Maryland:
First in the United States
in Decreasing
Colorectal Cancer Incidence Rates
2003--2007

MMWR July 8, 2011 / Vol. 60 / No. 26

Colorectal Cancer in Maryland:

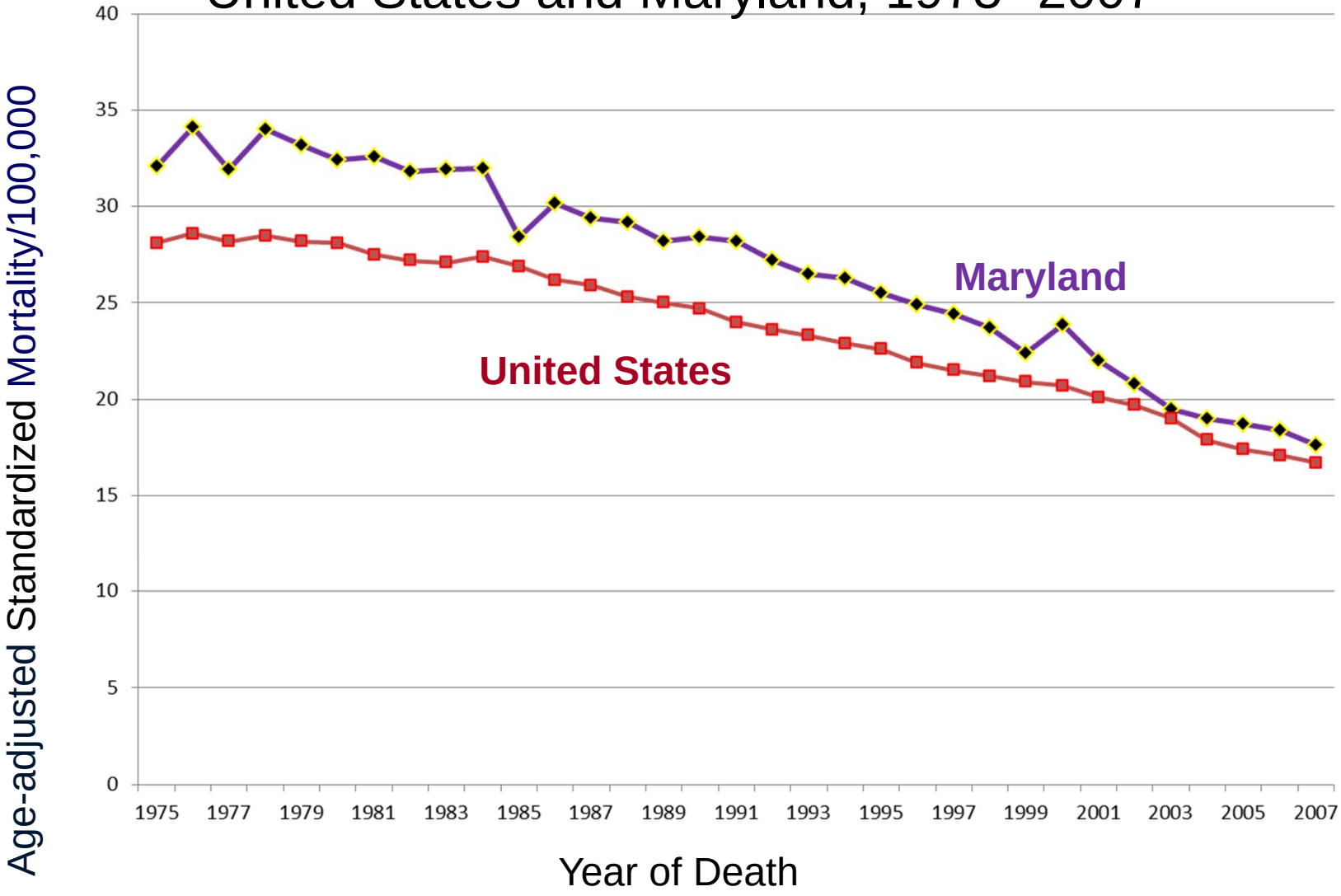
Successes and Future Directions

Diane M. Dwyer, MD
Center for Cancer Surveillance and Control
Maryland Dept. of Health and Mental Hygiene
November 29, 2011

Maryland Successes

Mortality from CRC (Deaths)

Colorectal Cancer Mortality
United States and Maryland, 1975--2007



statecancerprofiles.cancer.gov

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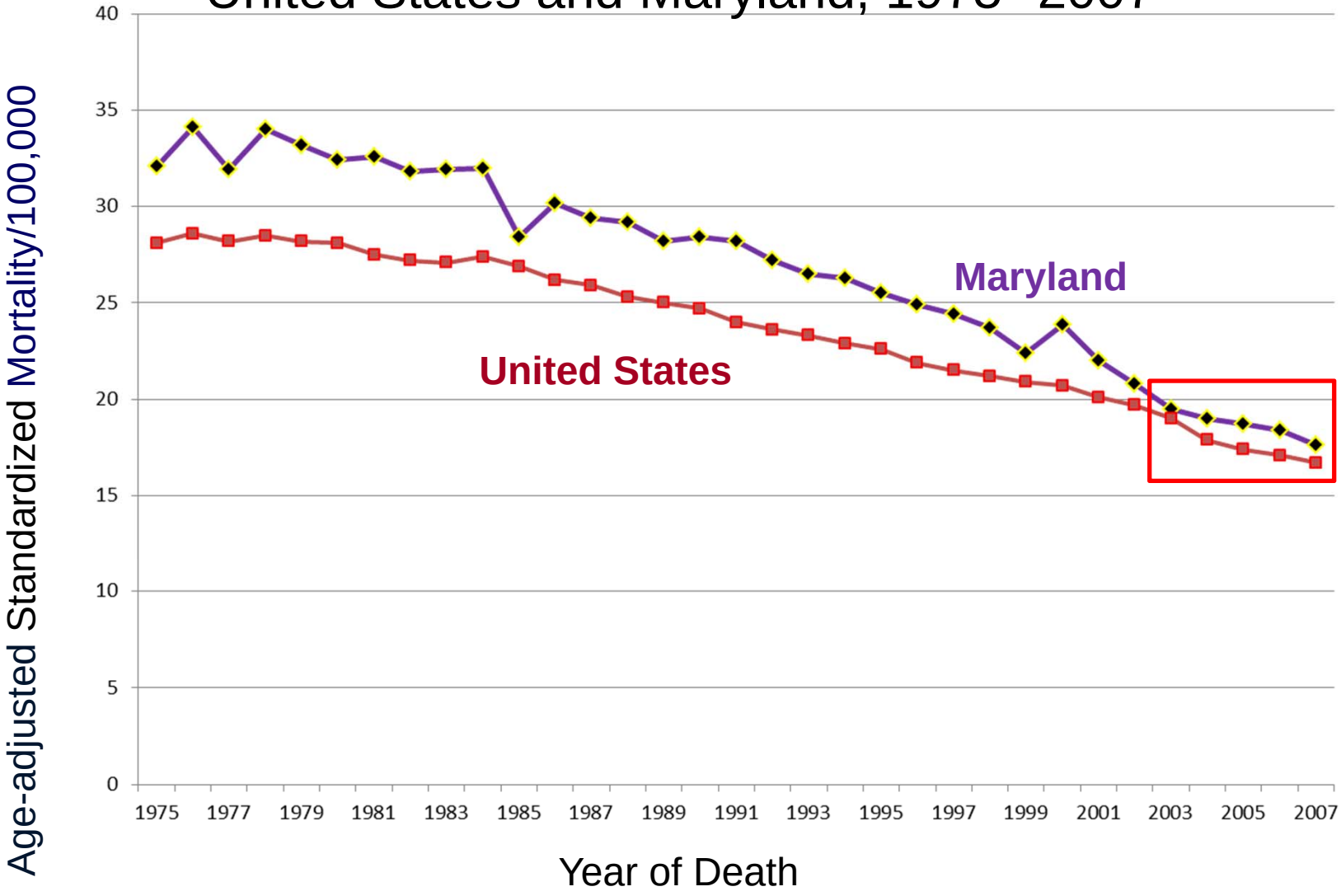

