

FRAMINGHAM HEART STUDY CODING MANUAL

Atrial Fibrillation/Flutter Cases Reviewed Through 2013

COHORT: Original, Offspring, Generation 3, New Offspring Spouse, Omni 1, Omni 2

TIME INTERVAL: Cases reviewed 1/1949 - 12/2010

DATASET NAME: vr_afcum_2013_a_0026d

OBSERVATIONS: 17276

Variables that define a unique record: PID, ECGDATE, ECG_ORDER.

It is possible for an individual to have more than one case on a particular day. If there is more than one case on a particular day, the variables IDTYPE, ID, ECGDATE, ECG_ORDER (order of ECGs within a day), RHYTHM can be used to distinguish between cases.

Data was generated by examining ECGs from FHS exams as well as hospital and other medical records obtained on FHS participants. Normal sinus rhythm cases are included in this dataset. See protocol for rules regarding case review.

All cases were reviewed by a cardiologist or MD.

This dataset replaces vr_afcum_2012_m_0772.

This dataset is a modified version of the original dataset. Some observations were deleted due to consent restrictions. This coding manual is based on the original dataset. Therefore the value ranges, number of observations and/or cohorts found in the modified dataset, may differ from those stated in this manual.

IDTYPE

Variable name: IDTYPE

Description: Framingham Heart Study Cohort Identifier

| Code or Value | Description | Count |
|---------------|-----------------------------|-------|
| 0 | Original Cohort | 8184 |
| 1 | Offspring Cohort | 8123 |
| 2 | New Offspring Spouse Cohort | 115 |
| 3 | Generation 3 Cohort | 490 |
| 7 | Omni 1 Cohort | 310 |
| 72 | Omni 2 Cohort | 54 |

ID

Variable name: ID

Description: Framingham Heart Study Participant identifier within a cohort

Note: IDTYPE and ID taken together form the Framingham Heart Study participant identification number.

ID deleted - use random ID (PID)

PID

Variable name: PID

Description: Random ID

ECGDATE

Variable name: ECGDATE

Description: Date of ECG

Units: Number of days since Exam 1

| Code or Value | Description | Count |
|---------------|-----------------|-------|
| -8271 — 23590 | Range of values | 17276 |

RHYTHM

Variable name: RHYTHM

Description: Type of rhythm

| Code or Value | Description | Count |
|---------------|--------------------------------------|-------|
| 0 | Normal sinus rhythm | 5970 |
| 1 | Atrial fibrillation | 9242 |
| 2 | Atrial flutter | 857 |
| 3 | Atrial fibrillation / atrial flutter | 354 |
| 7 | Other | 746 |
| . | Unknown | 107 |

RHYTHSPE

Variable name: RHYTHSPE

Description: Rhythm specification

| Code or Value | Description | Count |
|---------------|----------------------------|-------|
| Blank | N/A or Field not filled in | 16515 |
| Not blank | Filled in | 761 |

Note: This text field is filled in when RHYTHM=7.

RHYTHSPE deleted - to preserve confidentiality

ECGLOC**Variable name:** ECGLOC**Description:** ECG location

| Code or Value | Description | Count |
|---------------|------------------------------|-------|
| 1 | Hospital/ER | 9415 |
| 2 | Outside MD | 3551 |
| 3 | FHS Exam ECG | 2840 |
| 4 | Outside Holter | 345 |
| 5 | FHS Holter | 45 |
| 6 | By history, ECG report only | 964 |
| 7 | Pacemaker/AICD interrogation | 116 |

ATHROMRX**Variable name:** ATHROMRX**Description:** Discharge antithrombotics

| Code or Value | Description | Count |
|---------------|----------------------|-------|
| 0 | None | 5116 |
| 1 | Warfarin | 4554 |
| 2 | Aspirin | 3414 |
| 3 | Warfarin and aspirin | 1731 |
| 4 | Other comb | 674 |
| 5 | Clopidogrel | 60 |
| 6 | Dabigatran | 81 |
| 7 | LMWH | 11 |
| 8 | Rivaroxaban | 8 |
| . | Unknown | 1627 |

Note: Dabigatran and LMWH were added to the data collection form in 2011.
Rivaroxaban was added to the data collection form in 2012.

