ARIC

HOSPITAL ABSTRACTION FORM

ID NUMBER: ☐☐☐☐☐☐☐   FORM CODE: | H | R | A | VERSIONS: A- I   DATE: 06/07/2023

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: (Same as
☐☐ — ☐☐ — ☐☐☐☐
Month   Day   Year

A. MEDICAL ABSTRACTION

1.a. Hospital code number: *(Renumbered as HRAF0a)* ☐☐

 [If code 96-99, name and location]:

 _____

 _____

 b. Medical Record Number: *(Renumbered as HRAF0b)*

 ☐☐☐☐☐☐☐☐☐☐☐☐☐

 c. Primary admission diagnosis *(Removed from HRAF to CHI1A)*

 ☐☐☐☐ ☐☐ .

 [Specify if diagnosis is not ICD coded]

 _____

2. Record the ICD9-CM diagnoses and procedure
 codes from the hospital discharge index
 (or Eligibility Form): *(Removed from HRAF to CHI2)*

 a. ☐☐☐☐ . ☐☐

 b. ☐☐☐☐ . ☐☐

 c. ☐☐☐☐ . ☐☐

 d. ☐☐☐☐ . ☐☐

 e. ☐☐☐☐ . ☐☐

 f. ☐☐☐☐ . ☐☐

 g. ☐☐☐☐ . ☐☐

 h. ☐☐☐☐ . ☐☐

 i. ☐☐☐☐ . ☐☐

 j. ☐☐☐☐ . ☐☐

 k. ☐☐☐☐ . ☐☐

 l. ☐☐☐☐ . ☐☐

 m. ☐☐☐☐ . ☐☐

 n. ☐☐☐☐ . ☐☐

 o. ☐☐☐☐ . ☐☐

 p. ☐☐☐☐ . ☐☐

 q. ☐☐☐☐ . ☐☐

 r. ☐☐☐☐ . ☐☐

 s. ☐☐☐☐ . ☐☐

 t. ☐☐☐☐ . ☐☐

 u. ☐☐☐☐ . ☐☐

 v. ☐☐☐☐ . ☐☐

 w. ☐☐☐☐ . ☐☐

 x. ☐☐☐☐ . ☐☐

 y. ☐☐☐☐ . ☐☐

 z. ☐☐☐☐ . ☐☐

3a. Abstracting for: *(Removed from HRAF to CFDC5A)*

ARIC Cohort……………………. C (go to question 3b)
Community……………………… S (go to question 4)
JHS Cohort-not ARIC Cohort…… J (go to question 4)

(Removed from HRAF to CFDC5B)

3b. Is the patient's address in the ARIC community surveillance catchment area?

Yes…………….. Y
No……………… N
Not determined…..U

4. Has the hospital chart for *(Removed from HRAF to CFD0D)*
this event been located? ....……... Yes   Y

No   N

Go to Item 97,
Screen 35.

5. a. Last name: . *(Removed from HRAF to CFD1A)*

_____

b. Initials: _____

6. **ENTER ON CFDB FORM** *(Removed from HRAF to CFD2)*
Social Security/Medicare Number:

| | | | – | | | – | | | | | – | |

7. **ENTER ON CFDB FORM**
Do you know the Patient's address?

Yes..........Y

No ....N

Address: *(Removed from HRAF to CFD4B)*

_____

_____
City   County   State

(Removed from HRAF to CFD4F4)
7.b. Zip Code:
| | | | | |

(Removed from HRAF to CHI3)
8. Sex: ....………….. Male   M

Female   F

9. Race or ethnic group: *(Removed from HRAF to CHI4)*

White/Caucasian ......…………………W

Black/African American ......…..………B

Asian/Pacific Islander …………………...A

American Indian/ Native Alaskan ……….I

Other ....………………………...O

Unknown/not recorded .... U

a. Does this person *(Removed from HRAF to CHI5A)*
have health insurance? ...…....... Yes   Y

No   N

Go to Item 11,
Screen 4.

