Item 33 is answered "Yes", Go to Item 35.

34.a. Is there a history of any other chronic ischemic heart disease? ..... Yes Y

No N

Go to Item 35.

b. Specify: _____

35. Is there a history of valvular disease or cardiomyopathy? .....…. Yes Y

No N

36. Is there a history of coronary bypass surgery prior to this event? …. Yes Y

No N

37. Is there a history of coronary angioplasty prior to this event? ..... Yes Y

No N

38.a. Is there a history of hypertension (high blood pressure) prior to this event? .....……. Yes Y

No N

Unknown U

b. Does this patient have diabetes (high blood sugar), either history or diagnosed this hospitalization?.....…… Yes Y

No N

Unknown U

39. Is there a history of stroke prior to this event? ..... Yes Y

No N

Go to Item 41.

Unknown U

40. Did a stroke occur within 4 weeks prior to this event? ..... Yes Y

No N

Unknown U

41. Were any cardiac enzymes reported within days 1-4 after arrival at the hospital or after in-hospital CHD event? ..... Yes Y

No N

Go to Item 43cc.

42.a. Is there mention of the patient having either trauma, a surgical procedure, or rhabdomyolysis, within one week prior to measurement of enzymes? .... Yes Y

No N

Go to Item 42d.

b. Indicate type of procedure or trauma: Yes No

1. Cardiac procedure…… Y N
2. CPR or cardioversion…….. Y N
3. Other cardiac trauma…… Y N

4. Specify:_____

5. Rhabdomyolysis……... Y N
6. Intramuscular injection……. Y N
7. Non-cardiac procedure……..... Y N

42.c. Enter the item number from the biomarkers section of this form corresponding to the first biomarker measurement performed after the trauma, cardiac procedure or rhabdomyolysis: ☐☐

d. Is there any evidence of hemolytic disease during the hospitalization? .....……. Yes Y

No N

↓ 8. Specify:_____ 9. Non-cardiac trauma…….... Y N	

B. BIOMARKERS

43. LABORATORY STANDARDS

Range Set 1		Upper Limit of Normal		Special** Units
Total CK (CPK)	a.			
CK-MB (hrt frac)	b.		c.	
Total LDH	d.			
LDH1	e		f.	
LDH2	g.		h.	
LDH1/LDH2	i.		j.	
Troponin I	u.		v.	
Troponin T	w.		x.	

BNP (brain natriuretic peptide): cc. pg/ml If Q41=N, then answer only Q43cc and Q43dd. Then skip to Q56aa.

Serum Creatinine: dd. mg/dl

Pro- BNP: ee. pg/ml

Range Set 2		Upper Limit of Normal		Special** Units
Total CK (CPK)	k.			
CK-MB (hrt frac)	l.		m.	
Total LDH	n.			
LDH1	o.		p.	
LDH2	q.		r.	
LDH1/LDH2	s.		t.	
Troponin I	y.		z.	
Troponin T	aa.		bb.	

**Special Units:

CK-MB, Troponin I, Troponin T
1 = (Negative/Positive) or (Absent/Present) or (Normal/Abnormal)
2 = (Negative/Weak Positive/Positive) or (Absent/Trace/Present) or (Normal/High Normal/Abnormal)
CK-MB, LDH1, LDH2

LDH1/LDH2
5 = %
6 = Proportion (decimal)
7 = (Negative/Positive) or (LDH1 ≤ LDH2 / LDH1 > LDH2)

3 = Expressed as % of total enzyme
4 = Expressed as proportion (decimal units) of total enzyme

BIOMARKERS: DAY ONE

44.a. Date ☐☐–☐☐–☐☐☐☐

b. Were enzyme measurements taken on this date?..... Yes Y / No N

Go To Item 48.a.

Record values in chronologic order for the three highest reports for each enzyme on Day One of arrival or in-hospital CHD event. (LDH1 and LDH2 must be on same specimen.)