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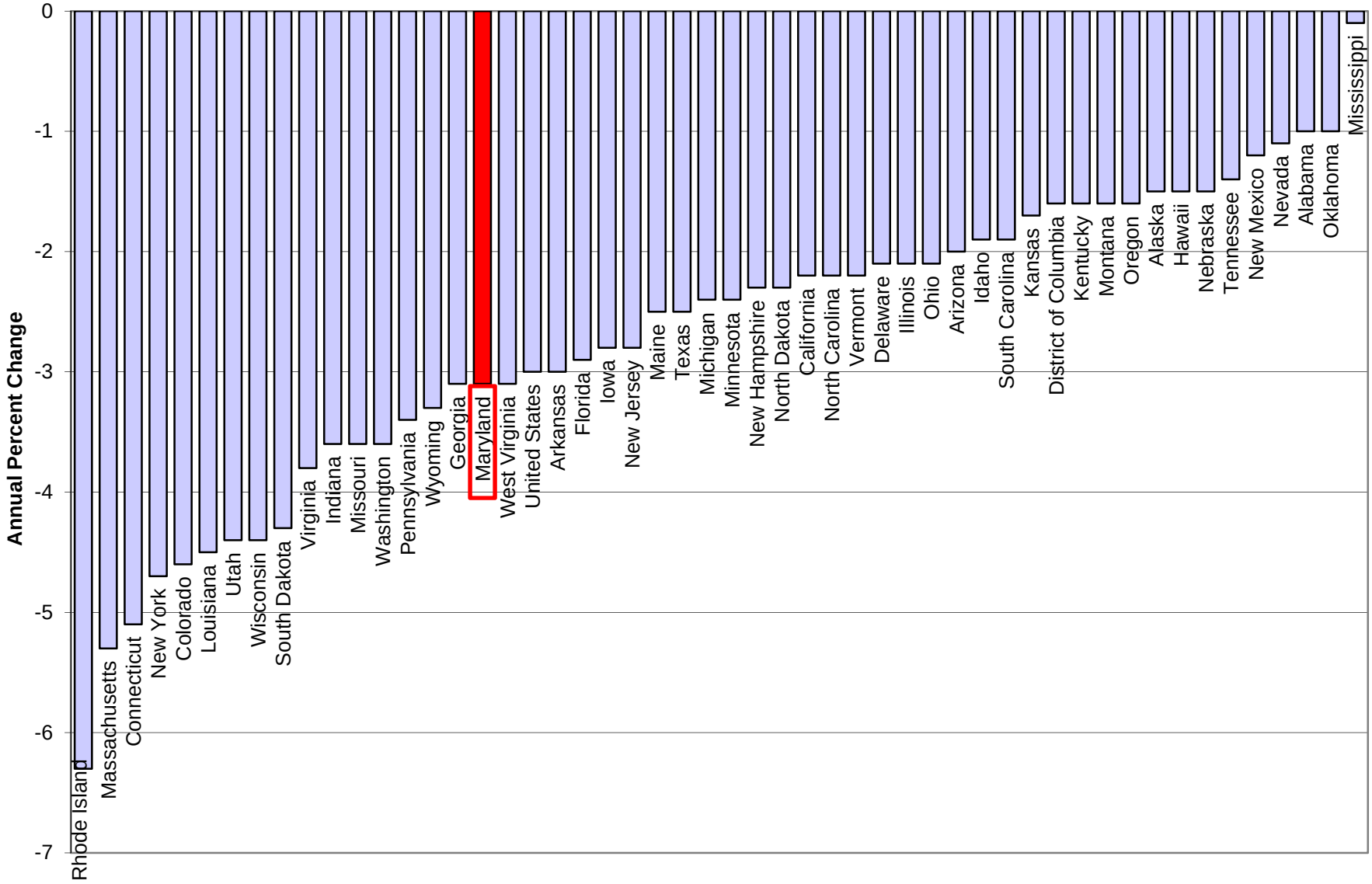
Vital Signs:

Colorectal Cancer Screening, Incidence, and Mortality United States*

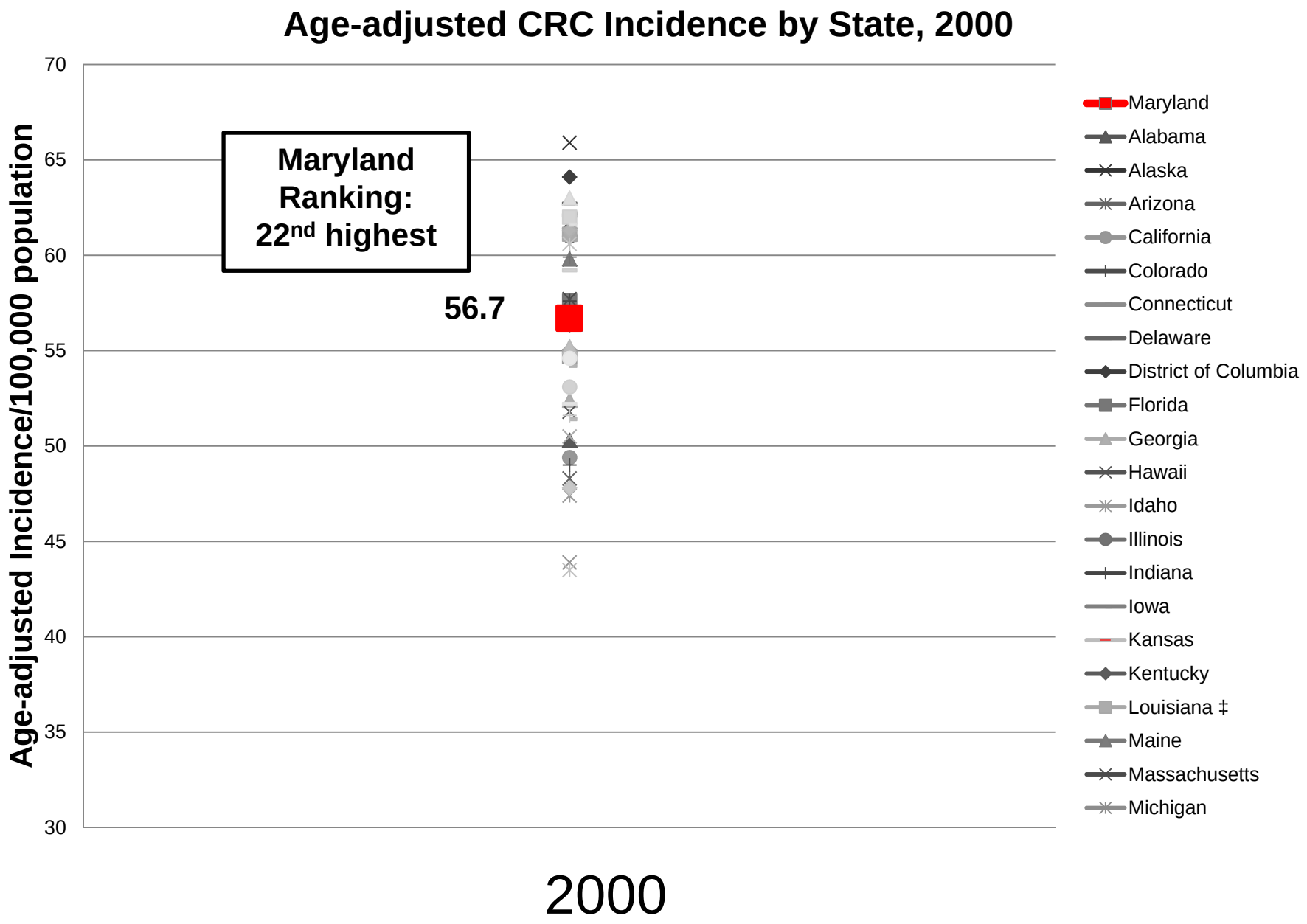
*Morbidity and Mortality Weekly Report. July 8, 2011 / Vol. 60 / No. 26