Unknown   U

(Removed from HRAF to CHI5B)
9.b. Indicate type of insurance recorded:

	Yes	No	Unknown
1. Prepaid insurance or health plan, such as BC/BS or HMO	Y	N	U
2. Medicare	Y	N	U
3. Medicaid	Y	N	U
4. Other	Y	N	U

10. **ENTER ON CFDB FORM**

Birthdate: (*Removed from HRAF to CFD3)*

			–			–			

    Month   Day   Year

=

11.a. Date of arrival
    at this hospital: *(Removed from HRAF to CHI6A)*

    Month   Day   Year

(Removed from HRAF to CHI6B)

  b. Arrival time at this
    hospital (24 hr clock):

              H H   M M

(Removed from HRAF to CHI7)

12. Did an emergency medical service
    unit transport the patient to
    this hospital? .... Yes   Y

                       No   N

               Unknown   U

(Removed from HRAF to CHI8)

13.a. Was the patient transferred from or
     to another acute care hospital? .……... Yes   Y

                            No   N

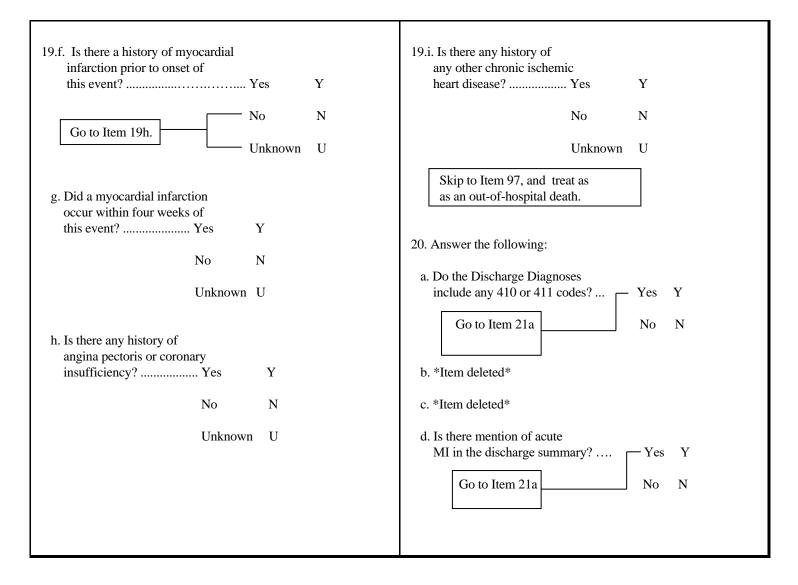 | Go to Item 14, Screen 5. |

FIRST TRANSFER: *(Removed from HRAF to CHI)*

13.b. Was this an in-catchment hospital? ... Yes   Y
Removed from HRAF to CHI8B

                         No   N

  b.1. Hospital Code: _____(*Removed from HRAF to CHI8B1)*

  If 96 - 99, specify:

    Hospital Name _____

    City _____

    State _____

  c. Date of admission to that hospital: *(Removed from HRAF to CHI8C)*

    Month   Day   Year

  c.1. Was the patient transferred *(Removed from HRAF to CHI8C1)*
    a second time?................……... Yes Y

                        No N

   | Go to Item 14. |

SECOND TRANSFER: *(Removed from HRAF to CHI)*

(Removed from HRAF to CHI8D)

 13.d. Was this an in-catchment hospital? ... Yes   Y

                         No   N

  d.1. Hospital Code: _____*(Removed from HRAF to CHI8D1)*

  If 96 - 99, specify:

    Hospital name _____

    City _____

    State _____

 (Removed from HRAF to CHI8D)

  e. Date of admission to that hospital:

    Month   Day   Year

(Renumbered as HRAF0C)

