

This dataset is created based on Gen 1 FHS participants' self-reported information.

The following is the timeline for related questions found in individual FHS core exams (N = No, Y = Yes):

FHS Core Exam	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Aspirin	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

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ID

IDTYPE

Variable name: idtype

Description: Framingham Heart Study cohort identifier

Code or Value	Description
0	Gen 1

ID

Variable name: id

Description: Framingham Heart Study participant identifier within cohort

IDTYPE and ID must be used together to form a unique study participant identification number or use variable “framid” instead

Code or Value	Description
0 – 9999	Range of values

Note: To preserve confidentiality, the exact range for the ID is not reflected in the coding manual.

FRAMID

Variable name: Framid

Description: Framingham ID assigned to each participant

Code or Value	Description
00000 – 99999	Gen 1

Note: To preserve confidentiality, the exact range for the ID is not reflected in the coding manual.

THYROID_CORE7

Variable name: thyroid_core7

Description: Thyroid disease present, exam 7

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from MF531 in core exam 7.

MF531 LIFETIME HISTORY OF THYROID DISEASE: OTHER THYROID DISEASE, EXAM 7

1000 NO HISTORY OF THYROID DISEASE
 0000 NONE
 0001 HYPERTHYROID, WITHOUT GOITER
 0002 HYPOTHYROID
 0003 GOITER, NOT HYPERTHYROID
 0004 CANCER
 0005 NODULE
 0006 OTHER OR UNKNOWN TYPE
 0007 HYPERTHYROID WITH GOITER
 9999 UNKNOWN
 9997 DID NOT TAKE EXAM 7

Refer to R code for more information.

THYROID_CORE20

Variable name: thyroid_core20

Description: Thyroid disease present, exam 20

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from FM230 and FM231 in core exam 20.

FM230 HAVE YOU EVER HAD THYROID SURGERY?

0 NO
 1 YES
 . UNKNOWN

Thyroid Disease Variables

FM231 HAVE YOU EVER HAD ANY OTHER THYROID DISEASE?
0 NO
1 YES
. UNKNOWN

Refer to R code for more information.

THYROID_CORE21

Variable name: thyroid_core21

Description: Thyroid disease present, exam 21

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from FN184 in core exam 21.

FN184 DIAGNOSED WITH THYROID CONDITION IN INTERIM
0 NO
1 YES
. UNKNOWN

Refer to R code for more information.

THYROID_CORE22

Variable name: thyroid_core22

Description: Thyroid disease present, exam 22

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from FO162 in core exam 22.

FO162 DIAGNOSED WITH THYROID CONDITION IN INTERIM
0 NO
1 YES
. UNKNOWN

Refer to R code for more information.

THYROID_CORE23

Thyroid Disease Variables

Variable name: thyroid_core23

Description: Thyroid disease present, exam 23

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from FP102 in core exam 23.

FP102 DIAGNOSED WITH THYROID CONDITION IN INTERIM

0 NO

1 YES

2 MAYBE

. UNKNOWN

Refer to R code for more information.

THYROID_CORE24

Variable name: thyroid_core24

Description: Thyroid disease present, exam 24

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from FQ193 in core exam 24.

FQ193 INTERIM DIAGNOSIS OF A THYROID CONDITION

0 NO

1 YES

. UNKNOWN

Refer to R code for more information.

THYROID_CORE25

Variable name: thyroid_core25

Description: Thyroid disease present, exam 25

Code or Value	Description
0	No
1	Yes

Thyroid Disease Variables

.	Unknown
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Note: This variable was derived from FR251 in core exam 25.

FR251 MEDICAL HISTORY - THYROID
 INTERIM DIAGNOSIS OF A THYROID CONDITION?
 0 NO
 1 YES
 . UNKNOWN

Refer to R code for more information.

THYROID_CORE26

Variable name: thyroid_core26

Description: Thyroid disease present, exam 26

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from FS324 in core exam 26.

FS324 INTERIM DIAGNOSIS OF A THYROID CONDITION
 0 NO
 1 YES
 . UNKNOWN

Refer to R code for more information.

THYROID_CORE27

Variable name: thyroid_core27

Description: Thyroid disease present, exam 27

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from FT333 in core exam 27.

FT333 INTERIM DIAGNOSIS OF A THYROID CONDITION
 0 NO
 1 YES
 . UNKNOWN

Thyroid Disease Variables

Refer to R code for more information.

THYROID_CORE28

Variable name: thyroid_core28

Description: Thyroid disease present, exam 28

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from FU034 in core exam 28.

FU034 THYROID: SINCE YOUR LAST EXAM HAVE YOU HAD A DIAGNOSIS
 OF A THYROID CONDITION?
 0 NO
 1 YES
 . UNKNOWN

Refer to R code for more information.

