

Supplementary Online Content

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eAPPENDIX 1. Exclusion Criteria (Prior Diagnosis of Diabetes and Pregnancy)

eAPPENDIX 2. Criteria to Determine High-Risk Factors

This supplementary material has been peer reviewed, edited, and approved by the authors.

eAPPENDIX 2. **Criteria to Determine High-Risk Factors^a**

High-risk factor	Definition	Criteria	ICD-9 codes
Age	Age ≥45 y	Age ≥45 y as of January 1, 2005	None
Ethnicity	African American, Latino, Native American, Asian American, or Pacific Islander	Listed ethnicity	None
Hypertension	By diagnosis code	2 ICD-9 codes per criteria of Elixhauser et al ¹⁹ on 2 separate occasions within any 2-y period in 2003-2007	401.1, 401.9, 402.10, 402.90, 404.10, 404.90, 405.11, 405.19, 405.91, 405.99
Cholesterol	Hyperlipidemia or hypertriglyceridemia by diagnosis code or laboratory test result	2 ICD-9 codes per criteria of Segars and Lea ²¹ on 2 separate occasions within any 2-y period in 2003-2007 OR low-density lipoprotein cholesterol level ≥160 mg/dL ¹⁸ or high-density lipoprotein cholesterol level <35 mg/dL or triglyceride level >250 mg/dL ⁹	272.0-272.9
Polycystic ovarian syndrome	By diagnosis code	2 ICD-9 codes ^b on 2 separate occasions within any 2-y period in 2003-2007	256.4
Prediabetes	Impaired fasting glucose, impaired glucose tolerance, subclinical diabetes, or gestational diabetes by diagnosis code	2 ICD-9 codes ^b on 2 separate occasions in 2003-2004	Impaired fasting glucose: 790.21 Impaired glucose tolerance: 790.22 Subclinical diabetes: 790.29 Gestational diabetes: 648.8
Vascular disease	Ischemic heart disease, stroke, or peripheral vascular disease by diagnosis code	2 ICD-9 codes per Chronic Condition Data Warehouse ²⁰ (ischemic heart disease), Goldstein, ²² Tirschwell and Longstreth ²³ (stroke), or Elixhauser et al ¹⁹ (peripheral vascular disease) on 2 separate occasions within any 2-y period in 2003-2007	Ischemic heart disease: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.10, 414.11, 414.12, 414.19, 414.8, 414.9 Stroke: 430, 431, 434.00, 434.01, 434.10, 434.11, 434.90, 434.91, 435.0, 435.1, 435.3, 435.8, 435.9, 436, 997.02 Peripheral vascular disease: 440.0, 440.1, 440.2, 440.20, 440.21, 440.22, 440.23, 440.24, 440.29, 440.30, 440.31, 440.32, 440.8, 440.9, 441.2, 441.4, 441.7, 441.9, 443.1, 443.81, 443.89, 443.9, 447.1, 557.1, 557.9, V434
Overweight	BMI ≥25 or overweight or obese by diagnosis code	2 ICD-9 codes per criteria of Elixhauser et al ¹⁹ on 2 separate occasions within any 2-y period in 2003-2007 OR most recent recorded BMI ≥25	278.0, 278.00, 278.01

^a High-risk variables for the 3 American Diabetes Association risk factors—physical inactivity, first-degree family history, and other clinical conditions with insulin resistance—were not available. BMI = body mass index; ICD-9 = *International Classification of Diseases, 9th Revision*.

^b Only single ICD-9 code exists; no validation references available.

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eAPPENDIX 1. Exclusion Criteria (Prior Diagnosis of Diabetes and Pregnancy)^a