Annual Percent Change in CRC Mortality by State, 2003--2007

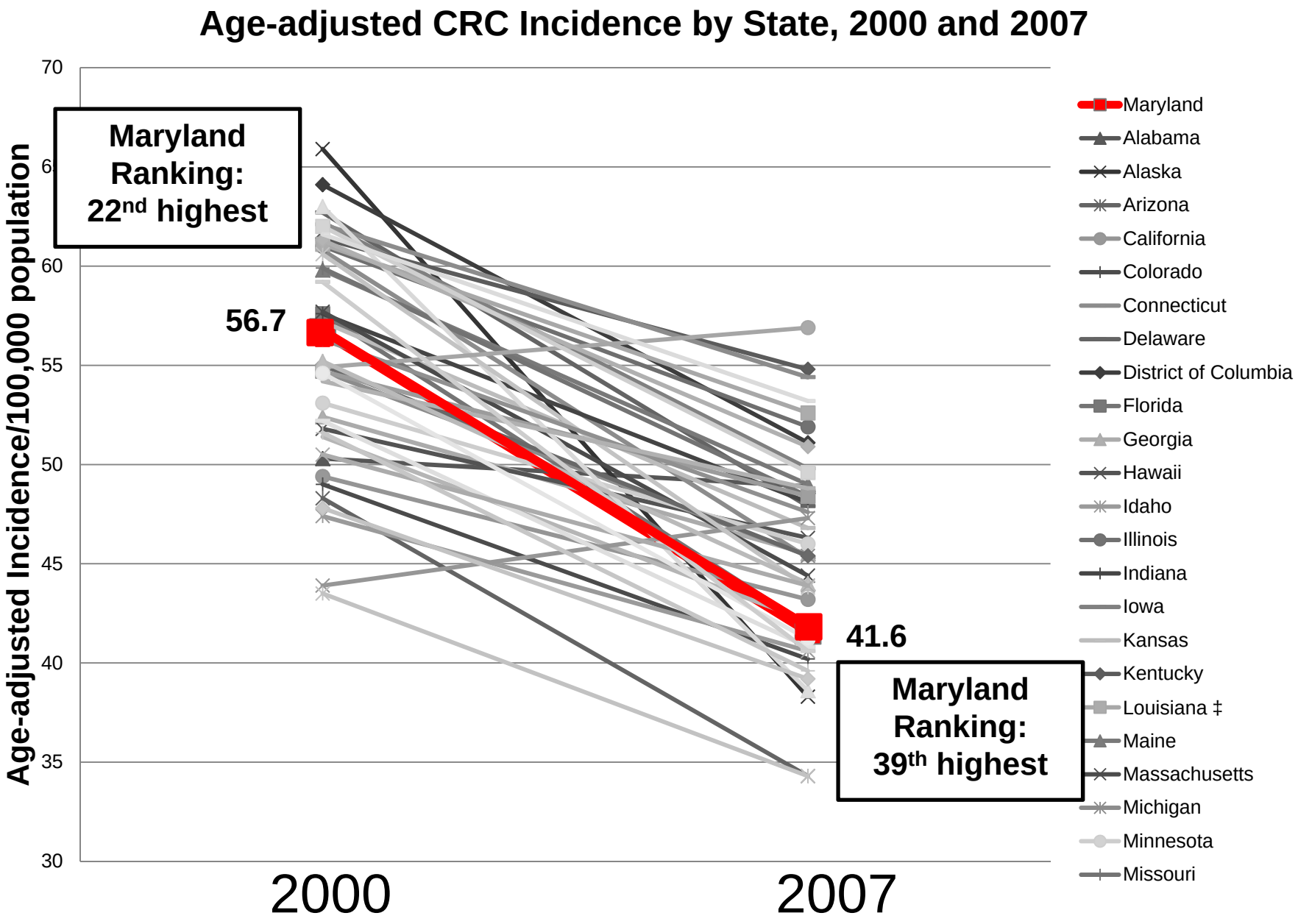


Data source: MMWR July 8, 2011 / Vol. 60 / No. 26

Incidence of CRC
(New Cases)



Source: National Program of Cancer Registries (NPCR)



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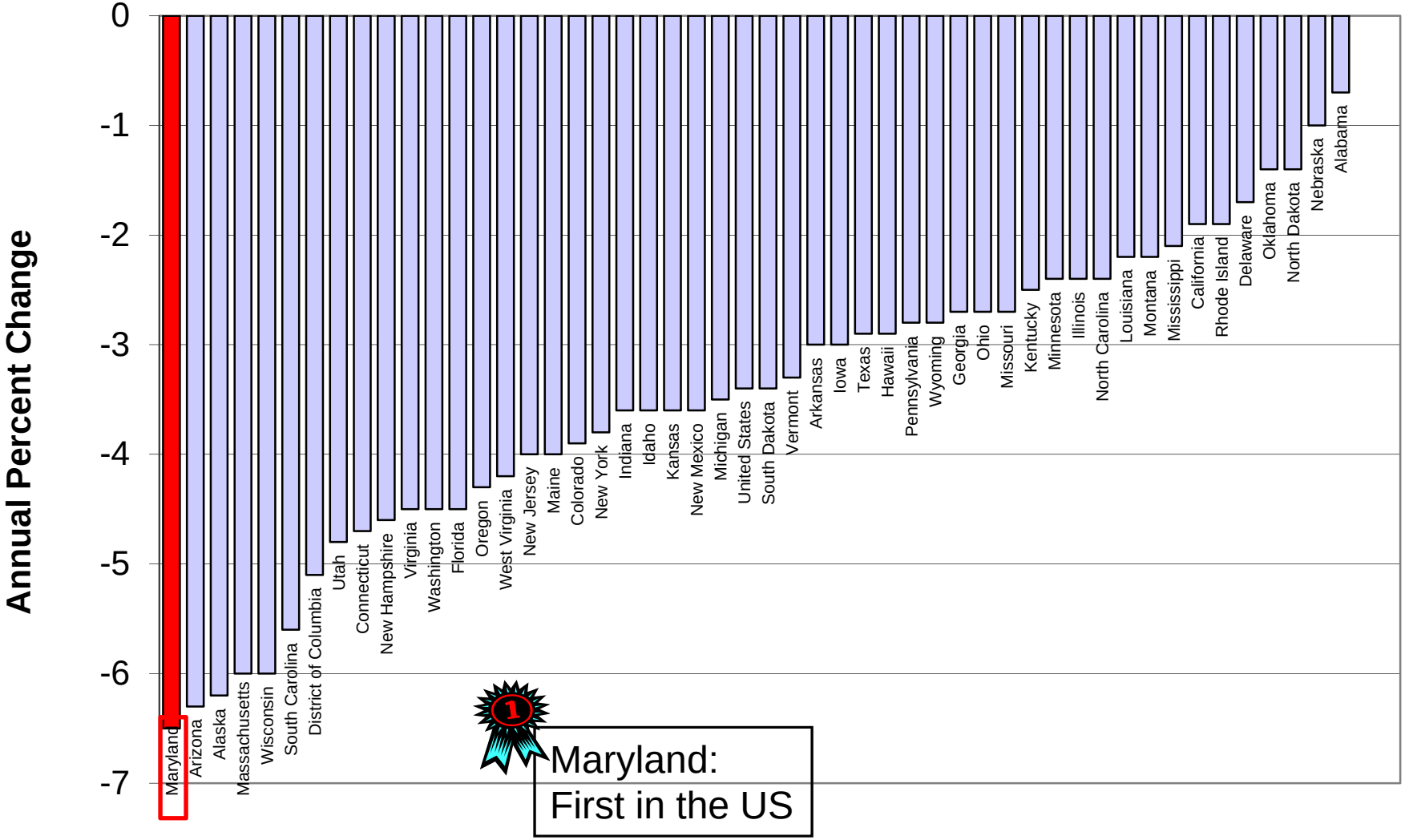
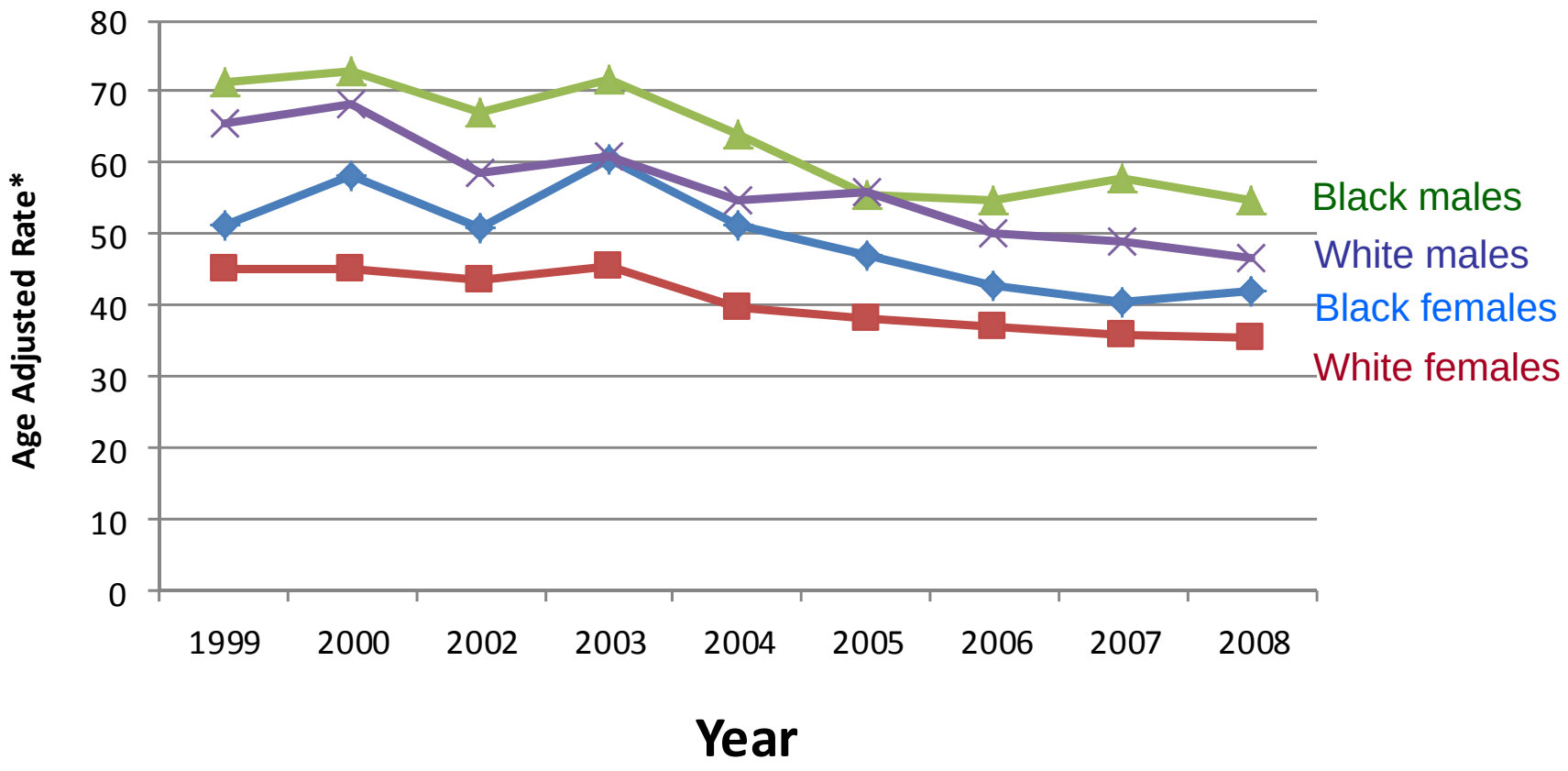