			Value (See Footnote next page)*		Range Set
45.	Total CK (CPK)	a.	☐☐☐☐☐	b.	☐
	CK-MB (hrt frac)	c.	☐☐☐☐.☐☐	d.	☐
	Total LDH	e.	☐☐☐☐	f.	☐
	LDH1	g.	☐☐☐☐.☐☐	h.	☐
	LDH2	i.	☐☐☐☐.☐☐	j.	☐
	LDH1/LDH2	k.	☐☐☐.☐☐	l.	☐
	Troponin I	m.	☐☐☐☐.☐☐	n.	☐
	Troponin T	o.	☐☐☐.☐☐	p.	☐
46.	Total CK (CPK)	a.	☐☐☐☐☐	b.	☐
	CK-MB (hrt frac)	c.	☐☐☐☐.☐☐	d.	☐
	Total LDH	e.	☐☐☐☐	f.	☐
	LDH1	g.	☐☐☐☐.☐☐	h.	☐
	LDH2	i.	☐☐☐☐.☐☐	j.	☐
	LDH1/LDH2	k.	☐☐☐.☐☐	l.	☐
	Troponin I	m.	☐☐☐☐.☐☐	n.	☐
	Troponin T	o.	☐☐☐.☐☐	p.	☐
47.	Total CK (CPK)	a.	☐☐☐☐☐	b.	☐
	CK-MB (hrt frac)	c.	☐☐☐☐.☐☐	d.	☐
	Total LDH	e.	☐☐☐☐	f.	☐
	LDH1	g.	☐☐☐☐.☐☐	h.	☐
	LDH2	i.	☐☐☐☐.☐☐	j.	☐
	LDH1/LDH2	k.	☐☐☐.☐☐	l.	☐
	Troponin I	m.	☐☐☐☐.☐☐	n.	☐
			☐☐☐.☐☐		☐

BIOMARKERS: DAY TWO

48.a. Date ☐☐–☐☐–☐☐☐☐ (Month – Day – Year)

b. Were enzyme measurements taken on this date? ..... Yes Y

No N → Go to Item 51.a.

Record values in chronologic order for the two highest reports for each enzyme on Day Two following arrival or in-hospital CHD event. (LDH1 and LDH2 must be on same specimen.)

			Value*		Range Set
49.	Total CK (CPK)	a.	☐☐☐☐☐		b. ☐
	CK-MB (hrt frac)	c.	☐☐☐☐.☐☐		d. ☐
	Total LDH	e.	☐☐☐☐		f. ☐
	LDH1	g.	☐☐☐☐.☐☐		h. ☐
	LDH2	i.	☐☐☐☐.☐☐		j. ☐
	LDH1/LDH2	k.	☐☐☐.☐☐		l. ☐
	Troponin I	m.	☐☐☐☐.☐☐		n. ☐
	Troponin T	o.	☐☐☐.☐☐		p. ☐

			Value*		Range Set
50.	Total CK (CPK)	a.	☐☐☐☐☐		b. ☐
	CK-MB (hrt frac)	c.	☐☐☐☐.☐☐		d. ☐
	Total LDH	e.	☐☐☐☐		f. ☐
	LDH1	g.	☐☐☐☐.☐☐		h. ☐
	LDH2	i.	☐☐☐☐.☐☐		j. ☐
	LDH1/LDH2	k.	☐☐☐.☐☐		l. ☐
	Troponin I	m.	☐☐☐☐.☐☐		n. ☐
	Troponin T	o.	☐☐☐.☐☐		p. ☐

*Special Values:

CK-MB, Troponin I, Troponin T

A = Negative or absent or normal
B = Weak positive or weak present or trace or high-normal or small
C = Present or positive or abnormal or medium or large

LDH1/LDH2

D = LDH1/LDH2 reported only as ≥ upper limit or positive or LDH1 > LDH2 (or "flipped")
E = LDH1/LDH2 reported only as < upper limit or negative or LDH1 ≤ LDH2 (or "non-flipped)

BIOMARKERS: DAY THREE

51.a. Date ☐☐–☐☐–☐☐☐☐ (Month Day Year)

b. Were enzyme measurements taken on this date? ..... Yes Y

No N → Go to Item 54.a.

