

PopSim Effectiveness and Cost Estimates by Intervention

ACADEMIC DETAILING + PROVIDER ASSESSMENT AND FEEDBACK (DETAILING+)

Intervention Effectiveness:

Intervention	Relative Risk	Lower Bound	Upper Bound	Population, Setting and Study Information for Data Sources	Sources
<p>Academic detailing + provider assessment and feedback: A clinic-level intervention that consists of provider education and monitoring of CRC screening practices. Provider training is provided onsite and covers the importance of CRC screening, suggestions of how to talk to patients about CRC screening, and best-practices for encouraging patients to get screened for CRC. Each provider receives an individual quarterly report describing progress in boosting CRC screening rates among patients, including specialized recommendations for improvement.</p>	1.27	1.20	1.30	<p>Ferreira et al., 2005:</p> <ul style="list-style-type: none"> ● <u>Population:</u> 1,978 male veterans at least 50 years of age, average-risk, due for CRC screening and had a clinic visit during the study period; 50% African American, 45% White; 79% with a high school education (of those for whom educational information was available) ● <u>Setting:</u> 2 primary care outpatient clinic firms at a VA Medical Center in Chicago, IL ● <u>Time:</u> May 2001-June 2003 ● <u>Study type:</u> Randomized controlled trial at the clinic firm level comparing detailing+ intervention vs. usual care <p>Dougherty et al., 2018:</p> <ul style="list-style-type: none"> ● <u>Study type:</u> Systematic review and meta-analysis of randomized controlled trials of interventions to increase CRC screening in average-risk populations and conducted in U.S. clinical settings ● <u>Number of studies:</u> 73 total studies, of which 18 focused on clinician-directed interventions (all included academic detailing) ● <u>Effectiveness:</u> Risk difference compared to usual care was 10% (95% CI: 3%-17%) for clinician interventions of academic detailing, and 13% (95% CI: 8%-19%) for clinician reminders 	Ferreira et al., 2005; Dougherty et al., 2018

Intervention Implementation Cost:

Intervention components	Cost per clinic	Lower Bound	Upper Bound	Setting and Population Where Costs Were Collected	Sources
<p>Physician training sessions: 5-6 total hours of training per year, including initial training on CRC screening guidelines and improving communication with patients, and subsequent feedback sessions on the clinic's as well as the individual provider's CRC screening recommendation rate and patient adherence. *Cost is per clinic, not per patient.</p>	\$970.25	\$700	\$1,250	<p>Ferreira et al., 2005:</p> <ul style="list-style-type: none"> ● <u>Setting:</u> 2 primary care outpatient clinic firms at a VA Medical Center in Chicago, IL ● <u>Population:</u> 1,978 male veterans at least 50 years of age, average-risk, due for CRC screening and had a clinic visit during the study period; 50% African American, 45% White; 79% with a high school education (of those for whom educational information was available) ● <u>Notes:</u> The provider intervention included a 2-hour orientation plus four 1-hour follow-up sessions. It was offered to 45 providers (40 residents, 2 nurse practitioners, and 3 attendings. Across sessions, participation rates ranged from 63% to 88%. *This study was used to estimate provider and trainer time spent in trainings <p>Email correspondence with a clinician who facilitates an academic detailing+ intervention, 2018:</p> <ul style="list-style-type: none"> ● <u>Setting:</u> N/A ● <u>Population:</u> N/A ● <u>Notes:</u> Trainers charge \$100 to \$200 per hour, and there can be additional costs including materials, travel, food and drink, etc. associated with these trainings. The upper bound includes some additional costs related to trainer prep time if external trainers are used. *This communication was used to estimate the costs associated with hiring trainings and conducting training sessions 	Ferreira et al., 2005
<p>Technical and programming staff to prepare (e.g., code, format) quarterly CRC screening reports for individual providers. *Cost is per clinic, not per patient.</p>	\$207.91	\$150	\$270	<p>United States Department of Labor Bureau of Labor Statistics:</p> <ul style="list-style-type: none"> ● <u>Setting:</u> Oregon ● <u>Population:</u> N/A ● <u>Notes:</u> We obtained mean hourly wages for Medical Records and Health Information Technicians in Oregon from the Bureau of Labor 	United States Department of Labor Bureau of Labor Statistics

				<p>Statistics. The wage estimates were multiplied by the number of hours required to develop and program provider reports</p> <p>Email correspondence with a clinician who facilitates an academic detailing+ intervention, 2018:</p> <ul style="list-style-type: none"> ● <u>Setting</u>: N/A ● <u>Population</u>: N/A ● <u>Notes</u>: Average cost estimate assumes that it takes 4 hours to write and test the provider reports initially, as well as 4 additional hours per year (i.e. one-hour for each quarterly report) to update and produce quarterly reports. Lower and upper bounds allow for variation in level of programming experience among staff 	
<p>Quarterly meetings with updates: one-on-one meetings between a provider and health administrator (e.g., medical director) to review the provider’s CRC screening rate and action items for the quarter. *Cost is per clinic, not per patient.</p>	\$408.30	\$250	\$550	<p>United States Department of Labor Bureau of Labor Statistics:</p> <ul style="list-style-type: none"> ● <u>Setting</u>: Oregon ● <u>Population</u>: N/A ● <u>Notes</u>: We obtained mean hourly wages for a Medical Director (or equivalent) in Oregon from the Bureau of Labor Statistics. The wage estimates were multiplied by the number of hours required to facilitate quarterly meetings with providers. <p>Email correspondence with a clinician who facilitates a academic detailing+ intervention, 2018:</p> <ul style="list-style-type: none"> ● <u>Setting</u>: N/A ● <u>Population</u>: N/A ● <u>Notes</u>: Average cost estimate assumes that it takes 1 hour per quarter (i.e., 4 hours total) to prepare for the meetings, such as reviewing the data and developing action items, and to conduct the meetings. 	United States Department of Labor Bureau of Labor Statistics
Total cost per clinic:	\$1,586.46				

References

- Dougherty, M. K., Brenner, A. T., Crockett, S. D., Gupta, S., Wheeler, S. B., Coker-Schwimmer, M., . . . Reuland, D. S. (2018). Evaluation of Interventions Intended to Increase Colorectal Cancer Screening Rates in the United States: A Systematic Review and Meta-analysis. *JAMA Intern Med*, *178*(12), 1645-1658. doi:10.1001/jamainternmed.2018.4637
- Ferreira, M. R., Dolan, N. C., Fitzgibbon, M. L., Davis, T. C., Gorby, N., Ladewski, L., . . . Bennett, C. L. (2005). Health Care Provider-Directed Intervention to Increase Colorectal Cancer Screening Among Veterans: Results of a Randomized Controlled Trial. *Journal of Clinical Oncology*, *23*(7), 1548-1554. doi:10.1200/JCO.2005.07.049
- United States Department of Labor Bureau of Labor Statistics. May 2018 State Occupational Employment and Wage Estimates. Oregon.