

Framingham Heart Study

Original Cohort Exam 4

01/15/1954-07/01/1958

N=4541

Exam Form Versions

- 9-52 Re-examination X-ray Report
- 4-53 Summary of findings
- 12-54 Interval Medical History & Cardiovascular Examination
- 3-57 Exam IV Code Sheets: Card No. 1 & 3

Notes on Framingham Heart Study Main Exam Data Collection Forms

Multiple versions of each exam form were used at the time of data collection. However, only one version of each exam form has been provided in the samples below. The other versions, which can be found in the participants' charts, have the same variables as the sample exam forms, but may be placed in a different format.

On some of the sample exam forms, the same variable may be found on two different data sheets. An example of this would be variable "FA159" on original cohort exam 8, which is "Signs of CVA: Aphasia." This variable appears both in the physical examination and Exam VIII Code Sheet Card No. 4. The reason for the reappearance of variables is that one data sheet was used for collection of the data, while the other was used to enter the data into the computer. Variables appearing more than once on an exam form should hold the same value in both places for that particular participant.

SUMMARY OF FINDINGS

Record No. ID
Sex MF3 Height MF217 / MF218 In.

Exam
4

Name _____

Exam? Number and Date		I	II	III	IV	V	VI	VII	VIII	IX	X
LABP	Admission	/	/	/	/	/	/	/	/	/	/
	1st Examiner	/	/	/	/	/	/	/	/	/	/
	2nd Examiner	/	/	/	/	/	/	/	/	/	/
PE	Weight in lbs.				MF216						
	Vital Capacity				MF215						
X-RAY*	Doubtful										
	Abnormal										
ECG**	Doubtful										
	Abnormal										
BCG (Grade)											

MF278

(*) If Doubtful or Abnormal, indicate:
 Gr.V.—great vessels
 GCE—generalized cardiac enlargement
 LVH—left ventricular hypertrophy MF279
 Other Cont—other contour
 Non CV—non CV disease

(**) If Doubtful or Abnormal, indicate:
 Myo Inf—myocardial infarct MF279
 LVH—left ventricular hypertrophy
 IVB—IV block MF281
 AVB—AV block
 NS T-wave—nonspecific T-wave MF283
 Arr—arrhythmia MF284

Name _____

Record No. ID

DIAGNOSTIC IMPRESSION AT TIME

		I	II	III	IV	V	VI
CARDIOVASCULAR IMPRESSION	CARDIAC	NO CVD	/ / /	/ / /	/ / /	/ / /	/ / /
		Arteriosclerotic HD					
		Angina pectoris					
		Myocardial infarct, by history					
		Myocardial Infarct, by ECG					
		Rheumatic HD					
		RF or chorea					
		Systolic murmur(s): Mitral					
		(enter grade) Aortic					
		Diastolic murmur(s): Mitral					
		(enter grade) Aortic					
		X-Ray evidence ^{1/}					
		Hypertensive HD					
		High blood pressure					
		LVH or GCE on X-Ray					
		LVH by ECG					
		Other HD ^{2/}					
		NCA				MF254	
	Functional and Physiologic Dx						
	Functional class ^{3/}				MF288		
	Congestive heart failure				MF289		
	VASCULAR	Other Vascular Disease					
		Cerebrovascular accident					
		Peripheral arterial insufficiency					
NON-CV DIAGNOSIS ^{4/}							
	Type letter sent to patient ^{5/}						
	Reviewer's initials						

Record No.

IP

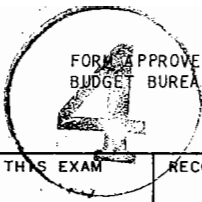
LABORATORY FINDINGS

Exam. Number and Date		I	II	III	IV	V	VI	VII	VIII	IX	X
BLOOD ANALYSIS	STS										
	Cholesterol										
	Hemoglobin										
	Phospholipid										
	Sugar										
	Uric Acid										
URINALYSIS	Specific Gravity										
	Sugar										
	Albumin										

MF208
MF209
MF210
MF211
MF212

MF214

INTERVAL MEDICAL HISTORY



NAME (Last)	(First)	(Middle)	DATE LAST EXAM	DATE THIS EXAM	RECORD NO.
					ID

1. ACUTE INFECTIONS

A. - + Head colds and other U.R.I. per year **MF229**

B. - + Sore throats, severe **MF230**

C. - + Other (Specify) **MF231**

2. RHEUMATIC HISTORY

A. Does examiner believe patient had active rheumatic fever? **MF232**

Original Recurrent

B. Does examiner believe patient has arthritis? **MF233**

Rheumatoid Hypertrophic Other (Specify)