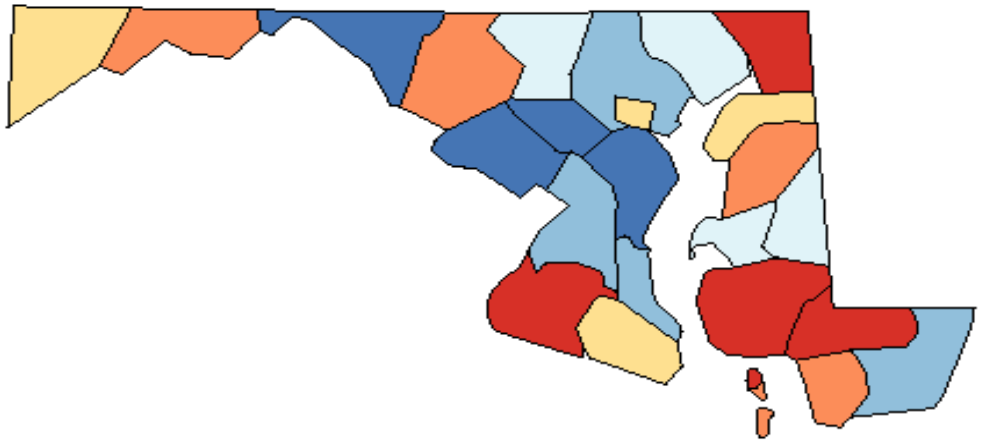
Data source: MMWR July 8, 2011 / Vol. 60 / No. 26

Age-adjusted CRC Incidence in Maryland by Gender and Race
Maryland, 1999-2008



Maryland Cancer Registry
* Rates are per 100,000 and are age adjusted and standardized to the 2000 U.S. standard population

Incidence Rates† for Maryland, 2004 - 2008
Colon & Rectum
All Races (includes Hispanic), Both Sexes, All Ages



Age-Adjusted

Annual Incidence Rate

(Cases per 100,000)

Quantile Interval

- 53.2 to 55.5
- 51.1 to 53.1
- 48.2 to 51.0
- 46.3 to 48.1
- 42.5 to 46.2
- 36.4 to 42.4

US (SEER + NPCR)
Rate (95% C.I.)
47.6 (47.5 - 47.7)

Maryland
Rate (95% C.I.)
44.8 (44.0 - 45.6)

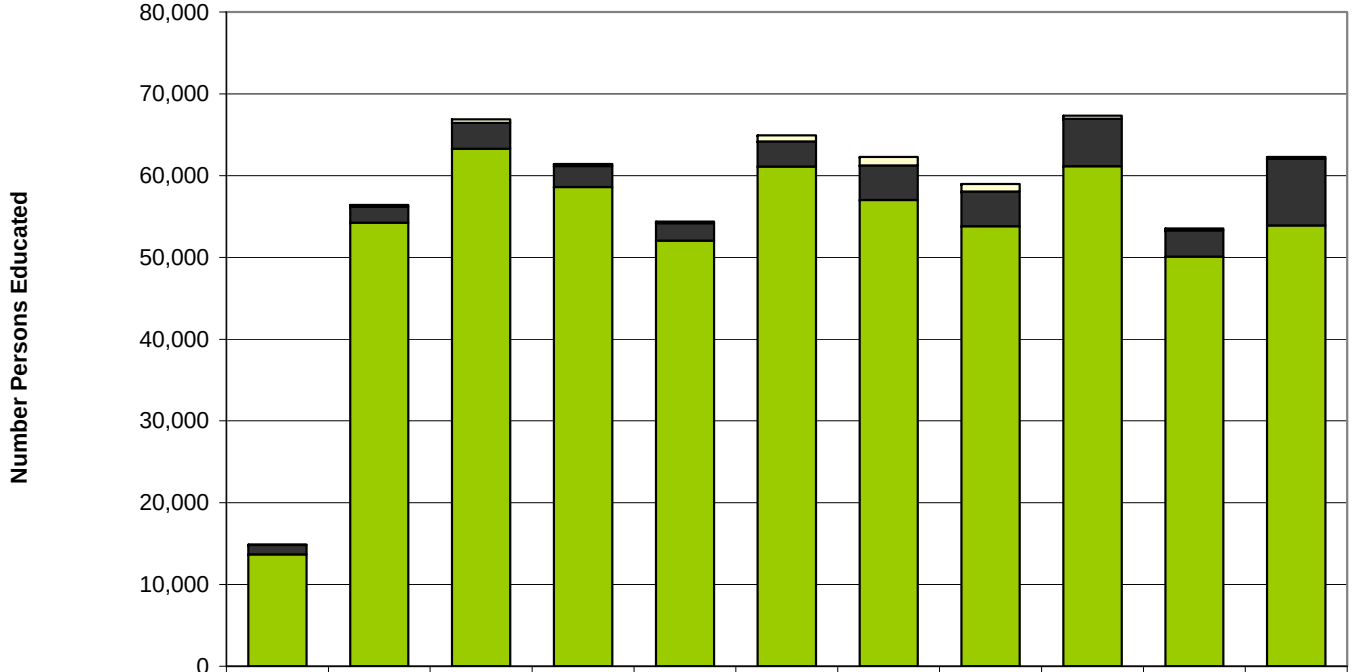
Created by statecancerprofiles.cancer.gov on 10/28/2011 11:02 am.
State Cancer Registries may provide more current or more local data.
Data presented on the State Cancer Profiles Web Site may differ from statistics reported by the State Cancer Registries (for more information).

