

**Section A: CSSCD Phase 1**  
**7.2.0: Acute Chest Syndrome (ACS) Overview**

---

A. CSSCD Forms (collection) and Datasets (storage) Relating to Event

<b>Form #</b>	<b>Name of Form</b>	<b>Collected</b>	<b>Patient Population</b>	<b>SAS Dataset</b>
32	Acute Chest Syndrome	03/01/79- 07/01/85	All	<b>R32.SD2</b>
		07/01/85- 06/01/86	All patients < 6 years & non-HbSS ≥ 6 years	
		06/01/86- 12/31/86	All non-HbSS patients entered at < 6 months of age until age 6.	
32E	Acute Chest Syndrome – Form II	07/01/85- 12/31/86	HbSS patients ≥ 6 years	<b>R43.SD2</b>
53	Comprehensive Special Event Form for Patients Entered at < 6 Months of Age	01/01/87	Patients entered at < 6 months of age.	<b>R53.SD2</b>
--	“Acute Chest Syndrome Summary”	03/01/79- 09/30/88	All – includes summary information about ACS events reported on Forms 32, 32E, 48 & 53	<b>R63.SD2</b>
33	Acute Chest Syndrome Flow Sheet	03/01/79- 12/31/86	All long-form (Form 32) Acute Chest Syndrome events if patient hospitalized or seen daily	<b>R33.SD2</b>
52	Acute Event Treatment Follow-up	03/01/79- 12/31/86	All long-form (Form 32) Acute Chest Syndrome events if patient not hospitalized or seen daily for event <u>or</u> patient hospitalized prior to use of 09/30/80 version of Form 33	<b>R52.SD2</b>

B. Definition of the Event:

**Acute Chest Syndrome:** (See Sections 7.2.1, 7.2.2, & 7.2.4)

1. a new pulmonary infiltrate which is demonstrable on a chest x-ray or by an isotope scan of the lungs, or

**Section A: CSSCD Phase 1**  
**7.2.0: Acute Chest Syndrome (ACS) Overview**

---

2. evidence of pleuritic chest pain, with or without dyspnea, in the absence of a pulmonary infiltrate on the chest x-ray. If pleuritic pain is limited to the chest and chest films are negative, then a perfusion lung scan is required.

Any episodes where the chest films, scan and other pertinent tests did not indicate a new lesion were to be followed as painful crisis [Form 30 – See Section 7.1.0].

**7.2.1: Acute Chest Syndrome – Form 32**

---

daily

52	Acute Event Treatment Follow-up	03/01/79- 12/31/86	All long-form (Form 32) Acute Chest Syndrome events if patient not hospitalized or seen daily for event <u>or</u> patient hospitalized prior to use of 09/30/80 version of Form 33	<b>R52.SD2</b>
----	---------------------------------	-----------------------	--	----------------

**B. Definition of the Event:**

**Acute Chest Syndrome:** (See Sections 7.2.1, 7.2.2, & 7.2.4)

1. a new pulmonary infiltrate which is demonstrable on a chest x-ray or by an isotope scan of the lungs, or
2. evidence of pleuritic chest pain, with or without dyspnea, in the absence of a pulmonary infiltrate on the chest x-ray. If pleuritic pain is limited to the chest and chest films are negative, then a perfusion lung scan is required.

Any episodes where the chest films, scan and other pertinent tests did not indicate a new lesion were to be followed as painful crisis [Form 30 – See Section 7.1.0].

- A. List of variables deleted    **F32DATE F32INIT F32NDATE F32LASTU F32LASTE F32ESTAT F32VDATE F32DFC F32FCB F32WHEN F32BLDD F32WHZD F32CGHD F32FEVD F32CHLD F32PHLD F32SHRD F32PEB F32LABDT**
- B. List of variables modified    **NONE**
- C. List of variables modified with a name change    **NONE**
- D.    Old name
- E.    New name
- F. List of variables modified date to days since DOE
- G.    Old name    **F32DATE F32WHEN F32BLDD F32WHZD F32CGHD F32FEVD F32CHLD F32PHLD F32SHRD**
- H.    New name    **JF32DATE JF32WHEN JF32BLDD JF32WHZD JF32CGHD JF32FEVD JF32CHLD JF32PHLD JF32SHRD**
- I. Collection Information:

## 7.2.1: Acute Chest Syndrome – Form 32

---

**Form 32 (Acute Chest Syndrome)** was completed each time a study patient presented at a study participant clinic, emergency room, or hospital with an on-going acute chest syndrome (per definition – See 7.2.0)

Any episode not adhering to the criteria for acute chest syndrome was to be treated as a painful crisis (See Section 7.1.0).

J. Data Collection Period: 03/79 – 12/86

Form 32 was used between 03/01/79 and 07/01/85 for all patients. After 07/01/85, Form 32 continued to be used for all patients < 6 years of age and all non-HbSS patients  $\geq$  6 years of age until 06/01/86. From 06/01/86 to 12/31/86, the form was used for 1) all non-HbSS patients entered at < 6 months of age and 2) HbSS patients entered at < 6 months of age until age 6 only. A shortened version of the form (Form 32E) was used to collect acute chest syndrome information on HbSS patients  $\geq$  6 years of age after 07/01/85.

K. Form Version Dates: 03/01/79, 05/02/79, 09/25/80, 03/17/82

L. Files Used to Store Information:

SAS System File: **R32.SD2**

Format File: **R32.FMT**

E. Unique Record Identifiers: **ANONID, F32DATE**

F. Number of Observations (Patients) in SAS Dataset: 1,919 (1,021)

G. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See pp. 188-190
- Listing of Variables by Position: See pp. 191-193

H. Notes About Selected Variables:

- **F32TRANS, F32TRNS** – These two variables, due to version differences, collect similar information. However, neither is complete by itself, due to differences in dates of collection. Taken in concert, a positive answer for *either* of these two questions indicates that the patient was transfused within the six months preceding the event.
- **F32CBCWB** – is the CBC White Blood Cell Count variable assumed to be “uncorrected” in relation to nucleated red blood cells (nRBCs). There is a

## 7.2.1: Acute Chest Syndrome – Form 32

---

question as to whether clinics uniformly adhered to this recording policy, and there is no way of knowing whether the values recorded on the form are in fact uncorrected.

- **F32NRB** – is the Nucleated Red Blood Cell variable. The field length here is 2-digits. If there were more than 100 nRBCs/100 WBC then a value of 99 is entered.
- **WBC Differential Variables** – When any of the following (**F32DFPMN**, **F32DFBND**, **F32DFEOS**, **F32DFBAS**, **F32DFLYM**, **F32DFMON**, **F32DFATC**, **F32DFMM**) are recorded, then the sum of the entire set should be 100. Some of these variables are entered as missing, when the value in fact should be “0”. If the sum of differential variables with non-missing values is 100, then the missing values among that sum are assumed to be 0.
- **F32PERF** – for binary variables usually the highest numbers in the sequence is the “NO” value. For this variable “NO” was coded as “0” on forms entered before 04/26/82.

### I. Computed Variables:

- **F32FLOWS** – is the number of follow-up hospitalization or “flow” sheets, in this case Form 33 sheets, associated with a given Form 32. It was derived by linking “Record 33” with “Record 32” by date (**F33DATE=F32DATE**) patient first sought care, and counting the number of forms that linked up.
- **F32DHOSP** – is the number of days that data were collected on hospitalized acute chest events. The number was derived by linking “Record 32” with all “Record 33s” at that date sought care (**F32DATE** with **F33DATE**) and counting all the mo/day variables that are not missing for a given hospital stay (i.e., will equate with # of days hospitalized when forms are filled in correctly).
- **F32FRM52** – is the type code associated with a Form 52 (Acute Event Treatment Follow-up) with the same date as the ACS event (**F52DATE**, **F32DATE**). **F32FRM52** was made equal to the value of **F52TYPE** of the Form 52 with the same date sought care. If the value of **F32FRM52=33**, treatment follow-up information will be in the “Record 33” with the same date rather than in a “Record 52”.

## 7.2.1: Acute Chest Syndrome – Form 32

---

### J. Inter-Relationship with Other Datasets:

Acute Chest Syndrome data were also collected on

<b>Phase 1 Forms</b>	<b>SAS Dataset</b>
Form 32E	<b>R43.SD2</b>
Form 53	<b>R53.SD2</b>
-----	<b>R63.SD2</b>

[See Sections 7.2.2, 7.2.4, & 7.9]

It was decided that enough detailed acute chest syndrome data had been gathered on HbSS patients  $\geq 6$  years of age by 07/01/85. At that point, a “shortened” version of Form 32 was designed for this group of patients—Form 32E—Acute Chest Syndrome Form II. Form 32 continued to be used for all non-HbSS patients and all HbSS patients  $< 6$  years of age.

Form 32E, which contains only the most rudimentary facts pertaining to a given acute chest event (date, associated events, hospitalized (?), transfused (?), infiltrate (?), number of lobes, final diagnosis, and ICDA codes), was used to record acute chest events for HbSS patients  $\geq 6$  years of age after July 1, 1985. Form 32E was used for acute chest events for this group of patients though 12/31/86. Thereafter, 01/01/87 – 09/30/88, additional acute chest events are documented of Form 53, The Comprehensive Special Event Form for Patients Entered at  $< 6$  Months of Age. Form 32E data are stored in **R43.SD2**.

Form 53, The Comprehensive Special Event Form For Patients Entered at  $< 6$  Months of Age, stored in **R53.SD2**, was used to continue collection of acute chest event information from 01/01/87 through the end of the Phase 1 study.

Analysis of acute chest syndrome rates must take into account ACS data stored in all 3 data sets: **R32.SD2**, **R43.SD2**, and **R53.SD2**. To facilitate obtaining counts of ACS events throughout Phase 1, the dataset **R63.SD2** (See Section 7.2.4) includes summary information for events from all 3 datasets.

### 2. Follow-up and treatment information were collected on

<b>Phase 1 Forms</b>	<b>SAS Dataset</b>
Form 33	<b>R33.SD2</b>
Form 52	<b>R52.SD2</b>

### 7.2.1: Acute Chest Syndrome – Form 32

---

Both of the above mentioned records should be linked to the appropriate acute chest event “Record 32” by the date of the acute chest event (i.e., if **F33DATE=F32DATE**, or if **F52DATE=F32DATE**).

- a. Form 33 is the Acute Chest Syndrome Flow Sheet. Form 33 data are stored in **R33.SD2**. The form was completed if the patient was either hospitalized or seen on a daily basis as an outpatient for an acute chest syndrome event. It contains daily and summary information from day 2 of hospitalization for the event, through discharge. Each “Record” 33 contains 6 days of hospital information, so consequently, multiple “Record” 33s could exist for a given acute chest syndrome event, dependent on length of stay.

“Record” 33s are sorted by **ANONID**, **F33DATE**, and **F33SHEET** (flow sheet number). Therefore, information for hospital days 2-7 should be on **F33SHEET=1**; days 8-13 on **F33SHEET=2**, etc.

Form 33 was used in conjunction with Form 32 to describe hospitalized acute chest events. Form 33 version 09/30/80 contains the medication and resolution of symptoms information normally found on Form 52 (see below), but versions before this date do not. So for all acute chest events which occurred before the implementation of Form 33 version 09/30/80, Form 32 must be linked to Form 52 for medication and resolution of symptom information (i.e., if **F52DATE=F32DATE**) and also must link to Form 33 for daily laboratory values (i.e., if **F33DATE=F32DATE**).

Form 33 was not completed in conjunction with the shortened acute chest syndrome form (Form 32E).

- b. Form 52 is the Acute Event Treatment Follow-up form stored in **R52.SD2** that was used to collect summary non-hospitalization information for acute chest events reported on Form 32 and summary resolution and final diagnosis information for all acute chest events occurring before use of the 09/30/80 version of Form 33. It does not record daily or laboratory data, since these are hospitalization values. However, the information it does collect on treatment, resolution of symptoms, and diagnosis is corollary to that collected on the 09/30/80 version of Form 33 for hospitalized events.

This form was used from the inception of the project to record

### 7.2.1: Acute Chest Syndrome – Form 32

---

follow-up information for all types of acute events. In order to link a specific “Record 32” with a “Record 52”, the date patient first sought care is used (i.e., **F52DATE=F32DATE**). When **F32FRM52=31** or **F32FRM52=33** then treatment information is stored in **R31.SD2** or **R33.SD2** respectively, rather than **R52.SD2**. “Record 32” should be linked by date to “Record 31” or “Record 33” for treatment, resolution of symptoms, and diagnostic data (e.g., if **F32FRM52=31** then **F31DATE=F32DATE** or if **F32FRM52=33** then **F33DATE=F32DATE**).

**7.2.1: Acute Chest Syndrome – Form 32**

---

# CODEBOOK FOR CSSCD FORM 32

## ACUTE CHEST SYNDROME

CSSCD FULL COHORT PATIENTS

---

CONTENTS OF SAS DATASET: R32.SD2

DATA FROM CSSCD FORM 32 - ACUTE CHEST SYNDROME

VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION

IN THE SAS DATASET AND ON FORM 32

The SAS System 10:44 Thursday, December 7, 2006 1

### The CONTENTS Procedure

Data Set Name	OUT1.R32	Observations	1919
Member Type	DATA	Variables	81
Engine	V9	Indexes	0
Created	15:37 Wednesday, November 29, 2006	Observation Length	648
Last Modified	15:37 Wednesday, November 29, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

### Engine/Host Dependent Information

Data Set Page Size	16384
Number of Data Set Pages	78
First Data Page	1
Max Obs per Page	25
Obs in First Data Page	8
Number of Data Set Repairs	0
File Name	r32.sas7bdat
Release Created	9.0000M0
Host Created	XP_PRO

### Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
69	F32ANGIO	Num	8	ANGIOGRAM DONE
66	F32BGPCO	Num	8	BLOOD GASES PCO2
67	F32BGPH	Num	8	BLOOD GASES PH
65	F32BGPO2	Num	8	BLOOD GASES PO2
68	F32BGTMP	Num	8	TEMPERATURE WHEN BLOOD DRAWN
49	F32BLCL1	Num	8	BLOOD MICROBIOLOGY CULTURE
50	F32BLCL2	Num	8	BLOOD MICROBIOLOGY CULTURE
7	F32BLD	Num	8	SPITTING UP BLOOD
48	F32BLRBN	Num	8	TOTAL BILIRUBIN
30	F32CBCHB	Num	8	CBC HB
31	F32CBCHC	Num	8	CBC HCT
35	F32CBCMH	Num	8	CBC MCH
34	F32CBCMV	Num	8	CBC MCV
32	F32CBCRB	Num	8	CBC RBC
33	F32CBCWB	Num	8	CBC WBC
9	F32CGH	Num	8	COUGH
11	F32CHL	Num	8	CHILLS

---

SECTION 7.2.1 ACUTE CHEST SYNDROME

FORM 32

**CODEBOOK FOR CSSCD FORM 32**

**ACUTE CHEST SYNDROME**

CSSCD FULL COHORT PATIENTS

---

6	F32COUGH	Num	8	COUGH WHEN TAKING BREATH
18	F32DAY1	Num	8	DAYS ON MEDICATION
19	F32DAY2	Num	8	DAYS ON MEDICATION
20	F32DAY3	Num	8	DAYS ON MEDICATION
42	F32DFATC	Num	8	DIFFERENTIAL ATYPICAL CELLS
39	F32DFBAS	Num	8	DIFFERENTIAL BASOPHILS
37	F32DFBND	Num	8	DIFFERENTIAL BANDS
38	F32DFEOS	Num	8	DIFFERENTIAL EOSINOPHILS
40	F32DFLYM	Num	8	DIFFERENTIAL LYMPHOCYTES

**CODEBOOK FOR CSSCD FORM 32**

**ACUTE CHEST SYNDROME**

CSSCD FULL COHORT PATIENTS

The SAS System

10:44 Thursday, December 7, 2006 2

The CONTENTS Procedure

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
43	F32DFMM	Num	8	DIFFERENTIAL METAMYELOCYTES MYELOCYTES
41	F32DFMON	Num	8	DIFFERENTIAL MONOCYTES
36	F32DFPMN	Num	8	DIFFERENTIAL PMN
72	F32DHOSP	Num	8	NUMBER OF DAYS HOSPITALIZED
2	F32EVENT	Num	8	ASSOCIATED EVENTS
10	F32FEV	Num	8	FEVER
70	F32FLOWS	Num	8	NUMBER OF FLOWSHEETS
71	F32FRM52	Num	8	IS THERE A 52 ON THE DATABASE
54	F32GRAM1	Num	8	GRAM STAIN ORGANISM
55	F32GRAM2	Num	8	GRAM STAIN ORGANISM
56	F32GRAM3	Num	8	GRAM STAIN ORGANISM
57	F32GRAM4	Num	8	GRAM STAIN ORGANISM
3	F32HOSP	Num	8	HOSPITALIZED
45	F32LNGIN	Num	8	LUNG INFILTRATE
27	F32LOWXL	Num	8	LOWER EXTREMETIES LEFT
28	F32LOWXR	Num	8	LOWER EXTREMITIES RIGHT
26	F32LUNG	Num	8	TYPE OF LUNG PROBLEM
14	F32MED	Num	8	PRIOR MEDICATION FOR EPISODE?
15	F32MED1	Num	8	PRIOR MEDICATIONS
16	F32MED2	Num	8	PRIOR MEDICATIONS
17	F32MED3	Num	8	PRIOR MEDICATIONS
44	F32NRB	Num	8	NUCLEATED RED BLOOD CELLS
53	F32OCL	Num	8	OTHER CULTURE
29	F32OPHYS	Num	8	OTHER PHYSICAL FINDINGS
5	F32PAIN	Num	8	IS THERE PAIN OR DISCOMFORT
47	F32PERF	Num	8	LOCATION OF PERFUSION DEFECT
12	F32PHL	Num	8	COUGHED UP PHLEGM
46	F32PLEFF	Num	8	PLEURAL EFFUSION
58	F32PMN	Num	8	PMN
24	F32PULSE	Num	8	PULSE BEATS PER MINUTE
25	F32RESP	Num	8	RESPIRATION BREATHS PER MINUTE
13	F32SHR	Num	8	SHORTNESS OF BREATH
51	F32SPCL1	Num	8	SPUTUM MICROBIOLOGY CULTURE
52	F32SPCL2	Num	8	SPUTUM MICROBIOLOGY CULTURE
63	F32THCL1	Num	8	THORACENTESIS CULTURE
64	F32THCL2	Num	8	THORACENTESIS CULTURE
62	F32THGLU	Num	8	THORACENTESIS GLUCOSE
61	F32THPRO	Num	8	THORACENTESIS PROTEIN
60	F32THRBC	Num	8	THORACENTESIS RBC
59	F32THWBC	Num	8	THORACENTESIS WBC
22	F32TMP	Num	8	TEMPERATURE
23	F32TMPH	Num	8	HOW TEMPERATURE TAKEN
4	F32TRANS	Num	8	TRANSFUSED IN LAST SIX MONTHS
21	F32TRNS	Num	8	TRANSFUSED AS PRIOR TREATMENT
8	F32WHZ	Num	8	WHEEZING
75	JF32BLDD	Num	8	DATE SPITTING UP BLOOD - RECODE DAYS SINCE DOE