Record values in chronologic order for the two highest reports for each enzyme on Day Three following arrival or in-hospital CHD event. (LDH1 and LDH2 must be on same specimen.)

		Value*	Range Set
52.	Total CK (CPK)	a. ☐☐☐☐☐	b. ☐
	CK-MB (hrt frac)	c. ☐☐☐☐.☐☐	d. ☐
	Total LDH	e. ☐☐☐☐	f. ☐
	LDH1	g. ☐☐☐☐.☐☐	h. ☐
	LDH2	i. ☐☐☐☐.☐☐.	j. ☐
	LDH1/LDH2	k. ☐☐☐.☐☐.	l. ☐
	Troponin I	m. ☐☐☐☐.☐☐.	n. ☐
	Troponin T	o. ☐☐☐.☐☐.	p. ☐

		Value*	Range Set
53.	Total CK (CPK)	a. ☐☐☐☐☐	b. ☐
	CK-MB (hrt frac)	c. ☐☐☐☐.☐☐	d. ☐
	Total LDH	e. ☐☐☐☐	f. ☐
	LDH1	g. ☐☐☐☐.☐☐.	h. ☐
	LDH2	i. ☐☐☐☐.☐☐.	j. ☐
	LDH1/LDH2	k. ☐☐☐.☐☐.	l. ☐
	Troponin I	m. ☐☐☐☐.☐☐.	n. ☐
	Troponin T	o. ☐☐☐.☐☐.	p. ☐

*Special Values:

CK-MB, Troponin I, Troponin T

A = Negative or absent or normal

B = Weak positive or weak present or trace or high-normal or small

C = Present or positive or abnormal or medium or large

LDH1/LDH2

D = LDH1/LDH2 reported only as ≥ upper limit or positive or LDH1 > LDH2 (or "flipped")

E = LDH1/LDH2 reported only as < upper limit or negative or LDH1 ≤ LDH2 (or "non-flipped)

BIOMARKERS: DAY FOUR

54.a. Date ☐☐–☐☐–☐☐☐☐ (Month Day Year)

b. Were enzyme measurements taken on this date? ..... Yes Y

No N → Go to Item 56aa.

Record values in chronologic order for the two highest reports for each enzyme on Day Four following arrival or in-hospital CHD event. (LDH1 and LDH2 must be on same specimen.)

			Value*		Range Set
55.	Total CK (CPK)	a.	☐☐☐☐☐	b.	☐
	CK-MB (hrt frac)	c.	☐☐☐☐.☐☐	d.	☐
	Total LDH	e.	☐☐☐☐	f.	☐
	LDH1	g.	☐☐☐☐.☐☐	h.	☐
	LDH2	i.	☐☐☐☐.☐☐	j.	☐
	LDH1/LDH2	k.	☐☐☐.☐☐.	l.	☐
	Troponin I	m.	☐☐☐☐.☐☐.	n.	☐
	Troponin T	o.	☐☐☐.☐☐.	p.	☐

			Value*		Range Set
56.	Total CK (CPK)	a.	☐☐☐☐☐	b.	☐
	CK-MB (hrt frac)	c.	☐☐☐☐.☐☐	d.	☐
	Total LDH	e.	☐☐☐☐	f.	☐
	LDH1	g.	☐☐☐☐.☐☐	h.	☐
	LDH2	i.	☐☐☐☐.☐☐	j.	☐
	LDH1/LDH2	k.	☐☐☐.☐☐.	l.	☐
	Troponin I	m.	☐☐☐☐.☐☐.	n.	☐
	Troponin T	o.	☐☐☐.☐☐.	p.	☐

*Special Values:

CK-MB, Troponin I, Troponin T

A = Negative or absent or normal
B = Weak positive or weak present or trace or high-normal or small
C = Present or positive or abnormal or medium or large

LDH1/LDH2

D = LDH1/LDH2 reported only as ≥ upper limit or positive or LDH1 > LDH2 (or "flipped")
E = LDH1/LDH2 reported only as < upper limit or negative or LDH1 ≤ LDH2 (or "non-flipped)

56.aa Was BNP measured? Yes Y No N

Go to Q56af.