14. Date of discharge (for nonfatal case) or death:

    Month   Day   Year

15. List the hospital discharge diagnosis and procedure codes exactly as they appear on the front sheet of the medical record and/or on the discharge summary:

a. ⬚⬚⬚⬚ . ⬚⬚

b. ⬚⬚⬚⬚ . ⬚⬚

c. ⬚⬚⬚⬚ . ⬚⬚

d. ⬚⬚⬚⬚ . ⬚⬚

e. ⬚⬚⬚⬚ . ⬚⬚

f. ⬚⬚⬚⬚ . ⬚⬚

g. ⬚⬚⬚⬚ . ⬚⬚

h. ⬚⬚⬚⬚ . ⬚⬚

i. ⬚⬚⬚⬚ . ⬚⬚

j. ⬚⬚⬚⬚ . ⬚⬚

15.k. ⬚⬚⬚⬚ . ⬚⬚

l. ⬚⬚⬚⬚ . ⬚⬚

m. ⬚⬚⬚⬚ . ⬚⬚

n. ⬚⬚⬚⬚ . ⬚⬚

o. ⬚⬚⬚⬚ . ⬚⬚

p. ⬚⬚⬚⬚ . ⬚⬚

q. ⬚⬚⬚⬚ . ⬚⬚

r. ⬚⬚⬚⬚ . ⬚⬚

s. ⬚⬚⬚⬚ . ⬚⬚

t. ⬚⬚⬚⬚ . ⬚⬚

u. ⬚⬚⬚⬚ . ⬚⬚

v. ⬚⬚⬚⬚ . ⬚⬚

w. ⬚⬚⬚⬚ . ⬚⬚

x. ⬚⬚⬚⬚ . ⬚⬚

y. ⬚⬚⬚⬚ . ⬚⬚

z. ⬚⬚⬚⬚ . ⬚⬚
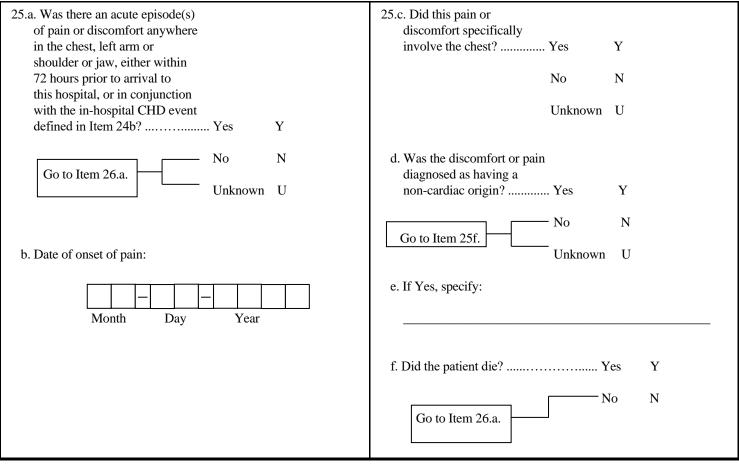
16. Discharge diagnoses Transcribed (as they
    appear on front sheet of medical record
    and/or discharge summary)?
                Yes (Y)* or No (N)
                [If Yes, specify on notelog]

ID Label

17. What was the disposition of the patient on discharge?

Deceased   D

Discharged alive   A ——— | Go to item 20 |

18. *(Removed from HRAH)*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

Go to Item 19h.

                                Unknown   U

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

Go to Item 21a

                            No   N

b. *Item deleted*

c. *Item deleted*

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

Go to Item 21a

                            No   N

20.e. The following apply to this chart:

   1. I*(Auto filled as Yes on HRAH)*s this person a
     cohort participant? ....…………... Yes   Y

                                          No   N

   2. Is there more than one ECG? ….┌─ Yes   Y

            ┌──────────────┐
            │ Go to Item 21a. │
            └──────────────┘ No   N

   3. Is any Cardiac Enzyme
     above the normal limit? ....………┌─ Yes   Y

            ┌──────────────┐
            │ Go to Item 21a. │
            └──────────────┘ No   N

   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. │
└─────────────────────────────────┘

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21. *(Removed from HRAH)*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

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22. *(Removed from HRAH)*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

[Go to Item 26.a.]