SECTION 7.2.1 ACUTE CHEST SYNDROME

FORM 32

CODEBOOK FOR CSSCD FORM 32

ACUTE CHEST SYNDROME

CSSCD FULL COHORT PATIENTS

---

77	JF32CGHD	Num	8	DATE COUGH - RECODE DAYS SINCE DOE
79	JF32CHLD	Num	8	DATE CHILLS - RECODE DAYS SINCE DOE
73	JF32DATE	Num	8	DATE FIRST SOUGHT CARE - RECODE DAYS SINCE DOE
78	JF32FEVD	Num	8	DATE FEVER - RECODE DAYS SINCE DOE
80	JF32PHLD	Num	8	DATE COUGHED UP PHLEGM - RECODE DAYS SINCE DOE
81	JF32SHRD	Num	8	DATE SHORTNESS OF BREATH - RECODE DAYS SINCE DOE
74	JF32WHEN	Num	8	WHEN PAIN BEGAN - RECODE DAYS SINCE DOE
76	JF32WHZD	Num	8	DATE WHEEZING - RECODE DAYS SINCE DOE

\*\*\*\*\*  
\* R32.FMT contains value labels for numerical codes assigned to categorical\*

---

SECTION 7.2.1 ACUTE CHEST SYNDROME

FORM 32

CODEBOOK FOR CSSCD FORM 32

ACUTE CHEST SYNDROME

CSSCD FULL COHORT PATIENTS

---

\* variables in the SAS dataset R32.SD2 \*

---

\* SIR/DBMS 2.2 SAS PROC STEP FROM DATABASE: CSSCD 11/04/98 10:49:40;

PROC FORMAT;

\* FORMAT NO\_YES used for the following variables: F32HOSP F32TRANS F32COUGH  
F32MED F32TRNS;

VALUE NO\_YES

1 = 'NO'  
2 = 'YES';

VALUE F32PAIN

4 = 'NO PAIN'  
1 = 'YES MILD'  
2 = 'YES MODERATE'  
3 = 'YES SEVERE';

\* FORMAT SYMPT used for the following variables: F32BLD F32WHZ F32CGH F32FEV  
F32CHL F32PHL F32SHR;

VALUE SYMPT

1 = 'NO'  
2 = 'DK'  
3 = 'YES';

VALUE F32TMPH

1 = 'ORAL'  
2 = 'RECTAL';

VALUE F32LUNG

0 = 'NO FINDINGS(0)'  
1 = 'RALES(1)'  
2 = 'RHONCHI(2)'  
4 = 'PERCUSSION DULLNES(4)'  
8 = 'WHEEZING(8)'  
16 = 'NO FINDINGS(16)';

\* FORMAT LEXTR used for the following variables: F32LOWXL F32LOWXR;

VALUE LEXTR

0 = 'NO SYMPTOMS(0)'

CODEBOOK FOR CSSCD FORM 32

ACUTE CHEST SYNDROME

CSSCD FULL COHORT PATIENTS

---

1	= 'WARMTH(1)'
2	= 'TENDERNESS(2)'
4	= 'HOMAN'S SIGN(4)'
8	= 'PALPABLE CORD(8)'
16	= 'NO SYMPTOMS(16)';

VALUE F32OPHYS

1	= 'NO'
2	= 'YES'
3	= 'YES SPECIFIED';

VALUE F32LNGIN

0	= 'NO(0)'
1	= 'LEFT UPPER(1)'
2	= 'LEFT LINGULA(2)'
4	= 'LEFT LOWER(4)'
8	= 'RIGHT UPPER(8)'
16	= 'RIGHT MIDDLE(16)'
32	= 'RIGHT LOWER(32)'
64	= 'NO(64)';

VALUE F32PERF

0	= 'NO(0)'
1	= 'LEFT UPPER(1)'
2	= 'LEFT LINGULA(2)'
4	= 'LEFT LOWER(4)'
8	= 'RIGHT UPPER(8)'
16	= 'RIGHT MIDDLE(16)'
32	= 'RIGHT LOWER(32)'
64	= 'NOT DONE(64)';

VALUE F32PLEFF

1	= 'ABSENT'
2	= 'PRESENT UNSP.'
3	= '<= .5 CM'
4	= '>.5 CM AND <=4 CM'
5	= '>4 CM';

\* FORMAT F32SPCLF used for the following variables: F32SPCL1 F32SPCL2;

VALUE F32SPCLF

-1	= 'NEGATIVE';
----	---------------

\* FORMAT F32GRAMF used for the following variables: F32GRAM1 F32GRAM2

CODEBOOK FOR CSSCD FORM 32

ACUTE CHEST SYNDROME

CSSCD FULL COHORT PATIENTS

---

---

F32GRAM3 F32GRAM4;

VALUE F32GRAMF

10 = 'GRAM POSITIVE DIPLOCOCCI'  
100 = 'GRAM POSITIVE COCCI'  
400 = 'GRAM NEGATIVE RODS'  
9999 = 'OTHER';

VALUE F32PMN

1 = 'ABSENT'  
2 = 'PRESENT UNSP.'  
3 = 'MANY'  
4 = 'MODERATE'  
5 = 'SCANTY';

VALUE F32ANGIO

1 = 'DONE'  
2 = 'NOT DONE';

\* FORMAT

F32HOSP F32TRANS F32COUGH F32MED F32TRNS NO\_YES.  
F32PAIN F32PAIN.  
F32BLD F32WHZ F32CGH F32FEV F32CHL F32PHL F32SHR SYMPT.  
F32TMPH F32TMPH.  
F32LUNG F32LUNG.  
F32LOWXL F32LOWXR LEXTR.  
F32OPHYS F32OPHYS.  
F32LNGIN F32LNGIN.  
F32PLEFF F32PLEFF.  
F32PERF F32PERF.  
F32SPCL1-F32SPCL2 F32SPCLF.  
F32GRAM1-F32GRAM4 F32GRAMF.  
F32PMN F32PMN.  
F32ANGIO F32ANGIO.;

RUN;  
QUIT;

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME**  
CSSCD FULL COHORT PATIENTS

---

---

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 1**  
 CSSCD FULL COHORT PATIENTS

F32VDATE ----- VERSION DATE **DELETED**

type: numeric (int)  
 label: datelab  
 range: [6999,8111] units: 1  
 unique values: 4 coded missing: 0 / 1919

tabulation:	Freq.	Numeric	Label
	244	6999	03/01/79
	7	7061	05/02/79
	943	7573	09/25/80
	725	8111	03/17/82

F32EVNT1 ----- ASSOCIATED EVENT CODE 1

type: numeric (float)  
 range: [30,90] units: 1  
 unique values: 16 coded missing: 1755 / 1919

tabulation:			
Freq.	Value	Freq.	Value
2	30	7	46
1	31	51	48
2	32	1	49
23	33	23	54
2	36	1	62
5	38	1	83
1	40	39	84
2	42	3	90

F32EVNT1:

1. Computed variable: F32EVNT1 = int(F32EVENT/1000000), NOT saved in the .SD2 file.
2. See Appendix L for event form codes.

F32EVNT2 ----- ASSOCIATED EVENT CODE 2

type: numeric (float)  
 range: [0,90] units: 1  
 unique values: 14 coded missing: 1755 / 1919

tabulation:			
Freq.	Value	Freq.	Value
101	0	10	49
1	31	10	52
3	33	2	54
1	42	1	62
1	45	1	83
3	46	21	84
8	48	1	90

F32EVNT2:

1. Computed variable: F32EVNT2 = int((F32EVENT - F32EVNT1\*1000000)/10000), NOT saved in the .SD2 file.
2. See Appendix L for event form codes.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 1**  
 CSSCD FULL COHORT PATIENTS

---

F32EVNT3 ----- ASSOCIATED EVENT CODE 3

type: numeric (float)  
 range: [0,84] units: 1  
 unique values: 10 coded missing: 1755 / 1919

tabulation:	Freq.	Value
	143	0
	1	32
	2	33
	2	46
	3	48
	1	49
	3	52
	3	54
	1	62
	5	84

F32EVNT3:

1. Computed variable: F32EVNT3 = int((F32EVENT - F32EVNT1\*1000000 - F32EVNT2\*10000)/100), NOT saved in the .SD2 file.
2. See Appendix L for event form codes.

F32EVNT4 ----- ASSOCIATED EVENT CODE 4

type: numeric (float)  
 range: [0,96] units: 1  
 unique values: 10 coded missing: 1755 / 1919

tabulation:	Freq.	Value
	154	0
	1	32
	1	48
	1	52
	1	56
	1	60
	2	84
	1	88
	1	92
	1	96

F32EVNT4:

1. Computed variable: F32EVNT4 = (F32EVENT - F32EVNT1\*1000000 - F32EVNT2\*10000 - F32EVNT3\*100), NOT saved in the .SD2 file.
2. See Appendix L for event form codes.

F32HOSP ----- HOSPITALIZED

type: numeric (float)  
 label: F32HOSP  
 range: [1,2] units: 1  
 unique values: 2 coded missing: 6 / 1919

tabulation:	Freq.	Numeric	Label
	91	1	NO
	1822	2	YES

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F32TRANS ----- TRANSFUSED IN LAST SIX MONTHS

type: numeric (float)

label: F32TRANS

range: [1,2]

units: 1

unique values: 2

coded missing: 595 / 1919

tabulation:	Freq.	Numeric	Label
	1094	1	NO
	230	2	YES

F32TRANS:

1. Not applicable for version 03/01/79 and not entered before 04/26/82.  
See variable F32TRNS.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 2**  
CSSCD FULL COHORT PATIENTS

---

---

F32PAIN ----- IS THERE PAIN OR DISCOMFORT

type: numeric (float)  
label: F32PAIN

range: [1,4] units: 1  
unique values: 4 coded missing: 149 / 1919

tabulation:	Freq.	Numeric	Label
	127	1	YES MILD
	499	2	YES MODERATE
	367	3	YES SEVERE
	777	4	NO PAIN

F32COUGH ----- COUGH WHEN TAKING BREATH

type: numeric (float)  
label: F32COUGH

range: [1,2] units: 1  
unique values: 2 coded missing: 161 / 1919

tabulation:	Freq.	Numeric	Label
	851	1	NO
	907	2	YES

F32BLD ----- SPITTING UP BLOOD

type: numeric (float)  
label: F32BLD

range: [1,3] units: 1  
unique values: 3 coded missing: 14 / 1919

tabulation:	Freq.	Numeric	Label
	1849	1	NO
	6	2	DK
	50	3	YES

F32WHZ ----- WHEEZING

type: numeric (float)  
label: F32WHZ

range: [1,3] units: 1  
unique values: 3 coded missing: 17 / 1919

tabulation:	Freq.	Numeric	Label
	1652	1	NO
	12	2	DK
	238	3	YES

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 2**  
CSSCD FULL COHORT PATIENTS

---

---

F32CGH ----- COUGH

type: numeric (float)  
label: F32CGH

range: [1,3] units: 1  
unique values: 3 coded missing: 14 / 1919

tabulation:	Freq.	Numeric	Label
	544	1	NO
	7	2	DK
	1354	3	YES

F32FEV ----- FEVER

type: numeric (float)  
label: F32FEV

range: [1,3] units: 1  
unique values: 3 coded missing: 5 / 1919

tabulation:	Freq.	Numeric	Label
	393	1	NO
	27	2	DK
	1494	3	YES

F32CHL ----- CHILLS

type: numeric (float)  
label: F32CHL

range: [1,3] units: 1  
unique values: 3 coded missing: 29 / 1919

tabulation:	Freq.	Numeric	Label
	1544	1	NO
	45	2	DK
	301	3	YES

F32PHL ----- COUGHED UP PHLEGM

type: numeric (float)  
label: F32PHL

range: [1,3] units: 1  
unique values: 3 coded missing: 16 / 1919

tabulation:	Freq.	Numeric	Label
	1453	1	NO
	22	2	DK
	428	3	YES

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

---

F32SHR ----- SHORTNESS OF BREATH

type: numeric (float)  
 label: F32SHR

range: [1,3] units: 1  
 unique values: 3 coded missing: 314 / 1919

tabulation:	Freq.	Numeric	Label
	1126	1	NO
	22	2	DK
	457	3	YES

F32SHR:

1. Not applicable for version 03/01/79.

F32MED ----- PRIOR MEDICATION FOR EPISODE?

type: numeric (float)  
 label: F32MED

range: [1,2] units: 1  
 unique values: 2 coded missing: 29 / 1919

tabulation:	Freq.	Numeric	Label
	690	1	NO
	1200	2	YES

F32MED1 ----- PRIOR MEDICATIONS

type: numeric (float)

range: [3,999] units: 1  
 unique values: 24 coded missing: 1715 / 1919

tabulation:

Freq.	Value	Freq.	Value
5	3	1	323
2	25	1	337
5	28	4	371
1	71	3	375
1	93	1	382
3	126	1	420
1	148	1	434
2	152	1	443
1	170	12	480
135	171	2	481
2	196	1	554
1	249	17	999

F32MED1:

1. See Appendix D for medication codes.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

---

F32DAY1 ----- DAYS ON MEDICATION

type: numeric (float)

range: [0,9] units: 1

unique values: 10 coded missing: 1747 / 1919

tabulation: Freq. Value

1	0
42	1
33	2
26	3
16	4
15	5
8	6
8	7
5	8
18	9

F32MED2 ----- PRIOR MEDICATIONS

type: numeric (float)

range: [3,999] units: 1

unique values: 45 coded missing: 1486 / 1919

tabulation:

Freq.	Value	Freq.	Value
1	3	1	306
1	11	1	311
1	12	1	319
1	24	1	320
33	25	1	338
177	28	2	344
2	56	1	361
3	67	4	367
8	94	31	369
1	102	7	370
1	121	47	371
1	122	1	387
1	123	1	397
1	126	1	420
1	171	1	471
23	231	7	480
1	249	1	487
4	259	4	541
1	271	9	554
1	298	8	562
4	299	1	575
1	300	2	998
		32	999

F32MED2:

1. See Appendix D for medication codes.
2. Patients may have indicated only one or all three depending on the type(s) of medication.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

F32DAY2 ----- DAYS ON MEDICATION

```

      type: numeric (float)
      range: [0,9]
      unique values: 10
      tabulation: Freq. Value
                  2  0
                  49 1
                  55 2
                  63 3
                  46 4
                  37 5
                  21 6
                  12 7
                  12 8
                  74 9
  
```

units: 1  
 coded missing: 1548 / 1919

F32MED3 ----- PRIOR MEDICATIONS

```

      type: numeric (float)
      range: [0,999]
      unique values: 99
  
```

units: 1  
 coded missing: 973 / 1919

tabulation:

Freq.	Value	Freq.	Value	Freq.	Value	Freq.	Value
2	0	1	115	1	292	1	423
20	3	26	126	1	296	6	434
1	4	1	137	2	298	4	443
15	6	1	144	2	306	1	444
21	7	1	152	1	316	4	449
1	9	1	156	2	328	1	459
5	11	1	157	1	335	3	463
2	18	3	160	15	337	4	471
1	19	1	161	4	338	391	480
3	20	1	163	3	341	124	481
5	21	1	171	2	344	1	484
16	25	3	190	3	361	1	491
6	28	1	191	2	367	1	515
1	29	7	192	1	369	2	516
19	44	6	196	3	370	2	519
2	48	1	211	5	371	1	522
1	49	2	218	2	374	1	536
2	56	2	230	18	375	1	539
1	59	16	231	6	382	1	541
1	76	1	235	1	391	1	542
1	79	16	249	1	397	1	548
3	94	1	271	3	413	6	554
1	95	1	279	1	416	2	562
6	102	2	282	9	420	1	563
						1	564
						1	931
						61	999

F32MED3:

1. See Appendix D for medication codes.
2. Patients may have indicated only one or all three depending on the type(s) of medication.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 2**  
CSSCD FULL COHORT PATIENTS

---

---

F32DAY3 ----- DAYS ON MEDICATION

type: numeric (float)

range: [1,9]

units: 1

unique values: 9

coded missing: 1030 / 1919

tabulation:

Freq.	Value
310	1
214	2
106	3
65	4
40	5
18	6
32	7
20	8
84	9

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 2**  
CSSCD FULL COHORT PATIENTS

---

---

F32TRNS ----- TRANSFUSED AS PRIOR TREATMENT

type: numeric (float)  
label: F32TRNS

range: [1,2] units: 1  
unique values: 2 coded missing: 503 / 1919

tabulation: Freq. Numeric Label  
1181 1 NO  
235 2 YES

F32TRNS:

1. Not applicable for version 03/17/82. See variable F32TRANS.

F32TMP ----- TEMPERATURE

type: numeric (float)

range: [35.5,44.9] units: .1  
unique values: 57 coded missing: 16 / 1919

mean: 38.4596  
std. dev: 1.03267

percentiles: 10% 25% 50% 75% 90%  
37.1 37.7 38.5 39.2 39.8

F32TMPH ----- HOW TEMPERATURE TAKEN

type: numeric (float)  
label: F32TMPH

range: [1,2] units: 1  
unique values: 2 coded missing: 414 / 1919

tabulation: Freq. Numeric Label  
1142 1 ORAL  
363 2 RECTAL

F32TMPH:

1. Response required only if value was given for F32TMP.
2. Not applicable for version 03/01/79 and not entered before 07/21/81.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 2**  
CSSCD FULL COHORT PATIENTS

---

---

F32PULSE ----- PULSE BEATS PER MINUTE  
          type: numeric (float)  
  
          range: [48,272]                          units: 1  
unique values: 69                          coded missing: 37 / 1919  
  
          mean: 118.174  
          std. dev: 24.7489  
  
percentiles:          10%          25%          50%          75%          90%  
                          88          100          120          136          150

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

---

F32RESP ----- RESPIRATION BREATHS PER MINUTE  
 type: numeric (float)  
 range: [10,99] units: 1  
 unique values: 49 coded missing: 59 / 1919  
 mean: 31.9919  
 std. dev: 12.2945  
 percentiles: 10% 25% 50% 75% 90%  
 20 24 28 40 48

F32LUNG ----- TYPE OF LUNG PROBLEM  
 type: numeric (float)  
 label: F32LUNG  
 range: [0,16] units: 1  
 unique values: 17 coded missing: 8 / 1919

tabulation:	Freq.	Numeric	Label
	6	0	NO FINDINGS(0)
	366	1	RALES(1)
	80	2	RHONCHI(2)
	76	3	
	155	4	PERCUSSION DULLNES(4)
	237	5	
	32	6	
	44	7	
	45	8	WHEEZING(8)
	50	9	
	19	10	
	26	11	
	11	12	
	32	13	
	6	14	
	27	15	
	699	16	NO FINDINGS(16)

F32LUNG:

1. Binary coded variable. See Part II for explanation of binary coded variables.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

