

# COLORECTAL CANCER SCREENING INFORMATION FOR PROVIDERS

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Indian Health Service  
National GPRA Team

# Measure Logic

- **Denominator:** Active Clinical patients ages 50 through 75 without a documented history of colorectal cancer or total colectomy.
- **Numerator:** Patients who have had any CRC screening, defined as any of the following:
  - 1) Fecal Occult Blood Test (FOBT) or Fecal Immunochemical Test (FIT) during the report period (i.e. during the current GPRA year)
  - 2) Flexible Sigmoidoscopy in the past **5 years**
  - 3) Colonoscopy in the past **10 years**

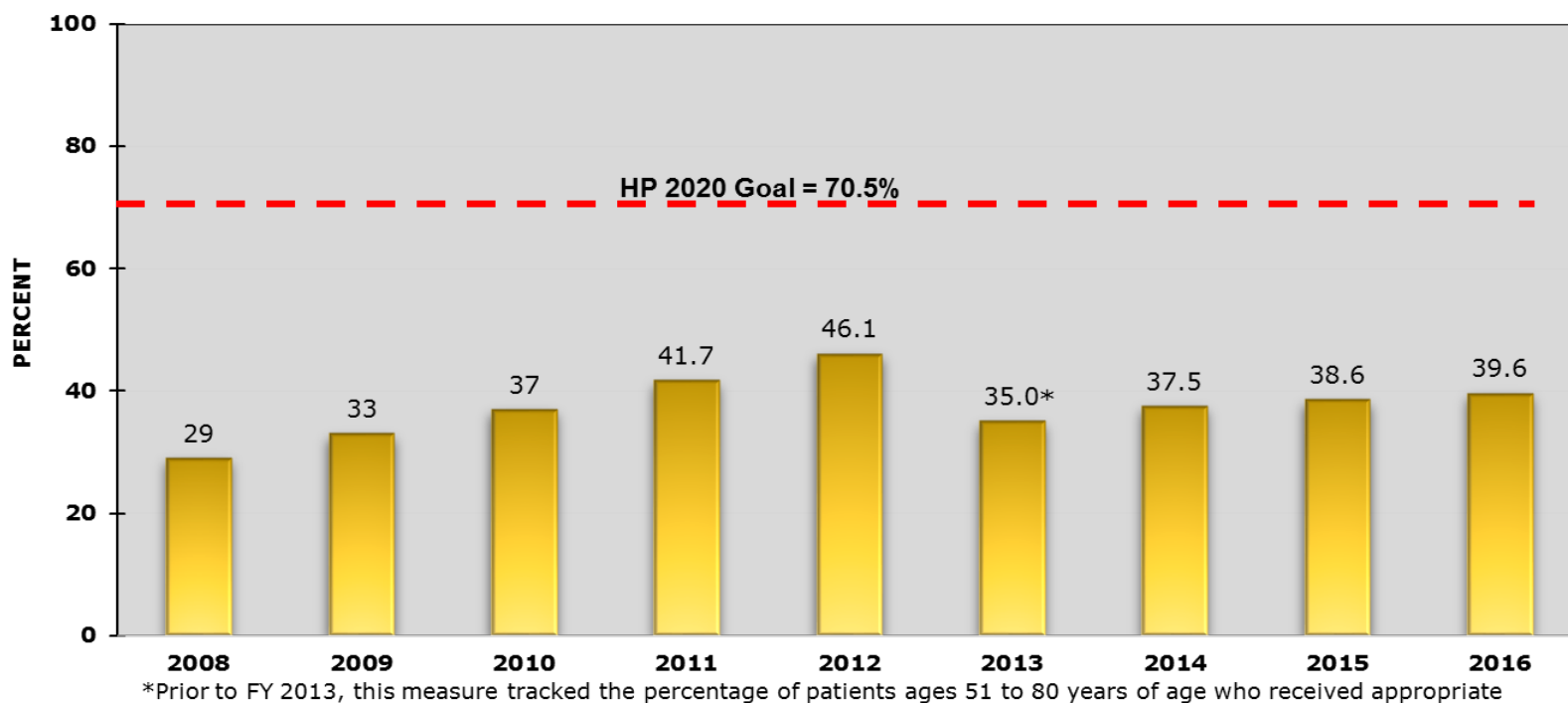
# Measure Logic (cont.)