Unknown   U

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. *(Removed from HRAH)*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. *(Removed from HRAH)*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. *(Removed from HRAH)*S3 Gallop (third heart sound) .... Yes   Y

                           No   N

28.d. *(Removed from HRAH)*Rales (not just basilar) ..... Yes   Y

                       No   N

e. *(Removed from HRAH)*Ventricular fibrillation or
cardiac arrest or asystole .... Yes   Y

[Go to Item 28f.] ———————   No   N

  1. *(Removed from HRAH)*Did ventricular fibrillation
or cardiac arrest occur
within the first 24 hours
after onset of this event? ... Yes   Y

                       No   N

                      Unknown   U

f. *(Removed from HRAH)*Pulmonary embolus .... Yes   Y

                      No   N

g. *(Removed from HRAH)*Stroke ....……Yes   Y

                      No   N

h. *(Removed from HRAH)*Pneumonia ....… Yes   Y

                      No   N

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

                           <u>Yes</u> <u>No</u>

a. *(Removed from HRAH)*Cardiac catheterization
Y   N

b. *(Removed from HRAH)*Coronary angiography
Y   N

c. Coronary angioplasty   Y   N

[Go to Item 29c2.] ———————

29.c.1. *(Removed from HRAH)*Approximately how long after the
onset of this event was the
performance of the coronary
angioplasty?

          Before onset ....….…....... A

          < 1 hour   ....……....... B

          $\geq$ 1 hour and <2 hours C

          $\geq$2 hours and <4 hours .... D

          $\geq$4 hours and <6 hours .... E

          $\geq$6 hours and <8 hours .... F

          $\geq$8 hours and <24 hours ... G

          $\geq$24 hours   ....……....... H

          Unknown   ....……....... U

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

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┌─────────────────────┐
│  Go to Item 29.d.   │──────────── No   N
└─────────────────────┘
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c.3. *(Removed from HRAH)*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. *(Removed from HRAH)*Swan-Ganz catheterization   Y N

e. *(Removed from HRAH)*Echocardiography   Y N

f. Coronary bypass surgery   Y   N

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┌─────────────────────┐
│  Go to Item 29g.    │────────────┐
└─────────────────────┘
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f.1. *(Removed from HRAH)*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

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┌──────────────────────────────────┐
│  If 29g and 29h were answered     │
│  "No", Go to Item 29i.            │
└──────────────────────────────────┘
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29.h.1. *(Removed from HRAH)*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. *(Removed from HRAH)*Aortic balloon pump	Y	N
j. *(Removed from HRAH)* Radionucleide scan of heart	Y	N

Go to Item 29m.

k. *(Removed from HRAH)*If yes, specify type:

_____

l. *Item deleted*

m. *(Removed from HRAH)* MRI scan of heart   Y   N

n. *(Removed from HRAH)* Exercise stress test   Y   N

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

Go to Item 29p2.

a. *(Removed from HRAH)*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. *(Removed from HRAH)*Implanted defibrillator	Y	N

Go to Item 29p2c

a. *(Removed from HRAH)*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

≥24 hours ....………....   H

Unknown ....……......   U

	Yes	No
29.p.2. c. *(Removed from HRAH)*Coronary CT	Y	N
d. *(Removed from HRAH)*MRI Stress Test	Y	N

29.q. *(Removed from HRAH)*Other (specify):

1._____

_____

2._____

_____

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. *(Removed from HRAH)*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

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31. *(Removed from HRAH)*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

	Yes	No
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

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┌─────────────────────────────┐
│ If Item 32 or Item 33 is answered │
│ "Yes", Go to Item 35.           │
└─────────────────────────────┘
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34.a. Is there a history of any other
chronic ischemic heart disease? ..... Yes   Y

No   N

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┌──────────────┐
│ Go to Item 35. │
└──────────────┘
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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.   *(Removed from HRAH)*Is there a history of
stroke prior to this event? ..... Yes   Y

                            ┌─── No   N
┌──────────────────┐   │
│ Go to Item 41.   │───────┤
└──────────────────┘   │
                            └─── Unknown   U

40. *(Removed from HRAH)*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
                            │
                            ▼
                8. Specify:_____
9. Non-cardiac trauma……………….... 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

B. BIOMARKERS

43. <u>LABORATORY STANDARDS</u>

<u>Range Set 1</u>   Upper Limit <u>of Normal</u>   Special** <u>Units</u>

Total CK (CPK)   a. ☐☐☐☐

CK-MB (hrt frac)   b. ☐☐☐☐.☐☐   c. ☐

(Removed from HRAH) Total LDH ☐☐☐☐

(Removed from HRAH) LDH1 ☐☐☐☐.☐☐   . ☐   f.

