Work flow for ICD-10 conversion

We work on operationalizing each POP individually

Susie delivers to Jodi description of counts of each POP as: mean, median, IQR for the whole country in aggregate for review

Jodi reviews the diagnosis and procedures codes resulting from use of Crosswalk

Susie prepares SAS code for individual POP and runs the counts in 2010; pays attention to the unit of observation\*

Susie stacks all eligible benes for each POP into a long file with each row including the indicator of **victim-hood, ACG, sex, age, and the indicator for HRR** or the new indicator for health system attribution

Jodi works on figuring out the AHRQ tool that aggregates hospitals into health systems

Hsien-yen generates an **ACG measure** for each of the included eligible benes

\***unit of observation**: for some POPs, it is per person per date of service (multiple eligible episodes), for some POPs, it is per person (only once per year)

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| **Mean and Median Counts of Indicators of Overuse Across Regions, 2010 Months 1-6 (N=422 regions) -MARKETSCAN** | | | | | |
|  | **Per 1000** | | | | |
| **Overuse Indicator** | **Mean** | **Median** | **Interquartile Range** | | |
| Stress echocardiography in symptomatic or ischemic equivalent acute chest pain\* | 52.4 | 36.6 | 0.0 | - | 72.8 |
| Laminectomy or spinal fusion | 0.6 | 0.6 | 0.4 | - | 0.8 |
| Hysterectomy for benign disease | 3.5 | 3.3 | 2.5 | - | 4.3 |
| Fiberoptic laryngoscopy for sinusitis diagnosis\* | 2.4 | 1.6 | 0.7 | - | 3.0 |
| Nasal endoscopy for sinusitis diagnosis\* | 21.3 | 16.4 | 9.5 | - | 28.5 |
| Routine monitoring of digoxin in patients with congestive heart failure | 18.7 | 16.6 | 9.6 | - | 23.5 |
| EEG monitoring in individuals presenting with syncope\* | 59.6 | 55.3 | 39.2 | - | 75.4 |
| Serological tests for *Helicobacter pylori* | 4.2 | 4.1 | 2.8 | - | 5.4 |
| MRI in adults with mild traumatic brain injury\* | 22.9 | 20.8 | 7.5 | - | 31.3 |
| PET, CT, and radionuclide bone scan in individuals with low-risk prostate cancer | 112 | 105 | 80.3 | - | 135 |
| Traction for low back pain | 222 | 216 | 169 | - | 271 |
| Screening for asymptomatic carotid artery stenosis in the general adult population | 1.3 | 1.1 | 0.8 | - | 1.6 |
| Preoperative chest radiography in the absence of a clinical suspicion\* | 135 | 118 | 89.6 | - | 165 |
| Tumor marker studies in asymptomatic women with previously treated breast cancer | 289 | 272 | 165 | - | 386 |
| Diagnostic tests, such as immunoglobulin testing, in the evaluation of allergy\* | 12.2 | 10.5 | 5.9 | - | 16.7 |
| Sinus CT for uncomplicated acute rhinosinusitis\* | 1.1 | 0.9 | 9.0 | - | 1.4 |
| MRI lumbar spine for low back pain\* | 491 | 493 | 454 | - | 530 |
| Thorax CT use with and without contrast\* | 70.2 | 47.4 | 22.9 | - | 94.0 |
| Abdomen CT use with and without contrast\* | 182 | 136 | 90.6 | - | 259 |
| \*Count is per 1000 eligible episodes rather than per 1000 beneficiaries  CT indicates computed tomography; EEG, electroencephalography; MRI, magnetic resonance imaging; PET, positron emission tomography. | | | | | |

This is 2010 – **MarketScan** rates of events. These are the means and medians of each region (should be roughly. The total count across the country (not the average of the regional measures) will be somewhere around the mean/median.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mean and Median Counts of Potentially Overuse Procedures (POPs)**  **Across Hospital Referral Regions (n=306 regions) –Medicare 2008** | | | | | | | | | | | | | |
|  | | **Potentially Overused Procedure** | | **Mean** | | **Median** | | **Interquartile Range** | | | | |
|  | |  | **Per 1000** | | **Per 1000** | | **Per 1000** | | | **Per 1000** | |
| POP 01 | | Stress echocardiography for detection of CAD/risk assessment in symptomatic or ischemic equivalent acute chest pain \* | 33.0 | | 22.7 | | | | 2.7 | | 45.5 | | |
| POP 10 | | Laminectomy or spinal fusion | 2.2 | | 1.9 | | 1.2 | | | 2.9 | |
| POP 11 | | Hysterectomy for benign disease | 2.8 | | 2.7 | | 1.5 | | | 3.9 | |
| POP 20 | | Fiberoptic laryngoscopy for sinusitis diagnosis\* | 7.0 | | 5.2 | | 2.2 | | | 9.5 | |
| POP 21 | | Nasal endoscopy for sinusitis diagnosis\* | 34.9 | | 24.8 | | 12.1 | | | 45.8 | |
| POP 24 | | More than one emergency department visit in last 30 days of life | 146 | | 147 | | 121 | | | 168 | |
| POP 26 | | Routine monitoring of digoxin in patients with congestive heart failure | 3.6 | | 3.5 | | 2.8 | | | 4.2 | |
| POP 27 | | EEG monitoring in individuals presenting with syncope\* | 22.8 | | 21.2 | | 13.3 | | | 29.4 | |
| POP 32 | | Serological tests for helicobacter pylori | 9.3 | | 8.2 | | 5.5 | | | 11.2 | |
| POP 34 | | Appropriate Head CT Imaging in Adults with Mild Traumatic Brain Injury\* | 14.7 | | 12.7 | | 6.1 | | | 21.1 | |
| POP 36 | | PET, CT, and radionuclide bone scan in individuals with prostate CA at low risk for metastasis | 20.7 | | 19.4 | | 9.3 | | | 28.4 | |
| POP 37 | | Traction for low back pain\* | 115 | | 106 | | 77.8 | | | 137 | |
| POP 41 | | Screening for asymptomatic carotid artery stenosis in the general adult population | 12.5 | | 11.0 | | 8.4 | | | 14.9 | |
| POP 43 | | Preoperative chest radiography in the absence of a clinical suspicion for intrathoracic pathology\* | 219 | | 213 | | 168 | | | 259 | |
| POP 45 | | In asymptomatic women with previously treated breast cancer, performing follow-up tumor marker studies | 732 | | 672 | | 464 | | | 984 | |
| POP 46 | | Diagnostic tests, such as immunoglobulin G testing or an indiscriminate battery of immunoglobulin E tests, in the evaluation of allergy\* | 4.5 | | 3.7 | | 1.7 | | | 5.8 | |
| POP 47 | | Sinus CT or indiscriminately prescribe antibiotics for uncomplicated acute rhinosinusitis \* | 14.0 | | 12.4 | | 6.9 | | | 19.1 | |
| POP 49 | | MRI Lumbar Spine for Low Back Pain \* | 395 | | 395 | | 356 | | | 441 | |
| POP 50 | | Thorax CT Use of Contrast Material\* | 64.9 | | 47.5 | | 26.8 | | | 79.7 | |
| POP 51 | | Abdomen CT use of contrast material\* | 222 | | 187 | | 133 | | | 288 | |

\*count is per 1000 eligible episodes rather than per 1000 beneficiaries, ACS=acute coronary syndrome CAD=coronary artery disease, CT=computed tomography, EEG=electroencephalography, MRI=magnetic resonance imaging, PET=positron emission tomography,