-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Count of Co-occurences \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

USE AgeDx -- The name of your database is likely to be different

-- Create new tables from DxAge\_x tables and use CAST to change data types

/\*

DROP TABLE #temp

SELECT \* INTO #temp FROM [dbo].[DxAge\_1] -- 4233546 rows

INSERT INTO #temp SELECT \* FROM [dbo].[DxAge\_2] -- 5223128 rows

INSERT INTO #temp SELECT \* FROM [dbo].[DxAge\_3] -- 4179754 rows

INSERT INTO #temp SELECT \* FROM [dbo].[DxAge\_4] -- 3807014 rows

DROP TABLE dbo.final

SELECT CAST([id] as int) as id

 , [icd9]

 , CASE AgeAtDx WHEN 'NULL' THEN null ELSE CAST(AgeAtDx as float) END as AgeAtDx

 , CASE AgeAtFirstDM WHEN 'NULL' THEN null ELSE CAST(AgeAtFirstDM as float) END as [AgeAtFirstDM]

 , CASE AgeAtDeath WHEN 'NULL' THEN null ELSE CAST(AgeAtDeath as float) END as [AgeAtDeath]

INTO dbo.final

FROM #temp

\*/

SELECT Count(\*) FROM dbo.final

--(17,443,442 rows)

-- Select distinct ICD codes for each person

DROP TABLE #temp

SELECT DISTINCT ID, ICD9

INTO #temp

FROM dbo.final

SELECT TOP 5 \* from #temp WHERE ID='86154'

/\*

ID ICD9

86154 IV15.3

86154 IE933.1

86154 IV10.02

86154 I356.9

86154 I530.81

\*/

-- (10,265,591 row(s) affected)

DROP TABLE #list

SELECT id, STUFF((SELECT ',' +x.icd9 FROM #temp x

WHERE x.id=y.id ORDER BY icd9 for xml path ('')), 1,1,'') AS ICD9List

INTO #list

FROM #temp y

GROUP BY id

ORDER BY id ASC

 -- (829827 row(s) affected)

SELECT TOP 5 \* FROM #list

 id ICD9List

23347 I309.3,I327.23,I333.94,I346.90,I401.9,I493.90,IV62.84

23348 I403.90,I582.9,I585.9,IV58.49

23349 I244.9,I250.02,I272.4,I294.8,I403.90,I585.9,IV58.67

23350 I560.9,I787.01

23351 I294.8,I403.90,I465.9,I525.9,I585.9,I787.21,IV12.54,IV66.7

SELECT top 20 ICD9List, COUNT(ID) AS CntPt

FROM #list

GROUP BY ICD9List

HAVING COUNT(ID) >29

ORDER BY COUNT(ID)

/\*

ICD9List CntPt

I185.,I401.9,I530.81 30

I153.4 30

I188.9,IV58.49 30

I272.4,I401.9,I722.10 30

I285.9,I715.35 30

I296.90,I309.81 30

I300.4,I309.81 30

I401.9,I427.89 30

I475. 30

I550.91,IV58.75 30

I681.00 30

I724.02,I738.4 30

I727.61 30

IV58.89 30

I296.30,IV62.84 31

I296.33,IV62.84 31

I300.00,I786.59 31

I346.90 31

I415.19 31

I434.91 31

\*/