† Incidence rates (cases per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ... , 80-84, 85+). Rates are for invasive cancer only (except for bladder which is invasive and in situ) or unless otherwise specified. Rates calculated using SEER*Stat. Population counts for denominators are based on Census populations as modified by NCI. The US populations included with the data release have been adjusted for the population shifts due to hurricanes Katrina and Rita for 62 counties and parishes in Alabama, Mississippi, Louisiana, and Texas. The 1969-2008 US Population Data File is used with SEER November 2010 data. The 1969-2008 US Population Data File is used with NPCR January 2011 data.

statecancerprofiles.cancer.gov

Success in
Education and Outreach

Maryland Cigarette Restitution Fund CPEST Program
Persons Educated in Group, Brief, and Individual Sessions (Form 1) - Colorectal Cancer
Number Educated by Type of Audience and Fiscal Year*^



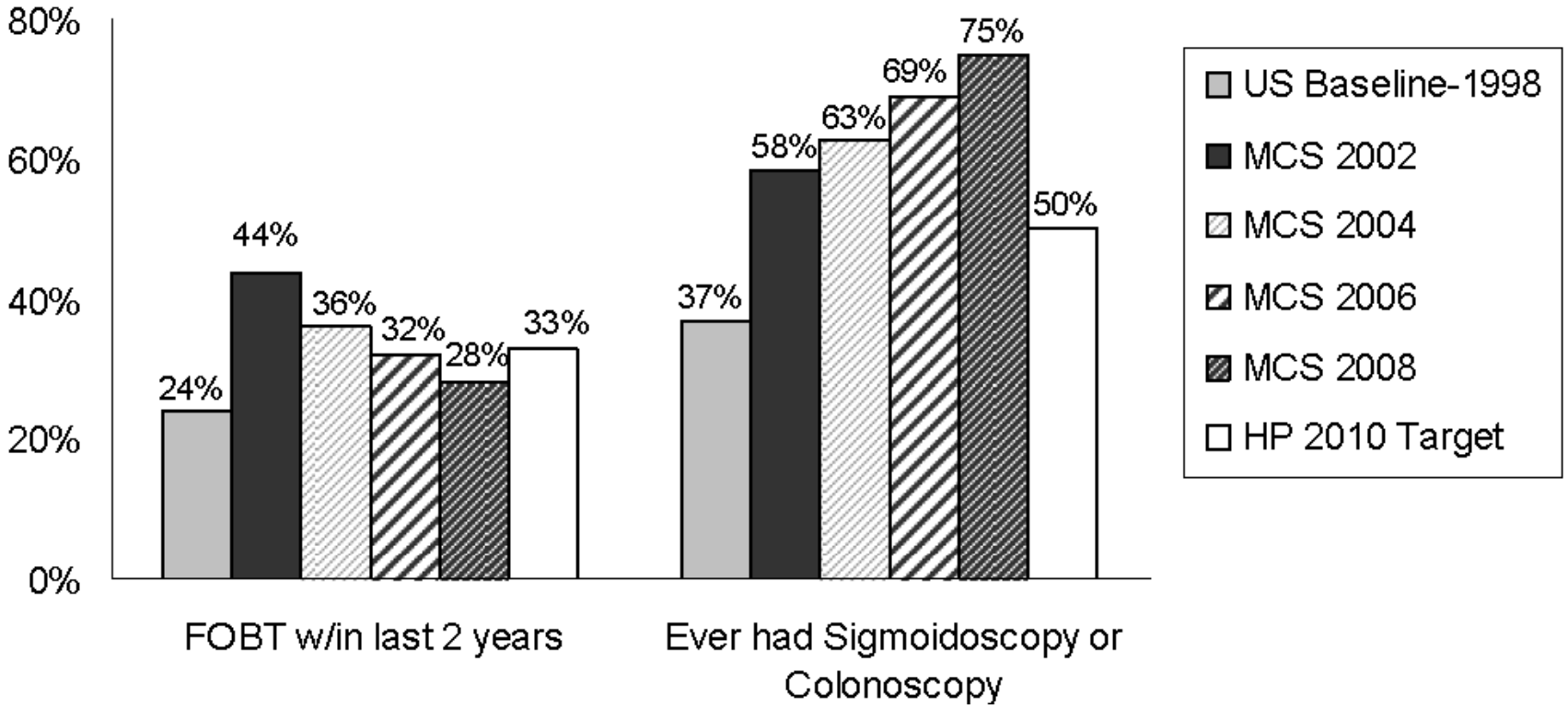
	7/1/00-6/30/01	7/1/01-6/30/02	7/1/02-6/30/03	7/1/03-6/30/04	7/1/04-6/30/05	7/1/05-6/30/06	7/1/06-6/30/07	7/1/07-06/30/08	7/1/08-06/30/09	7/1/09-06/30/10	7/1/10-06/30/11
Trainers/Educators	56	218	462	222	189	726	1,036	909	377	212	240
Health Care Professionals	1,136	1,973	3,175	2,589	2,150	3,096	4,213	4,268	5,815	3,218	8,144
General Public	13,694	54,229	63,260	58,600	52,044	61,103	57,033	53,808	61,136	50,090	53,895

Fiscal Year

CRC Messages Targeted via Media and Resource Materials – July 1, 2000 – June. 30, 2011:
>186 million people potentially reached through, e.g., TV, radio, and print media, etc.

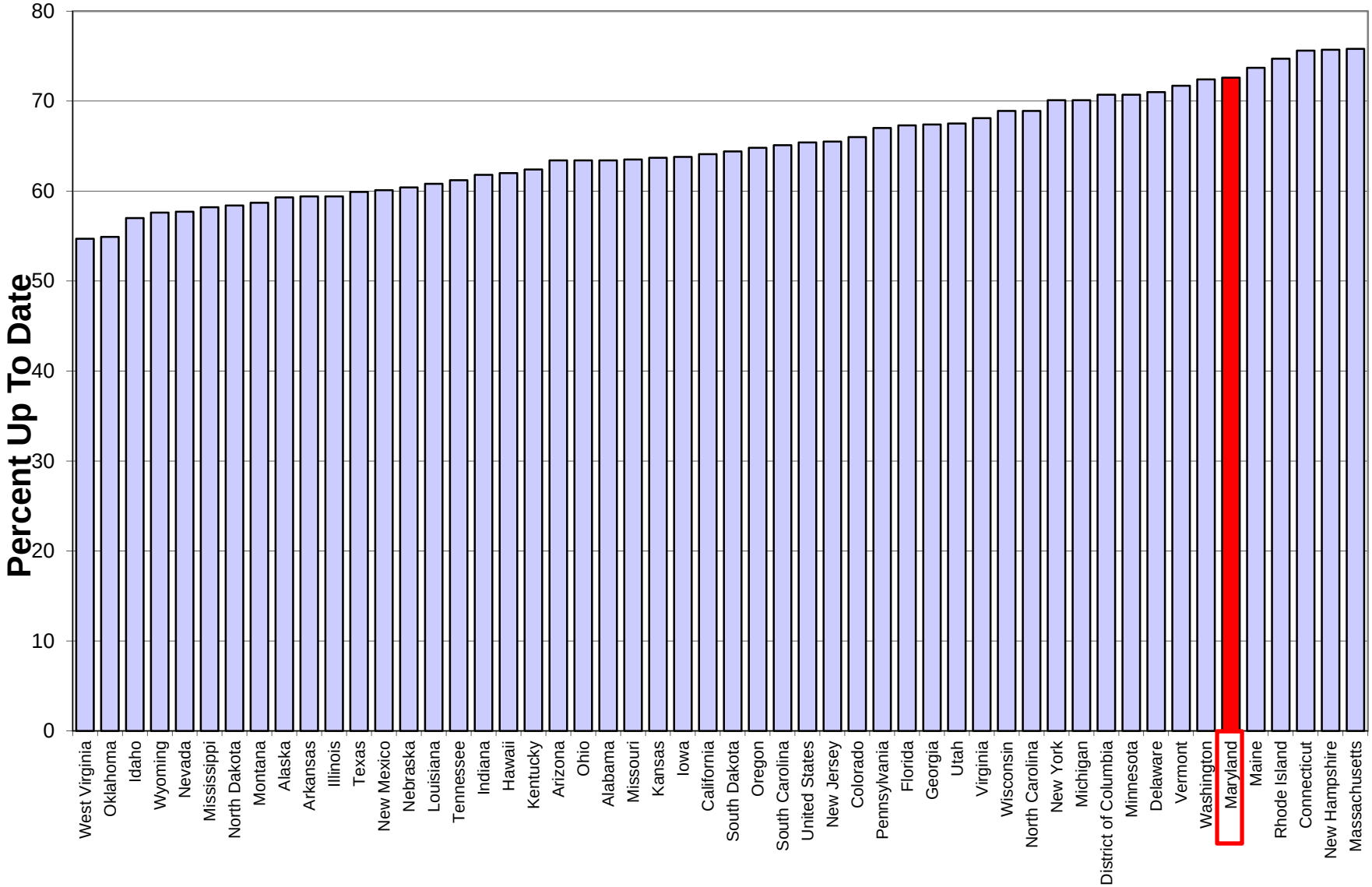
Success in Screening for CRC

Chart 11-4 Prevalence of CRC Screening Among MCS Respondents Age 50 Years and Older Compared to U.S. Baseline; MCS 2002, 2004, 2006, and 2008; and Healthy People 2010 Targets



Source: Maryland Cancer Surveys

Colorectal Cancer: Up-To-Date Screening by State, 2010



MMWR July 8, 2011 / Vol. 60 / No. 26 from Behavioral Risk Factor Surveillance System Population-based Survey

