**A Model EHR-based Clinical Decision Support System for Public Health**

**Metrics and definitions developed by the Institute for Family Health and the New York City Department of Health and Mental Hygiene**

| **Metric No.** | **METRIC** | **NUMERATOR** | **DENOMINATOR** |
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| 1 | **POPULATION: Asthmatics**  Asthma Control | Patients who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment (leukotriene modifiers, cromolyn sodium, nedocromil sodium, or  sustained-released methylxanthines)  (drug list available at www. amaassn.  org/ama/pub/category/4837.html) | All patients ages 5-40 years with mild, moderate, or severe persistent asthma Patient selection: ICD-9-CM Codes for asthma: 493.00-493.92; and Additional individual medical record review must be completed to identify those patients with mild, moderate, or severe persistent asthma; and Patient’s age is between 5 and 40 years  Exclusions: Documentation of patient reason(s) for not prescribing either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment. |
| 2 | **POPULATION: Preventive care**  Breast Cancer Screening | Number of patients in denominator who had a mammogram (ordered or self-reported) within 24 months up to and including the last day of the reporting period NCQA measure uses the following numerator codes: (CPT Codes: 76083, 76090-76092; ICD-9-CM Codes 87.36, 87.37; V-Codes: V76.11, V76.12; UB-92 Codes; 0401, 0403)  Documentation in the medical record must include both of the following: a note indicating the date the mammogram was performed and the result or finding. | Number of unique female patients 52-69 years of age having at least one visit in the previous 12 months up to and including the last day of the reporting period.  Exclude women who had a bilateral mastectomy. If there is evidence of two separate mastectomies, this patient may be excluded from the measure. The bilateral mastectomy must have occurred by the last day of the measurement year. (For Bilateral: ICD-9-CM Codes: 85.42, 85.44, 85.46, 85.48; CPT Codes: 19180.50 or 19180 w/modifier 09950\*, 19200.50 or 19200 w/modifier code 09950\*, 19220.50 or 19220 w/modifier 09950\*, 19240.50 or 19240 w/ modifier 09950\*.) (For Unilateral codes (need 2 separate occurrences on 2 different dates of service): ICD-9-CM Codes: 85.41, 85.43, 85.45, 85.47; CPT Codes 19180, 19200, 19220, 19240) \*.50 and 09950 modifier codes indicate the procedure was bilateral and performed during the same operative session. |
| 3 | **POPULATION: Preventive care**  Cervical Cancer Screening | Number of patients in denominator having had a Cervical cancer screening test (PAP test) within 36 months up to and including the last day of the reporting period.  Documentation in the medical record must include a note indicating the date the test was performed, and the result or finding. | Number of unique female patients age 21-64 having at least one visit in the previous 12 months up to and including the last day of the reporting period  Exclude women who had a hysterectomy and who have no residual cervix. Exclusionary evidence in the medical record must include a note indicating a hysterectomy with no residual cervix. Documentation of “complete hysterectomy”, “total hysterectomy”, “total abdominal hysterectomy”, or “radical hysterectomy” meets the criteria for hysterectomy with no residual cervix. Documentation of “hysterectomy” alone does not meet the criteria because it does not indicate the cervix has been removed.) The hysterectomy must have occurred by the last day of the measurement year. Use any of the following codes or descriptions of codes in the medical record, listed below to identify allowable exclusions: Surgical codes for hysterectomy CPT (51925, 56308, 58150, 58152, 58200, 58210, 58240, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290-58294, 58550, 58551, 58552-58554, 58951, 58953-58954, 58956, 59135) ICD-9-CM (68.4-68.8, 618.5) V codes: (V67.01, V76.47) |
| 4 | **POPULATION: Preventive care**  Colorectal Cancer Screening | Number of patients in denominator having one or more of the following documented completed tests: (1) a fecal occult blood test within 12 months up to and including the last day of the reporting period, (2) a flexible sigmoidoscopy within 5 years up to and including the last day of the reporting period, (3) a double contrast barium enema within 5 years up to and including the last day of the reporting period, (4) a colonoscopy within 10 years up to and including the last day of the reporting  Documentation in the medical record must  include both of the following:  • a note indicating the date the colorectal cancer screening was performed, and  • for a notation in the progress notes, the result or finding (this ensures the screening was performed and not merely ordered.)  For a notation in the medical history, a result is not required. Documentation in the medical history pertains to screenings that happened in the past and it is assumed that the result was negative (a positive result would have been noted as such). A notation in the medical history must include a date reference that meets the timeline outlined in the specifications. | Number of unique patients, ages 51-80, with at least one visit in past 12 months |
