## Supplementary Online Content

Modi ZJ, Lu Y, Ji N, et al. Risk of cardiovascular disease and mortality in young adults with end-stage renal disease: an analysis of the United States Renal Data System. *JAMA Cardiol*. Published online March 20, 2019. doi:10.1001/jamacardio.2019.0375

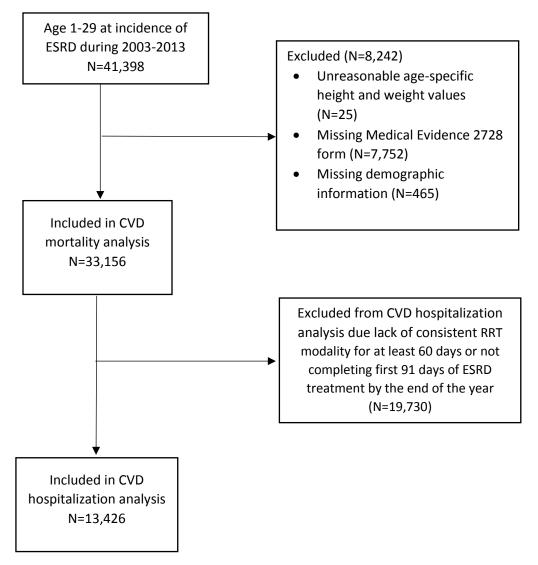
eFigure. Participation Flowchart

eTable 1. ICD-9 Codes Used for Cardiovascular Hospitalizations

eTable 2. Death Notification Form Cause of Death Codes Used for Cardiovascular Mortality

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Participation Flowchart



Diagnosis Groups	ICD-9 Diagnosis and Procedure Codes
Coronary Artery Disease and Infarction	410, 410.0, 410.1, 410.2, 410.3, 410.4, 410.5, 410.6, 410.7, 410.8, 410.9, 411, 411.0, 411.1, 411.8, 412, 413, 413.0, 413.1, 413.9, 414, 414.0, 414.01, 414.02, 414.05, 414.06, 414.07, 414.1, 414.10, 414.11, 414.12, 414.19, 414.2, 414.3, 414.4, 414.8, 414.9, 440, 440.1, 440.2, 440.21, 440.22, 440.23, 440.24, 440.29, 440.3, 440.4, 440.8, 440.9, 441, 441.0, 441.3, 441.4, 441.9, 442, 443.2, 443.21, 443.22, 443.23, 443.24, 443.29, 443.8, 443.9, 444, 445, 447.1, 447.2, 447.3, 447.5, 447.6, 447.7, 447.70, 447.71, 447.72, 447.73, 447.8, 447.9, 448, 448.0, 448.1, 448.9, 449, 429.2, 459.1, 459.10, 459.11, 459.12, 459.13, 459.19, 459.2, 459.3, 459.30, 459.31, 459.32, 459.33, 459.39, 459.8, 459.81, 459.89, 459.9, 429.7, 429.71, 429.79
Arrhythmia	426, 426.0, 426.1, 426.10, 426.11, 426.12, 426.13, 426.3, 426.4, 426.5, 426.6, 426.7, 426.8, 426.9, 427, 427.0, 427.1, 427.2, 427.3, 427.31, 427.32, 427.4, 427.41, 427.5, 427.6, 427.8, 427.81, 427.89, 427.9
Heart Failure	404.03, 428, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9, 402.01, 402.11 402.91, 404.13, 404.93, 398.91
Non-Atherosclerotic Vascular Disease	442.0, 442.2, 442.3, 442.82, 444.21, 447.0, 430, 431, 432, 432.0, 432.1, 432.9, 433, 433.0, 433.1, 433.2, 433.3, 433.8, 433.9, 434.0, 434.00, 434.01, 434.1, 434.10, 434.11, 434.9, 435, 435.0, 435.1, 435.2, 435.3, 435.8, 435.9, 436, 437, 437.0, 437.1, 437.3, 437.4, 437.5, 437.6, 437.7, 437.8, 437.9, 438, 438.0, 438.1, 438.10, 438.11, 438.12, 438.13, 438.14, 438.19, 438.2, 438.20, 438.21, 438.22, 438.3, 438.4, 438.5, 438.8, 438.81, 438.82, 438.83, 438.84, 438.85, 438.9, 446, 446.1, 446.5, 443.82, 443.0, 443.1, 447.4
Valve Disease Other	394, 395, 396, 397, 391.1, 424.0, 424.1, 424.3, V433, 424.9, 421, 421.0 420, 420.9, 420.91, 422, 422.9, 422.91, 423, 425, 425.0, 425.1, 425.2, 425.3, 425.4, 425.5, 425.7, 425.8, 425.9, 429, 429.0, 429.1, 429.2, 429.3, 429.4, 429.5, 429.6, 429.8, 429.81, 429.82, 429.83, 429.89, 429.9, 416, 746.1, 746.2, 746.3, 746.4, 746.5, 746.6, 746.7, 746.8, 746.81, 746.82, 746.83, 746.84, 746.85, 746.86, 746.87, 746.89, 745, 745.0, 745.1, 745.10, 745.11, 745.12, 745.19, 745.2, 745.3, 745.4, 745.5, 745.6, 745.60, 745.61, 745.69, 745.7, 745.8, 745.9, 398.99, 398.0, 398.9, 398.90, 391.2, 391.8, 391.9, 391.0, 402.00, 402.10, 402.90, 404.02, 404.12, 404.92, ,747, 747.0, 747.1, 471.0, 747.11, 747.2, 747.20, 747.21, 747.22, 747.29, 747.3, 747.31, 747.32, 747.39, 747.4, 747.40, 747.41, 747.42, 747.49, 747.5, 747.6, 747.60, 747.62, 747.63, 747.64, 747.69, 747.8, 747.81, 747.82, 747.83, 747.89, 747.9

eTable 1. ICD-9 Codes Used for Cardiovascular Hospitalizations

## eTable 2. Death Notification Form Cause of Death Codes Used for Cardiovascular Mortality

Cause of Death Codes Included 23 Acute Myocardial Infarction 25 Pericarditis, including Cardiac Tamponade 26 Atherosclerotic Heart Disease 27 Cardiomyopathy 28 Cardiac Arrhythmia 29 Cardiac Arrest 30 Valvular Heart Disease 32 Congestive Heart Failure 36 Cerebrovascular Accident including Intracranial Hemorrhage 61 Cardiac Infection (Endocarditis)