Summary

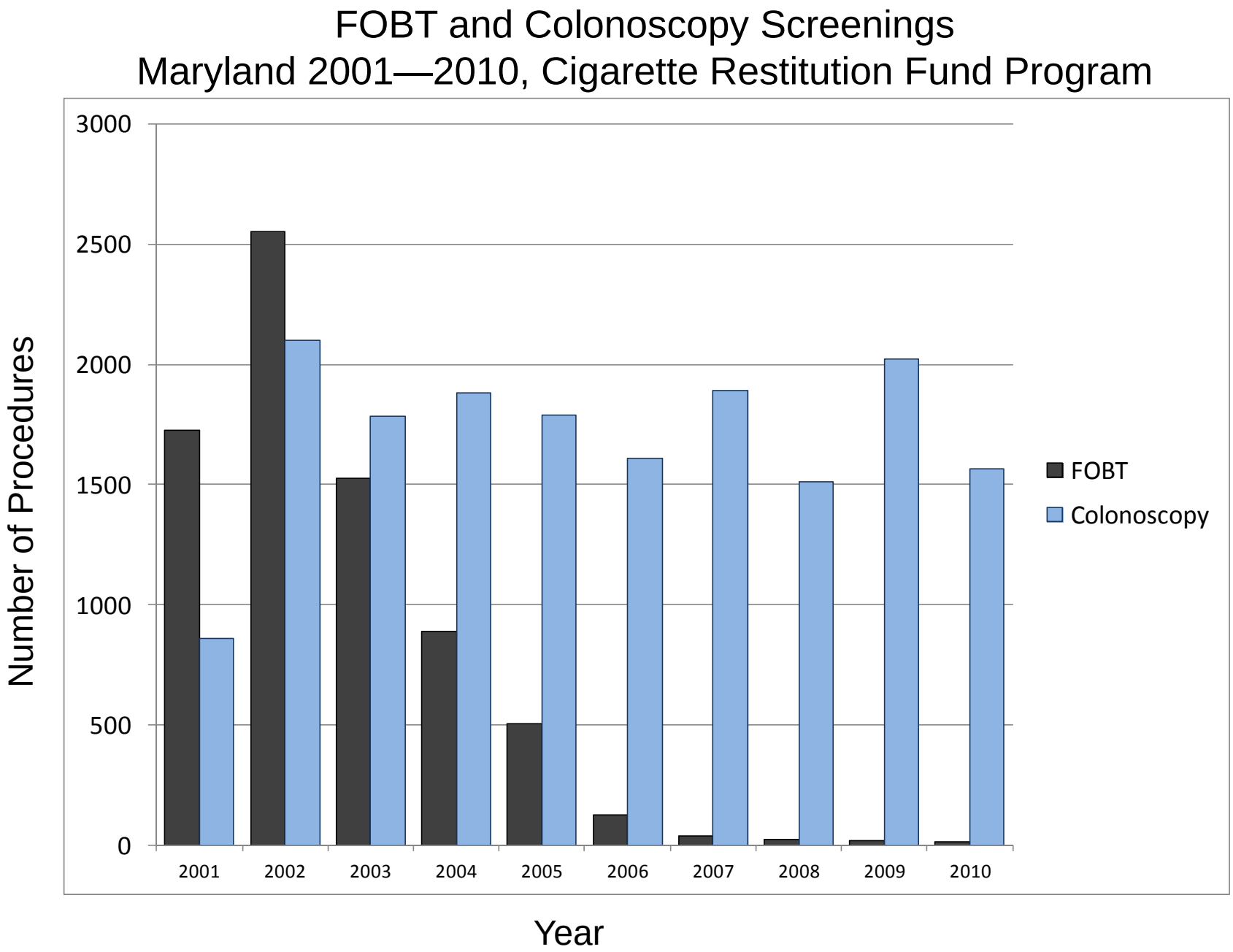
- Maryland had First Place for the largest decrease in CRC incidence in the US from 2003 to 2007
- Maryland is tied at 16th Place (with Georgia and West Virginia) for CRC mortality rate decrease
- Maryland is among the states with the highest CRC screening rates in 2010

Maryland CRC Screening Programs:

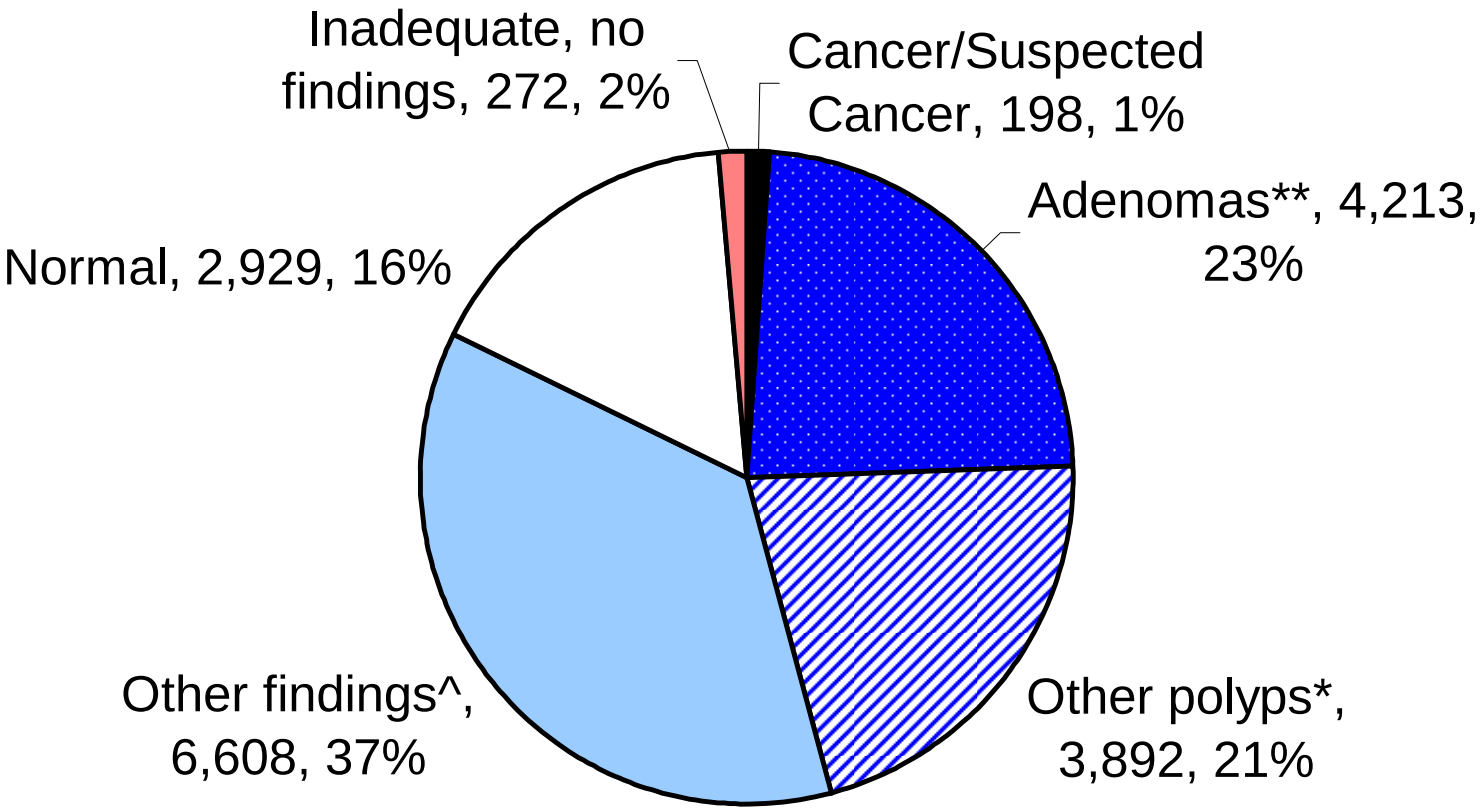
Cigarette Restitution Fund Program
CDC Screening Demonstration Program
CDC CRC Control Program
Maryland Cancer Fund Screening Grants

Total People Screened for CRC
Low Income, Un- or Under Insured
Maryland, 2001—June 30, 2011

- CRF CRC Screened (with col or FOBT): 20,624
- CDC Screening Demonstration: 696
  Program (with col, 2006--2009)
- CDC Control Program (number cols, FY2011): 204
- Maryland Cancer Fund (number cols 2008—11): 308


FOBT and Colonoscopy Screenings
Maryland 2001—2010, Cigarette Restitution Fund Program
Number of Procedures
3000
2500
2000
1500
1000
500
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
FOBT
Colonoscopy

Findings of 18,112 Colonoscopies*, July 1, 2000 – June 30, 2011



***Low income, and uninsured or under-insured, by most advanced finding**

IF…

If 10% of adenomas progress to cancer…

Maryland colonoscopy screenings for the low income/ un- or under-insured will have prevented about 430 colorectal cancers!

and

Early detection will have prevented deaths.