| 5 | **POPULATION: Diabetes**  A1C testing in patients with diabetes | Number of patients in denominator who had one or more HbA1c test results recorded during the past 12 months up to and including the last day of the reporting period. (can be identified through either CPT Code 83036 or LOINC Codes 4548-4, 4549-2, 17855-8, 17856-6, or 4637-5, or an automated laboratory record with a service date, or, at minimum, documentation in the medical record must include a note indicating the date on which the HbA1c test was performed and the result.) | Number of unique patients seen in the reporting period, 18-75 years of age, with two ambulatory care visits since diabetes diagnosis in past 24 months. Diabetes diagnosis: ICD-9- CM Codes 250, 357.2, 362.0, 366.41, 648.0; DRGs 294, 205 Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241, 99245, 99271-99275, 99301-99303, 99311-99313, 99321-99323, 99331-99333, 99341-99355, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99499; UB-92 Revenue Codes 019X, 0456, 049X-053X, 055X-059X, 065X, 066X, 076X, 077X, 082X-085X, 088X, 092X, 094X, 096X, 0972-0979, 0982-0986, 0988, 0989 |
| 6 | **POPULATION: Diabetes**  A1C levels in patients with Diabetes (good control) | Number of patients in denominator having at least one A1C level measured in the past 12 months up to and including the last day of the reporting period, AND whose most recent recorded A1C level is < 7.0%. | Same denominator and exclusions as measure 360 |
| 7 | **POPULATION: Diabetes**  A1C levels in patients with Diabetes (poor control) | Number of patients in denominator having at least one A1C level measured in the past 12 months up to and including the last day of the reporting period, and whose most recent recorded A1C level is >9.0%, PLUS the number of patients in denominator who have had no A1C levels measured in the previous 12 months up to and including the last day of the reporting period. | Same denominator and exclusions as measure 360 |
| 8 | **POPULATION: Diabetes**  LDL levels (<100) in patients with Diabetes | Number of patients in denominator having at least one LDL Cholesterol level measured in the past 12 months up to and including the last day of the reporting period, and whose most recent recorded LDL level is < 100 mg/dl | Same denominator and exclusions as measure 360 (Diabetes) |
| 9A | **POPULATION: Preventive care**  Flu shots 50-64 (PM) | Number of patients in denominator who received a flu shot since the most recent September 1 | Number of unique patients ages 50-64, seen for at least one visit in the previous 24 months up to and including the last day of the reporting period. |
| 9B | **POPULATION: Preventive care**  Flu shots over 64 (PM) | Number of patients in denominator who received a flu shot since the most recent September 1 | Number of unique patients at least age 65, seen for at least one visit in the previous 24 months up to and including the last day of the reporting period. |
| 10 | **POPULATION: Cardiovascular disease**  Ischemic Vascular  Disease(IVD): use of aspirin or another  antithrombotic | The number of patients who have documentation of use of aspirin or another antithrombotic during the 12-month measurement period. Documentation in the medical record must include, at a minimum, a note indicating the date on which aspirin or another antithrombotic was prescribed or documentation of prescription from another treating physician. (Exclude patient self-report). | Number of patients, age 18 years and older with a diagnosis of ischemic vascular disease (IVD) for at least 12 months, who have been under the care of the physician or physician group for IVD for at least 12 months (this is defined by documentation of a face-to-face visit for IVD care between the physician and the patient that predates the most recent IVD visit by at least 12 months.) Codes to Identify a Patient with a Diagnosis of Ischemic Vascular  Disease: ICD-9: 411, 413, 414.0, 414.8, 414.9,  429.2, 433-434, 440.1, 440.2, 444, 445 |
| 11 | **POPULATION: Cardiovascular disease**  LDL levels (<100) in patients with Ischemic Vascular Disease (IVD) | Number of patients in denominator having at least one LDL Cholesterol level measured in the past 12 months up to and including the last day of the reporting period, AND who has a recorded LDL level of < 100 mg/dl in the past 12 months. (Exclude patient self-report or self-monitoring, LDL to HDL ratio and findings reported on progress notes or other non-laboratory documentation). | Number of patients, age 18 years and older with a diagnosis of ischemic vascular disease (IVD) for at least 12 months, who have been under the care of the physician or physician group for IVD for at least 12 months (this is defined by documentation of a face-to-face visit for IVD care between the physician and the patient that predates the most recent IVD visit by at least 12 months.) Codes to Identify a patient with a diagnosis of Ischemic Vascular Disease: ICD-9: 411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445 |
| 12 | **POPULATION: Preventive care**  Pneumococcal vaccination | Number of patients in denominator who have ever received the pneumococcal vaccination (CPT code 90732) | Number of unique patients who were age 65 or older seen for at least one visit in the reporting period  Exclusions:  • Previous anaphylactic reaction to the vaccine/components  • Other medical reason(s) documented by the  practitioner for not receiving a pneumococcal  vaccination (ICD-9-CM Exclusion Codes for PC-8  pneumonia vaccination: 995.0 and E949.6, 995.1  and E949.6, 995.2 and E949.6  • Patient reason(s) (e.g., economic, social, religious) |