3. HOSPITALIZATIONS (Give reason for)

A. Date Hospital

- + Illness or operation

B. Date Hospital

Illness or operation

MF234 4. THYROID DISEASE

A. Type diagnosed

B. Treatment

C. Present status

MF235 5. DIABETES

A. - + Insulin: amt. required _____

B. Insulin shock: no. times _____

C. Coma: no. times _____

6. HYPERTENSION

- + No. times blood pressure taken since exam here

7. ROUTINE HEALTH EXAMS Date

A. - + Insurance

B. - + Place of employment

C. - + Armed forces

D. - Private physician

E. Other (Specify)

F. Abnormalities found (Specify)

8. KIDNEY DISEASE

MF236 New dx Type: _____

- + Recurrence

Basis for dx: _____

9. PREGNANCIES (Since last exam) **MF237**

No. Miscarriages: No. _____

Albuminuria

Severe edema

Hypertension Convulsions

Examiner believes patient had - + toxemia of pregnancy

10. MENOPAUSE **MF238**

- + Symptoms present during interim

- + Artificial

- + Menses ceased at age **MF239**

11. WEIGHT DURING INTERIM

A. Maximum	B. Minimum
Reason for change	
Do you restrict your caloric intake? How? MF240	

- + Have you followed a prescribed diet? Specify **MF240**

NOTES (Specify section)

INTERVAL MEDICAL HISTORY - PAGE 2	SURNAME	RECORD NO. ID
12. REST AND ACTIVITY	20. ANGINA OR CHEST DISCOMFORT	
A. Rest avg. hrs. Sleep <u> </u> Added rest <u> </u>	- +	Do you ever have chest pain or discomfort?
B. SOB (1) What do you do?	- +	Do you get any pain or discomfort when you exert yourself, or when you are excited?
_____	- +	Does the feeling occur at rest?
_____		Date of onset
_____		Location
(2) Av. hrs. per day Sedentary <u> </u> Moderate activity <u> </u>		Type
Slight activity <u> </u> Heavy activity <u> </u>		Duration
C. Extracurricular activities		Radiation
Avg. hrs. per day Sedentary <u> </u> Moderate activity <u> </u>		Precipitated by
Slight activity <u> </u> Heavy activity <u> </u>		Relieved by
D. Summary by examiner		Frequency
Avg. hrs. per day Sedentary <u> </u> Moderate activity <u> </u>	- +	A. Examiner believes chest pain represents angina pectoris
Slight activity <u> </u> Heavy activity <u> </u>	- +	B. Patient's doctor has said patient has angina pectoris
E. Examiner thinks physical condition is consistent with patient's estimate of activity	- +	C. Examiner believes patient had a coronary attack. Comment:
13. PERSISTENT COUGH		
- + Are you bothered by a cough? Duration: <u> </u>		
14. HEMOPTYSIS		
- + Amount: <u> </u>		D. Patient reports a coronary attack
15. DYSPNEA ON EXERTION		E. Examiner's interpretation of other (non-cardiac) chest discomfort
- + Grade 1 2 3 4		
Increase in past year 0 1 2 3		
16. ORTHOPNEA		
- + No. of pillows used <u> / </u>		
17. PAROXYSMAL NOCTURNAL DYSPNEA		NOTES (Specify section)
- + Frequency <u> </u>		
18. BOTHERED BY HEADACHES		
- + Location Frequency <u> </u>		
Examiner believes they are due to: <u> </u>		
19. PALPITATION (Patient is aware of heartbeat)		
- + Frequency: <u> </u>		
Examiner believes this is due to: <u> </u>		

MF241

21. OTHER CV DISEASE

A. CHF B. CVA C. Enlarged heart

D. Nervous heart E. Peri-carditis F. Sub-acute endocarditis

G. Other (Specify)

22. ABDOMINAL PAIN OR INDIGESTION

- + Pain Indigestion

Location _____

MF242 Peptic ulcer MF243 Gallbladder disease

Comment: _____

23. CALF PAIN OR CRAMP WHILE WALKING

- + Distance: _____

- + Examiner believes this is claudication

24. PHLEBITIS

- + Acute Chronic

Precipitating factors _____

25. ANKLE EDEMA

- + When occurs: _____

26. ALLERGIES

- + A. MF244 Hay fever B. MF245 Hives C. MF246 Asthma

D. Drug reaction (Specify) MF247

E. other (Specify) MF248

27. DRUGS TAKEN

- + Digitalis: amt. MF249

- + Nitroglycerin: amt. _____

- + Hypotensive drugs (Specify) MF250

other (Check boxes)