F32LOWXL ----- LOWER EXTREMITIES LEFT

type: numeric (float)  
 label: F32LOWXL  
 range: [0,16] units: 1  
 unique values: 12 coded missing: 47 / 1919

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
374	0	NO SYMPTOMS(0)	3	9	
190	1	WARMTH(1)	4	10	
27	2	TENDERNESS(2)	1	12	
29	3		3	13	
0	4	HOMAN'S SIGN(4)	3	14	
1	7		47	15	
0	8	PALPABLE CORD(8)	1190	16	NO SYMPTOMS(16)

F32LOWXL:

1. Not applicable for version 03/01/79.
2. Binary coded variable. See Part II for explanation of binary coded variables.

F32LOWXR ----- LOWER EXTREMITIES RIGHT

type: numeric (float)  
 label: F32LOWXR  
 range: [0,16] units: 1  
 unique values: 12 coded missing: 47 / 1919

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
386	0	NO SYMPTOMS(0)	3	9	
188	1	WARMTH(1)	4	10	
21	2	TENDERNESS(2)	1	12	
25	3		3	13	
0	4	HOMAN'S SIGN(4)	4	14	
1	6		45	15	
0	8	PALPABLE CORD(8)	1191	16	NO SYMPTOMS(16)

F32LOWXR:

1. Not applicable for version 03/01/79.
2. Binary coded variable. See Part II for explanation of binary coded variables.

F32OPHYS ----- OTHER PHYSICAL FINDINGS

type: numeric (float)  
 label: F32OPHYS  
 range: [1,3] units: 1  
 unique values: 3 coded missing: 1553 / 1919

tabulation:

Freq.	Numeric	Label
206	1	NO
159	2	YES
1	3	YES SPECIFIED

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 4**  
 CSSCD FULL COHORT PATIENTS

---

F32CBCHB ----- CBC HB

type: numeric (float)  
 range: [2.3,15.9] units: .1  
 unique values: 108 coded missing: 52 / 1919  
 mean: 8.19946  
 std. dev: 1.71595

percentiles:        10%        25%        50%        75%        90%  
                      6.2            7            8            9.2        10.4

F32CBCHC ----- CBC HCT

type: numeric (float)  
 range: [6.3,43.1] units: .1  
 unique values: 269 coded missing: 24 / 1919  
 mean: 24.3407  
 std. dev: 5.35862

percentiles:        10%        25%        50%        75%        90%  
                      18.3        20.7        23.8        27.5        31.6

F32BCRB ----- CBC RBC

type: numeric (float)  
 range: [.5,6.9] units: .01  
 unique values: 344 coded missing: 168 / 1919  
 mean: 2.84641  
 std. dev: .794458

percentiles:        10%        25%        50%        75%        90%  
                      1.96        2.26        2.71        3.32        3.91

F32CBCWB ----- CBC WBC

type: numeric (float)  
 range: [2.4,89] units: .1  
 unique values: 371 coded missing: 48 / 1919  
 mean: 20.3844  
 std. dev: 8.82358

percentiles:        10%        25%        50%        75%        90%  
                      11.1        14.5        19        24.6        31.1

F32CBCWB:

1. Assumed to be 'uncorrected' in relation to nucleated RBCs.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 4**  
 CSSCD FULL COHORT PATIENTS

---

F32BCMV ----- CBC MCV  
 type: numeric (float)  
 range: [54,117] units: 1  
 unique values: 59 coded missing: 168 / 1919  
 mean: 87.0714  
 std. dev: 9.8969  
 percentiles: 10% 25% 50% 75% 90%  
                   74 81 88 94 99

F32BCMH ----- CBC MCH  
 type: numeric (float)  
 range: [20.1,35] units: .1  
 unique values: 146 coded missing: 379 / 1919  
 mean: 29.2225  
 std. dev: 3.45009  
 percentiles: 10% 25% 50% 75% 90%  
                   24.05 26.75 29.7 31.9 33.6

F32DFPMN ----- DIFFERENTIAL PMN  
 type: numeric (float)  
 range: [4,94] units: 1  
 unique values: 84 coded missing: 123 / 1919  
 mean: 62.0212  
 std. dev: 15.7782  
 percentiles: 10% 25% 50% 75% 90%  
                   41 53 64 73 80

F32DFBND ----- DIFFERENTIAL BANDS  
 type: numeric (float)  
 range: [0,73] units: 1  
 unique values: 40 coded missing: 418 / 1919  
 mean: 4.95203  
 std. dev: 6.73867  
 percentiles: 10% 25% 50% 75% 90%  
                   0 1 3 7 13

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 4**  
CSSCD FULL COHORT PATIENTS

---

---

F32DFE0S ----- DIFFERENTIAL EOSINOPHILS

type: numeric (float)

range: [0,28] units: 1  
unique values: 20 coded missing: 172 / 1919

mean: 1.41786  
std. dev: 2.45847

percentiles:	10%	25%	50%	75%	90%
	0	0	0	2	4

F32DFBAS ----- DIFFERENTIAL BASOPHILS

type: numeric (float)

range: [0,34] units: 1  
unique values: 16 coded missing: 216 / 1919

mean: .397534  
std. dev: 1.62997

percentiles:	10%	25%	50%	75%	90%
	0	0	0	0	1

F32DFLYM ----- DIFFERENTIAL LYMPHOCYTES

type: numeric (float)

range: [0,95] units: 1  
unique values: 80 coded missing: 126 / 1919

mean: 24.6247  
std. dev: 14.7165

percentiles:	10%	25%	50%	75%	90%
	8	14	22	33	44

F32DFMON ----- DIFFERENTIAL MONOCYTES

type: numeric (float)

range: [0,32] units: 1  
unique values: 29 coded missing: 146 / 1919

mean: 6.93683  
std. dev: 4.53547

percentiles:	10%	25%	50%	75%	90%
	2	4	6	10	13

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 4**  
CSSCD FULL COHORT PATIENTS

---

---

F32DFATC ----- DIFFERENTIAL ATYPICAL CELLS

type: numeric (float)

range: [0,21] units: 1  
unique values: 16 coded missing: 232 / 1919

mean: .440427  
std. dev: 1.42877

percentiles:	10%	25%	50%	75%	90%
	0	0	0	0	1

F32DFMM ----- DIFFERENTIAL METAMYELOCYTES|MYELOCYTES

type: numeric (float)

range: [0,10] units: 1  
unique values: 9 coded missing: 253 / 1919

mean: .20048  
std. dev: .716615

percentiles:	10%	25%	50%	75%	90%
	0	0	0	0	1

F32NRB ----- NUCLEATED RED BLOOD CELLS

type: numeric (float)

range: [0,99] units: 1  
unique values: 73 coded missing: 190 / 1919

mean: 5.53094  
std. dev: 13.8455

percentiles:	10%	25%	50%	75%	90%
	0	0	1	4	14

F32NRB:

1. If value more than 100nRBCs/100WBCs, then value of 99 entered.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 5**  
 CSSCD FULL COHORT PATIENTS

F32LNGIN ----- LUNG INFILTRATE  
                   type: numeric (float)  
                   label: F32LNGIN  
                   range: [0,64]  units: 1  
 unique values: 49  coded missing: 12 / 1919

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
6	0	NO(0)	366	32	RIGHT LOWER(32)
63	1	LEFT UPPER(1)	2	33	
29	2	LEFT LINGULA(2)	6	34	
6	3		1	35	
464	4	LEFT LOWER(4)	228	36	
13	5		1	37	
16	6		8	38	
5	7		2	39	
118	8	RIGHT UPPER(8)	14	40	
12	9		8	44	
2	10		1	45	
16	12		1	46	
1	13		65	48	
174	16	RIGHT MIDDLE(16)	2	49	
5	17		2	50	
8	18		17	52	
28	20		1	53	
2	21		6	54	
2	22		1	55	
24	24		7	56	
2	25		4	60	
1	27		2	61	
9	28		1	62	
1	31		7	63	
			147	64	NO(64)

F32LNGIN:

1. Binary coded variable. See Part II for explanation of binary coded variables.

F32PLEFF ----- PLEURAL EFFUSION  
                   type: numeric (float)  
                   label: F32PLEFF  
                   range: [1,5]  units: 1  
 unique values: 5  coded missing: 244 / 1919

tabulation:

Freq.	Numeric	Label
1411	1	ABSENT
76	2	PRESENT UNSP.
120	3	<= .5 CM
58	4	>.5 CM AND <=4 CM
10	5	>4 CM

F32PLEFF:

1. Not applicable for version 03/01/79 and not entered before 04/26/82.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 5**  
 CSSCD FULL COHORT PATIENTS

F32PERF ----- LOCATION OF PERFUSION DEFECT

type: numeric (float)  
 label: F32PERF  
 range: [0,64] units: 1  
 unique values: 12 coded missing: 539 / 1919

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
282	0	NO(0)	1	10	
0	1	LEFT UPPER(1)	2	16	RIGHT MIDDLE(16)
0	2	LEFT LINGULA(2)	4	32	RIGHT LOWER(32)
8	4	LEFT LOWER(4)	7	36	
1	7		3	48	
1	8	RIGHT UPPER(8)	1	63	
1	9		1069	64	NOT DONE(64)

F32PERF:

1. Binary coded variable. See Part II for explanation of binary coded variables.
2. 'NO' was coded as '0' on forms entered before 04/26/82.
3. Location of perfusion defect is based on lung scans which were optional tests, unless they were used for entry to the study.

F32BLRBN ----- TOTAL BILIRUBIN

type: numeric (float)  
 range: [.1,54] units: .1  
 unique values: 129 coded missing: 1122 / 1919

mean: 3.98407  
 std. dev: 4.10734

percentiles:      10%      25%      50%      75%      90%  
                              1      1.7      2.9      4.9      7.8

F32BLCL1 ----- BLOOD MICROBIOLOGY CULTURE

type: numeric (float)  
 range: [-1,9000] units: 1  
 unique values: 19 coded missing: 1832 / 1919

tabulation:

Freq.	Value	Freq.	Value
18	-1	1	404
4	110	1	405
8	120	1	410
3	130	1	411
1	160	1	412
31	170	7	1200
1	202	1	1300
1	203	1	2100
4	401	1	5130
		1	9000

F32BLCL1:

1. See Appendix H for pathogen codes.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 5**  
 CSSCD FULL COHORT PATIENTS

F32BLCL2 ----- BLOOD MICROBIOLOGY CULTURE

          type: numeric (float)  
           range: [301,1200]                          units: 1  
 unique values: 2                          coded missing: 1916 / 1919

          tabulation: Freq. Value  
                           1 301  
                           2 1200

F32BLCL2:

1. See Appendix H for pathogen codes.

F32SPCL1 ----- SPUTUM MICROBIOLOGY CULTURE

          type: numeric (float)  
           label: F32SPCL1  
           range: [100,9999]                          units: 1  
 unique values: 20                          coded missing: 1788 / 1919

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
3	100		2	401	
1	106		1	408	
31	110		3	410	
1	120		1	412	
15	130		1	800	
5	140		1	1070	
8	160		7	1200	
17	170		3	1300	
2	202		16	9000	
1	301		12	9999	

F32SPCL1:

1. See Appendix H for pathogen codes.

F32SPCL2 ----- SPUTUM MICROBIOLOGY CULTURE

          type: numeric (float)  
           label: F32SPCL2  
           range: [110,9999]                          units: 1  
 unique values: 12                          coded missing: 1881 / 1919

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
3	110		4	1200	
1	130		4	1300	
1	140		1	1400	
3	160		1	6100	
1	400		13	9000	
1	407		5	9999	

F32SPCL2:

1. See Appendix H for pathogen codes.

CODEBOOK FOR CSSCD FORM 32  
ACUTE CHEST SYNDROME - PAGE 5  
CSSCD FULL COHORT PATIENTS

---

---

F320CL ----- OTHER CULTURE

type: numeric (float)

range: [-1,9999] units: 1  
unique values: 20 coded missing: 1850 / 1919

tabulation:

Freq.	Value	Freq.	Value
10	-1	1	404
5	110	1	405
1	120	1	407
8	130	1	408
6	140	2	1200
2	150	2	5120
2	160	1	6300
2	170	5	9000
1	203	1	9500
7	401	10	9999

F320CL:

1. See Appendix H for pathogen codes.

F32GRAM1 ----- GRAM STAIN ORGANISM

type: numeric (float)  
label: F32GRAM1

range: [-1,9999] units: 1  
unique values: 16 coded missing: 1811 / 1919

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
1	-1		1	160	
1	1		19	170	
11	10	GRAM POSITIVE DIPLOCOCCI	6	202	
7	100	GRAM POSITIVE COCCI	1	800	
1	106		2	1200	
14	110		19	9000	
3	130		1	9900	
3	140		18	9999	OTHER

F32GRAM1:

1. See Appendix H for pathogen codes.
2. Required only if sputum samples was obtainable.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 5**  
CSSCD FULL COHORT PATIENTS

---

---

F32GRAM2 ----- GRAM STAIN ORGANISM

    type: numeric (float)  
    label: F32GRAM2  
  
    range: [10,9999]                                units: 1  
unique values: 9                                coded missing: 1892 / 1919

tabulation:	Freq.	Numeric	Label
	1	10	GRAM POSITIVE DIPLOCOCCI
	8	100	GRAM POSITIVE COCCI
	1	110	
	1	202	
	2	400	GRAM NEGATIVE RODS
	1	401	
	1	1200	
	7	9000	
	5	9999	OTHER

F32GRAM2:

1. See Appendix H for pathogen codes.
2. Required only if sputum samples was obtainable.

F32GRAM3 ----- GRAM STAIN ORGANISM

    type: numeric (float)  
    label: F32GRAM3  
  
    range: [100,9000]                                units: 1  
unique values: 6                                coded missing: 1909 / 1919

tabulation:	Freq.	Numeric	Label
	1	100	GRAM POSITIVE COCCI
	1	120	
	1	202	
	1	300	
	3	400	GRAM NEGATIVE RODS
	3	9000	

F32GRAM3:

1. See Appendix H for pathogen codes.
2. Required only if sputum samples was obtainable.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 5**  
CSSCD FULL COHORT PATIENTS

---

---

F32GRAM4 ----- GRAM STAIN ORGANISM

type: numeric (float)  
label: F32GRAM4

range: [160,9999] units: 1  
unique values: 3 coded missing: 1913 / 1919

tabulation:	Freq.	Numeric	Label
	1	160	
	2	9000	
	3	9999	OTHER

F32GRAM4:

1. See Appendix H for pathogen codes.
2. Required only if sputum samples was obtainable.

F32PMN ----- PMN

type: numeric (float)  
label: F32PMN

range: [1,5] units: 1  
unique values: 4 coded missing: 1664 / 1919

tabulation:	Freq.	Numeric	Label
	113	1	ABSENT
	45	3	MANY
	45	4	MODERATE
	52	5	SCANTY

F32PMN:

1. See Appendix H for pathogen codes.
2. Required only if sputum samples was obtainable.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 6**  
CSSCD FULL COHORT PATIENTS

---

---

F32THWBC ----- THORACENTESIS WBC

type: numeric (float)

range: [.1,95] units: .1  
unique values: 36 coded missing: 1877 / 1919

mean: 16.4405  
std. dev: 20.8152

percentiles:	10%	25%	50%	75%	90%
	1.1	2.2	10.05	20	36.1

F32THWBC:

1. Required only if F32PLEFF  $\geq$  2.

F32THRBC ----- THORACENTESIS RBC

type: numeric (float)

range: [.1,9.9] units: .1  
unique values: 20 coded missing: 1892 / 1919

mean: 3.42963  
std. dev: 2.77666

percentiles:	10%	25%	50%	75%	90%
	.1	1.2	3	4.8	9

F32THRBC:

1. Required only if F32PLEFF  $\geq$  2.

F32THPRO ----- THORACENTESIS PROTEIN

type: numeric (float)

range: [0,50] units: .1  
unique values: 29 coded missing: 1871 / 1919

mean: 5.95625  
std. dev: 8.5596

percentiles:	10%	25%	50%	75%	90%
	2.4	3.3	4	5	7

F32THPRO:

1. Required only if F32PLEFF  $\geq$  2.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 6**  
CSSCD FULL COHORT PATIENTS

---

---

F32THGLU ----- THORACENTESIS GLUCOSE

          type: numeric (float)  
          range: [0,446]  units: 1  
unique values: 31  coded missing: 1881 / 1919

          mean: 117.895  
          std. dev: 62.9409

          percentiles:      10%      25%      50%      75%      90%  
                              82      93      108      137      156

F32THGLU:

1. Required only if F32PLEFF  $\geq$  2.

F32THCL1 ----- THORACENTESIS CULTURE

          type: numeric (float)  
          range: [140,170]                                      units: 10  
unique values: 3  coded missing: 1916 / 1919

          tabulation: Freq. Value  
                          1 140  
                          1 160  
                          1 170

F32THCL1:

1. Required only if F32PLEFF  $\geq$  2.

F32THCL2 ----- THORACENTESIS CULTURE

          type: numeric (float)  
          range: [301,301]                                      units: 1  
unique values: 1  coded missing: 1918 / 1919

          tabulation: Freq. Value  
                          1 301

F32THCL2:

1. Required only if F32PLEFF  $\geq$  2.

F32BGP02 ----- BLOOD GASES PO2

          type: numeric (float)  
          range: [8,99]  units: 1  
unique values: 72  coded missing: 1448 / 1919

          mean: 70.0446  
          std. dev: 17.1024

          percentiles:      10%      25%      50%      75%      90%  
                              47      60      70      81      96

F32BGP02:

1. Not applicable for version 03/01/79.
2. Required only if patients  $\geq$  20 years of age, while at rest, sitting, breathing room air.

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - PAGE 6**  
 CSSCD FULL COHORT PATIENTS

F32BGPCO ----- BLOOD GASES PCO2

type: numeric (float)  
 range: [17,91] units: 1  
 unique values: 38 coded missing: 1437 / 1919

mean: 34.3568  
 std. dev: 6.71403

percentiles:	10%	25%	50%	75%	90%
	27	30	34	37	41

F32BGPCO:

1. Not applicable for version 03/01/79.
2. Required only if patients  $\geq$  20 years of age, while at rest, sitting, breathing room air.

F32BGPH ----- BLOOD GASES PH

type: numeric (float)  
 range: [4.4,7.8] units: .1  
 unique values: 9 coded missing: 1432 / 1919

mean: 7.41684  
 std. dev: .157801

percentiles:	10%	25%	50%	75%	90%
	7.4	7.4	7.4	7.5	7.5

F32BGPH:

1. Not applicable for version 03/01/79.
2. Required only if patients  $\geq$  20 years of age, while at rest, sitting, breathing room air.