Condition	Definition	Criteria	ICD-9 codes
Diabetes mellitus	By diagnosis code	2 ICD-9 codes per Hebert ¹⁴ on 2 separate occasions within any 2-y period in 2003-2004 ^b	250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93, 357.2, 362.01, 362.02, 366.41
Pregnancy	By diagnosis code	≥1 PP-1 code OR both a PP-2 and PP-4 code in any year in 2003-2007. PP-1 and PP-4 are ICD-9 codes, PP-2 is a CPT code	PP-1: 650, V27, V27.0, V27.2, V27.3, V27.5, V27.6; PP-2: 59400, 59409, 59410, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620, 59622; PP-4: 640.01, 640.11, 640.21, 640.31, 640.41, 640.51, 640.61, 640.71, 640.81, 640.91, 641.01, 641.11, 641.21, 641.31, 641.41, 641.51, 641.61, 641.71, 641.81, 641.91, 642.01, 642.02, 642.11, 642.12, 642.21, 642.22, 642.31, 642.32, 642.41, 642.42, 642.51, 642.52, 642.61, 642.62, 642.71, 642.72, 642.81, 642.82, 642.91, 642.92, 643.01, 643.11, 643.21, 643.31, 643.41, 643.51, 643.61, 643.71, 643.81, 643.91, 644.21, 645.11, 645.21, 646.01, 646.11, 646.12, 646.21, 646.22, 646.31, 646.41, 646.42, 646.51, 646.52, 646.61, 646.62, 646.71, 646.81, 646.82, 646.91, 647.01, 647.02, 647.11, 647.12, 647.21, 647.22, 647.31, 647.32, 647.41, 647.42, 647.51, 647.52, 647.61, 647.62, 647.71, 647.72, 647.81, 647.82, 647.91, 647.92, 648.01, 648.02, 648.11, 648.12, 648.21, 648.22, 648.31, 648.32, 648.41, 648.42, 648.51, 648.52, 648.61, 648.62, 648.71, 648.72, 648.81, 648.82, 648.91, 648.92, 651.01, 651.11, 651.21, 651.31, 651.41, 651.51, 651.61, 651.71, 651.81, 651.91, 652.01, 652.11, 652.21, 652.31, 652.41, 652.51, 652.61, 652.71, 652.81, 652.91, 653.01, 653.21, 653.31, 653.41, 653.51, 653.61, 653.71, 653.81, 653.91, 654.01, 654.02, 654.11, 654.12, 654.21, 654.22, 654.31, 654.32, 654.41, 654.42, 654.51, 654.52, 654.61, 654.62, 654.71, 654.72, 654.81, 654.82, 654.91, 654.92, 655.01, 655.21, 655.31, 655.41, 655.51, 655.61, 655.71, 655.81, 655.91, 656.01, 656.11, 656.21, 656.31, 656.51, 656.61, 656.71, 656.81, 658.91, 659.01, 659.11, 659.21, 659.31, 659.41, 659.51, 659.61, 659.71, 659.81, 659.91, 660.01, 660.11, 660.21, 660.31, 660.41, 660.51, 660.61, 660.71, 660.81, 660.91, 661.01, 661.11, 661.21, 661.31, 661.41, 661.51, 661.61, 661.71, 661.81, 661.91, 662.01, 662.11, 662.21, 662.31, 662.41, 662.51, 662.61, 662.71, 662.81, 662.91, 663.01, 663.11, 663.21, 663.31, 663.41, 663.51, 663.61, 663.71, 663.81, 663.91, 663.93, 664.01, 664.11, 664.21, 664.31, 664.41, 664.51, 664.61, 664.71, 664.81, 664.91, 665.01, 665.11, 665.22, 665.31, 665.41, 665.51, 665.61, 665.71, 665.72, 665.81, 665.82, 665.91, 665.92, 666.02, 666.12, 666.22, 666.32, 666.42, 666.52, 666.62, 666.72, 666.82, 666.92, 667.02, 667.12, 667.22, 667.32, 667.42, 667.52, 667.62, 667.72, 667.82, 667.92, 668.01, 668.02, 668.11, 668.12, 668.21, 668.22, 668.31, 668.32, 668.41, 668.42, 668.51, 668.52, 668.61, 668.62, 668.81, 668.82, 668.91, 668.92, 669.01, 669.02, 669.11, 669.12, 669.21, 669.22, 669.31, 669.32, 669.41, 669.42, 669.51, 669.52, 669.61, 669.62, 669.71, 669.72, 669.81, 669.82, 669.91, 669.92, 670.02, 671.01, 671.02, 671.11, 671.12, 671.21, 671.22, 671.31, 671.32, 671.41, 671.42, 671.51, 671.52, 671.61, 671.62, 671.71, 671.72, 671.81, 671.82, 671.91, 671.92, 672.02, 673.01, 673.02, 673.11, 673.12, 673.21, 673.22, 673.31, 673.32, 673.41, 673.42, 673.51, 673.52, 673.61, 673.62, 673.71, 673.72, 673.81, 673.82, 674.01, 674.02, 674.12, 674.22, 674.32, 674.42, 674.51, 674.52, 674.62, 674.72, 674.81, 674.82, 674.92, 675.01, 675.02, 675.11, 675.12, 675.21, 675.22, 675.31, 675.32, 675.41, 675.42, 675.51, 675.52, 675.61, 675.62, 675.71, 675.72, 675.81, 675.82, 675.91, 675.92, 676.01, 676.02, 676.11, 676.12, 676.21, 676.22, 676.31, 676.32, 676.41, 676.42, 676.51, 676.52, 676.61, 676.62, 676.71, 676.72, 676.81, 676.82, 676.91, 676.92

^a ICD-9 = *International Classification of Diseases, 9th Revision*; PP = pregnancy.

^b Note codes and criteria used to remove patients with diabetes in the run-in period in 2003-2004 were the same codes and criteria used to determine new cases of diabetes mellitus in the years 2005-2007.

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