Amphetamine Aspirin Laxatives

Antacids Hormones Sedatives

Antibiotics Injections Sulfa

Antihistamine Iron Vitamins

Other (Specify)

28. STIMULANTS USED

- + Coffee MF251 cups/day

- + Tea cups/day

- + Tobacco (per day) MF252

Cigarettes _____ Cigars _____ Pipes _____

- + Alcohol Highballs or cocktails MF253

_____ day _____ days/mo. None < 1/mo.

Beer _____ day _____ days/mo. None < 1/mo.

Wine _____ day _____ days/mo. None < 1/mo.

29. HAS PATIENT SEEN A DOCTOR DURING INTERVAL FOR ANY OTHER REASON?

- + Specify: _____

30. RAYNAUD'S PHENOMENON

- + _____

31. SYNCOPE

- + No. times _____

32. NEUROCIRCULATORY ASTHENIA MF254

+ Does examiner think patient has NCA?

Comment: _____

NOTES (Specify section)

OTHER CONTRIBUTORY HISTORY (Interval or lifetime)

Communication Rating

Good

Fair

Poor

Reason:

Examiner's Signature

CONSULTANT'S NOTES AND DIAGNOSIS

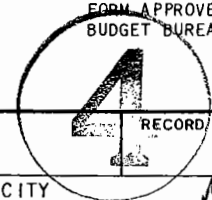
Left Arm B.P.

Sys _____ Dias _____

Date _____

Consultant's Signature _____

CARDIOVASCULAR EXAMINATION



NAME (Last)		(First)		(Middle)		DATE		
1. ORAL TEMPERATURE		2. RESPIRATION		3. VITAL CAPACITY		a. Actual b. Ideal		
4. HAIR		Color		% Gray		Bald Pattern		
						<input type="checkbox"/> Front <input type="checkbox"/> Back <input type="checkbox"/> Sides		
S K I N	5. COLOR (Specify: pale, blush, cyanotic, etc.)				SECOND OBSERVER'S COMMENTS			
	<input type="checkbox"/> Normal <input type="checkbox"/> Other							
6. LESIONS		- +		Type		Location		
7. FINGER CLUBBING		- +		0 1 2 3				
E Y E S	8. EXOPHTHALMOS		0 1 2 3 4					
	9. ARCUS SENILIS		0 1 2					
	10. XANTHELASMA		- +		L. R.		Size mm	
	11. RETINA							
		a. Tortuous		0 1 2 3 4				
		b. Narrowing		0 1 2 3 4				
<input type="checkbox"/> Viewed <input type="checkbox"/> Not Viewed		c. Wide Light Reflex		0 1 2 3 4				
		d. AV Nicking		0 1 2 3 4				
		e. Silver Wire		0 1 2 3 4				
		f. Hemorrhages		0 1 2 3 4				
		g. Exudate		0 1 2 3 4				
		<input type="checkbox"/> Normal <input type="checkbox"/> Abnormal		h. Other (Specify)				
		i. Abnormal Group		I II III IV				
N E C K	12. THYROID ABNORM.		<input type="checkbox"/> Single Nodule <input type="checkbox"/> Multiple Nodules					
			Size of Nodule(s)		Location			
			mm					
		Diffuse: <input type="checkbox"/> Slight <input type="checkbox"/> Medium <input type="checkbox"/> Marked						
13. VEIN ENGORGEMENT		0 1 2						
14. LYMPHATICS:		Abnormal Lymph Nodes		MF258 +		Location		
C H E S T	15. DEFORMITY		<input type="checkbox"/> a. Increased AP Diam. <input type="checkbox"/> b. Kyphosis					
			0 1 2 3 4 0 1 2 3 4					
			c. Other (Specify)					
16. BREASTS		<input type="checkbox"/> Not Examined <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal						
		(Specify abnormality)						
17. LUNGS		<input type="checkbox"/> a. Breath Sounds: <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal						
		<input type="checkbox"/> b. Rales - + Type Location						
		c. Other Abnormality (Specify)						