(Removed from HRAH) LDH2 ☐☐☐☐.☐☐   . ☐   h.

(Removed from HRAH) LDH1/LDH2 ☐☐☐.☐☐   . ☐   j.

Troponin I   u. ☐☐☐.☐☐   v. ☐

Troponin T   w. ☐☐.☐☐   x. ☐

BNP (brain natriuretic peptide): cc. ☐☐☐☐.☐   pg/ml

Serum Creatinine: dd. ☐☐☐.☐   mg/dl

Pro- BNP: ee. ☐☐☐.☐   pg/ml

> If Q41=N, then answer only Q43cc, Q43dd and Q43ee. Then skip to Q56aa.

<u>Range Set 2</u>   Upper Limit <u>of Normal</u>   Special** <u>Units</u>

Total CK (CPK)   k. ☐☐☐☐

CK-MB (hrt frac)   l. ☐☐☐☐ ☐☐   m. ☐

(Removed from HRAH) Total LDH ☐☐☐

(Removed from HRAH) LDH1 ☐☐☐ ☐☐   ☐   p.

(Removed from HRAH) LDH2 ☐☐☐ ☐☐   ☐   r.

(Removed from HRAH) LDH1/LDH2 ☐☐☐ ☐☐   ☐   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
    3 = Expressed as % of total enzyme
    4 = Expressed as proportion (decimal units) of total enzyme

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

BIOMARKERS: DAY ONE

44.a. Date

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

Go To Item 48.a. ⌐ No N

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.)

<u>Value</u> (See Footnote next page)*   <u>Range Set</u>

45. Total CK (CPK)   a.   b.

CK-MB (hrt frac)   c.   .   d.

*(Removed from HRAH)*Total LDH   e.   f.

(Removed from HRAH) LDH1   g.   .   h.

*(Removed from HRAH)*LDH2   i.   .   j.

(Removed from HRAH) LDH1/LDH2   k.   .   l.

Troponin I   m.   .   n.

Troponin T   o.   .   p.

46. Total CK (CPK)   a.   b.

CK-MB (hrt frac)   c.   .   d.

(Removed from HRAH) Total LDH   e.   f.

(Removed from HRAH) LDH1   g.   .   h.

(Removed from HRAH) LDH2   i.   .   j.

*(Removed from HRAH)*LDH1/LDH2   k.   .   l.

Troponin I   m.   .   n.

Troponin T   o.   .   p.

47. Total CK (CPK)   a.   b.

CK-MB (hrt frac)   c.   .   d.

*(Removed from HRAH)*Total LDH   e.   f.

*(Removed from HRAH)*LDH1   g.   .   h.

*(Removed from HRAH)*LDH2   i.   .   j.

(Removed from HRAH) LDH1/LDH2   k.   .   l.

Troponin I   m.   .   n.

Troponin T   o.   .   p.

P. 26

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. [ ]

　　*(Removed from HRAH)*Total LDH e. [ ][ ][ ][ ]　f. [ ]

　　(Removed from HRAH) LDH1 g. [ ][ ][ ][ ] . [ ]　h. [ ]

　　(Removed from HRAH) LDH2 i. [ ][ ][ ][ ] . [ ]　j. [ ]

　　(Removed from HRAH) 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. [ ]

　　*(Removed from HRAH)*Total LDH e. [ ][ ][ ][ ]　f. [ ]

　　(Removed from HRAH) LDH1 g. [ ][ ][ ][ ] . [ ]　h. [ ]

　　(Removed from HRAH) LDH2 i. [ ][ ][ ][ ] . [ ]　j. [ ]