THYROID_CORE29

Variable name: thyroid_core29

Description: Thyroid disease present, exam 29

Code or Value	Description
0	No
1	Yes
.	Unknown

Note: This variable was derived from FU034 in core exam 28.

FV025 THYROID: SINCE YOUR LAST EXAM HAVE YOU HAD A DIAGNOSIS
 OF A THYROID CONDITION?
 0 NO
 1 YES
 . UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE7

Variable name: thyroid_med_core7

Description: Interim history of thyroid medication use in exam 7

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from MF532 in core exam 7.

MF532 93/41 LIFETIME HISTORY OF THYROID DISEASE: CURRENT STATUS OF
 THYROID DISEASE, EXAM 7
 1000 NO HISTORY OF THYROID DISEASE
 0000 NORMAL
 0001 HYPERTHYROID, ON MEDICATION
 0002 HYPERTHYROID, NOT ON MEDICATION
 0003 HYPOTHYROID, ON MEDICATION
 0004 HYPOTHYROID, NOT ON MEDICATION
 0005 EUTHYROID, BUT NOT ON MEDICATION
 0006 EUTHYROID, ON MEDICATION
 9999 UNKNOWN
 9997 DID NOT TAKE EXAM 7

Refer to R code for more information.

THYROID_MED_CORE8

Variable name: thyroid_med_core8

Description: Interim history of thyroid medication use in exam 8

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FA123 in core exam 8.

FA123 103/69 MEDICINE TAKEN DURING INTERIM: THYROID
 0 NO THYROID (B WITH CODE X IN COL. 62 OR 0)
 1 TAKING NOW
 2 TOOK DURING INTERIM, BUT NOT AT PRESENT
 3 TOOK DURING INTERIM, TIME UNKNOWN

Thyroid Medicine Variables

9999 UNKNOWN IF TAKEN OR NOT

Refer to R code for more information.

THYROID_MED_CORE9

Variable name: thyroid_med_core9

Description: Interim history of thyroid medication use in exam 9

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FB71 and FB72 in core exam 9.

FB71 113/13 INTERIM HISTORY OF MEDICINE: THYROID

0000 NO

0001 YES. TAKING NOW

0002 YES, BUT NOT TAKING NOW

9999 UNKNOWN

FB72 113/14 INTERIM HISTORY OF MEDICINE: ANTITHYROID

0000 NO

0001 YES, TAKING NOW

0002 YES, BUT NOT TAKING NOW

9999 UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE10

Variable name: thyroid_med_core10

Description: Interim history of thyroid medication use in exam 10

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FC88 and FC89 in core exam 10.

FC88 123/13 INTERIM HISTORY OF MEDICINE USED: THYROID

0 NO

1 YES, NOW

2 YES, NOT NOW

9 UNKNOWN

Thyroid Medicine Variables

FC89 123/14 INTERIM HISTORY OF MEDICINE USED: ANTITHYROID

- 0 NO
- 1 YES, NOW
- 2 YES, NOT NOW
- 9 UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE11

Variable name: thyroid_med_core11

Description: Interim history of thyroid medication use in exam 11

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FD80 and FD81 in core exam 11.

FD80 133/13 INTERIM HISTORY OF MEDICINE USED: THYROID

- 0 NO
- 1 YES, NOW
- 2 YES, NOT NOW
- 9 UNKNOWN

FD81 133/14 INTERIM HISTORY OF MEDICINE USED:

ANTITHYROID

- 0 NO
- 1 YES, NOW
- 2 YES, NOT NOW (NONE)
- 9 UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE12

Variable name: thyroid_med_core12

Description: Interim history of thyroid medication use in exam 12

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Thyroid Medicine Variables

Note: This variable was derived from FE91 in core exam 12.

FE91 202/13 INTERIM HISTORY OF MEDICINE USED:

THYROID

0 NO

1 YES, NOW

2 YES, NOT NOW

9 UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE13

Variable name: thyroid_med_core13

Description: Interim history of thyroid medication use in exam 13

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FF93 in core exam 13.

FF93 302/13 INTERIM HISTORY OF MEDICINE USED:

THYROID

0 NO

1 YES, NOW

2 YES, NOT NOW

. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE14

Variable name: thyroid_med_core14

Description: Interim history of thyroid medication use in exam 14

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FD80 and FD81 in core exam 14.

FG92 402/15 INTERIM HISTORY OF MEDICINE USED:

THYROID

0 NO

Thyroid Medicine Variables

- 1 YES, NOW
- 2 YES, NOT NOW
- . UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE15

Variable name: thyroid_med_core15

Description: Interim history of thyroid medication use in exam 15

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FH92 in core exam 15.