F32BGTMP ----- TEMPERATURE WHEN BLOOD DRAWN

type: numeric (float)  
 range: [35.8,41.1] units: .1  
 unique values: 45 coded missing: 1520 / 1919

mean: 38.1511  
 std. dev: .929361

percentiles:	10%	25%	50%	75%	90%
	37	37.4	38.1	38.9	39.3

F32BGTMP:

1. Not applicable for version 03/01/79.

F32ANGIO ----- ANGIOGRAM DONE

type: numeric (float)  
 label: F32ANGIO  
 range: [1,2] units: 1  
 unique values: 2 coded missing: 674 / 1919

tabulation:	Freq.	Numeric	Label
	14	1	DONE
	1231	2	NOT DONE

**CODEBOOK FOR CSSCD FORM 32**  
**ACUTE CHEST SYNDROME - COMPUTED VARIABLES**  
 CSSCD FULL COHORT PATIENTS

F32FLOWS ----- NUMBER OF FLOWSHEETS

type: numeric (float)  
 range: [0,12] units: 1  
 unique values: 11 coded missing: 0 / 1919

tabulation:

Freq.	Value	Freq.	Value
169	0	9	5
1062	1	2	6
557	2	2	7
87	3	2	8
27	4	1	10
		1	12

F32FLOWS:

1. See section on computed variables.

F32FRM52 ----- IS THERE A 52 ON THE DATABASE

type: numeric (float)  
 range: [0,48] units: 1  
 unique values: 8 coded missing: 0 / 1919

tabulation:

Freq.	Value
105	0
19	30
2	31
220	32
1558	33
1	42
1	44
13	48

F32FRM52:

1. See section on computed variables.

F32DHOSP ----- NUMBER OF DAYS HOSPITALIZED

type: numeric (float)  
 range: [0,73] units: 1  
 unique values: 39 coded missing: 100 / 1919

tabulation:

Freq.	Value	Freq.	Value
70	0	22	15
27	1	14	16
83	2	6	17
199	3	1	30
213	4	1	32
230	5	1	35
281	6	1	38
132	7	14	18
134	8	7	19
		6	20
		6	21
		3	22
		4	23
108	9	5	24
78	10	4	25
75	11	3	27
47	12		
16	13		

## 7.2.2: Acute Chest Syndrome Form II - Form 32E

---

F32DHOSP:

1. See section on computed variables.

\_dta:

1. Created 7/14/99.

A. List of variables deleted    **F43DATE F43INIT F43NDATE F43LASTU F43LASTE  
F43ESTAT F43VDATE F43DFC F43FCB**

B. List of variables modified    **NONE**

C. List of variables modified with a name change    **NONE**

D.    Old name

E.    New name

F. List of variables modified date to days since DOE

G.    Old name    **F43DATE**

H.    New name    **JF43DATE**

I. Collection Information:

**Form 32E (Acute Chest Syndrome Form II)** is a short version of Form 32 documenting only the patient's visit date, hospitalization and transfusion status, infiltrate location, and final diagnosis occurring in HbSS patients  $\geq 6$  years of age. This insured completeness in calculating rates of events (counts), but cut off recording of hospitalization variables.

Form 32E (Acute Chest Syndrome Form II), like form 32 was completed each time a HbSS study patient  $\geq 6$  years of age presented at a study participant clinic, emergency room, or hospital with an acute chest syndrome event (per definition – See Section 7.2.0).

Any episode not adhering to the criteria for acute chest syndrome was to be treated as a painful crisis (See Section 7.1.0).

J. Data Collection Period: 07/85 – 12/86

Form 32E was used between 07/01/85 through 05/31/86 to collect information about events for HbSS patients  $\geq 6$  years of age. It continued to be used through 12/31/86 for HbSS patients  $\geq 6$  years of age who were entered at  $< 6$  months of age.

K. Form Version Dates: 06/19/85

L. Files Used to Store Information:

SAS System File: **R43.SD2**

## 7.2.2: Acute Chest Syndrome Form II - Form 32E

---

Format File: **R43.FMT**

Note: Some records in this dataset are for 1) events of non-HbSS patients or 2) events of HbSS patients < 6 years of age – i.e., Form 32, rather than Form 32E, should have been used to report these events.

M. Unique Record Identifiers: **ANONID, F43DATE**

N. Number of Observations (Patients) in SAS Dataset: 220 (183)

O. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See pp. 226-227
- Listing of Variables by Position: See pp. 227

P. Notes About Selected Variables:

- **F43ICDA1-F43ICDA4** – The set up of the final diagnosis question on Form 32E implies that the variable **F43ICDA1** would correspond to “Pneumonia”, **F43ICDA2** to “Pulmonary Infarction”, **F43ICDA3** to “Pulmonary Embolism”, and **F43ICDA4** to “Other” ICD codes. However, in truth, the data entry protocol entered any and all of the diagnostic codes to any and all of the available variables indiscriminately.

Consequently, the easiest way of dealing with the final diagnosis variables is as a group. If any of the **F43ICDA1-F43ICDA4** variables, associated with a given event, is equal to a discrete ICD code, then assume the ICD code corresponds to one of the disorders which constitute the final diagnosis.

Q. Computed Variables: None

R. Inter-Relationship with Other Datasets:

Acute Chest Syndrome event data were also collected on

<b>Phase I Forms</b>	<b>SAS Dataset</b>
Form 32	<b>R32.SD2</b>
Form 53	<b>R53.SD2</b>
-----	<b>R63.SD2</b>

[See Sections 7.2.1, 7.2.4, & 7.9]

Form 32 is a long version containing complete laboratory measurements and complete background information [See Section 7.2.1], and was used between 03/01/79 and 07/01/85 to report all acute chest events. It continued to be used from

## 7.2.2: Acute Chest Syndrome Form II - Form 32E

---

07/01/85 through 12/31/86 for all non-HbSS patients and for HbSS patients until age 6. After 07/01/85, Form 32E was used for reporting ACS events in patients  $\geq 6$  years of age. From 01/01/87 through 09/30/88, ACS events were reported on Form 53, the Comprehensive Special Event Form for Patients Entered at < 6 Months of Age (See Section 7.9).

The SAS dataset **R63.SD2** includes summary information for all ACS events reported throughout Phase I (See Section 7.2.3). The variable **F63FORM** stores the form number (32, 43(32E), 48, 53) that was the source for the data.

Completion of separate follow-up and treatment forms (Forms 33 and/or 52) was *NOT* required for events reported on Form 32E.

**CODEBOOK FOR CSSCD FORM 32E**  
**ACUTE CHEST SYNDROME FORM II**  
 CSSCD FULL COHORT PATIENTS

The SAS System

10:44 Thursday, December 7, 2006 4

The CONTENTS Procedure

Data Set Name	OUT1.R43	Observations	220
Member Type	DATA	Variables	17
Engine	V9	Indexes	0
Created	17:10 Wednesday, November 29, 2006	Observation Length	136
Last Modified	17:10 Wednesday, November 29, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	12288
Number of Data Set Pages	3
First Data Page	1
Max Obs per Page	90
Obs in First Data Page	68
Number of Data Set Repairs	0
File Name	r43.sas7bdat
Release Created	9.0000M0
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
8	F43CXRAY	Num	8	PULMONARY INFILTRATE ON CHEST X-RAY
7	F43DAYHP	Num	8	NUMBER OF DAYS HOSPITALIZED
11	F43DIAG	Num	8	FINAL DIAGNOSIS
2	F43EVENT	Num	8	SPECIAL EVENT FORM FILLED OUT?
3	F43EVNT1	Num	8	CSSCD EVENT NO.
4	F43EVNT2	Num	8	CSSCD EVENT NO.
5	F43EVNT3	Num	8	CSSCD EVENT NO.
6	F43EVNT4	Num	8	CSSCD EVENT NO.
13	F43ICDA1	Num	8	ICDA CODE
14	F43ICDA2	Num	8	ICDA CODE
15	F43ICDA3	Num	8	ICDA CODE
16	F43ICDA4	Num	8	ICDA CODE
9	F43NUMLB	Num	8	NUMBER OF LOBES INVOLVED
12	F43PNORG	Num	8	PNEUMONIA ORGANISM
10	F43TRANS	Num	8	TRANSFUSED IN LAST 4 MONTHS
17	JF43DATE	Num	8	DATE PATIENT FIRST SOUGHT CARE - RECODE DAYS SINCE DOE

CODEBOOK FOR CSSCD FORM 32E  
ACUTE CHEST SYNDROME FORM II  
CSSCD FULL COHORT PATIENTS

---

---

CODEBOOK FOR CSSCD FORM 32E  
ACUTE CHEST SYNDROME FORM II  
CSSCD FULL COHORT PATIENTS

---

---

\*\*\*\*\*  
\*\*\*\*\*  
\* R43.FMT contains value labels for numerical codes assigned to  
categorical\*  
\* variables in the SAS dataset R43.SD2  
\*  
\*\*\*\*\*  
\*\*\*\*;

\* SIR/DBMS 2.2 SAS PROC STEP FROM DATABASE: CSSCD 06/11/99 11:40:29;

PROC FORMAT;

PROC FORMAT PRINT;

\*FORMAT NO\_YES used for the following variables: F43EVENT F43CXRAY  
F43TRANS;

VALUE NO\_YES

1 = 'NO'  
2 = 'YES';

VALUE F43DIAG

1 = 'PNEMONIA'  
2 = 'PULMONARY INFARCTION'  
3 = 'PULMONARY EMBOLISM'  
4 = 'OTHER';

\* FORMAT

F43EVENT F43CXRAY  
F43TRANS NO\_YES.  
F43DIAG F43DIAG.;

RUN;  
QUIT;

CODEBOOK FOR CSSCD FORM 32E  
ACUTE CHEST SYNDROME FORM II  
CSSCD FULL COHORT PATIENTS

---

---

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

F43VDATE ----- VERSION DATE **DELETED**

type: numeric daily date (int)

label: datelab

range: [9301,9301] units: 1

or equivalently: [19jun1985,19jun1985] units: days

unique values: 1 coded missing: 0 / 220

tabulation:	Freq.	Numeric	Label
	220	9301	06/19/85

F43EVENT ----- SPECIAL EVENT FORM FILLED OUT?

type: numeric (float)

label: F43EVENT

range: [1,2] units: 1

unique values: 2 coded missing: 1 / 220

tabulation:	Freq.	Numeric	Label
	80	1	NO
	139	2	YES

F43EVNT1 ----- CSSCD EVENT NO.

type: numeric (float)

range: [33,90] units: 1

unique values: 11 coded missing: 86 / 220

tabulation:	Freq.	Value
	1	33
	2	34
	6	36
	2	44
	6	46
	9	48
	1	52
	78	54
	1	83
	23	84
	5	90

F43EVNT1:

1. Required if another special event form was filled out in association with this event.

F43EVNT2 ----- CSSCD EVENT NO.

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

---

type: numeric (float)

range: [34,90] units: 1  
 unique values: 10 coded missing: 170 / 220

tabulation: Freq. Value

1	34
1	39
1	46
10	48
1	50
4	54
1	64
1	83
29	84
1	90

F43EVNT2:

1. Required if more than 1 special event form was filled out in association with this event.

F43EVNT3 ----- CSSCD EVENT NO.

type: numeric (float)

range: [31,90] units: 1  
 unique values: 12 coded missing: 195 / 220

tabulation: Freq. Value

1	31
1	34
1	36
4	46
2	48
1	49
1	52
3	54
2	62
1	83
6	84
2	90

F43EVNT3:

1. Required if more than 2 special event forms were filled out in association with this event.

F43EVNT4 ----- CSSCD EVENT NO.

type: numeric (float)

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

---

range: [46,90] units: 1  
unique values: 5 coded missing: 209 / 220

tabulation: Freq. Value  
2 46  
1 47  
4 62  
3 84  
1 90

#### F43EVNT4:

1. Required if more than 3 special event forms were filled out in association with this event.

#### F43DAYHP ----- NUMBER OF DAYS HOSPITALIZED

type: numeric (float)

range: [0,38] units: 1  
unique values: 27 coded missing: 5 / 220

mean: 8.43721  
std. dev: 5.6299

percentiles: 10% 25% 50% 75% 90%  
3 5 7 10 14

#### F43CXRAY ----- PULMONARY INFILTRATE ON CHEST X-RAY

type: numeric (float)  
label: F43CXRAY

range: [1,2] units: 1  
unique values: 2 coded missing: 2 / 220

tabulation: Freq. Numeric Label  
14 1 NO  
204 2 YES

#### F43NUMLB ----- NUMBER OF LOBES INVOLVED

type: numeric (float)

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

range: [1,3] units: 1  
unique values: 3 coded missing: 29 / 220

tabulation:	Freq.	Value
	127	1
	59	2
	5	3

F43NUMLB:

1. Required only if F43CXRAY=2.

F43TRANS ----- TRANSFUSED IN LAST 4 MONTHS

type: numeric (float)  
label: F43TRANS

range: [1,2] units: 1  
unique values: 2 coded missing: 5 / 220

tabulation:	Freq.	Numeric	Label
	168	1	NO
	47	2	YES

F43DIAG ----- FINAL DIAGNOSIS

type: numeric (float)  
label: F43DIAG

range: [1,4] units: 1  
unique values: 3 coded missing: 23 / 220

tabulation:	Freq.	Numeric	Label
	168	1	PNEUMONIA
	21	2	PULMONARY INFARCTION
	8	4	OTHER

F43PNORG ----- PNEUMONIA ORGANISM

type: numeric (float)

range: [110,9999] units: 1  
unique values: 5 coded missing: 202 / 220

tabulation:	Freq.	Value
	2	110
	5	170
	1	408
	2	9000
	8	9999

F43PNORG:

1. See Appendix H - PATHOGEN LIST.

F43ICDA1 ----- ICDA CODE

type: numeric (float)

range: [34,933.19] units: .01

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

---

unique values: 12

coded missing: 21 / 220

tabulation:	Freq.	Value
	1	34
	7	282.62
	1	282.66
	18	415.1
	1	466
	1	473
	160	486
	1	490
	4	493.9
	3	511.9
	1	786.52
	1	933.19

F43ICDA1:

1. See ICD-9 Codebook for diagnosis codes.

F43ICDA2 ----- ICDA CODE

type: numeric (float)

range: [10.9,560.1]

units: .01

unique values: 7

coded missing: 212 / 220

tabulation:	Freq.	Value
	1	10.9
	1	282.6
	1	282.62
	1	376.01
	1	415.1
	2	511.9
	1	560.1

F43ICDA2:

1. See ICD-9 Codebook for diagnosis codes.

F43ICDA3 ----- ICDA CODE

type: numeric (float)

range: [34,733.4]

units: .01

unique values: 3

coded missing: 217 / 220

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

---

```

tabulation:  Freq.    Value
              1        34
              1    282.62
              1    733.4
    
```

F43ICDA3:

1. See ICD-9 Codebook for diagnosis codes.

F43ICDA4 ----- ICDA CODE

```

              type:  numeric (float)

              range:  [282.62,511.9]          units:  .01
unique values:  3                                coded missing:  216 / 220
    
```

```

tabulation:  Freq.    Value
              1    282.62
              1     485
              2    511.9
    
```

F43ICDA4:

1. See ICD-9 Codebook for diagnosis codes.

\_dta:

1. Created 06/20/00.

- A. List of variables deleted    **F33DATE F33INIT F33NDATE F33LASTU F33LASTE  
F33ESTAT F33VDATE F33DTE1-F33DTE6 F33LDTE1 F33LDTE2 F33MDT1-  
FEEMDT3  
F33HMDT1-F33HMDT3 F33NOSYM**
- B. List of variables modified    **NONE**
- C. List of variables modified with a name change    **NONE**
- D.    Old name
- E.    New name
- F. List of variables modified date to days since DOE
- G.    Old name    **F33DATE F33NOSYM**
- H.    New name    **JF33DATE J33NOSYM**
- I. Collection Information:

**Form 33 (Acute Chest Syndrome Flow Sheet)** was completed each time a Form 32 was completed and the patient was hospitalized or seen daily as an outpatient for an Acute Chest Syndrome Event.

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

---

The form contains daily and laboratory information from day 2 of hospitalization for the event, through discharge. Each Form 33 contains 6 days of hospital information, so consequently, multiple Form 33s can exist for a given event, dependent on length of stay or outpatient follow-up. Laboratory data are recorded every third hospital day (i.e., days 4, 7, 10, 13, etc.)

Treatment follow-up, medication, resolution of symptoms, and final diagnosis information is also recorded on this form.

J. Date Collection Period: 03/79 – 12/86

The form was used for the entire cohort through 05/86 and continued to be used for the infant cohort through 12/86.

K. Form Version Dates: 03/01/79, 05/02/79, 09/30/80

Not all information from all forms has been retained to the final database. Variables considered unimportant or unusable from early forms have been permanently dropped from the final database. Also, variables not appearing on earlier forms have been added to later versions. Consequently, the codebook coincides closely with the most recent version of Form 33.

L. Files Used to Store Information:

SAS System File: **R33.SD2**

Format File: **R33.FMT**

M. Unique Record Identifiers: **ANONID, F33DATE, F33SHEET**

Records within the dataset are sorted by **ANONID, F33DATE, and F33SHEET**

N. Number of Observations (Patients) in SAS Dataset: 2,686 (961)

O. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See pp. 240-243
- Listing of Variables by Position: See pp. 244-246

P. Notes About Selected Variables:

- **F33DTE1-F33DTE6, F33MDT1-F33MDT3, F33HMDT1-F33HMDT3** – These date variables are recorded as four-digit integers composed of 2-digit month and 2-digit day of follow-up.

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

---

- **F33CBWB1, F33CBWB2** – is the CBC White Blood Cell Count variable assumed to be “uncorrected” in relation to nucleated red blood cells (nRBCs). There is question as to whether clinics uniformly adhered to this recording policy, and there is no way of knowing whether the values recorded on the form are in fact uncorrected.
- **WBC Differential Variables** – When any of the following sets (**F33DPMN1, F33DBDN1, F33DEOS1, F33DBAS1, F33DLYM1, F33DMON1, F33DATC1, F33DFMM1**) or (**F33DPMN2, F33DBDN2, F33DEOS2, F33DBAS2, F33DLYM2, F33DMON2, F33DATC2, F33DFMM2**) are recorded, then the sum of the entire set should be 100.

Some of these variables are entered as missing, when the value in fact should be “0”. If the sum of differential variables with non-missing values is 100, the missing values among that sum are assumed to be 0.

- **F33DIAG1–F33DIAG4** – the set-up of the discharge box on the last page of Form 33 implies the following: that 1) it is filled out upon resolution of symptoms, and 2) that the variable **F33DIAG1** would correspond to Pneumonia, **F33DIAG2** to Pulmonary Infarct, **F33DIAG3** to Pulmonary Emboli etc. However, in truth, the final diagnosis indicators may have appeared only on a flow sheet earlier than complete resolution of symptoms, (that is a **F33SHEET** number lower than the last one on the database for that **F33DATE**), and entry protocol entered any and all of the diagnostic codes to any and all of the available variables indiscriminately.

Consequently the easiest way of dealing with the final diagnosis variables is as a group, over all Form 33s completed for the given event date (**F33DATE**). If any of the **F33DIAG1-F33DIAG4** variables, on any of the sheets associated with a given event date is equal to a discrete ICDA code, then assume the ICDA corresponds to one of the disorders which constitute the final diagnosis.