H
E
A
R
T

18. CARDIAC RHYTHM Regular Marked SA Premature beats No./min. SECOND OBSERVER'S COMMENTS

AF Gallop other (Specify)

19. APICAL RATE

20. THRILL - + Location Systolic Diastolic

21. HEART SIZE Normal Enlarged

Apex Impulse Not felt Normal other

Inside MCL Outside MCL

LBD Not made out Inside MCL Outside MCL

22. HEART SOUNDS Normal Abnormal

Specify abnormality:

23. PULMONIC SECOND SOUNDS >A₂ = A₂ <A₂

24. THIRD SOUND None heard Present (Specify)

25. SYSTOLIC MURMURS (Patient recumbent) None heard

AREA	TIMING	QUALITY	GRADE	PITCH
a. Apex	E M L	BL Ha Mu C Dc	1 2 3 4 5 6	Lo Me Hi
b. Mid Precordium	E M L	BL Ha Mu C Dc	1 2 3 4 5 6	Lo Me Hi
c. Left Base	E M L	BL Ha Mu C Dc	1 2 3 4 5 6	Lo Me Hi
d. Right Base	E M L	BL Ha Mu C Dc	1 2 3 4 5 6	Lo Me Hi
e. Transmission <input type="checkbox"/> None <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D to <input type="checkbox"/> AAL <input type="checkbox"/> MAL <input type="checkbox"/> Back <input type="checkbox"/> Neck				
f. Significant change when sitting <input type="checkbox"/> Absent <input type="checkbox"/> Present (Specify)				

26. DIASTOLIC MURMURS None heard

AREA	TIMING	QUALITY	GRADE
a. Mitral - +	A MP AAL E M L	Ru Cr	Before Exercise 0 1 2 3 4 After Exercise 0 1 2 3 4
b. Aortic - +	A MP LB RB E M L	BL Dcr	0 1 2 3 4
c. Patient was exercised <input type="checkbox"/> Yes <input type="checkbox"/> No			

27. OTHER BRUIES - + Describe

A B D O M	28. LIVER	PALPABLE ON FULL INSPIRATION 0 1 2 3 4 5 Tender - + <i>(CMS in MCL)</i>										SECOND OBSERVER'S COMMENTS							
	29. SPLEEN PALPABLE	+																	
L A N D E E F E E T	30. FEMORAL PULSE	<input type="checkbox"/> Normal <input type="checkbox"/> Diminished <input type="checkbox"/> Absent <input type="checkbox"/> Corrigan																	
	31. ANKLE EDEMA	LEFT					RIGHT												
	32. VARICES	LEFT					RIGHT												
	33. IN CHF NOW	<input type="checkbox"/> No <input type="checkbox"/> Yes																	
	34. EMOTIONAL STATE	<input type="checkbox"/> Tense <input type="checkbox"/> Relaxed																	
A N T H R O P O M E T R I C	35. a. Weight lbs.	MF216			b. Stature inches	MF217/MF218			c. Sitting hgt. in.	MF219			d. Dynamometer Measure	MF220					
	e. girths cms.	(1) Middle upper arm			MF221			(2) Wrist			MF222			(3) waist		MF223			
	f. Breadths cms.	(1) Bi-condyler				(2) Mid-segmental				(3) Bi-malleolar									
	g. Skinfolds cms.	(1) Back			MF224			(2) Arm			MF225			(3) Chest			MF226		
	see note	(4) Abdomen			MF227			(5) Thigh			MF228								
	NOTE: Skinfold sites - males: (1) below right scapula; (2) halfway down back of right upper arm; (3) above and right of nipple; (4) right of navel; (5) above the knee cap.																		
X- M R E A S U R E S	36. a. Bone breadth cm.							d. Marrow breadth cm.											
	c. Lean limb breadth cm.							d. Total limb breadth cm.											
	e. Fat layer cm.	(1)						(2)											

ID

37. OTHER SIGNIFICANT FINDINGS:

38. CONSULTANT'S NOTES AND DIAGNOSES:

MF264/
MF265

MF266/
MF267

39. BLOOD PRESSURE (Patient sitting)	First Examiner		2nd Examiner	Consultant	Final
	Left Arm	Right Arm	Left Arm	Left Arm	Left Arm

40. CLINICAL CARDIOVASCULAR DIAGNOSTIC IMPRESSION

SECOND OBSERVER'S OPINION

Etiological

Anatomical

Physiological

Functional Class I II III IV

41. NON-CARDIAC DIAGNOSTIC IMPRESSION

a.

b.

c.

