Supplemental Table S1. Characteristics of the 42,611 colonoscopy exams performed in adults age 65 and older in the New Hampshire Colonoscopy Registry between 2009-2019

Exam characteristic	Indication of Colonoscopy, N and %						P-value
	Screening		Surveillance		Diagnostic		
Practice setting							<0.001
Academic medical center	4084	23.3	4713	24.8	1894	31.3	
Ambulatory endoscopy center	5457	31.1	5356	28.2	1542	25.5	
Community hospital	7848	44.8	8826	46.4	2557	42.2	
Private practice	138	0.79	130	0.68	66	1.1	
Sedation used[a]							<0.001
Moderate sedation	9844	57.2	10938	58.7	3233	54.8	
Monitored anesthesia care	7168	41.6	7469	40.1	2613	44.3	
None	184	1.1	195	1.1	39	0.7	
Other	17	0.10	27	0.14	11	0.2	
Adequate bowel preparation quality[a]	16625	97.9	18062	97.8	5645	96.5	<0.001
Complete exam to cecum							<0.001
Yes	17119	97.7	18703	98.3	5771	95.3	
No	408	2.3	322	1.7	288	4.8	
Reasons for incomplete exams[b]							
Obstruction	18	6.1	6	2.9	25	14.4	<0.001
Inadequate bowel preparation	91	31.0	102	48.6	49	28.2	<0.001
Sedation	28	9.5	22	10.5	15	8.6	0.83
Tortuous colon	138	46.9	69	32.3	64	36.8	0.004
Other	59	20.1	31	14.8	37	21.3	0.20

All p-values are from Pearson's chi-squared tests.
[a]Missing data: Bowel Prep quality (3.1%), Sedation type (2.0%)
[b]Where provided; could have multiple reasons

Supplemental Table S2. Most advanced finding during colonoscopy by patient age and indication of exam. *We included complete exams with adequate prep and if there were findings, we had path. If >1 exam within 12 months, findings are merged in this table.*

Most advanced finding by indication[a]	Age group, N and %										p-value[b]
	65-69		70-74		75-79		80-84		≥85		
Screening[c]											
Colorectal cancer	24	0.3	30	0.6	21	1.0	5	1.0	0	0.0	<.0001
Advanced polyps[d]	675	7.1	375	7.6	166	7.8	41	7.9	12	13.6	0.14
Non-advanced polyps	2672	28.2	1432	28.9	603	28.5	155	29.8	27	30.7	0.86
No significant findings	6095	64.4	3124	63.0	1328	62.7	319	61.4	49	55.7	0.11
Surveillance[c]											
Colorectal cancer	24	0.3	21	0.4	20	0.6	10	0.8	4	1.6	.001
Advanced polyps[d]	752	9.4	596	10.2	367	11.2	134	11.2	29	12.0	0.029
Non-advanced polyps	3044	38.2	2360	40.5	1329	40.5	505	42.4	84	34.7	0.003
No significant findings	4145	52.0	2844	48.9	1563	47.7	543	45.6	125	51.7	<0.0001
Diagnostic[c]											
Colorectal cancer	40	1.9	29	1.7	31	2.7	26	4.0	18	8.0	<0.0001
Advanced polyps[d]	174	8.1	159	9.3	111	9.7	55	8.5	14	6.2	0.27
Non-advanced polyps	498	23.2	417	24.5	291	25.5	152	23.4	58	25.7	0.58
No significant findings	1438	66.9	1098	64.5	707	62.0	416	64.1	136	60.2	0.037

[a] *Advanced polyps was defined as adenomas ≥10 mm in size or any size with high grade dysplasia or villous features; hyperplastic polyp ≥10 mm; sessile serrated polyps >= 10 mm, or any size with dysplasia; or traditional serrated adenomas of any size. Non-advanced polyps was defined as one or more adenomas <10 mm without villous features or high grade dysplasia or sessile serrated polyps <10mm without dysplasia*

[b] *p-value is for the trend for each pathology category across the four age groups within the specific indication for colonoscopy using the Cochran-Armitage test for trend*
sessile serrated polyps >= 10 mm, or any size with dysplasia; or traditional serrated adenomas of any size;

[c] *Missing data screening (340, 1.9%), surveillance (486, 2.6%), diagnostic (149, 2.5%)*

[d] *p-value for incidence of colorectal cancer across the three indications by age group: 65-69, p <.001; 70-74, p<.001; 75-79, p <.001; 80-84, p <.001; ≥85, p=0.0003*

[e] *p-value for incidence of advanced polyps across the three indications by age group: 65-69, p <0.001; 70-74, p <0.001; 75-79, p=0.0003; 80-84, p=0.04; ≥85, p=0.05*

Supplemental Figure S3. Recommendations to continue colonoscopy by age and indication of current colonoscopy