- **F33RALE1-F33RALE6, F33PD1-F33PD6, F33WHZ1-F33WHZ6** – On versions earlier than 09/30/80, there were four response choices: right (1), left (2), both (3), none (4). On version 09/30/80, there were only two: “yes” and “no”; 3 was used as the code for “yes”.
- The following variables were not collected before 09/30/80, and consequently all acute chest follow-up on versions before that date will contain missing values: **F33TRANS, F33MCD1-F33MCD3, F33HMCD1-F33HMCD3, F33MDT1-**

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

---

**F22MDT3, F33HMDT1-F33HMDT3, F33MND1-F33MND3, F33HMND1-F33HMND3, F33NOSYM, F33COMP, F33INBED, F33MSWRK, F33PNORG, F33DIAG1-F33DIAG4.**

These variables, however, are corollary to those that are collected on a Form 52 [See Section 7.10], and the missing information for versions before 09/30/80 can be filled in by linking to the appropriate Form 52.

Q. Computed Variables: None

R. Inter-Relationship with Other Datasets:

- Form 33 contains daily follow-up data for acute chest events reported on Form 32 (**R32.SD2**). “Record 33” is linked to “Record 32” by id (**ANONID**) and date patient sought care (if **F32DATE=F33DATE**).

The number of “Record 33s” which will link with any given “Record 32” is dependent on the length of the hospitalization. If a patient was hospitalized (or seen daily as an outpatient) for 7 days or less, then only “Record 33” should be on the database for the event (**F33SHEET=1**). If a patient was hospitalized for 8-13 days, two “Record 33s” should be on the database, (**F33SHEET=1** for days 2-7; **F33SHEET=2** for days 8-13), etc.

[See Section 7.2.1]

- Acute Chest Syndrome Treatment and Follow-up information was also collected on

<b>Phase 1 Forms</b>	QQQQQQ. <u>S</u>
	<u>AS Dataset</u>
Form 52	<b>R52.SD2</b>

Form 52 is the Acute Event Treatment Follow-up form that was used to collect summary non-hospitalization information for acute chest events when Form 32 was filled out. It does not record daily laboratory data, since these are hospitalization values. It does collect treatment, medications, resolution of symptoms, and diagnosis information that is corollary to that collected on Form 33 version 09/30/80 for hospitalized events. Form 33 versions before 09/30/80 do not record that corollary information, so Form 52 was filled out in conjunction with each acute chest syndrome event before use of the 09/30/80 version of Form 33 to record this information. Consequently, for any acute chest events

### 7.2.3: Acute Chest Syndrome Flow Sheet – Form 33

---

before 09/30/80, both Form 33 and Form 52 must be queried to obtain both daily lab values and result of treatment and final diagnosis variables.

Form 52 was used from the inception of the project to record follow-up information for all types of acute events. In order to link a specific “Record 32” with a Record 52 the date patient first sought care is used (i.e., **F52DATE=F32DATE**). When **F32FRM52=31** or **F32FRM52=33** then treatment information is not stored in **R52.SD2**, but rather in **R31.SD2** or **R33.SD2** respectively, and “Record 32” should be linked by date to “Record 31” or “Record 33” for treatment, resolution of symptoms, and diagnostic data (e.g., if **F32FRM52=31**, then **F33DATE=F32DATE** or if **F32FRM52=33** then **F33DATE=F32DATE**).

**CODEBOOK FOR CSSCD FORM 33  
ACUTE CHEST SYNDROME FLOW SHEET**

CSSCD FULL COHORT PATIENTS

CONTENTS OF SAS DATASET: R33.SD2

DATA FROM CSSCD FORM 33 - ACUTE CHEST SYNDROME FLOW SHEET  
VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION  
IN THE SAS DATASET AND ON FORM 33

The SAS System 10:44 Thursday, December 7, 2006 5

The CONTENTS Procedure

Data Set Name	OUT1.R33	Observations	2686
Member Type	DATA	Variables	99
Engine	V9	Indexes	0
Created	11:17 Thursday, November 30, 2006	Observation Length	792
Last Modified	11:17 Thursday, November 30, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	16384
Number of Data Set Pages	136
First Data Page	1
Max Obs per Page	20
Obs in First Data Page	5
Number of Data Set Repairs	0
File Name	O:\decastat\EBP\CSSCD\Phase 1 LAD DEV\sd2anon\r33.sas7bdat
Release Created	9.0000M0
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
51	F33CBHB1	Num	8	CBC HB G DL
52	F33CBHB2	Num	8	CBC HB G DL
53	F33CBHC1	Num	8	CBC HCT %
54	F33CBHC2	Num	8	CBC HCT %
55	F33CBWB1	Num	8	CBC WBC X10NINTH L
56	F33CBWB2	Num	8	CBC WBC X10NINTH L
21	F33CHPN1	Num	8	CHEST PAIN
22	F33CHPN2	Num	8	CHEST PAIN
23	F33CHPN3	Num	8	CHEST PAIN
24	F33CHPN4	Num	8	CHEST PAIN
25	F33CHPN5	Num	8	CHEST PAIN
26	F33CHPN6	Num	8	CHEST PAIN
90	F33COMP	Num	8	COMPLICATIONS FROM TREATMENT
69	F33DATC1	Num	8	DIFFERENTIAL ATYPICAL CELLS
70	F33DATC2	Num	8	DIFFERENTIAL ATYPICAL CELLS
63	F33DBAS1	Num	8	DIFFERENTIAL BASOPHILS
64	F33DBAS2	Num	8	DIFFERENTIAL BASOPHILS
59	F33DBDN1	Num	8	DIFFERENTIAL BANDS

SECTION 7.2.3 ACUTE CHEST SYNDROME FLOW SHEET

FORM 33

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET**  
CSSCD FULL COHORT PATIENTS

---

60	F33DBDN2	Num	8	DIFFERENTIAL BANDS
61	F33DEOS1	Num	8	DIFFERENTIAL EOSINOPHILS
62	F33DEOS2	Num	8	DIFFERENTIAL EOSINOPHILS
71	F33DFMM1	Num	8	DIFFERENTIAL METAMYELOCYTES MYCLOCYTES
72	F33DFMM2	Num	8	DIFFERENTIAL METAMYELOCYTES MYCLOCYTES
94	F33DIAG1	Num	8	ICDA CODE OF FINAL DIAGNOSIS
95	F33DIAG2	Num	8	ICDA CODE OF FINAL DIAGNOSIS
96	F33DIAG3	Num	8	ICDA CODE OF FINAL DIAGNOSIS

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET**  
 CSSCD FULL COHORT PATIENTS

The SAS System

10:44 Thursday, December 7, 2006 6

The CONTENTS Procedure

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
97	F33DIAG4	Num	8	ICDA CODE OF FINAL DIAGNOSIS
65	F33DLYM1	Num	8	DIFFERENTIAL LYMPHOCYTES
66	F33DLYM2	Num	8	DIFFERENTIAL LYMPHOCYTES
67	F33DMON1	Num	8	DIFFERENTIAL MONOCYTES
68	F33DMON2	Num	8	DIFFERENTIAL MONOCYTES
57	F33DPMN1	Num	8	DIFFERENTIAL PMN
58	F33DPMN2	Num	8	DIFFERENTIAL PMN
81	F33HMCD1	Num	8	HOME MEDICATION CODE
82	F33HMCD2	Num	8	HOME MEDICATION CODE
83	F33HMCD3	Num	8	HOME MEDICATION CODE
87	F33HMND1	Num	8	HOME NUMBER DAYS
88	F33HMND2	Num	8	HOME NUMBER DAYS
89	F33HMND3	Num	8	HOME NUMBER DAYS
91	F33INBED	Num	8	# OF DAYS STAYED IN BED
73	F33LNGN1	Num	8	LUNG INFILTRATE
74	F33LNGN2	Num	8	LUNG INFILTRATE
78	F33MCD1	Num	8	MEDICATION CODE
79	F33MCD2	Num	8	MEDICATION CODE
80	F33MCD3	Num	8	MEDICATION CODE
84	F33MND1	Num	8	NUMBER DAYS
85	F33MND2	Num	8	NUMBER DAYS
86	F33MND3	Num	8	NUMBER DAYS
92	F33MSWRK	Num	8	# OF DAYS MISSED SCHOOL OR WORK
39	F33PD1	Num	8	PERCUSSION DULLNESS
40	F33PD2	Num	8	PERCUSSION DULLNESS
41	F33PD3	Num	8	PERCUSSION DULLNESS
42	F33PD4	Num	8	PERCUSSION DULLNESS
43	F33PD5	Num	8	PERCUSSION DULLNESS
44	F33PD6	Num	8	PERCUSSION DULLNESS
75	F33PLEF1	Num	8	PLEURAL EFFUSION
76	F33PLEF2	Num	8	PLEURAL EFFUSION
27	F33PLPN1	Num	8	PLEURITIC PAIN
28	F33PLPN2	Num	8	PLEURITIC PAIN
29	F33PLPN3	Num	8	PLEURITIC PAIN
30	F33PLPN4	Num	8	PLEURITIC PAIN
31	F33PLPN5	Num	8	PLEURITIC PAIN
32	F33PLPN6	Num	8	PLEURITIC PAIN
9	F33PLSE1	Num	8	PULSE
10	F33PLSE2	Num	8	PULSE
11	F33PLSE3	Num	8	PULSE
12	F33PLSE4	Num	8	PULSE
13	F33PLSE5	Num	8	PULSE
14	F33PLSE6	Num	8	PULSE
93	F33PNORG	Num	8	PNEUMONIA ORGANISM
33	F33RALE1	Num	8	RALES
34	F33RALE2	Num	8	RALES
35	F33RALE3	Num	8	RALES

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET**  
CSSCD FULL COHORT PATIENTS

---

36	F33RALE4	Num	8	RALES
37	F33RALE5	Num	8	RALES
38	F33RALE6	Num	8	RALES
15	F33RESP1	Num	8	RESPIRATION PER MINUTE
16	F33RESP2	Num	8	RESPIRATION PER MINUTE

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET**  
CSSCD FULL COHORT PATIENTS

---

---

The SAS System

10:44 Thursday, December 7, 2006 7

The CONTENTS Procedure

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
17	F33RESP3	Num	8	RESPIRATION PER MINUTE
18	F33RESP4	Num	8	RESPIRATION PER MINUTE
19	F33RESP5	Num	8	RESPIRATION PER MINUTE
20	F33RESP6	Num	8	RESPIRATION PER MINUTE
2	F33SHEET	Num	8	SHEET NUMBER
3	F33TMP1	Num	8	TEMPERATURE
4	F33TMP2	Num	8	TEMPERATURE
5	F33TMP3	Num	8	TEMPERATURE
6	F33TMP4	Num	8	TEMPERATURE
7	F33TMP5	Num	8	TEMPERATURE
8	F33TMP6	Num	8	TEMPERATURE
77	F33TRANS	Num	8	TRANSFUSED FOR EPISODE?
45	F33WHZ1	Num	8	WHEEZING
46	F33WHZ2	Num	8	WHEEZING
47	F33WHZ3	Num	8	WHEEZING
48	F33WHZ4	Num	8	WHEEZING
49	F33WHZ5	Num	8	WHEEZING
50	F33WHZ6	Num	8	WHEEZING
99	J33NOSYM	Num	8	DATE SYMPTOMS GONE - RECODE DAYS SINCE DOE
98	JF33DATE	Num	8	DATE FIRST SOUGHT CARE - RECODE DAYS SINCE DOE

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET**  
 CSSCD FULL COHORT PATIENTS

```
*****
*****
* R33.FMT contains value labels for numerical codes assigned to
categorical *
* variables in the SAS dataset R33.SD2
*
*****
*****;
```

```
* SIR/DBMS 2.2 SAS PROC STEP FROM DATABASE: CSSCD    01/31/99 12:54:41;
```

```
PROC FORMAT;
```

```
* FORMAT LOC_PN is used for the following variables: F33CHPN1-F33CHPN6
F33PLPN1-
F33PLPN6;
```

```
VALUE LOC_PN
  0          = 'NO (0) '
  1          = 'LEFT UPPER (1) '
  2          = 'LEFT LOWER (2) '
  4          = 'RIGHT UPPER (4) '
  8          = 'RIGHT LOWER (8) '
 16         = 'NO (16) ';
```

```
* FORMAT LOC_SYMP is used for the following variables: F33RALE1-
F33RALE6
F33WHZ1-
F33WHZ6;
```

```
VALUE LOC_SYMP
  0          = 'NO '
  1          = 'YES RIGHT '
  2          = 'YES LEFT '
  3          = 'YES BOTH '
  4          = 'NO ';
```

```
* FORMAT LUNGINF is used for the following variables: F33LNGN1
F33LNGN2;
```

```
VALUE LUNGINF
  0          = 'NO (0) '
  1          = 'LEFT UPPER (1) '
  2          = 'LEFT LINGULA (2) '
  4          = 'LEFT LOWER (4) '
  8          = 'RIGHT UPPER (8) '
 16         = 'RIGHT MIDDLE (16) '
 32         = 'RIGHT LOWER (32) '
 64         = 'NO (64) ';
```

```
* FORMAT PLEF is used for the following variables: F33PLEF1 F33PLEF2;
```

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET**  
CSSCD FULL COHORT PATIENTS

---

---

VALUE PLEF  
0 = 'NO'  
1 = 'YES, UNSPECIFIED'  
2 = 'RIGHT'  
3 = 'RIGHT'  
4 = 'LEFT'  
5 = 'LEFT'  
6 = 'BOTH'  
7 = 'BOTH'  
8 = 'NO';

\* FORMAT NO\_YES is used for the following variables: F33TRANS F33COMP;

VALUE NO\_YES  
1 = 'NO'  
2 = 'YES';

\* FORMAT ILLNESS is used for the following variables: F33INBED  
F33MSWRK;

VALUE ILLNESS  
-2 = 'NA'  
-3 = 'NO'  
-4 = 'NOT FILLED IN';

\* FORMAT  
F33CHPN1 F33CHPN2 F33CHPN3 F33CHPN4 F33CHPN5 F33CHPN6  
F33PLPN1 F33PLPN2 F33PLPN3 F33PLPN4 F33PLPN5 F33PLPN6  
LOC\_PN.  
F33RALE1 F33RALE2 F33RALE3 F33RALE4 F33RALE5 F33RALE6  
F33PD1 F33PD2 F33PD3 F33PD4 F33PD5 F33PD6  
F33WHZ1 F33WHZ2 F33WHZ3 F33WHZ4 F33WHZ5 F33WHZ6 LOC\_SYMP.  
F33LNGN1 F33LNGN2 LUNGINF.  
F33PLEF1 F33PLEF2 PLEF.  
F33TRANS F33COMP NO\_YES.  
F33INBED F33MSWRK ILLNESS.;  
  
RUN;  
QUIT;

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
 CSSCD FULL COHORT PATIENTS

---

F33SHEET ----- SHEET NUMBER

type: numeric (float)  
 range: [1,12] units: 1  
 unique values: 12 coded missing: 0 / 2686

tabulation:

Freq.	Value
1773	1
695	2
133	3
44	4
17	5
8	6
6	7
4	8
2	9
2	10
1	11
1	12

F33VDATE ----- VERSION DATE **DELETED**

type: numeric daily date (int)  
 label: datelab  
 range: [6999,7578] units: 1  
 or equivalently: [01mar1979,30sep1980] units: days  
 unique values: 3 coded missing: 0 / 2686

tabulation:

Freq.	Numeric	Label
286	6999	03/01/79
7	7061	05/02/79
2393	7578	09/30/80

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33TMP1 ----- TEMPERATURE

type: numeric (float)

range: [35.9,41.4]                      units: .1  
unique values: 51                      coded missing: 24 / 2686

mean: 38.139  
std. dev: .93457

percentiles:            10%            25%            50%            75%            90%  
                          37            37.4            38            38.8            39.4

F33TMP2 ----- TEMPERATURE

type: numeric (float)

range: [35.9,41.5]                      units: .1  
unique values: 49                      coded missing: 161 / 2686

mean: 37.9839  
std. dev: .883031

percentiles:            10%            25%            50%            75%            90%  
                          37            37.2            37.8            38.6            39.2

F33TMP3 ----- TEMPERATURE

type: numeric (float)

range: [35.9,41.8]                      units: .1  
unique values: 51                      coded missing: 405 / 2686

mean: 37.8458  
std. dev: .858395

percentiles:            10%            25%            50%            75%            90%  
                          36.9            37.2            37.7            38.4            39

F33TMP4 ----- TEMPERATURE

type: numeric (float)

range: [35.5,40.6]                      units: .1  
unique values: 49                      coded missing: 737 / 2686

mean: 37.7779  
std. dev: .840703

percentiles:            10%            25%            50%            75%            90%  
                          36.9            37.2            37.6            38.3            38.9

