**Supplementary Table 1.** Definition of exclusion criteria within the GI Quality Improvement Consortium (GIQuIC)

|  |  |
| --- | --- |
| **Exclusion criteria** | **Definition within GIQuIC** |
| Inflammatory bowel disease | Indication of “inflammatory bowel disease of the intestine if more precise diagnosis or determination of the extent/severity of activity of disease will influence immediate/future management” or risk assessment of “Inflammatory Bowel Disease ( ≥ 8 years pancolitis or ≥ 15 years left sided colitis) or “Inflammatory Bowel Disease with Known Dysplasia” |
| Serrated polyposis syndrome | Risk assessment of “personal or family history of serrated polyposis syndrome” defined as (1) at least 5 serrated polyps proximal to sigmoid, with 2 or more ≥ 10 mm; (2) any serrated polyps proximal to sigmoid with family history of serrated polyposis syndrome; or (3) > 20 serrated polyps of any size throughout the colon) |
| Personal or family history of a genetic colorectal cancer syndrome | Risk assessment of personal or family history of “High Risk Genetic Family Cancer Syndrome (e.g. Familial Adenomatous Polyposis Syndrome, HNPCC/Lynch Syndrome”) |

**Supplementary Table 2.** Census regions of the United States

|  |  |
| --- | --- |
| **Region** | **States** |
| Northeast | Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, Pennsylvania |
| Midwest | Indiana, Illinois, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota |
| South | Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, Texas |
| West | Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, Wyoming, Alaska, California, Hawaii, Oregon, Washington |

**Supplementary Table 3.** Recommendations for no further colonoscopy among gastroenterologists (GIs) and non-gastroenterologists (non-GIs).

|  |  |
| --- | --- |
| **Finding at surveillance colonoscopy** | **Recommendation for****no further colonoscopy** |
| **GI, %** | **Non-GI, %** | **P-value** |
| Colorectal cancer | 8.4 | 11.9 | 0.25 |
| Advanced lesiona | 6.8 | 4.8 | .006 |
| 3 or more adenomas | 10.1 | 8.4 | .03 |
| 1-2 small adenomas | 17.9 | 15.9 | <.05 |
| Hyperplastic | 21.7 | 19.1 | 0.02 |
| No polyps | 36.7 | 31.2 | <.05 |

aAdvanced lesion was defined as any adenoma ≥10 mm in size, or with high grade dysplasia, or with villous features or significant serrated polyps defined as size ≥10 mm, or with dysplasia or traditional serrated adenoma.

**Supplementary Table 4.** Existing literature regarding the incidence of colorectal cancer (CRC) during surveillance colonoscopy among older adults

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Study** | **Design and setting** | **Age, yrs** | **N** | **CRC incidence rates**  | **Comments** |
| Pinsky and Schoen, 2015, US11 | Secondary data analysis, PLCO trial in 9 US communities | 55-80  | 2398 totalAge 65-69: 1678Age 70-74: 533Age 75-80: 187 | Age ≥70 vs. <70: HR 1.5 (0.7-3.5)Age 65-69: 6.6 per 10,000 PYsAge 70-74: 9.5 per 10,000 PYs  Age 75-80: 11.4 per 10,000 PYs |  |
| Tran et, 2014, US6 | Retrospective, single health system, 2001-2010 | ≥75Mean 79.6  | 4843 Ref age 50-74: 22929  | Age ≥75 vs. <75: HR 0.06 (0.02-0.13) Age 50-74: 36.1 per 10,000 PYs Age ≥ 75: 2.4 per 10,000 PYs |  |
| Van Heijningen et al, 2013, Netherlands13 | Retrospective, 10 hospitals, 1998-2008 | Mean 61.3 | 2990 totalAge 40-69: 1304Age 70-79: 593Age 80-89: 111 |  Age 40-69: 0.96% Age 70-79: 2.4% Age 80-89: 1.8% | Age not included in predictive model |
| Khan et al, 2011, UK15 | Retrospective data base, single center, 2005-2007 | ≥80 | 290 Ref age <80: 1616  |  Age <80: 6.4%  Age ≥80: 15.2% | No indication for colonoscopy |
| Miller et al, 2010, US17 | Retrospective, single center, 1997-2006 | Mean 62 | 399 totalAge ≥64: 217 | 0.5% | Age not evaluated |
| Martinez et al, 2009, North America12 | Secondary data analysis, pooling of 8 prospective studies | Mean 62.0 ± 9.5 | 9167Age <59: 3355Age 60-69: 3676Age 70-79: 2074Age ≥80: 62 |  Age <59: 0.2% Age 60-69: 0.6% Age 70-79: 1.3% Age ≥80: 1.6% |  |
| Duncan et al, 2006, US11 | Retrospective, single center, 1999-2003 | ≥ 80Mean 83.1 | 1,112 Surveillance: 335  | 0.6% |  |
| Sardinha et al, 1999, US16 | Retrospective, single center, 1994-1996 | 80-95Median 84 | 403 Surveillance: 210 | 1.9%  |  |

*PLCO, Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial; PYs, person-years; ref; referent group; US, United States; UK, United Kingdo*