- The denominator for this measure does not include any patients who have ever had a diagnosis of one of the following:
  - Colorectal Cancer
  - Total Colectomy

# Federal/Tribal GPRA Results

## Cancer Screening: Colorectal

AI/AN patients ages 50-75 who have received appropriate Colorectal Cancer Screening.



# Colorectal Cancer Incidence and Mortality

- Although colorectal cancer mortality rates have declined since the mid-1970s, colorectal cancers are the third most common cancer in the United States, and are the second leading cause of cancer deaths.
- An estimated 135,493 new cases of colorectal cancer are projected to be diagnosed and 50,260 colorectal cancer-related deaths are projected to occur in 2017 in the United States.

<sup>1</sup>U.S. Cancer Statistics Working Group. *United States Cancer Statistics: 1999–2006 Incidence and Mortality Web-based Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2010.

<sup>2</sup>"Key Statistics for colorectal cancer" [www.cancer.org/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics](http://www.cancer.org/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics) ..

# Colorectal Cancer Rates Among American Indians

- Colorectal Cancer is the third second most common cancer among AI/ANs, following breast/prostate cancers and lung cancer. It is the second most common cause of cancer death among AI/ANs after lung cancer.
- A study of colon cancer rates over a 12-year period found that while the overall incidence of colon cancer decreased in this period by 12%, the incidence rate among Native Americans *increased* by 38%. The study also found:
  - The increase in incidence was higher among Native American women than men
  - Stage 3 tumors represented 29% of all cancers
  - The sigmoid colon was the most common site location.

<sup>3</sup>Thuraingam R, Jandova J, Pandit V, Michailidou M, Nfonsam VN, Assessing the national trends in colon cancer among Native Americans: a 12 year SEER database study. *Am J Surg* 2016 Nov22 (epub)

# Colorectal Cancer Rates Among American Indians (cont.)

- From 1999-2004 overall incidence (per 100,000) of colorectal cancer was 9% lower in American Indians than non-Hispanic whites, but rates among American Indians vary widely across the U.S.
  - Incidence rates of CRC were higher in American Indians in the Northern Plains (72.5) and Southern Plains (60.2) than non-Hispanic whites (50.84).
- Native Americans from the Northern Plains have the highest age-adjusted cancer mortality compared to Native Americans from any other region in the U.S.

<sup>4</sup>Perdue, DG, Perkins, C, Jackson-Thompson, J, Coughlin, SS, Ahmed, F, Haverkamp, D, Jim, MA. Regional differences in colorectal cancer incidence, stage, and subsite among American Indians and Alaska Natives, 1999-2004. *Cancer*. 2008; 113(S5): 1179-1190.

<sup>5</sup>Pandhi, N, Guadagnolo, BA, Kanekar, S, Petereit, DG, Smith, MA. Cancer Screening in Native Americans from the Northern Plains. *American Journal of Preventive Medicine*. 2010; 38(4): 389-395.

# Colorectal Cancer Rates Among Alaska Natives

- Colorectal cancer rates among Alaska Natives are well above the national average.
- A long-term surveillance project found a colorectal cancer rate of 98.5 per 100,000 among Alaska Native men, and 106.2 per 100,000 among Alaska Native women, compared to 61.4 among non-Hispanic white men, and 40.6 among non-Hispanic white women in Alaska.

<sup>6</sup>Perdue, DG, Perkins, C, Jackson-Thompson, J, Coughlin, SS, Ahmed, F, Haverkamp, D, Jim, MA. Regional differences in colorectal cancer incidence, stage, and subsite among American Indians and Alaska Natives, 1999-2004. *Cancer*. 2008; 113(S5): 1179-1190.



# Colorectal Cancers Less Likely to be Diagnosed at Earlier Stages in AI/ANs

- Between 1999 and 2003, 66.5% of AI/ANs were diagnosed at late stage disease compared with 59.6% of non-Hispanic whites.
- Patients diagnosed at the local stage have a five-year relative survival rate of about 90%, those diagnosed at the regional stage have a 70% five-year relative survival rate, and those diagnosed at the distant stage have a 12% five-year relative survival rate.