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33TMP5 ----- TEMPERATURE

type: numeric (float)

range: [35.5,41.2]                      units: .1  
unique values: 50                      coded missing: 1062 / 2686

mean: 37.6908  
std. dev: .801798

percentiles:	10%	25%	50%	75%	90%
	36.9	37.1	37.5	38.1	38.8

F33TMP6 ----- TEMPERATURE

type: numeric (float)

range: [34.6,40.9]                      units: .1  
unique values: 49                      coded missing: 1373 / 2686

mean: 37.619  
std. dev: .7567

percentiles:	10%	25%	50%	75%	90%
	36.8	37	37.5	38	38.7

F33PLSE1 ----- PULSE

type: numeric (float)

range: [25,208]                      units: 1  
unique values: 92                      coded missing: 54 / 2686

mean: 111.695  
std. dev: 22.4616

percentiles:	10%	25%	50%	75%	90%
	84	96	110	128	140

F33PLSE2 ----- PULSE

type: numeric (float)

range: [36,200]                      units: 1  
unique values: 81                      coded missing: 196 / 2686

mean: 109.976  
std. dev: 21.3902

percentiles:	10%	25%	50%	75%	90%
	82	94	108	124	140

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33PLSE3 ----- PULSE

type: numeric (float)

range: [25,180] units: 1  
unique values: 84 coded missing: 438 / 2686

mean: 107.764  
std. dev: 20.5547

percentiles:	10%	25%	50%	75%	90%
	82	92	104	120	136

F33PLSE4 ----- PULSE

type: numeric (float)

range: [24,180] units: 1  
unique values: 75 coded missing: 769 / 2686

mean: 106.138  
std. dev: 19.6683

percentiles:	10%	25%	50%	75%	90%
	82	92	102	120	132

F33PLSE5 ----- PULSE

type: numeric (float)

range: [26,176] units: 1  
unique values: 71 coded missing: 1083 / 2686

mean: 104.182  
std. dev: 19.3584

percentiles:	10%	25%	50%	75%	90%
	80	90	100	120	130

F33PLSE6 ----- PULSE

type: numeric (float)

range: [25,180] units: 1  
unique values: 74 coded missing: 1394 / 2686

mean: 103.295  
std. dev: 19.3984

percentiles:	10%	25%	50%	75%	90%
	80	90	100	116	130

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33RESP1 ----- RESPIRATION PER MINUTE

                  type: numeric (float)

                  range: [12,99]                                units: 1

                  unique values: 48                              coded missing: 55 / 2686

                  mean: 30.103

                  std. dev: 11.1616

percentiles:	10%	25%	50%	75%	90%
	20	22	28	36	44

F33RESP2 ----- RESPIRATION PER MINUTE

                  type: numeric (float)

                  range: [12,99]                                units: 1

                  unique values: 54                              coded missing: 194 / 2686

                  mean: 29.3347

                  std. dev: 10.409

percentiles:	10%	25%	50%	75%	90%
	20	22	26	36	44

F33RESP3 ----- RESPIRATION PER MINUTE

                  type: numeric (float)

                  range: [10,99]                               units: 1

                  unique values: 50                              coded missing: 436 / 2686

                  mean: 28.7382

                  std. dev: 10.2733

percentiles:	10%	25%	50%	75%	90%
	20	20	24	32	42

F33RESP4 ----- RESPIRATION PER MINUTE

                  type: numeric (float)

                  range: [10,99]                               units: 1

                  unique values: 49                              coded missing: 762 / 2686

                  mean: 28.2406

                  std. dev: 10.0626

percentiles:	10%	25%	50%	75%	90%
	20	20	24	32	40

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33RESP5 ----- RESPIRATION PER MINUTE

type: numeric (float)

range: [12,90] units: 1

unique values: 42 coded missing: 1077 / 2686

mean: 27.3126

std. dev: 9.39712

percentiles:	10%	25%	50%	75%	90%
	20	20	24	32	40

F33RESP6 ----- RESPIRATION PER MINUTE

type: numeric (float)

range: [12,80] units: 1

unique values: 41 coded missing: 1392 / 2686

mean: 26.9706

std. dev: 9.20376

percentiles:	10%	25%	50%	75%	90%
	20	20	24	30	40

CODEBOOK FOR CSSCD FORM 33  
ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1  
CSSCD FULL COHORT PATIENTS

---

---

F33CHPN1 ----- CHEST PAIN

type: numeric (float)  
label: F33CHPN1

range: [0,16] units: 1  
unique values: 17 coded missing: 96 / 2686

tabulation:	Freq.	Numeric	Label
	1613	0	NO (0)
	40	1	LEFT UPPER (1)
	154	2	LEFT LOWER (2)
	100	3	
	46	4	RIGHT UPPER (4)
	43	5	
	3	6	
	4	7	
	153	8	RIGHT LOWER (8)
	3	9	
	96	10	
	6	11	
	102	12	
	6	13	
	9	14	
	149	15	
	63	16	NO (16)

F33CHPN1:

1. Binary coded variable. See Part II for explanation of binary coded variables.

CODEBOOK FOR CSSCD FORM 33  
ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1  
CSSCD FULL COHORT PATIENTS

---

---

F33CHPN2 ----- CHEST PAIN

    type: numeric (float)  
    label: F33CHPN2

    range: [0,16]                                   units: 1  
unique values: 17                                   coded missing: 229 / 2686

tabulation:	Freq.	Numeric	Label
	1602	0	NO (0)
	38	1	LEFT UPPER (1)
	131	2	LEFT LOWER (2)
	85	3	
	38	4	RIGHT UPPER (4)
	42	5	
	3	6	
	2	7	
	122	8	RIGHT LOWER (8)
	2	9	
	86	10	
	4	11	
	86	12	
	6	13	
	8	14	
	137	15	
	65	16	NO (16)

F33CHPN2:

1. Binary coded variable. See Part II for explanation of binary coded variables.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
 CSSCD FULL COHORT PATIENTS

---

F33CHPN3 ----- CHEST PAIN

    type: numeric (float)  
    label: F33CHPN3

    range: [0,16]                                   units: 1  
 unique values: 16                                coded missing: 465 / 2686

tabulation:	Freq.	Numeric	Label
	1520	0	NO (0)
	30	1	LEFT UPPER (1)
	111	2	LEFT LOWER (2)
	63	3	
	27	4	RIGHT UPPER (4)
	28	5	
	3	6	
	4	7	
	98	8	RIGHT LOWER (8)
	62	10	
	6	11	
	75	12	
	5	13	
	6	14	
	106	15	
	77	16	NO (16)

F33CHPN3:

1. Binary coded variable. See Part II for explanation of binary coded variables.

CODEBOOK FOR CSSCD FORM 33  
ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1  
CSSCD FULL COHORT PATIENTS

---

---

F33CHPN4 ----- CHEST PAIN

type: numeric (float)  
label: F33CHPN4

range: [0,16] units: 1  
unique values: 16 coded missing: 792 / 2686

tabulation:	Freq.	Numeric	Label
	1341	0	NO (0)
	18	1	LEFT UPPER (1)
	79	2	LEFT LOWER (2)
	48	3	
	16	4	RIGHT UPPER (4)
	26	5	
	5	6	
	4	7	
	76	8	RIGHT LOWER (8)
	53	10	
	5	11	
	51	12	
	4	13	
	4	14	
	90	15	
	74	16	NO (16)

F33CHPN4:

1. Binary coded variable. See Part II for explanation of binary coded variables.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
 CSSCD FULL COHORT PATIENTS

---

F33CHPN5 ----- CHEST PAIN

type: numeric (float)  
 label: F33CHPN5

range: [0,16]                                  units: 1  
 unique values: 17                                coded missing: 1108 / 2686

tabulation:	Freq.	Numeric	Label
	1143	0	NO (0)
	15	1	LEFT UPPER (1)
	62	2	LEFT LOWER (2)
	35	3	
	15	4	RIGHT UPPER (4)
	24	5	
	3	6	
	2	7	
	59	8	RIGHT LOWER (8)
	1	9	
	41	10	
	1	11	
	38	12	
	3	13	
	4	14	
	72	15	
	60	16	NO (16)

F33CHPN5:

1. Binary coded variable. See Part II for explanation of binary coded variables.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33CHPN6 ----- CHEST PAIN

type: numeric (float)  
label: F33CHPN6

range: [0,16] units: 1  
unique values: 16 coded missing: 1410 / 2686

tabulation:	Freq.	Numeric	Label
	934	0	NO (0)
	10	1	LEFT UPPER (1)
	48	2	LEFT LOWER (2)
	24	3	
	13	4	RIGHT UPPER (4)
	17	5	
	3	6	
	45	8	RIGHT LOWER (8)
	2	9	
	28	10	
	3	11	
	31	12	
	3	13	
	4	14	
	57	15	
	54	16	NO (16)

F33CHPN6:

1. Binary coded variable. See Part II for explanation of binary coded variables.

CODEBOOK FOR CSSCD FORM 33  
ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1  
CSSCD FULL COHORT PATIENTS

---

F33PLPN1 ----- PLEURITIC PAIN

type: numeric (float)  
label: F33PLPN1  
range: [0,16] units: 1  
unique values: 16 coded missing: 98 / 2686

tabulation:	Freq.	Numeric	Label
	2050	0	NO (0)
	16	1	LEFT UPPER (1)
	81	2	LEFT LOWER (2)
	41	3	
	16	4	RIGHT UPPER (4)
	9	5	
	1	6	
	86	8	RIGHT LOWER (8)
	2	9	
	64	10	
	6	11	
	54	12	
	3	13	
	4	14	
	77	15	
	78	16	NO (16)

F33PLPN1:

1. Binary coded variable. See Part II for explanation of binary coded variables.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
 CSSCD FULL COHORT PATIENTS

---

F33PLPN2 ----- PLEURITIC PAIN

type: numeric (float)  
 label: F33PLPN2

range: [0,16] units: 1  
 unique values: 17 coded missing: 235 / 2686

tabulation:	Freq.	Numeric	Label
	1938	0	NO (0)
	14	1	LEFT UPPER (1)
	77	2	LEFT LOWER (2)
	44	3	
	15	4	RIGHT UPPER (4)
	7	5	
	1	6	
	1	7	
	75	8	RIGHT LOWER (8)
	2	9	
	61	10	
	4	11	
	52	12	
	2	13	
	5	14	
	75	15	
	78	16	NO (16)

F33PLPN2:

1. Binary coded variable. See Part II for explanation of binary coded variables.

CODEBOOK FOR CSSCD FORM 33  
ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1  
CSSCD FULL COHORT PATIENTS

---

F33PLPN3 ----- PLEURITIC PAIN

    type: numeric (float)  
    label: F33PLPN3

        range: [0,16]                                    units: 1  
unique values: 15                                    coded missing: 470 / 2686

tabulation:	Freq.	Numeric	Label
	1780	0	NO (0)
	12	1	LEFT UPPER (1)
	54	2	LEFT LOWER (2)
	31	3	
	13	4	RIGHT UPPER (4)
	8	5	
	69	8	RIGHT LOWER (8)
	2	9	
	46	10	
	4	11	
	42	12	
	1	13	
	4	14	
	61	15	
	89	16	NO (16)

F33PLPN3:

1. Binary coded variable. See Part II for explanation of binary coded variables.

**CODEBOOK FOR CSSCD FORM 33  
ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33PLPN4 ----- PLEURITIC PAIN

type: numeric (float)  
label: F33PLPN4

range: [0,16]                                        units: 1  
unique values: 16                                      coded missing: 799 / 2686

tabulation:	Freq.	Numeric	Label
	1526	0	NO (0)
	9	1	LEFT UPPER (1)
	47	2	LEFT LOWER (2)
	18	3	
	11	4	RIGHT UPPER (4)
	8	5	
	1	7	
	51	8	RIGHT LOWER (8)
	1	9	
	45	10	
	3	11	
	36	12	
	1	13	
	6	14	
	45	15	
	79	16	NO (16)

F33PLPN4:

1. Binary coded variable. See Part II for explanation of binary coded variables.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
 CSSCD FULL COHORT PATIENTS

---

F33PLPN5 ----- PLEURITIC PAIN

type: numeric (float)  
 label: F33PLPN5

range: [0,16] units: 1  
 unique values: 15 coded missing: 1113 / 2686

tabulation:	Freq.	Numeric	Label
	1269	0	NO (0)
	5	1	LEFT UPPER (1)
	38	2	LEFT LOWER (2)
	12	3	
	8	4	RIGHT UPPER (4)
	8	5	
	46	8	RIGHT LOWER (8)
	1	9	
	40	10	
	2	11	
	30	12	
	1	13	
	5	14	
	41	15	
	67	16	NO (16)

F33PLPN5:

1. Binary coded variable. See Part II for explanation of binary coded variables.

F33PLPN6 ----- PLEURITIC PAIN

type: numeric (float)  
 label: F33PLPN6

range: [0,16] units: 1  
 unique values: 15 coded missing: 1416 / 2686

tabulation:	Freq.	Numeric	Label
	1025	0	NO (0)
	2	1	LEFT UPPER (1)
	28	2	LEFT LOWER (2)
	11	3	
	5	4	RIGHT UPPER (4)
	6	5	
	35	8	RIGHT LOWER (8)
	1	9	
	31	10	
	1	11	
	25	12	
	1	13	
	5	14	
	33	15	
	61	16	NO (16)

F33PLPN6:

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

1. Binary coded variable. See Part II for explanation of binary coded variables.

F33RALE1 ----- RALES

type: numeric (float)  
label: F33RALE1

range: [0,4] units: 1  
unique values: 5 coded missing: 38 / 2686

tabulation:	Freq.	Numeric	Label
	1446	0	NO
	190	1	YES RIGHT
	151	2	YES LEFT
	800	3	YES BOTH
	61	4	NO

F33RALE1:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33RALE2 ----- RALES

type: numeric (float)  
label: F33RALE2

range: [0,4] units: 1  
unique values: 5 coded missing: 181 / 2686

tabulation:	Freq.	Numeric	Label
	1396	0	NO
	181	1	YES RIGHT
	134	2	YES LEFT
	736	3	YES BOTH
	58	4	NO

F33RALE2:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33RALE3 ----- RALES

type: numeric (float)  
label: F33RALE3

range: [0,4] units: 1  
unique values: 5 coded missing: 422 / 2686

tabulation:	Freq.	Numeric	Label
	1292	0	NO
	154	1	YES RIGHT
	120	2	YES LEFT
	634	3	YES BOTH
	64	4	NO

F33RALE3:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33RALE4 ----- RALES

type: numeric (float)  
label: F33RALE4

range: [0,4] units: 1  
unique values: 5 coded missing: 758 / 2686

tabulation:	Freq.	Numeric	Label
	1151	0	NO
	125	1	YES RIGHT
	85	2	YES LEFT
	508	3	YES BOTH
	59	4	NO

F33RALE4:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33RALE5 ----- RALES

type: numeric (float)  
label: F33RALE5

range: [0,4] units: 1  
unique values: 5 coded missing: 1074 / 2686

tabulation:	Freq.	Numeric	Label
	1006	0	NO
	91	1	YES RIGHT
	61	2	YES LEFT
	400	3	YES BOTH
	54	4	NO

F33RALE5:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33RALE6 ----- RALES

type: numeric (float)  
label: F33RALE6

range: [0,4] units: 1  
unique values: 5 coded missing: 1389 / 2686

tabulation:	Freq.	Numeric	Label
	816	0	NO
	68	1	YES RIGHT
	41	2	YES LEFT
	325	3	YES BOTH
	47	4	NO

F33RALE6:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33PD1 ----- PERCUSSION DULLNESS

type: numeric (float)  
label: F33PD1

range: [0,4] units: 1  
unique values: 5 coded missing: 47 / 2686

tabulation:	Freq.	Numeric	Label
	1802	0	NO
	174	1	YES RIGHT
	122	2	YES LEFT
	468	3	YES BOTH
	73	4	NO

F33PD1:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33PD2 ----- PERCUSSION DULLNESS

type: numeric (float)  
label: F33PD2

range: [0,4] units: 1  
unique values: 5 coded missing: 191 / 2686

tabulation:	Freq.	Numeric	Label
	1736	0	NO
	159	1	YES RIGHT
	102	2	YES LEFT
	425	3	YES BOTH
	73	4	NO

F33PD2:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33PD3 ----- PERCUSSION DULLNESS

type: numeric (float)  
label: F33PD3

range: [0,4] units: 1  
unique values: 5 coded missing: 430 / 2686

tabulation:	Freq.	Numeric	Label
	1602	0	NO
	132	1	YES RIGHT
	83	2	YES LEFT
	352	3	YES BOTH
	87	4	NO

F33PD3:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33PD4 ----- PERCUSSION DULLNESS

type: numeric (float)  
label: F33PD4

range: [0,4] units: 1  
unique values: 5 coded missing: 767 / 2686

tabulation:	Freq.	Numeric	Label
	1374	0	NO
	114	1	YES RIGHT
	60	2	YES LEFT
	297	3	YES BOTH
	74	4	NO

F33PD4:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33PD5 ----- PERCUSSION DULLNESS

type: numeric (float)  
label: F33PD5

range: [0,4] units: 1  
unique values: 5 coded missing: 1081 / 2686

tabulation:	Freq.	Numeric	Label
	1175	0	NO
	79	1	YES RIGHT
	52	2	YES LEFT
	239	3	YES BOTH
	60	4	NO

F33PD5:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33PD6 ----- PERCUSSION DULLNESS

type: numeric (float)  
label: F33PD6

range: [0,4] units: 1  
unique values: 5 coded missing: 1391 / 2686

tabulation:	Freq.	Numeric	Label
	952	0	NO
	55	1	YES RIGHT
	45	2	YES LEFT
	181	3	YES BOTH
	62	4	NO

F33PD6:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33WHZ1 ----- WHEEZING

type: numeric (float)  
label: F33WHZ1

range: [0,4] units: 1  
unique values: 5 coded missing: 45 / 2686

tabulation:	Freq.	Numeric	Label
	2284	0	NO
	39	1	YES RIGHT
	34	2	YES LEFT
	199	3	YES BOTH
	85	4	NO

F33WHZ1:

- 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33WHZ2 ----- WHEEZING

type: numeric (float)  
label: F33WHZ2

range: [0,4] units: 1  
unique values: 5 coded missing: 185 / 2686

tabulation:	Freq.	Numeric	Label
	2187	0	NO
	34	1	YES RIGHT
	26	2	YES LEFT
	163	3	YES BOTH
	91	4	NO

F33WHZ2:

- 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33WHZ3 ----- WHEEZING

type: numeric (float)  
label: F33WHZ3

range: [0,4] units: 1  
unique values: 5 coded missing: 430 / 2686

tabulation:	Freq.	Numeric	Label
	1981	0	NO
	29	1	YES RIGHT
	22	2	YES LEFT
	127	3	YES BOTH
	97	4	NO

F33WHZ3:

- 'YES' was coded as 'YES BOTH' on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

F33WHZ4 ----- WHEEZING

type: numeric (float)  
label: F33WHZ4

range: [0,4] units: 1  
unique values: 5 coded missing: 767 / 2686

tabulation:	Freq.	Numeric	Label
	1697	0	NO
	23	1	YES RIGHT
	15	2	YES LEFT
	93	3	YES BOTH
	91	4	NO

F33WHZ4:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33WHZ5 ----- WHEEZING

type: numeric (float)  
label: F33WHZ5

range: [0,4] units: 1  
unique values: 5 coded missing: 1083 / 2686

tabulation:	Freq.	Numeric	Label
	1437	0	NO
	19	1	YES RIGHT
	7	2	YES LEFT
	66	3	YES BOTH
	74	4	NO

F33WHZ5:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

F33WHZ6 ----- WHEEZING

type: numeric (float)  
label: F33WHZ6

range: [0,4] units: 1  
unique values: 5 coded missing: 1393 / 2686

tabulation:	Freq.	Numeric	Label
	1159	0	NO
	16	1	YES RIGHT
	7	2	YES LEFT
	44	3	YES BOTH
	67	4	NO

F33WHZ6:

1. 'YES' was coded as 'YES BOTH' on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 1**  
CSSCD FULL COHORT PATIENTS

---

---

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

---

F33CBHB1 ----- CBC HB G|DL  
 type: numeric (float)  
 range: [4,17.5] units: .1  
 unique values: 105 coded missing: 555 / 2686  
 mean: 8.35838  
 std. dev: 1.88014  
 percentiles: 10% 25% 50% 75% 90%  
                   6.2 7 8.1 9.5 11

F33CBHB2 ----- CBC HB G|DL  
 type: numeric (float)  
 range: [3.6,15] units: .1  
 unique values: 98 coded missing: 1524 / 2686  
 mean: 8.52186  
 std. dev: 1.89797  
 percentiles: 10% 25% 50% 75% 90%  
                   6.3 7.2 8.2 9.7 11.2

F33CBHC1 ----- CBC HCT %  
 type: numeric (float)  
 range: [6.2,45.2] units: .1  
 unique values: 274 coded missing: 553 / 2686  
 mean: 24.958  
 std. dev: 5.70541  
 percentiles: 10% 25% 50% 75% 90%  
                   18.2 20.8 24.1 28.4 33.1