56.ab. Record the value of the first, last, and highest measurements of BNP (pg/ml):

1. First: ☐☐☐☐.☐ 2. date: ☐☐–☐☐–☐☐☐☐ (mm/dd/yyyy)

3. Last (if more than one): ☐☐☐☐.☐ 4. date: ☐☐–☐☐–☐☐☐☐ (mm/dd/yyyy)

5. Highest of remaining values (if more than two): ☐☐☐☐.☐ 6. date: ☐☐–☐☐–☐☐☐☐ (mm/dd/yyyy)

56.af Was pro- BNP measured? Yes Y No N

Go to Q56ac.

56.ag. Record the value of the first, last, and highest measurements of pro-BNP (pg/ml):

1. First: ☐☐☐☐.☐ 2. date: ☐☐–☐☐–☐☐☐☐ (mm/dd/yyyy)

3. Last (if more than one): ☐☐☐☐.☐ 4. date: ☐☐–☐☐–☐☐☐☐ (mm/dd/yyyy)

5. Highest of remaining values (if more than two): ☐☐☐☐.☐ 6. date: ☐☐–☐☐–☐☐☐☐ (mm/dd/yyyy)

56.ac. Was serum creatinine measured? Yes Y No N.

Go to question 56.ae.

56.ad. Record the value of the first, second, and last measurements of serum creatinine (mg/dl):

1: First: ☐☐☐.☐ 2. date: ☐☐–☐☐–☐☐☐☐ (mm/dd/yyyy)

3: Second: ☐☐☐.☐ 4. date: ☐☐–☐☐–☐☐☐☐ (mm/dd/yyyy)

5: Last: ☐☐☐.☐ 6. date: ☐☐–☐☐–☐☐☐☐ (mm/dd/yyyy)

56.ae. Is this patient currently on kidney dialysis (anytime in the last four weeks)? YES Y NO N

C. ECG CODING

57. Were any 12 lead ECGs taken during this admission? ..... Yes Y

No N

Go to Item 97.

58. Are any of the ECGs codable: ..... Yes Y

No N

Go to Item 97.

FIRST CODABLE ECG AFTER ARRIVAL AT HOSPITAL (ECGF)

59. Date of ECGF ☐☐–☐☐–☐☐☐☐
Month Day Year

[Check calibration mark]

a. Time of ECGF: ☐☐:☐☐
H H M M

70. Are there other codable ECGs? ..... Yes Y

No N

Go to Item 94.

LAST CODABLE ECG ON THIS ADMISSION (ECGL)

71. Date of ECGL: ☐☐–☐☐–☐☐☐☐
Month Day Year

a. Time of ECGL: ☐☐☐☐☐
H H M M

82. Are there other codable ECGs taken <u>on or after</u> day 3 after admission, or on or after day 3 following an in-hospital event? ..... Yes Y

No N

Go to Item 94.

Find the last codable ECG on day 3 after admission, or on day 3 after an in-hospital event (ECGT). [If day 3 ECG is not available, use first available ECG thereafter.]

THIRD DAY ECG (ECGT)

83. Date of ECGT: ☐☐–☐☐–☐☐☐☐
Month Day Year

a. Time of ECGT: ☐☐☐☐☐
H H M M

94. Were ECGs sent to Minnesota ECG Reading Center? ..... Yes Y

Go to Item 97. — No N

	Yes	No
a. ECGF sent?	Y	N
b. ECGL sent?	Y	N
c. ECGT sent?	Y	N

D. ADMINISTRATIVE INFORMATION

97. Abstractor number: ☐☐☐

98. Date abstract completed: ☐☐–☐☐–☐☐☐☐

Month Day Year