

**BCS WORKFORCE SUPPLEMENTARY FILE****Appendix 1 Projection calculations**

Based on the following assumptions (extracted from BCS and survey data):

- Current number of screening colonoscopists = 415
- Drop-out rate after 5 years = 37.5%
- New screening colonoscopists per year = 16.6 (5-year average)
- Current mean PAs per colonoscopist = 1.2
- Aspirational mean PAs per colonoscopist = 2
- Current working weeks per year per colonoscopist = 42
- Points per screening colonoscopy list = 4
- Predicted screening colonoscopies in 2025 = 100,000

<b>FACTORS</b>	<b>CALCULATION</b>	<b>NUMBER/RESULT</b>
<b>Predicted Workforce</b>		
Number of current screening colonoscopists still working in 2025	$0.625 \times 415$	259
New screening consultants in next 5 years	$16.6 \times 5$	83
Total screening colonoscopists in 2025		342
<b>Current PAs</b>		
Yearly PAs for screening colonoscopy per colonoscopist (based on 42 weeks of work per year)	$1.2 \times 42$	50.4
Yearly PAs for screening workforce 2025 (based on current weekly PAs)	$50.4 \times 342$	17,236.8
<b>Aspirational PAs</b>		
Yearly PAs for screening colonoscopy per colonoscopist (based on 42 weeks of work per year)	$2 \times 42$	84
Yearly PAs for screening workforce 2025 (based on weekly aspirational PAs)	$83.16 \times 342$	28,440.7
<b>Workforce Requirements</b>		
Predicted screening PAs required in 2025 (based on 4 procedures per PA)	$100,000 / 4$	25,000
Deficit of screening procedures based on current predicted PAs	$100,000 - (17,236.8 \times 4)$	31,052.8
Number of extra colonoscopists required (using current PA model)	$(25,000 - 17,236.8) / 50.4$	154.03
If mean 2 screening PAs per week allowed, number of colonoscopists required to fulfil screening in 2025	$25,000 / (42 \times 2)$	297.6