F33CBHC2 ----- CBC HCT %  
 type: numeric (float)  
 range: [7.9,44.9] units: .1  
 unique values: 252 coded missing: 1521 / 2686  
 mean: 25.5224  
 std. dev: 5.73341  
 percentiles: 10% 25% 50% 75% 90%  
                   18.5 21.4 24.9 29.1 33.5

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

---

F33CBWB1 ----- CBC WBC X10INTH|L  
 type: numeric (float)  
 range: [3,99] units: .1  
 unique values: 341 coded missing: 594 / 2686  
 mean: 17.1947  
 std. dev: 7.97024  
 percentiles: 10% 25% 50% 75% 90%  
                   9.1 11.9 15.9 21 26.3

F33CBWB2 ----- CBC WBC X10INTH|L  
 type: numeric (float)  
 range: [3.1,57.2] units: .1  
 unique values: 261 coded missing: 1543 / 2686  
 mean: 15.5116  
 std. dev: 6.565  
 percentiles: 10% 25% 50% 75% 90%  
                   8.6 10.9 14.5 18.6 23.5

F33DPMN1 ----- DIFFERENTIAL PMN  
 type: numeric (float)  
 range: [3,95] units: 1  
 unique values: 89 coded missing: 757 / 2686  
 mean: 60.0581  
 std. dev: 15.9368  
 percentiles: 10% 25% 50% 75% 90%  
                   38 50 62 72 80

F33DPMN2 ----- DIFFERENTIAL PMN  
 type: numeric (float)  
 range: [3,91] units: 1  
 unique values: 81 coded missing: 1665 / 2686  
 mean: 57.9285  
 std. dev: 15.5633  
 percentiles: 10% 25% 50% 75% 90%  
                   36 48 60 69 77

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

F33DBDN1 ----- DIFFERENTIAL BANDS

type: numeric (float)

range: [0,35] units: 1  
 unique values: 30 coded missing: 1601 / 2686

mean: 3.7447  
 std. dev: 5.03551

percentiles:	10%	25%	50%	75%	90%
	0	0	2	5	10

F33DBDN2 ----- DIFFERENTIAL BANDS

type: numeric (float)

range: [0,37] units: 1  
 unique values: 26 coded missing: 2124 / 2686

mean: 3.61388  
 std. dev: 5.09364

percentiles:	10%	25%	50%	75%	90%
	0	0	2	5	10

F33DEOS1 ----- DIFFERENTIAL EOSINOPHILS

type: numeric (float)

range: [0,56] units: 1  
 unique values: 31 coded missing: 824 / 2686

mean: 2.87111  
 std. dev: 4.14547

percentiles:	10%	25%	50%	75%	90%
	0	0	2	4	7

F33DEOS2 ----- DIFFERENTIAL EOSINOPHILS

type: numeric (float)

range: [0,36] units: 1  
 unique values: 25 coded missing: 1693 / 2686

mean: 3.38872  
 std. dev: 3.92828

percentiles:	10%	25%	50%	75%	90%
	0	1	2	5	8

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

---

F33DBAS1 ----- DIFFERENTIAL BASOPHILS

type: numeric (float)

range: [0,43] units: 1  
 unique values: 14 coded missing: 895 / 2686

mean: .417085  
 std. dev: 1.48765

percentiles:	10%	25%	50%	75%	90%
	0	0	0	0	1

F33DBAS2 ----- DIFFERENTIAL BASOPHILS

type: numeric (float)

range: [0,54] units: 1  
 unique values: 11 coded missing: 1749 / 2686

mean: .600854  
 std. dev: 2.54882

percentiles:	10%	25%	50%	75%	90%
	0	0	0	1	2

F33DLYM1 ----- DIFFERENTIAL LYMPHOCYTES

type: numeric (float)

range: [0,90] units: 1  
 unique values: 81 coded missing: 780 / 2686

mean: 26.1737  
 std. dev: 14.0683

percentiles:	10%	25%	50%	75%	90%
	11	15	24	34	45

F33DLYM2 ----- DIFFERENTIAL LYMPHOCYTES

type: numeric (float)

range: [0,89] units: 1  
 unique values: 75 coded missing: 1688 / 2686

mean: 27.1944  
 std. dev: 13.7302

percentiles:	10%	25%	50%	75%	90%
	12	17	24	35	45

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 2**  
CSSCD FULL COHORT PATIENTS

---

---

F33DMON1 ----- DIFFERENTIAL MONOCYTES

type: numeric (float)

range: [0,30] units: 1  
unique values: 28 coded missing: 817 / 2686

mean: 7.33975  
std. dev: 4.43893

percentiles:	10%	25%	50%	75%	90%
	2	4	7	10	13

F33DMON2 ----- DIFFERENTIAL MONOCYTES

type: numeric (float)

range: [0,42] units: 1  
unique values: 24 coded missing: 1695 / 2686

mean: 7.54087  
std. dev: 4.56005

percentiles:	10%	25%	50%	75%	90%
	2	4	7	10	14

F33DATC1 ----- DIFFERENTIAL ATYPICAL CELLS

type: numeric (float)

range: [0,10] units: 1  
unique values: 10 coded missing: 1687 / 2686

mean: .411411  
std. dev: 1.09376

percentiles:	10%	25%	50%	75%	90%
	0	0	0	0	2

F33DATC2 ----- DIFFERENTIAL ATYPICAL CELLS

type: numeric (float)

range: [0,16] units: 1  
unique values: 11 coded missing: 2161 / 2686

mean: .514286  
std. dev: 1.46534

percentiles:	10%	25%	50%	75%	90%
	0	0	0	0	2

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 2**  
CSSCD FULL COHORT PATIENTS

---

---

F33DFMM1 ----- DIFFERENTIAL METAMYELOCYTES/MYELOCYTES  
type: numeric (float)  
range: [0,13] units: 1  
unique values: 11 coded missing: 1724 / 2686  
mean: .286902  
std. dev: 1.13263  
percentiles: 10% 25% 50% 75% 90%  
0 0 0 0 1

F33DFMM2 ----- DIFFERENTIAL METAMYELOCYTES/MYELOCYTES  
type: numeric (float)  
range: [0,36] units: 1  
unique values: 9 coded missing: 2176 / 2686  
mean: .380392  
std. dev: 1.88167  
percentiles: 10% 25% 50% 75% 90%  
0 0 0 0 1

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

F33LNGN1 ----- LUNG INFILTRATE

type: numeric (float)  
 label: F33LNGN1

range: [0,64] units: 1  
 unique values: 50 coded missing: 1147 / 2686

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
290	0	NO (0)	175	32	RIGHT LOWER (32)
36	1	LEFT UPPER (1)	14	33	
9	2	LEFT LINGULA (2)	3	34	
7	3		1	35	
219	4	LEFT LOWER (4)	206	36	
15	5		9	37	
15	6		5	38	
6	7		9	39	
84	8	RIGHT UPPER (8)	28	40	
50	9		6	41	
2	11		6	44	
12	12		2	45	
6	13		39	48	
1	14		8	49	
68	16	RIGHT MIDDLE (16)	4	50	
11	17		1	51	
4	18		10	52	
1	19		2	53	
17	20		9	54	
1	22		1	55	
2	23		8	56	
13	24		4	60	
2	25		4	62	
3	28		20	63	
1	29		90	64	NO (64)

F33LNGN1:

1. Binary coded variable. See Part II for explanation of binary coded variables.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

F33LNGN2 ----- LUNG INFILTRATE

type: numeric (float)  
 label: F33LNGN2

range: [0,64] units: 1  
 unique values: 47 coded missing: 1930 / 2686

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
164	0	NO (0)	72	32	RIGHT LOWER (32)
14	1	LEFT UPPER (1)	6	33	
4	2	LEFT LINGULA (2)	1	34	
2	3		114	36	
80	4	LEFT LOWER (4)	8	37	
6	5		5	38	
5	6		6	39	
6	7		9	40	
30	8	RIGHT UPPER (8)	2	41	
27	9		2	43	
2	11		4	44	
7	12		1	45	
4	13		21	48	
1	14		2	49	
21	16	RIGHT MIDDLE (16)	2	50	
2	17		10	52	
1	18		5	54	
1	19		3	56	
10	20		1	57	
1	23		1	60	
2	24		3	62	
1	25		11	63	
1	27		73	64	NO (64)
2	28				

F33LNGN2:

1. Binary coded variable. See Part II for explanation of binary coded variables.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 2**  
 CSSCD FULL COHORT PATIENTS

---

F33PLEF1 ----- PLEURAL EFFUSION

type: numeric (float)  
 label: F33PLEF1

range: [0,8] units: 1  
 unique values: 9 coded missing: 1159 / 2686

tabulation:	Freq.	Numeric	Label
	1015	0	NO
	59	1	YES,UNSPECIFIED
	45	2	RIGHT
	77	3	RIGHT
	55	4	LEFT
	38	5	LEFT
	39	6	BOTH
	71	7	BOTH
	128	8	NO

F33PLEF2 ----- PLEURAL EFFUSION

type: numeric (float)  
 label: F33PLEF2

range: [0,8] units: 1  
 unique values: 9 coded missing: 1927 / 2686

tabulation:	Freq.	Numeric	Label
	451	0	NO
	28	1	YES,UNSPECIFIED
	25	2	RIGHT
	47	3	RIGHT
	25	4	LEFT
	23	5	LEFT
	22	6	BOTH
	43	7	BOTH
	95	8	NO

F33TRANS ----- TRANSFUSED FOR EPISODE?

type: numeric (float)  
 label: F33TRANS

range: [1,2] units: 1  
 unique values: 2 coded missing: 336 / 2686

tabulation:	Freq.	Numeric	Label
	1501	1	NO
	849	2	YES

F33TRANS:  
 1. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

F33MCD1 ----- MEDICATION CODE

type: numeric (float)

range: [0,999]

units: 1

unique values: 93

coded missing: 1007 / 2686

tabulation:

Freq.	Value	Freq.	Value	Freq.	Value	Freq.	Value
1	0	2	121	1	310	1	471
1	3	2	123	1	311	19	480
1	7	6	126	1	328	6	481
1	20	2	159	3	329	1	484
2	21	2	161	4	336	1	487
36	25	13	170	15	337	1	502
3	26	602	171	1	339	1	519
547	28	1	174	1	341	6	530
1	29	1	175	7	344	52	541
1	31	1	177	1	346	1	542
1	32	1	190	5	361	1	547
2	44	2	192	1	364	1	550
1	48	1	207	41	369	1	553
1	54	1	213	32	370	8	554
1	56	4	230	18	371	24	562
2	59	70	231	1	375	2	564
1	67	1	232	4	382	1	569
3	92	6	249	2	391	2	575
1	93	6	259	1	396	7	582
11	94	1	270	8	397	1	900
1	101	1	279	1	420	27	999
9	102	1	285	2	430		
1	106	2	299	2	449		
1	111	2	300	1	459		

F33MCD1:

1. See Appendix D - CODED DRUG LIST.
2. Not collected on version 09/30/80.

F33MND1 ----- NUMBER DAYS

type: numeric (float)

range: [1,99]

units: 1

unique values: 44

coded missing: 988 / 2686

mean: 6.50707

std. dev: 9.91574

percentiles:	10%	25%	50%	75%	90%
	2	3	5	7	10

F33MND1:

1. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

F33MCD2 ----- MEDICATION CODE

type: numeric (float)

range: [0,999]

units: 1

unique values: 130

coded missing: 970 / 2686

tabulation:

Freq.	Value	Freq.	Value	Freq.	Value	Freq.	Value
1	0	1	156	1	324	1	457
1	3	2	159	1	327	5	462
1	5	1	161	6	328	3	463
8	6	4	164	2	329	175	480
3	7	1	170	2	331	45	481
1	11	1	171	1	336	4	484
1	12	1	180	37	337	2	503
1	20	4	190	1	338	2	506
18	21	4	191	1	339	1	509
103	25	3	192	2	341	2	512
5	26	3	196	21	344	2	516
398	28	1	227	6	361	7	519
1	31	14	230	1	363	1	522
3	44	196	231	4	367	5	530
1	46	1	237	1	368	1	537
2	48	1	247	68	369	2	539
3	56	2	248	77	370	43	541
2	59	50	249	45	371	1	547
2	67	1	253	6	374	20	554
2	76	24	259	6	375	18	562
5	92	1	269	5	382	2	563
6	94	1	270	1	391	1	564
3	95	1	276	14	397	1	567
1	96	4	279	1	410	2	575
1	99	2	280	1	414	2	582
44	102	1	281	3	420	1	800
3	103	2	286	2	429	1	811
6	106	1	287	1	430	1	900
2	122	5	298	6	434	1	990
2	125	5	299	1	435	2	998
15	126	3	304	3	443	38	999
4	130	3	306	1	444		
1	152	1	315	1	452		

F33MCD2:

1. See Appendix D - CODED DRUG LIST.
2. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
CSSCD FULL COHORT PATIENTS

---

---

F33MND2 ----- NUMBER DAYS

type: numeric (float)

range: [1,99]

units: 1

unique values: 37

coded missing: 948 / 2686

mean: 6.16398

std. dev: 10.0588

percentiles:	10%	25%	50%	75%	90%
	2	3	4	7	10

F33MND2:

1. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

F33MCD3 ----- MEDICATION CODE

type: numeric (float)

range: [0,999]

units: 1

unique values: 139

coded missing: 1347 / 2686

tabulation:

Freq.	Value	Freq.	Value	Freq.	Value	Freq.	Value
1	0	1	159	1	292	3	434
1	2	1	160	5	296	1	435
9	3	1	171	2	297	1	437
9	6	8	190	2	298	1	443
6	7	11	191	3	300	2	444
1	11	5	192	20	306	1	449
1	14	3	196	1	327	5	463
10	20	1	204	5	328	239	480
17	21	1	207	3	329	78	481
80	25	1	214	44	337	5	484
4	26	2	217	2	338	1	503
57	28	2	222	3	341	1	505
12	44	3	227	1	342	2	512
2	48	6	230	8	344	1	513
3	56	78	231	1	354	4	515
7	59	3	239	1	360	7	516
2	67	2	240	15	361	2	517
3	76	1	245	5	367	39	519
1	77	3	248	11	369	1	522
1	78	115	249	9	370	2	530
1	85	23	259	29	371	1	537
6	92	1	265	1	372	17	541
4	94	1	267	12	374	1	550
1	101	2	270	6	375	22	554
33	102	3	275	10	382	1	557
3	106	1	277	3	391	2	559
1	112	1	278	1	396	1	561
2	122	7	279	4	397	10	562
1	125	1	280	1	408	5	563
37	126	1	284	1	410	2	564
3	128	1	285	1	414	1	570
1	129	1	286	2	417	1	575
6	130	1	287	9	420	1	826
3	137	1	289	1	421	30	999
1	156	1	290	1	422		

F33MCD3:

1. See Appendix D - CODED DRUG LIST.
2. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
CSSCD FULL COHORT PATIENTS

---

---

F33MND3 ----- NUMBER DAYS

type: numeric (float)

range: [1,99]

units: 1

unique values: 37

coded missing: 1319 / 2686

mean: 6.96928

std. dev: 14.1363

percentiles:	10%	25%	50%	75%	90%
	1	2	4	7	10

F33MND3:

1. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

F33HMCD1 ----- HOME MEDICATION CODE

type: numeric (float)

range: [0,999] units: 1  
 unique values: 88 coded missing: 1518 / 2686

tabulation:

Freq.	Value	Freq.	Value	Freq.	Value	Freq.	Value
1	0	2	160	2	287	1	429
1	6	1	169	9	298	2	430
2	7	41	171	1	304	1	434
1	14	1	181	1	306	1	448
1	20	3	190	1	325	4	462
5	21	6	191	2	328	1	463
263	25	2	192	1	334	7	480
11	26	1	196	3	338	27	481
218	28	1	211	1	344	1	487
1	31	19	230	4	361	1	496
1	33	166	231	10	367	2	512
1	36	1	232	19	369	2	515
4	56	1	238	3	370	4	516
1	69	24	249	96	371	1	519
3	78	1	250	2	374	2	530
2	94	1	253	8	375	1	541
1	95	1	254	1	381	1	550
1	96	3	278	2	391	80	554
6	102	1	279	2	396	4	559
4	106	1	281	2	397	9	562
3	125	1	284	1	414	1	564
1	152	1	285	1	422	32	999

F33HMCD1:

1. See Appendix D - CODED DRUG LIST.
2. Not collected on version 09/30/80.

F33HMND1 ----- HOME NUMBER DAYS

type: numeric (float)

range: [0,99] units: 1  
 unique values: 27 coded missing: 1542 / 2686

mean: 15.3313  
 std. dev: 25.9573

percentiles: 10% 25% 50% 75% 90%  
 4 5 7 10 21

F33HMND1:

1. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

F33HMCD2 ----- HOME MEDICATION CODE

type: numeric (float)

range: [3,999]

units: 1

unique values: 96

coded missing: 1926 / 2686

tabulation:

Freq.	Value	Freq.	Value	Freq.	Value	Freq.	Value
1	3	5	157	2	296	1	436
1	6	1	159	5	298	1	443
2	7	3	181	1	304	2	449
1	17	3	190	2	306	1	462
5	20	7	191	1	315	4	463
8	21	2	192	3	328	1	471
2	22	1	196	1	335	14	480
1	23	1	204	6	338	56	481
1	24	2	217	1	341	2	484
78	25	4	230	1	342	1	489
4	26	71	231	1	344	2	507
77	28	3	239	1	349	1	512
1	34	1	240	1	355	5	515
6	56	1	241	1	361	5	516
3	59	2	248	10	367	2	519
1	74	141	249	10	369	3	522
2	103	1	265	6	370	1	534
1	104	1	276	41	371	2	537
1	106	1	277	12	374	1	545
2	108	1	280	14	375	20	554
1	125	1	285	2	410	2	559
6	126	1	287	1	417	1	562
2	152	1	290	2	430	1	578
1	153	1	292	8	434	34	999

F33HMCD2:

1. See Appendix D - CODED DRUG LIST.
2. Not collected on version 09/30/80.

F33HMND2 ----- HOME NUMBER DAYS

type: numeric (float)

range: [0,99]

units: 1

unique values: 27

coded missing: 1964 / 2686

mean: 33.3573

std. dev: 39.7859

percentiles:	10%	25%	50%	75%	90%
	4	6	10	98	99

F33HMND2:

1. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

F33HMCD3 ----- HOME MEDICATION CODE

type: numeric (float)

range: [3,999] units: 1

unique values: 72 coded missing: 2375 / 2686

tabulation:

Freq.	Value	Freq.	Value	Freq.	Value
1	3	1	222	1	417
1	7	1	227	1	422
1	11	13	231	2	429
1	20	3	239	2	434
2	25	1	247	1	449
2	28	2	248	2	452
1	32	100	249	7	463
1	33	4	275	1	471
2	44	1	286	1	476
1	48	1	287	14	480
1	52	1	298	36	481
2	59	2	328	1	491
1	62	1	335	1	497
1	123	1	341	1	509
6	126	3	367	1	512
1	127	2	369	7	515
1	152	1	370	2	516
6	156	11	371	3	519
3	159	1	372	1	522
1	171	6	374	1	537
3	190	6	375	1	554
2	191	1	408	1	564
4	192	1	410	1	572
1	197	2	413	10	999

