Appendix Table. CPT, ICD-9, and HCPCS codes for colonoscopy and sentinel events and for mammography

| **Procedure** | **CPT** | **ICD-9 Procedure** | **ICD-9**  **Diagnosis** | **HCPCS** | **Revenue center** |
| --- | --- | --- | --- | --- | --- |
| **Complications of Colonoscopy and Colonoscopy Screening\*** |  |  |  |  |  |
| **Identify outpatient colonoscopy based on Medicare place of service code = 22, 24, 49** |  |  |  |  |  |
| Screening |  |  |  | G0105, G0121 |  |
| Diagnostic | 45378 | 45.23 |  |  |  |
| With Polypectomy | 45380, 45383, 45384, 45385, 45392 | 45.42 |  |  |  |
| **Complications from colonoscopy** |  |  |  |  |  |
| **Note: all based on ER visit† or hospitalization within 30 days of the date of the procedure** |  |  |  |  |  |
| Serious gastrointestinal events |  |  |  |  |  |
| Perforation |  |  | 569.83, 998.2 |  |  |
| Gastrointestinal bleeding |  |  | 285.1, 578.x, 998.1 |  |  |
|  |  |  |  |  |  |
| **Mammography‡** | 77055, 77056, 77057  76090, 76091, 76092  77061, 77062, 77063 | 87.36, 87.37 |  | G0202, G0204, G0206 | 0401, 0403 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

\*As per Warren JL, Klabunde CN, Mariotto AB, et al. Adverse events after outpatient colonoscopy in the Medicare population. Ann Intern Med. Jun 16 2009;150(12):849-857. Note that did not include colonoscopy with other procedures, including foreign-body removal, submucosal injection, hemostasis, endoscopic ultrasound, and transmural or intramural aspiration and/or biopsy. To identify ER visits, we used revenue center codes of 0450-0459 or 0981 in the outpatient file or ER\_AMT>0 in the MEDPAR file.

**‡** Mammography based on HEDIS 2015 technical specifications[17](#_ENREF_17), but also including prior similar codes phased out in 2007 (76090-76092) and tomosynthesis codes (77061-77063) (note G0203, G0205 deleted 1/2005). To avoid double counting mammograms due to false positives or facility + physician bills, patients can only have one mammogram in a 3-month period—use the date of the first of these codes. We examined codes in the carrier and outpatient files.