Maryland CANCER FUND

Donations to the MCF enable local programs
to pay for **treatment**
for eligible patients with cancer,
including colorectal cancer

http//fha.maryland.gov/cancer/mcf_home.cfm

Line 39 on your Maryland Income Tax Return

Future Directions

Screening/Early Detection

Screening and Early Detection

- Advances in Colonoscopy
- Advances in CT colonography (virtual col)
- Advances in stool tests
- Advances in blood tests

Future Directions

Quality Assessment

Quality Indicator:

A measurement used to monitor, assess, and improve the quality of patient care

CO-RADS

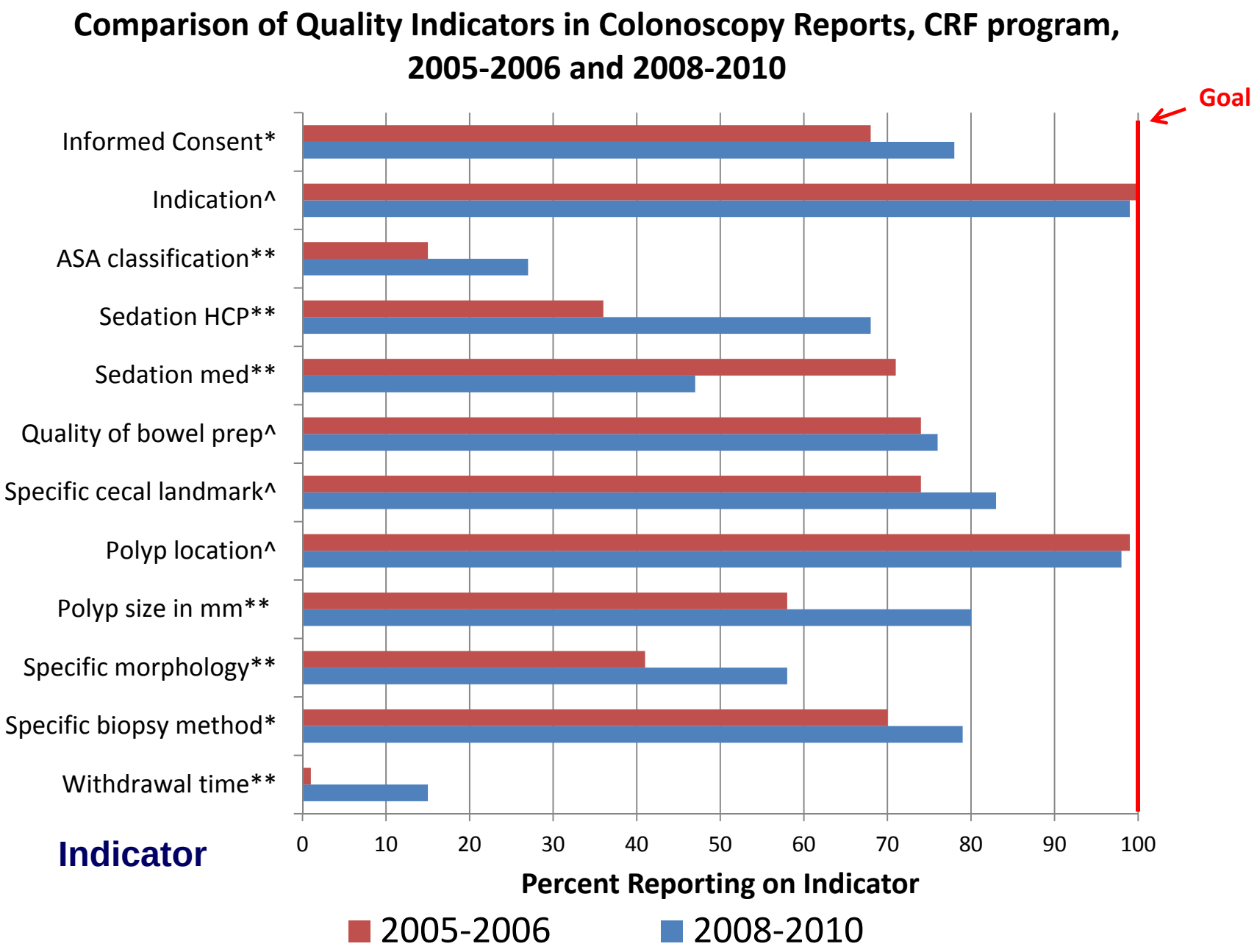
- Colonoscopy Reporting and Data Systems (CO-RADS)
- Standardized reporting of colonoscopy: one of the first steps to quality improvement

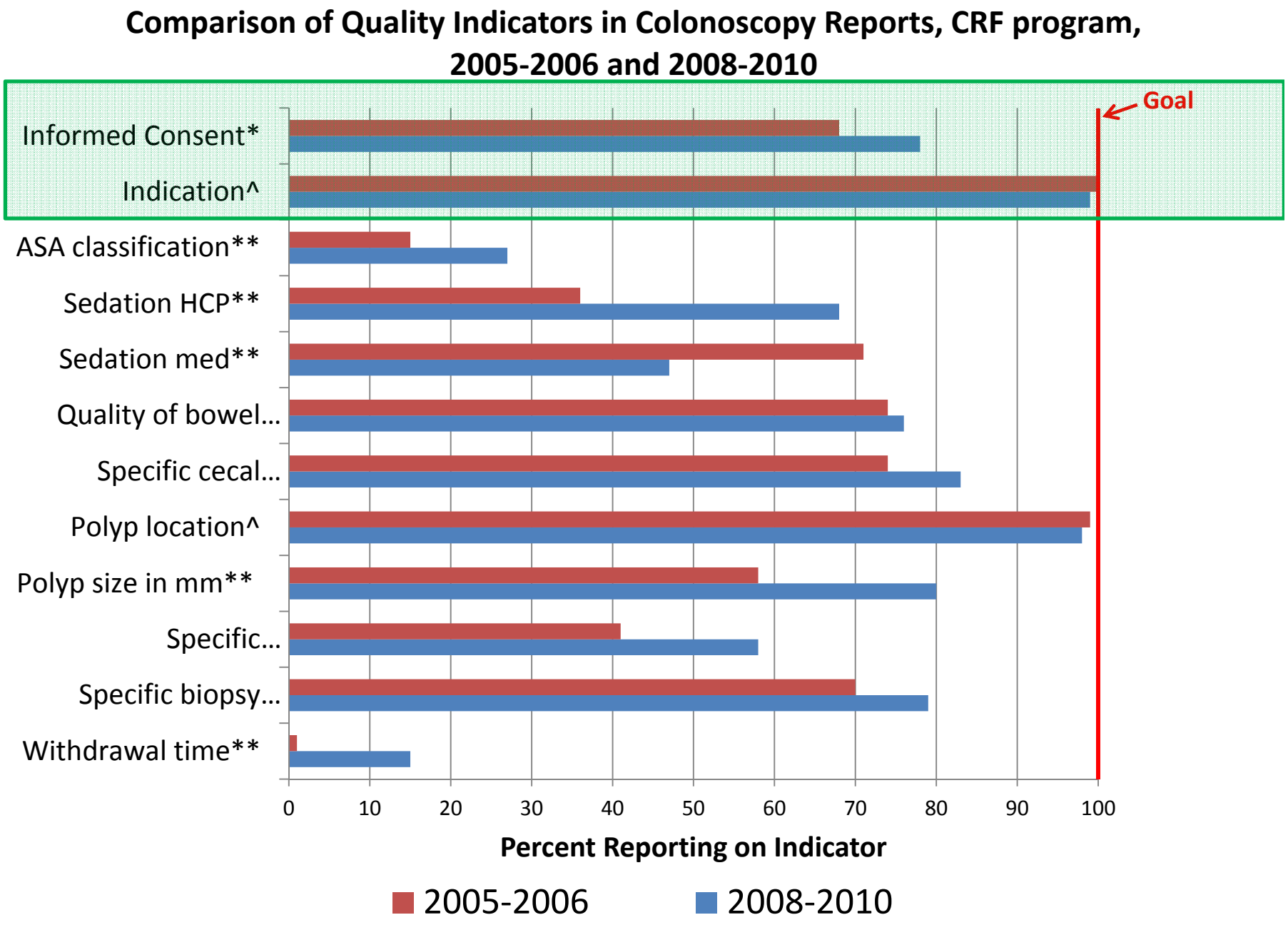
Lieberman DA, et al. Gastrointestinal Endoscopy 2007 (65)6:757-766