F33HMCD3:

1. See Appendix D - CODED DRUG LIST.
2. Not collected on version 09/30/80.

F33HMND3 ----- HOME NUMBER DAYS

type: numeric (float)

range: [1,99] units: 1

unique values: 22 coded missing: 2396 / 2686

mean: 63.2034

std. dev: 42.9603

percentiles:      10%      25%      50%      75%      90%

                         5          10          98          99          99

F33HMND3:

1. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

---

F33COMP ----- COMPLICATIONS FROM TREATMENT

type: numeric (float)  
 label: F33COMP

range: [1,3] units: 1  
 unique values: 3 coded missing: 898 / 2686

tabulation:	Freq.	Numeric	Label
	1725	1	NO
	53	2	YES
	10	3	

F33COMP:

1. Not collected on version 09/30/80.

F33INBED ----- # OF DAYS STAYED IN BED

type: numeric (float)  
 label: F33INBED

range: [-2,99] units: 1  
 unique values: 38 coded missing: 947 / 2686

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
206	-2	NA	11	18	
1	0		4	19	
59	1		13	20	
126	2		5	21	
175	3		8	22	
181	4		12	24	
193	5		3	25	
126	6		5	26	
134	7		9	28	
90	8		2	29	
49	9		2	30	
133	10		5	32	
29	11		2	35	
46	12		1	41	
11	13		1	44	
41	14		1	45	
30	15		2	49	
8	16		1	77	
11	17		3	99	

F33INBED:

1. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

---

F33MSWRK ----- # OF DAYS MISSED SCHOOL OR WORK

type: numeric (float)  
 label: F33MSWRK

range: [-3,99] units: 1  
 unique values: 37 coded missing: 938 / 2686

tabulation:

Freq.	Numeric	Label	Freq.	Numeric	Label
114	-3	NO	8	18	
853	-2	NA	1	19	
8	1		17	20	
8	2		10	21	
23	3		2	23	
21	4		7	24	
103	5		4	25	
44	6		4	27	
85	7		1	28	
52	8		3	30	
42	9		2	34	
160	10		4	35	
26	11		1	36	
37	12		1	37	
8	13		2	44	
34	14		1	55	
41	15		2	75	
8	16		2	99	
9	17				

F33MSWRK:

1. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
CSSCD FULL COHORT PATIENTS

---

---

F33PNORG ----- PNEUMONIA ORGANISM

type: numeric (float)

range: [10,9999]

units: 1

unique values: 23

coded missing: 2574 / 2686

tabulation: Freq. Value

1	10
1	12
2	14
1	100
16	110
1	111
1	120
3	140
32	170
3	401
1	409
3	481
1	485
7	486
11	1200
1	1300
2	4850
8	5120
1	5130
1	6200
1	6890
2	9000
12	9999

F33PNORG:

1. See Appendix H - PATHOGEN LIST.
2. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

F33DIAG1 ----- ICDA CODE OF FINAL DIAGNOSIS

type: numeric (float)

range: [1.7,997.03]

units: .01

unique values: 51

coded missing: 1027 / 2686

tabulation:

Freq.	Value	Freq.	Value
1	1.7	3	482.2
1	38.09	1	482.3
1	38.2	1	482.4
1	79.9	1	482.8
1	93.96	17	483
1	93.99	3	483.7
4	99.01	36	485
1	135	1425	486
3	282.6	1	486.6
8	282.62	1	487
4	382.9	1	490
1	401	4	493.9
1	415	11	511.9
2	415.01	1	518
52	415.1	5	518.3
1	436	1	518.8
1	448.5	1	519.1
3	465.9	1	548.5
1	466	3	780.6
1	474.1	1	786
6	476	2	786.09
1	480.6	1	786.52
1	480.8	1	790.7
7	480.9	1	989.99
27	481	1	997.03
4	481.1		

F33DIAG1:

1. See ICD-9 codebook for diagnosis codes.
2. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

F33DIAG2 ----- ICDA CODE OF FINAL DIAGNOSIS

type: numeric (float)

range: [3.31,984.9]

units: .01

unique values: 52

coded missing: 2442 / 2686

tabulation:

Freq.	Value	Freq.	Value
1	3.31	60	415.1
1	11.9	1	428
1	28.3	1	451.19
1	34.1	1	451.2
3	38.2	1	451.9
1	38.41	3	463
3	38.9	1	465.9
1	52.9	2	481
1	73.59	2	485
3	79.9	4	486
1	92.15	10	493.9
1	99.04	19	511.9
2	277	3	518
1	282.06	1	518.3
9	282.6	2	519.1
9	282.61	1	519.8
68	282.62	1	560.1
1	282.64	1	575
1	282.65	1	686.9
1	284.9	1	733.4
1	286.62	2	780.6
2	336.1	1	786
1	381.1	1	789
4	382.9	1	790.7
1	415	1	958.1
2	415.01	1	984.9

F33DIAG2:

1. See ICD-9 codebook for diagnosis codes.
2. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
CSSCD FULL COHORT PATIENTS

---

---

F33DIAG3 ----- ICDA CODE OF FINAL DIAGNOSIS

type: numeric (float)

range: [3.31,999.8]

units: .01

unique values: 22

coded missing: 2638 / 2686

tabulation:	Freq.	Value
	1	3.31
	1	3.8
	1	34.91
	1	93.99
	1	135.7
	9	282.6
	4	282.61
	12	282.62
	1	284.9
	2	285.9
	1	415.1
	2	429.3
	1	511.9
	1	574.2
	1	614.9
	1	673.1
	2	696.1
	1	730
	1	780.3
	1	790.5
	1	812.2
	2	999.8

F33DIAG3:

1. See ICD-9 codebook for diagnosis codes.
2. Not collected on version 09/30/80.

**CODEBOOK FOR CSSCD FORM 33**  
**ACUTE CHEST SYNDROME FLOW SHEET - PAGE 3**  
 CSSCD FULL COHORT PATIENTS

---

F33DIAG4 ----- ICDA CODE OF FINAL DIAGNOSIS

type: numeric (float)

range: [3.31,999.8]

units: .01

unique values: 59

coded missing: 2463 / 2686

tabulation:

Freq.	Value	Freq.	Value
		1	583.6
1	3.31	2	599
1	8	1	682.6
1	34.91	1	692.9
1	38.2	1	730.12
1	38.41	1	733.9
1	52.9	3	780.6
1	82.62	1	782.4
1	92.15	1	784
4	99.04	1	786.3
1	112.9	1	865.04
1	135	1	958.7
1	203.24	1	999.8
1	262.82		
2	282.04		
9	282.6		
12	282.61		
74	282.62		
7	282.66		
1	283.9		
1	284.9		
1	285.9		
1	289.03		
1	289.3		
1	340		
1	349.9		
10	382.9		
5	402.91		
2	415		
3	415.1		
1	427.5		
Freq.	Value		
4	428		
1	428.1		
2	465		
12	465.9		
1	466.9		
1	473.9		
2	480.6		
2	485		
1	486		
5	493.9		
19	511.9		
1	517.8		
3	518.8		
1	564		
2	574		
2	574.2		

## 7.2.4: Acute Chest Syndrome Summary – “Form” 63

---

### F33DIAG4:

1. See ICD-9 codebook for diagnosis codes.
2. Not collected on version 09/30/80.

### \_dta:

1. Created 06/08/00.

### List of variables deleted **F63DATE**

- A. List of variables modified **NONE**
- B. List of variables modified with a name change **NONE**
- C. Old name
- D. New name
- E. List of variables modified date to days since DOE
- F. Old name **F63DATE**
- G. New name **JF63DATE**
- H. Collection Information:

In order to facilitate calculation of acute chest syndrome (ACS) event rates throughout the entire first phase of CSSCD, information from all event form sources that collected ACS data was combined in a single dataset (**R63.SD2**). “Form” 63 is designated as the “form” source for the data in this dataset.

- I. Data Collection Period: 03/79 – 09/88

<u>Source of Data</u>	<u>Time Period Used</u>
Form 32: Acute Chest Syndrome	03/79 – 12/86
Form 32E: Acute Chest Syndrome Form II	07/85 – 12/86
Form 48: Acute Febrile Illness (if chest x-ray positive for infiltrate)	03/79 – 12/86
Form 53: Comprehensive Special Event Form for Patients Entered at < 6 Months of Age	01/87 – 09/88

- J. Form Version Dates:

Form 32: 03/01/79, 05/02/79, 09/25/80, 03/17/82

## 7.2.4: Acute Chest Syndrome Summary – “Form” 63

---

Form 32E: 06/19/85

Form 48: 03/01/79, 10/10/80

Form 53: 11/20/86

K. File Used to Store Information:

SAS System File: **R63.SD2**

Format File: **R63.FMT**

L. Unique Record Identifiers: **ANONID, F63DATE**

Records within the dataset are sorted by **ANONID** and **F63DATE**.

M. Number of Observations (Patients) in SAS Dataset: 2,327 (1,169)

N. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See p. 298
- Listing of Variables by Position: See p. 299

O. Notes About Selected Variables:

- **F63INFIL** – By definition, the value should be 2 (yes) for this variable (lung infiltrate) for all events in this dataset. However, an infiltrate was not documented on forms submitted for 141 events in the dataset (response missing for 11 and 1 (no) for 130).

P. Computed Variables:

- **F63DHOSP** – is the variable name for number of days hospitalized. If the data source (**F63FORM**) was Form 32, the value was computed as described in Section 7.2.1 for **F32DHOSP**

Q. Inter-relationship with Other Datasets:

Additional details about acute chest syndrome events reported on Form 32 (**F63FORM=32**) are stored in **R32.SD2** (See Section 7.2.1). Additional information about ACS events reported on Form 32E (**F63FORM=43**) are stored in **R43.SD2** (See Section 7.2.2). Other data from ACS events reported on Form 53 (**F63FORM=53**) are stored in **R53.SD2** (See Section 7.9). If one of the ACS forms was not filled out but x-ray results reported on Form 48 (**F63FORM=48**) were positive for an infiltrate, additional information about the event is stored in **R48.SD2** (See Section 7.7.1).

In summary, an ACS event record is included in the ACS summary dataset **R63.SD2** if:

#### **7.2.4: Acute Chest Syndrome Summary – “Form” 63**

---

1. a Form 32 was completed, or
2. a Form 32E was completed, or
3. chest x-ray results on Form 48 were positive for an infiltrate, or
4. ACS was checked as the reason for completion of Form 53, or
5. Chest x-ray results on Form 53 were positive for an infiltrate.

**CODEBOOK FOR CSSCD 'FORM' 63**  
**ACUTE CHEST SYNDROME EVENT SUMMARY**

CSSCD FULL COHORT PATIENTS

---

CONTENTS OF SAS DATASET: R63.SD2  
DATA FROM CSSCD "FORM" 63 - ACUTE CHEST SYNDROME SUMMAR  
INCLUDES EVENTS REPORTED BETWEEN 3/79 AND 9/88  
VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION  
The SAS System 10:44 Thursday, December 7, 2006 8

The CONTENTS Procedure

Data Set Name	OUT1.R63	Observations	2327
Member Type	DATA	Variables	11
Engine	V9	Indexes	0
Created	11:34 Thursday, November 30, 2006	Observation Length	88
Last Modified	11:34 Thursday, November 30, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	8192
Number of Data Set Pages	26
First Data Page	1
Max Obs per Page	92
Obs in First Data Page	65
Number of Data Set Repairs	0
File Name	r63.sas7bdat
Release Created	9.0000M0
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
9	F63CULTR	Num	8	BLOOD CULTURE RESULTS
3	F63DHOSP	Num	8	NUMBER OF DAYS HOSPITALIZED
4	F63FORM	Num	8	WHICH FORM WAS FILLED OUT
2	F63HOSP	Num	8	HOSPITALIZED
5	F63INFIL	Num	8	LUNG INFILTRATE
7	F63INFST	Num	8	INFILTRATE SITE; BINARY CODED
8	F63LOBEN	Num	8	NO. OF INVOLVED LOBES
10	F63ORG	Num	8	ORGANISM CULTURED IN BLOOD
6	F63SRCIN	Num	8	SOURCE OF INFILTRATE INFORMATION
11	JF63DATE	Num	8	DATE FIRST SOUGHT CARE - RECODE DAYS SINCE DOE

**CODEBOOK FOR CSSCD 'FORM' 63**  
**ACUTE CHEST SYNDROME EVENT SUMMARY**  
CSSCD FULL COHORT PATIENTS

---

---

**CODEBOOK FOR CSSCD 'FORM' 63**  
**ACUTE CHEST SYNDROME EVENT SUMMARY**

CSSCD FULL COHORT PATIENTS

---

\*\*\*\*\*  
\* R63.FMT contains value labels for numerical codes assigned to categorical\*  
\* variables in the SAS dataset R63.SD2 \*  
\*\*\*\*\*;

\* SIR/DBMS 2.2 SAS PROC STEP FROM DATABASE: CSSCD    04/11/00;

PROC FORMAT PRINT;

\*    FORMAT NO\_YES used for the following variables: F63HOSP F63INFIL;

VALUE NO\_YES

1	= 'NO'
2	= 'YES';

VALUE F63SRCIN

1	= 'X-RAY 32'
2	= 'SCAN 32'
3	= 'X-RAY 33'
4	= 'X-RAY 43'
5	= 'X-RAY 53'
6	= 'X-RAY 48';

VALUE F63INFST

0	= 'NOT GIVEN (0)'
1	= 'L. UPPER (1)'
2	= 'L. LINGULA (2)'
4	= 'L. LOWER (4)'
8	= 'R. UPPER (8)'
16	= 'R. MIDDLE (16)'
32	= 'R. LOWER (32)'
64	= 'NONE (64)';

VALUE F63CULTR

1	= 'NEGATIVE'
2	= 'POSITIVE';

---

F63HOSP ----- HOSPITALIZED

---

SECTION 7.2.4 ACUTE CHEST SYNDROME SUMMARY

"FORM" 63

**CODEBOOK FOR CSSCD 'FORM' 63**  
**ACUTE CHEST SYNDROME EVENT SUMMARY**

CSSCD FULL COHORT PATIENTS

---

type: numeric (float)  
label: F63HOSP

range: [1,2] units: 1  
unique values: 2 coded missing: 11 / 2327

tabulation:	Freq.	Numeric	Label
	97	1	NO
	2219	2	YES

F63DHOSP ----- NUMBER OF DAYS HOSPITALIZED

type: numeric (float)

range: [0,73] units: 1  
unique values: 42 coded missing: 109 / 2327

mean: 6.91794  
std. dev: 5.16525

percentiles:	10%	25%	50%	75%	90%
	3	4	6	9	12

F63FORM ----- WHICH FORM WAS FILLED OUT

type: numeric (float)

range: [32,53] units: 1  
unique values: 4 coded missing: 0 / 2327

tabulation:	Freq.	Value
	1919	32
	214	43
	15	48
	179	53

F63FORM:

- See Appendix N - LIST OF CSSCD FORMS.

F63INFIL ----- LUNG INFILTRATE

type: numeric (float)  
label: F63INFIL

range: [1,2] units: 1  
unique values: 2 coded missing: 11 / 2327

tabulation:	Freq.	Numeric	Label
	130	1	NO
	2186	2	YES

**CODEBOOK FOR CSSCD 'FORM' 63**  
**ACUTE CHEST SYNDROME EVENT SUMMARY**  
CSSCD FULL COHORT PATIENTS

---

---

F63SRCIN ----- SOURCE OF INFILTRATE INFORMATION

type: numeric (float)

label: F63SRCIN

range: [1,6]

units: 1

unique values: 6

coded missing: 9 / 2327

tabulation:	Freq.	Numeric	Label
	1867	1	X-RAY 32
	7	2	SCAN 32
	44	3	X-RAY 33
	208	4	X-RAY 43
	177	5	X-RAY 53
	15	6	X-RAY 48

F63SRCIN:

1. Required only if F63INFIL $\geq$ 1.

F63INFST ----- INFILTRATE SITE; BINARY CODED

---

---

**CODEBOOK FOR CSSCD 'FORM' 63**  
**ACUTE CHEST SYNDROME EVENT SUMMARY**  
 CSSCD FULL COHORT PATIENTS

type: numeric (float)  
 label: F63INFST

range: [0,64]    units: 1  
 unique values: 49                                        coded missing: 409 / 2327

tabulation:

Freq.	Numeric	Label	1	62
6	0	NOT GIVEN (0)	7	63
63	1	L. UPPER (1)	107	64 NONE (64)
29	2	L. LINGULA (2)		
6	3			
482	4	L. LOWER (4)		
13	5			
16	6			
5	7			
123	8	R. UPPER (8)		
13	9			
3	10			
17	12			
1	13			
177	16	R. MIDDLE (16)		
5	17			
8	18			
29	20			
2	21			
2	22			
24	24			
2	25			
1	27			
9	28			
1	31			
373	32	R. LOWER (32)		
Freq.	Numeric	Label		
3	33			
6	34			
1	35			
238	36			
2	37			
8	38			
2	39			
14	40			
8	44			
1	45			
1	46			
67	48			
2	49			
2	50			
17	52			
1	53			
6	54			
1	55			
7	56			
4	60			
2	61			

## Section A: CSSCD Phase 1

### 7.2.0: Acute Chest Syndrome (ACS) Overview

---

F63INFST:

1. Binary coded variable. See Part II for explanation of binary coded variables.
2. Required only if  $1 \leq F63SRCIN \leq 3$ .

F63LOBEN ----- NO. OF INVOLVED LOBES  
          type: numeric (float)

          range: [1,6]  units: 1  
unique values: 6  coded missing: 336 / 2327

tabulation:	Freq.	Value
	1371	1
	520	2
	72	3
	16	4
	5	5
	7	6

F63LOBEN:

1. Required only if F63SRCIN = 1 or 3 or 4.

F63CULTR ----- BLOOD CULTURE RESULTS

          type: numeric (float)  
label: F63CULTR

          range: [1,2]  units: 1  
unique values: 2  coded missing: 35 / 2327

tabulation:	Freq.	Numeric	Label
	2209	1	NEGATIVE
	83	2	POSITIVE

**Section A: CSSCD Phase 1**  
**7.2.0: Acute Chest Syndrome (ACS) Overview**

---

F63ORG ----- ORGANISM CULTURED IN BLOOD  
          type: numeric (float)  
          range: [110,9000]                          units: 1  
unique values: 19                                  coded missing: 2244 / 2327

tabulation:

Freq.	Value
5	110
3	130
1	160
43	170
1	202
1	203
5	401
2	404
2	405
1	410
1	411
1	412
1	800
10	1200
1	1300
1	2100
1	3100
1	6810
2	9000

- F63ORG:
1. See Appendix H - PATHOGEN LIST.
  2. Required only if F63CULTR=2.

\_dta:

**Section A: CSSCD Phase 1**  
**7.2.0: Acute Chest Syndrome (ACS) Overview**

---

1. Created 05/12/00.