

Colorectal cancer screening: the cost case

Prepared for the accounting committee | Hidalgo County Health and Human Services | September 18, 2026

The question

Does it pay to find colorectal cancer early, and what would a screening programme cost here?

The answer

Screening is not a new expense. In the models the US Preventive Services Task Force used to set national policy, annual stool testing costs less over a person's lifetime than doing nothing at all, and it buys 125 to 163 quality-adjusted life years for every thousand people screened.

Lifetime cost and benefit per person	No screening	Annual FIT	Colonoscopy, 10-yearly
Cost per person	\$5,268 to \$5,845	\$3,811 to \$5,384	\$5,375 to \$7,031
Quality-adjusted life years gained per 1,000	0	125 to 163	132 to 177
Colorectal cancers per 1,000	77 to 88	20 to 46	12 to 34
Colorectal cancer deaths per 1,000	32 to 36	6 to 10	3 to 8

2021 dollars, 3 percent discount rate. Ranges are across the three CISNET microsimulation models. Sources: Nascimento de Lima, JNCI 2024; Knudsen, AHRQ decision analysis for the USPSTF, 2021.

Why it matters in this county

- Colorectal cancer incidence in Hidalgo County is rising 4.7 percent a year. Texas and the nation are flat.
- Sixty and a half percent of local cases are already late stage when they are found: 188 of the 311 diagnosed each year.
- Fifty-four percent of adults aged 45 to 75 are screened, below the median Texas county at 59.2 percent, and 40 percent of working-age adults here have no insurance.
- Ninety-six people in this county die of colorectal cancer every year.

What a programme would cost

There are about 113,500 unscreened adults aged 45 to 74 in Hidalgo County. Mailing each of them a stool test kit, with reminder calls and laboratory processing included, costs \$10.48 a head in a Hispanic-majority safety-net network of the same kind.

Line	Amount
Mail a kit to every unscreened adult, once	\$1,189,525
Billed charges, first year after one metastatic diagnosis	\$353,255
So the whole county mailing costs about	3.4 patients
Charges avoided when one patient is found early instead of late, year one	\$171,255
Stage shifts to pay for itself, measured in billed charges	7 patients
Stage shifts to pay for itself, measured in Medicare paid amounts	19 patients

Charges are commercial claims, 2023 dollars (Nguyen, Cancer Research Communications 2025). Paid amounts are Medicare, stage IV versus stage I colon cancer, 2019 dollars (Tramontano, PLoS ONE 2020). Outreach cost from Coronado, Cancer Epidemiology Biomarkers and Prevention 2023. First-year costs only; continuing and end-of-life care are excluded, so this understates the saving.

What we are asking for

Funding for a mailed stool-test outreach programme aimed at the unscreened adults already in our catchment. Seven patients caught early instead of late covers the cost of reaching all of them in billed charges, and nineteen do in dollars actually paid, before counting the years of life gained, the continuing care avoided, or the end-of-life costs that never arrive.

Every figure in this memo is sourced line by line in the accompanying workbook, CRC_Screening_Cost_Case.xlsx, one tab per research task.