ATHRSPEC**Variable name:** ATHRSPEC**Description:** Antithrombotics specification

| Code or Value | Description | Count |
|---------------|----------------------------|-------|
| Blank | N/A or Field not filled in | 16576 |
| Not blank | Filled in | 700 |

Note: This text field is filled in when ATHROMRX=4. Some antithrombotic Rx which are coded in ARTHMRX may be found in this text field due to data collection form changes over time.

AARRHYTH**Variable name:** AARRHYTH**Description:** Discharge antiarrhythmics yes/no

| Code or Value | Description | Count |
|---------------|-------------|-------|
| 0 | None | 12761 |
| 1 | Yes | 2935 |
| . | Unknown | 1580 |

AARRHRX**Variable name:** AARRHRX**Description:** Discharge antiarrhythmics, if AARRHYTH=1

| Code or Value | Description | Count |
|---------------|---|-------|
| 1 | Quinidine | 544 |
| 2 | Procainamide | 340 |
| 3 | Disopyramide | 174 |
| 4 | Tocainide | 5 |
| 5 | Flecainide | 246 |
| 6 | Mexiletine | 13 |
| 7 | Amiodarone | 820 |
| 8 | Encainide | 1 |
| 9 | Propafenone | 71 |
| 11 | Sotalol | 484 |
| 12 | Other or Comb. | 122 |
| 13 | Dofetilide | 54 |
| 14 | Dronedarone | 27 |
| 88 | No discharge antiarrhythmics (AARRHYTH = 0) | 12761 |
| . | Unknown | 1614 |

Note: Tocainide, Mexiletine, Encainide and Moricizine were dropped from the data collection form in 2011. These medications are no longer coded. Dronedarone was added in 2011.

AAOTHSPE**Variable name:** AAOTHSPE**Description:** Antiarrhythmics combination specification

| Code or Value | Description | Count |
|---------------|----------------------------|-------|
| Blank | N/A or Field not filled in | 17151 |
| Not blank | Filled in | 125 |

Note: This text field is filled in when AARRHRX=12. Some coded antiarrhythmics may be found in this text field due to data collection form changes over time.

CARVER**Variable name:** CARVER**Description:** Cardioversion attempted

| Code or Value | Description | Count |
|----------------------|-------------------------|--------------|
| 0 | No | 13672 |
| 1 | Spontaneous | 974 |
| 2 | Chemical | 430 |
| 3 | Electrical | 397 |
| 4 | Chemical and electrical | 116 |
| . | Unknown | 1687 |

CARVERRX**Variable name:** CARVERRX**Description:** Cardioversion medications, if CARVER=2 or 4

| Code or Value | Description | Count |
|---------------|----------------------------|-------|
| 1 | Quinidine | 132 |
| 2 | Procainamide | 159 |
| 3 | Disopyramide | 10 |
| 4 | Tocainide | 0 |
| 5 | Flecainide | 17 |
| 6 | Mexiletine | 3 |
| 7 | Amiodarone | 93 |
| 8 | Encainide | 0 |
| 9 | Propafenone | 12 |
| 11 | Sotalol | 38 |
| 12 | Other or Comb. | 26 |
| 13 | Dofetilide | 4 |
| 14 | Dronedarone | 2 |
| 88 | No cardioversion attempted | 13672 |
| . | Unknown | 3108 |

Note: Tocainide, Mexiletine, Encainide and Moricizine were dropped from the data collection sheet in 2011. They are no longer coded. Dronedarone was added in 2011.

CAROTHSPE**Variable name:** CAROTHSPE**Description:** Cardioversion specification

| Code or Value | Description | Count |
|---------------|----------------------------|-------|
| Blank | N/A or Field not filled in | 17247 |
| Not blank | Filled in | 29 |

Note: This text field is filled in when CARVERRX=12.