　　*(Removed from HRAH)*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 $\geq$ upper limit or positive or LDH1 > LDH2 (or "flipped")
　　　E = LDH1/LDH2 reported only as < upper limit or negative or LDH1 $\leq$ 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. [ ]	
	(Removed from HRAH) Total LDH	e. [ ][ ][ ][ ][ ]	f. [ ]	
	(Removed from HRAH) LDH1	g. [ ][ ][ ][ ] . [ ][ ]	h. [ ]	
	*(Removed from HRAH)*LDH2	i. [ ][ ][ ][ ] . [ ][ ]	j. [ ] .	
	(Removed from HRAH) 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. [ ]	
	*(Removed from HRAH)*Total LDH	e. [ ][ ][ ][ ][ ]	f. [ ]	
	*(Removed from HRAH)*LDH1	g. [ ][ ][ ][ ] . [ ][ ]	h. [ ] .	
	(Removed from HRAH) LDH2	i. [ ][ ][ ][ ] . [ ][ ]	j. [ ] .	
	*(Removed from HRAH)*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 $\geq$ upper limit or positive or LDH1 > LDH2 (or "flipped")
       E = LDH1/LDH2 reported only as < upper limit or negative or LDH1 $\leq$ 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. [ ]

      (Removed from HRAH) Total LDH   e. [ ][ ][ ][ ]   f.

      (Removed from HRAH) LDH1   g. [ ][ ][ ][ ] . [ ][ ]   h.

      (Removed from HRAH) LDH2   i. [ ][ ][ ][ ] . [ ][ ]   j.

      (Removed from HRAH) 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. [ ]

      (Removed from HRAH) LDH1   g. [ ][ ][ ][ ] . [ ][ ]   h.

      (Removed from HRAH) LDH2   i. [ ][ ][ ][ ] . [ ][ ]   j.

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

56.aa Was BNP measured?   <u>Yes</u>   <u>No</u>
                                                         Y   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   [ ][ ][ ] . [ ]   6. date: [ ][ ]—[ ][ ]—[ ][ ][ ][ ] (mm/dd/yyyy)
      values (if more than two):

56.af Was pro- BNP measured?   <u>Yes</u>   <u>No</u>
                                                         Y   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   [ ][ ][ ] . [ ]   6. date: [ ][ ]—[ ][ ]—[ ][ ][ ][ ] (mm/dd/yyyy)
      values (if more than two):

<mark>56ac & ad was moved to the CEL form</mark>
56.ac. Was serum creatinine measured?   <u>Yes</u>   <u>No</u>
                                                         Y   N.

┌─────────────────────────────┐   │
│   Go to question 56.ae.   ├───────┘
└─────────────────────────────┘   —

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

1: First: [ ][ ] [ ][ ]   2. date: [ ][ ]—[ ][ ]—[ ][ ][ ][ ] (mm/dd/yyyy)

5. Last (if more than one): [ ][ ] [ ][ ]   6. date: [ ][ ]—[ ][ ]—[ ][ ][ ][ ] (mm/dd/yyyy)

7. Highest of remaining   [ ][ ] [ ][ ]   8. date: [ ][ ]—[ ][ ]—[ ][ ][ ][ ] (mm/dd/yyyy)
values (if more than two):

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

(The following items # 60-69 were removed from HRA versions B, C, D, E and F)

60a. Does ECGF have a   *(Removed from HRA B,C,D,F*
     Suppression Pattern?

          Yes …….. Y
           No……… N*

60b. Which suppression pattern? *(Removed from HRA B,C,D,F)*

          Complete heart block………….C*
          WPW Pattern…………………..W*
          Pacemaker……………………. P*
          Ventricular Fibrillation………...F*
          Persistent ventricular rhythm …V*

61. Were any leads disqualified *(Removed from HRA B,C,D,F)*
    from Q-Wave measurement
    due to a majority of ventricular beats?

          Yes…….Y*
          No……..N

62a. Indicate any missing leads. *(Removed from HRAB,C,D,F)*
     Up to two are allowed;
     if AVR is missing, an
     additional two may be missing:
     First missing lead:

62b. Indicate any missing leads. *(Removed from HRAB,C,D,F)*
     Up to two are allowed; if AVR
     is missing, an additional two
     may be missing: Second missing lead:

63. Does ECGF have 7-1-1 or 7-2-1? *(Removed from HRA B,C,D,F)*

          Yes, 7-1-1……1
          Yes, 7-2-1….. 2
          No………… N

64. Do ANY Q or QS Patterns *(Removed from HRAB,C,D,F)*
    exist on ECGF in lateral
    leads listed on HRA Paper
    Form or in the "Help" Screen?