FH92 502/17 INTERIM HISTORY OF MEDICINE USED:
THYROID
0 NO
1 YES, NOW
2 YES, NOT NOW
. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE16

Variable name: thyroid_med_core16

Description: Interim history of thyroid medication use in exam 16

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from F216 and F217 in core exam 16.

F151 602/17 INTERIM HISTORY OF MEDICINE USED:
THYROID
0 NO
1 YES, NOW
2 YES, NOT NOW
. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE17

Variable name: thyroid_med_core17

Description: Interim history of thyroid medication use in exam 17

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FJ25 and FJ134 in core exam 17.

FJ25 34 INTERIM HISTORY OF MEDICINE USED:

THYROID

0 NO

1 YES, NOW

2 YES, NOT NOW

3 MAYBE

. UNKNOWN

FJ134 168 THYROID DISEASE:
EVER TAKEN THYROID MEDICATION

0 NO

1 YES

2 MAYBE

. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE18

Variable name: thyroid_med_core18

Description: Interim history of thyroid medication use in exam 18

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FJ25 and FJ134 in core exam 18.

FK106 DRUG21 MEDICINE USE: THYROID

0 NO

1 YES,NOW

2 YES, NOT NOW

Thyroid Medicine Variables

3 MAYBE
. UNKNOWN
FK215 THYDIS2 THYROID DISEASE:
THYROID MEDICATION IN INTERIM
0 NO
1 YES
2 MAYBE
. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE19

Variable name: thyroid_med_core19

Description: Interim history of thyroid medication use in exam 19

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FL142 and FL143 in core exam 19.

FL142 * DRUG24 THYROID EXTRACT (DESSICATED THYROID)
0 NO
1 YES, NOW
2 YES, NOT NOW
3 MAYBE
. UNKNOWN

FL143 * DRUG25 THYROXINE (SYNTHROID ETC.)
0 NO
1 YES, NOW
2 YES, NOT NOW
3 MAYBE
. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE20

Variable name: thyroid_med_core20

Description: Interim history of thyroid medication use in exam 20

Code or Value	Description
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Thyroid Medicine Variables

0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FM180 and FM181 in core exam 20.

FM180 * DRUG24 MEDICINE USE: THYROID EXTRACT (DESSICATED THYROID)
 0 NO
 1 YES, NOW
 2 YES, NOT NOW
 3 MAYBE
 . UNKNOWN

FM181 * DRUG25 MEDICINE USE: THYROXINE (SYNTHROID ETC.)
 0 NO
 1 YES, NOW
 2 YES, NOT NOW
 3 MAYBE
 . UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE21

Variable name: thyroid_med_core21

Description: Interim history of thyroid medication use in exam 21

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FN119 and FN120 in core exam 21.

FN119 THYROID EXTRACT (DESSICATED THYROID)
 0 NO
 1 YES, NOW
 2 YES, NOT NOW
 3 MAYBE
 . UNKNOWN

FN120 THYROXINE (SYNTHROID, ETC.)
 0 NO
 1 YES, NOW

Thyroid Medicine Variables

2 YES, NOT NOW
3 MAYBE
. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE22

Variable name: thyroid_med_core22

Description: Interim history of thyroid medication use in exam 22

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FO126 and FO127 in core exam 22.

FO126 MEDICATION USE: THYROID EXTRACT
 (DESSICATED THYROID)
 0 NO
 1 YES, NOW
 2 YES, NOT NOW
 3 MAYBE
 . UNKNOWN

FO127 MEDICATION USE: THYROXINE
 (SYNTHROID, ETC.)
 0 NO
 1 YES, NOW
 2 YES, NOT NOW
 3 MAYBE
 . UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE23

Variable name: thyroid_med_core23

Description: Interim history of thyroid medication use in exam 23

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Thyroid Medicine Variables

Note: This variable was derived from FP80 and FP081 in core exam 23.

FP080 MEDICATION USE: THYROID EXTRACT
 (DESSICATED THYROID)
 0 NO
 1 YES, NOW
 2 YES, NOT NOW
 3 MAYBE
 . UNKNOWN

FP081 MEDICATION USE: THYROXINE (SYNTHROID ETC.)
 0 NO
 1 YES, NOW
 2 YES, NOT NOW
 3 MAYBE
 . UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE24

Variable name: thyroid_med_core24

Description: Interim history of thyroid medication use in exam 24

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FQ165 and FQ166 in core exam 24.