SIGNATURE OF EXAMINER

DATE

SIGNATURE OF OBSERVER

TF-496-1
3-57

Coded by:	Date:
Verified by:	

EXAM IV CODE SHEET
Framingham Heart Study

Name

Age

Card No. 1 NUMERICAL DATA

IDENTIFICATION	1-4	5	6	15-18	19-22	23-26
	Record No.	Type Subject	Sex	Family No.	Secondary Family No.	Blood Family
BLOOD ANALYSIS	27-29	30-32	33-35	36-38	39-40	41-42
	Chol.	Hemo.	Phos.	Sugar	Uric Acid	Hematocrit
URINE	43	44-45	46-48	49-52	53-55	56-58
	Urine Sugar	Vital Capacity	Weight	Stature	Sitting Height	Dyn. Measure
GIRTHS	59-61	62-64	65-68			
	Middle Upper Arm	Wrist	Waist			
SKINFOLDS	69-70	71-72	73-74			
	Back	Arm	Chest			
	75-76	77-78				
	Abdomen	Thigh				

Coded by:	Date:
Verified by:	Record Number 1-4 <input type="text"/>

EXAM IV CODE SHEET
Framingham Heart Study

Card No. 3 BLOOD PRESSURES, X-RAY, AND ECG FINDINGS

BLOOD PRESSURE	1st. Examiner's Reading				2nd. BP Reading				27
	15-17	18-20		21-23	24-26		Taken by:		
	Sys.	Dias.		Sys.	Dias.				
	MF264	MF265		MF266	MF267			MF268	

X-RAY	28	29	30	31	32	33	34	35	36	37	38-40	41
	GI.	GCE	LVH	AH	O. Cont.	Aorta	Pulm. A.	Pos.	Calc.	Non-CV	Size	NIDR
		MF 269	MF 270	MF 271	MF 272	MF 273	MF 274	MF 275	MF 276		MF277	

ECG	42	43	44	45	46	47	48	49	50	51	52-54
	GL	MI	LVH	IVH	AVB	NS-T	ARR	IBBB	PR	Other	Vent. rate
	MF 278	MF 279	MF 280	MF 281	MF 282	MF 283	MF 284	MF 285	MF 286		MF287

FINAL DIAGNOSTIC IMPRESSION

ASHD	55	56	57	58	RHD	59
	ASHD	AP	MI-hist.	MI by ECG		
HHD	60	61	62			
	Definite	Possible	Blood Pressure			
OTHER	63	64	65	66		
	Other HD	MF 288 Func. Class	MF 289 CHF	CVA		

REST AND ACTIVITY

HOURS	Rest		Activity			
	67-68	69	70-71	72-73	74	75
	Sleep	Added rest	Sed.	Slight	Mod.	Heavy

RE-EXAMINATION X-RAY REPORT

4

NAME	SEX	AGE	HEIGHT MF217 MF218	WEIGHT MF216	RECORD NO.
------	-----	-----	--------------------------	-----------------	------------

READING OF PRESENT FILM	INTERPRETATION OF PRESENT FILM IN LIGHT OF CLINICAL DATA
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A. CARDIAC FINDINGS

Normal

Doubtful: specify nos. _____

Abnormal: specify nos. _____

A. CARDIAC FINDINGS

Normal

Doubtful: specify nos. _____

Abnormal: specify nos. _____

B. CARDIAC ABNORMALITIES

B. NON-CARDIAC ABNORMALITIES

1. Size

a. Generalized enlargement
C/T Ratio _____

b. LVH

c. AH MF271

d. RVH

None

Abnormalities: _____

2. Contour (other than enlargement)

Specify _____

CHANGE FROM PREVIOUS X-RAY

3. Great Vessels MF273

a. Aorta tortuous
(1) Asc. (2) Desc. (3) Arch

b. Aorta calcified

c. Other abnormality of aorta _____

No change

Changes (specify): _____

MF274 d. Pulmonary artery abnormal

**CHANGE IN INTERPRETATION OF PRESENT FILM
AFTER COMPARISON WITH PREVIOUS FILM**

MF275 **4. Position of heart**

No change

Changes (specify): _____

MF276 **5. Calcification (other than aortic)**

C. NON-CARDIAC ABNORMALITIES

None

Abnormalities: _____

C-R-A

S U

INTERPRETED BY: _____