          Yes …….. Y*
          No……… N

65. Do ANY Q or QS Patterns *(Removed from HRAB,C,D,F)*
    exist on ECGF in lateral
    leads listed on HRA Paper
    Form or in the "Help" Screen?

          Yes …….. Y
          No……… N

66. Do ANY Q or QS Patterns *(Removed from HRAB,C,D,F)*
    exist on ECGF in inferior
    leads listed on HRA Paper
    Form or in the "Help" Screen?

          Yes …….. Y*
          No……… N

67. Do ANY Q or QS Patterns *(Removed from HRAB,C,D,F)*
    exist on ECGF in inferior
    leads listed on HRA Paper
    Form or in the "Help" Screen?

          Yes …….. Y
          No……… N

78. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGL in inferior
leads listed on HRA Paper
Form or in the "Help" Screen?

    Yes …….. Y*
    No……… N

79. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGL in inferior
leads listed on HRA Paper
Form or in the "Help" Screen?

    Yes …….. Y
    No……… N

80. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGL in anterior
leads listed on HRA Paper
Form or in the "Help" Screen?

    Yes …….. Y*
    No……… N

81. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGL in anterior
leads listed on HRA Paper
Form or in the "Help" Screen?

    Yes …….. Y
    No……… N

82. Are there other codable ECGs taken
on or after 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

(The following items # 72a-81 were removed from HRA versions B, C, D, E and F)

84a. Does ECGT have a Suppression Pattern?
(Removed from HRA B,C, D,E F)

    Yes …….. Y
    No……… N*

84b. Which suppression pattern? *(Removed from HRA B,C,D,F)*

    Complete heart block………….C*
    WPW Pattern…………………..W*
    Pacemaker……………………. P*
    Ventricular Fibrillation………...F*
    Persistent ventricular rhythm …V*

85. Were any leads disqualified *(Removed from HRA B,C,D,F)*
from Q-Wave measurement
due to a majority of ventricular beats?

    Yes…….Y*
    No……..N

86a. Indicate any missing leads. *(Removed from HRA B,C,D,F)*
Up to two are allowed;
if AVR is missing, an
additional two may be missing:
First missing lead:

86b. Indicate any missing leads. *(Removed from HRA B,C,D,F)*
Up to two are allowed; if AVR
is missing, an additional two
may be missing: Second missing lead:

87. Does ECGL have 7-1-1 or 7-2-1? *(Removed from HRA B,C,D,F)*

Yes, 7-1-1……1
Yes, 7-2-1….. 2
No………… N

88. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGT in lateral
leads listed on HRA Paper
Form or in the "Help" Screen?

Yes …….. Y*
No……… N

89. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGT in lateral
leads listed on HRA Paper
Form or in the "Help" Screen?

Yes …….. Y
No……… N

90. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGT in inferior
leads listed on HRA Paper
Form or in the "Help" Screen?

Yes …….. Y*
No……… N

91. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGT in inferior
leads listed on HRA Paper
Form or in the "Help" Screen?

Yes …….. Y
No……… N

92. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGT in anterior
leads listed on HRA Paper
Form or in the "Help" Screen?

Yes …….. Y*
No……… N

93. Do ANY Q or QS Patterns *(Removed from HRA B,C,D,F)*
exist on ECGT in anterior
leads listed on HRA Paper
Form or in the "Help" Screen?

Yes …….. Y
No……… N

94. Were ECGs sent to
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

95. ECG Coder number: *(Removed from HRA B,C,D,F)*

96. Date ECG coded: mm-dd-yy *(Removed from HRA B,C,D,F)*

D. ADMINISTRATIVE INFORMATION

97. Abstractor number: ☐☐☐

98. Date abstract
completed: ☐☐ – ☐☐ – ☐☐☐☐
Month Day Year

99. Method of data collection: *(Removed from HRAF to CHI13 as "Source of information abstracted")*
C Computer
P Paper