<sup>7</sup>Perdue, DG, Perkins, C, Jackson-Thompson, J, Coughlin, SS, Ahmed, F, Haverkamp, D, Jim, MA. Regional differences in colorectal cancer incidence, stage, and subsite among American Indians and Alaska Natives, 1999-2004. *Cancer*. 2008; 113(S5): 1179-1190.

<sup>8</sup>Altekruse SF, Kosary CL, Krapcho M, Neyman N, Aminou R, Waldron W, Ruhl J, Howlander N, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Cronin K, Chen HS, Feuer EJ, Stinchcomb DG, Edwards BK (eds). *SEER Cancer Statistics Review, 1975-2007*, National Cancer Institute. Bethesda, MD

# Colorectal Cancer Risk Factors

- The primary risk factor for colorectal cancer is age, with more than 90% of cases occurring in persons aged 50 years or older.
  - A person at age 50 has a 5% lifetime risk of being diagnosed with colorectal cancer and a 2.5% chance of dying from it.
- Risk is increased by a personal or family history of colorectal cancer and/or polyps, or a personal history of inflammatory bowel disease.

<sup>9</sup>Ries LAG, Eisner MP, Kosary CL, Hankey BF, Miller BA, Clegg L, Mariotto A, Feuer EJ, Edwards BK (eds). *SEER Cancer Statistics Review, 1975-2002*, National Cancer Institute. Bethesda, MD

<sup>10</sup>Ries LA, Wingo PA, Miller DS, et al. The annual report to the nation on the status of cancer, 1973-1997, with special section on colorectal cancer. *Cancer*. 2000;88:2398-2424.

# Colorectal Cancer Risk Factors (cont.)

- Other risk factors include smoking, high alcohol consumption, obesity, physical inactivity, a diet high in saturated fat and/or red meat, and inadequate intake of fruits and vegetables.
- Surveys of the Alaska Native diet have reported several risk factors, including very low intake of fruit and vegetables, low levels of dietary fiber, and high intake of refined carbohydrates and sugars.

<sup>11</sup>Huxley, RR, Ansary-Moghaddam, A, Clifton, P, Czernichow, CL, Woodward, M. The impact of dietary and lifestyle risk factors on risk of colorectal cancer: A quantitative overview of the epidemiological evidence. *International Journal of Cancer*. 2009; 125(1): 171-180.

<sup>12</sup>Miller BA, Kolonel LN, Bernstein L, Young, Jr. JL, Swanson GM, West D, Key CR, Liff JM, Glover CS, Alexander GA, et. al. (eds). *Racial/Ethnic Patterns of Cancer in the United States, 1988-1992*, National Cancer Institute. NIH Pub. No. 96-4103. (SEER Program) Bethesda, MD , 1996.

# US Preventive Services Task Force Guidance

- The USPSTF recommends that clinicians screen men and women for colorectal cancer beginning at age 50 years and continuing until age 75 years.
- Previous USPSTF guidance recommended screening with a combination of high-sensitivity fecal occult blood tests (every 3 years) and flexible sigmoidoscopy (every 5 years). Current guidance does not emphasize specific screening approaches but highlights that colorectal cancer screening substantially reduces deaths among adults age 50-75 and not enough patients are being screened.

<sup>13</sup> Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA*, 2016; 315 (23): 2564-2575

# American College of Physicians Guidance

- The American College of Physicians recommends that average-risk adults age 50-75 should be screened for colorectal cancer using:
  - 1) annual high sensitivity gFOBT\* or FIT
  - 2) flexible sigmoidoscopy every 5 years
  - 3) high-sensitivity gFOBT or FIT every 3 years plus flexible sigmoidoscopy every 5 years, or
  - 4) colonoscopy every 10 years clinicians screen men and women for colorectal cancer beginning at age 50 years and continuing until age 75 years.

<sup>14</sup>Wilt TJ, Harris RP, Quaseem A: High Value Care Task Force of the American College of Physicians, Screening for cancer: advice for high-value care from the American College of Physicians . *Ann Intern Med* 2015; 162(10); 718-25.

\* gFOBT refers to Guaiac Fecal Occult Blood Test. Note that previous USPSTF guidance called specifically for the use of FOBT or FIT, which are immunochemical-based, not the gFOBT.

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