FQ165 MEDICATION USE - THYROID EXTRACT (DESSICATED THYROID)
 0 NO
 1 YES, NOW
 2 YES, NOT NOW
 3 MAYBE
 . UNKNOWN

FQ166 MEDICATION USE - THYROXINE (SYNTHROID, ETC)
 0 NO
 1 YES, NOW
 2 YES, NOT NOW
 3 MAYBE
 . UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE25

Variable name: thyroid_med_core25

Description: Interim history of thyroid medication use in exam 25

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FR217 and FR218 in core exam 25.

FR217 OTHER MEDICATIONS - THYROID EXTRACT (DESSICATED THYROID)

0 NO
1 YES, NOW
2 YES, NOT NOW
3 MAYBE
. UNKNOWN

FR218 OTHER MEDICATIONS - THYROXINE (SYNTHROID, ETC)

0 NO
1 YES, NOW
2 YES, NOT NOW
3 MAYBE
. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE26

Variable name: thyroid_med_core26

Description: Interim history of thyroid medication use in exam 26

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from F216 and F217 in core exam 26.

FS276 NONCARDIOVASCULAR MEDICATIONS: THYROID EXTRACT
(DESSICATED THYROID)

0 NO
1 YES, NOW
2 YES, NOT NOW

Thyroid Medicine Variables

3 MAYBE
. UNKNOWN

FS277 NONCARDIOVASCULAR MEDICATIONS: THYROXINE
(SYNTHROID, ETC.)

0 NO
1 YES, NOW
2 YES, NOT NOW
3 MAYBE
. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE27

Variable name: thyroid_med_core27

Description: Interim history of thyroid medication use in exam 27

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable was derived from FT283 and FT284 in core exam 27.

FT283 NONCARDIOVASCULAR MEDICATIONS: THYROID EXTRACT
(DESICCATED THYROID)

0 NO
1 YES, NOW
2 YES, NOT NOW
3 MAYBE
. UNKNOWN

FT284 NONCARDIOVASCULAR MEDICATIONS: THYROXINE
(SYNTHROID, ETC.)

0 NO
1 YES, NOW
2 YES, NOT NOW
3 MAYBE
. UNKNOWN

Refer to R code for more information.

THYROID_MED_CORE28

Variable name: thyroid_med_core28

Description: Interim history of thyroid medication use in exam 28

Thyroid Medicine Variables

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable is based on ATC coded datasets. Refer to appendix/R code for more information.

THYROID_MED_CORE29

Variable name: thyroid_med_core29

Description: Interim history of thyroid medication use in exam 29

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable is based on ATC coded datasets. Refer to appendix/R code for more information.

THYROID_MED_CORE30

Variable name: thyroid_med_core30

Description: Interim history of thyroid medication use in exam 30

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable is based on ATC coded datasets. Refer to appendix/R code for more information.

THYROID_MED_CORE31

Variable name: thyroid_med_core31

Description: Interim history of thyroid medication use in exam 31

Code or Value	Description
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Thyroid Medicine Variables

0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable is based on ATC coded datasets. Refer to appendix/R code for more information.

THYROID_MED_CORE32

Variable name: thyroid_med_core32

Description: Interim history of thyroid medication use in exam 32

Code or Value	Description
0	No thyroid medication usage
1	Thyroid medication usage
.	Did not attend exam/Unknown

Note: This variable is based on ATC coded datasets. Refer to appendix/R code for more information.

Appendix – Thyroid ATC codes

ATC codes for Thyroid

H03	THYROID THERAPY	
H03A	THYROID PREPARATIONS	
<i>H03AA</i>	<i>Thyroid hormones</i>	
H03AA01	Levothyroxine sodium	
H03AA02	Liothyronine sodium	
H03AA03	Combinations of levothyroxine and liothyronine	
H03AA04	Tiratricol	
H03AA05	Thyroid gland preparations	
H03B	ANTITHYROID PREPARATIONS	
<i>H03BA</i>	<i>Thiouracils</i>	
H03BA01	Methylthiouracil	
H03BA02	Propylthiouracil	
H03BA03	Benzylthiouracil	
<i>H03BB</i>	<i>Sulfur-containing imidazole derivatives</i>	
H03BB01	Carbimazole	
H03BB02	Thiamazole	
H03BB52	Thiamazole, combinations	
<i>H03BC</i>	<i>Perchlorates</i>	
H03BC01	Potassium perchlorate	
<i>H03BX</i>	<i>Other antithyroid preparations</i>	
H03BX01	Diiodotyrosine	
H03BX02	Dibromotyrosine	
H03C	IODINE THERAPY	
<i>H03CA</i>	<i>Iodine therapy</i>	*not included
<i>H03CA</i>	<i>Iodine therapy</i>	