CARVDATE

Variable name: CARVDATE
Description: Cardioversion date
Units: Number of days since Exam 1

| Code or Value | Description | Count |
|---------------|---------------------------------------|-------|
| -7673 — 23132 | Range of values | 1743 |
| . | Unknown or no cardioversion attempted | 15533 |

CARV_SUC

Variable name: CARV_SUC
Description: Cardioversion successful? Yes/no

| Code or Value | Description | Count |
|---------------|----------------------------|-------|
| 0 | No | 99 |
| 1 | Yes | 797 |
| 88 | No cardioversion attempted | 13672 |
| . | Unknown | 2708 |

Note: Variable CARV_SUC was added in 2010.

A value of "unknown" has been assigned to cases that were reviewed before CARV_SUC was added to the review form. To get a complete count of cardioversion attempted yes/no, see CARVER.

PHYS_1

Variable name: PHYS_1
Description: Reviewer - First physician ID

Note: Available upon request.

PHYS_1 deleted - used for administrative purposes only

PHYS_2

Variable name: PHYS_2
Description: Reviewer - Second physician ID

Note: Available upon request.

PHYS_2 deleted - used for administrative purposes only

PHYS_3

Variable name: PHYS_3

Description: Reviewer - Third physician ID

Note: Available upon request.

PHYS_3 deleted - used for administrative purposes only

PHYS_4

Variable name: PHYS_4

Description: Reviewer - Fourth physician ID

Note: Available upon request.

PHYS_4 deleted - used for administrative purposes only

STAFF_1

Variable name: STAFF_1

Description: Review staff ID

Note: Available upon request.

STAFF_1 deleted - used for administrative purposes only

ECG_HR

Variable name: ECG_HR

Description: Hour of ECG (time of day)

| Code or Value | Description | Count |
|---------------|---------------------------|-------|
| 0 — 24 | Range of values | 1659 |
| . | Unknown or not applicable | 15617 |

Note: Variable ECG_HR was added in 2009 in military time. Use in conjunction with ECG_MIN.

ECG_MIN

Variable name: ECG_MIN

Description: Minute of ECG (time of day)

| Code or Value | Description | Count |
|---------------|---------------------------|-------|
| 0 — 59 | Range of values | 1659 |
| . | Unknown or not applicable | 15617 |

Note: Variable ECG_MIN was added in 2009 in military time. Use in conjunction with ECG_HR.

ECG_ORDER

Variable name: ECG_ORDER

Description: Order of ECG if more than one ECG per day per participant

| Code or Value | Description | Count |
|---------------|-----------------------------|-------|
| . | one case within a day | 16149 |
| 1 | 1st case within a day | 545 |
| 2 | 2nd case within a day | 543 |
| 3 | 3rd case within a day | 29 |
| 4 | 4th case within a day | 4 |
| 5 | 5th case within a day | 1 |
| 90 | ECG order for admin purpose | 4 |
| 91 | ECG order for admin purpose | 1 |

Note: ECG_ORDER was added in 2009. It was added to differentiate ECGs when there is more than one ECG per day per participant. The values of the ECG_ORDER variable may not always reflect the order of ECGs within the date. To determine order within a day, see ECG_MIN and ECG_HR if available.

When the case order was unknown within a day (for example RHYTHM = by history only) then an arbitrary value of 90, 91, 92, ... etc. was assigned to the variable ECG_ORDER. Note that on a particular day it is possible to have both known and unknown cases.

PAGENUM

Variable name: PAGENUM

Description: Page number of data collection sheet

| Code or Value | Description | Count |
|---------------|-----------------|-------|
| 1 — 8623 | Range of values | 17276 |

Note: Used for bookkeeping purpose, administrative only

REVDATE

Variable name: REVDATE

Description: Review date of ECG

| Code or Value | Description | Count |
|-------------------|-----------------|-------|
| 09/1985 — 12/2013 | Range of values | 16688 |
| . | Unknown | 588 |

Note: REVDATE deleted - used for administrative purposes only

VERSION

Variable name: VERSION

Description: Version date of data collection sheet

| Code or Value | Description | Count |
|-----------------|---------------------------|-------|
| 1/2011 — 5/2012 | Range of values | 2308 |
| . | Unknown or not applicable | 14968 |

Note: Prior to 01/2011 data collection sheets did not have version date.

VERSION deleted - used for administrative purposes only