Quality Assessment of Colonoscopy Reporting:

A Comparison of Colonoscopy Reports Before and After CO-RADS

Eileen Steinberger, MD, MS


Comparison of Quality Indicators in Colonoscopy Reports, CRF program, 2005-2006 and 2008-2010
Goal
Informed Consent*
Indication^
ASA classification**
Sedation HCP**
Sedation med**
Quality of bowel prep^
Specific cecal landmark^
Polyp location^
Polyp size in mm**
Specific morphology**
Specific biopsy method*
Withdrawal time**
Indicator
0
10
20
30
40
50
60
70
80
90
100
Percent Reporting on Indicator
2005-2006
2008-2010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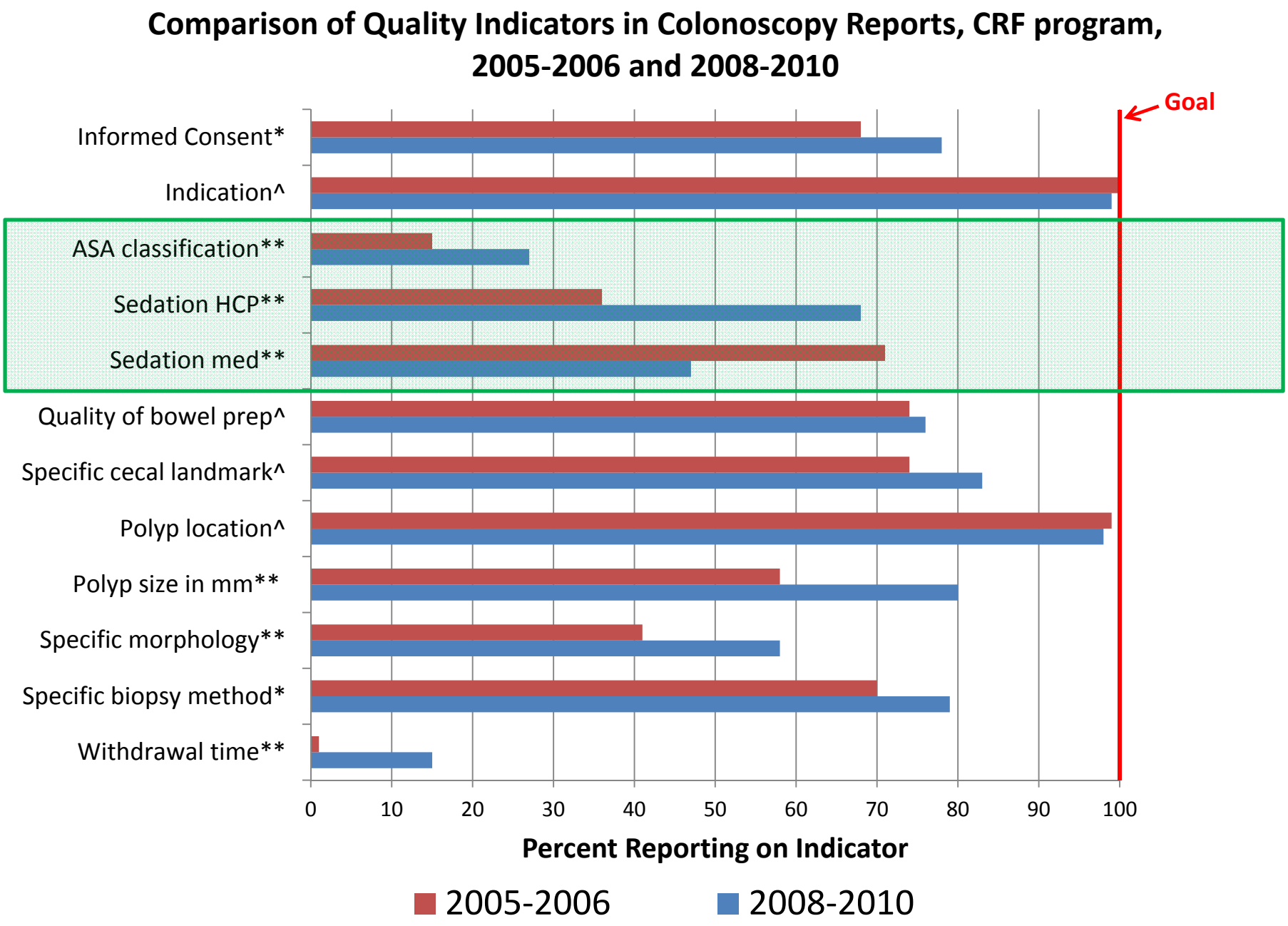
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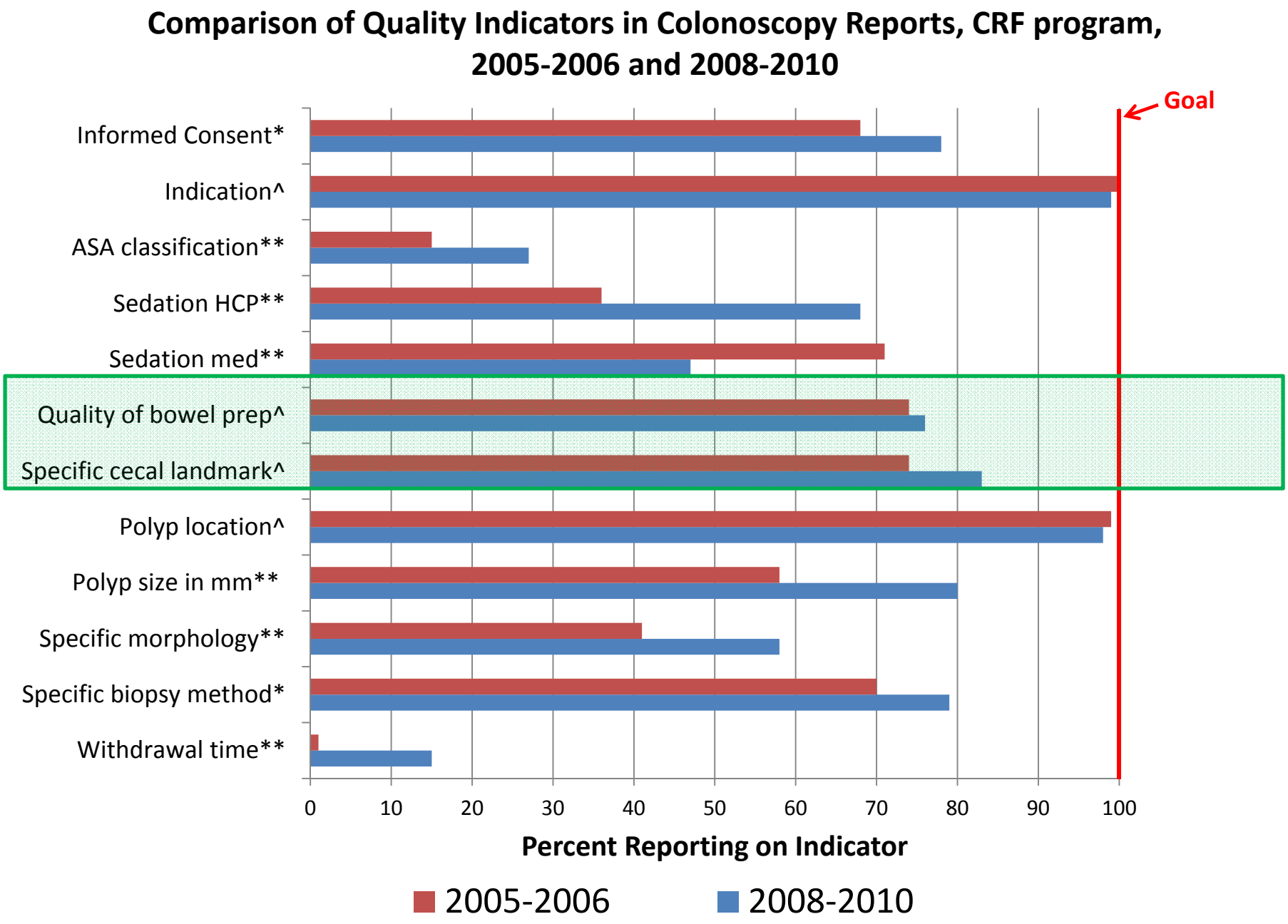
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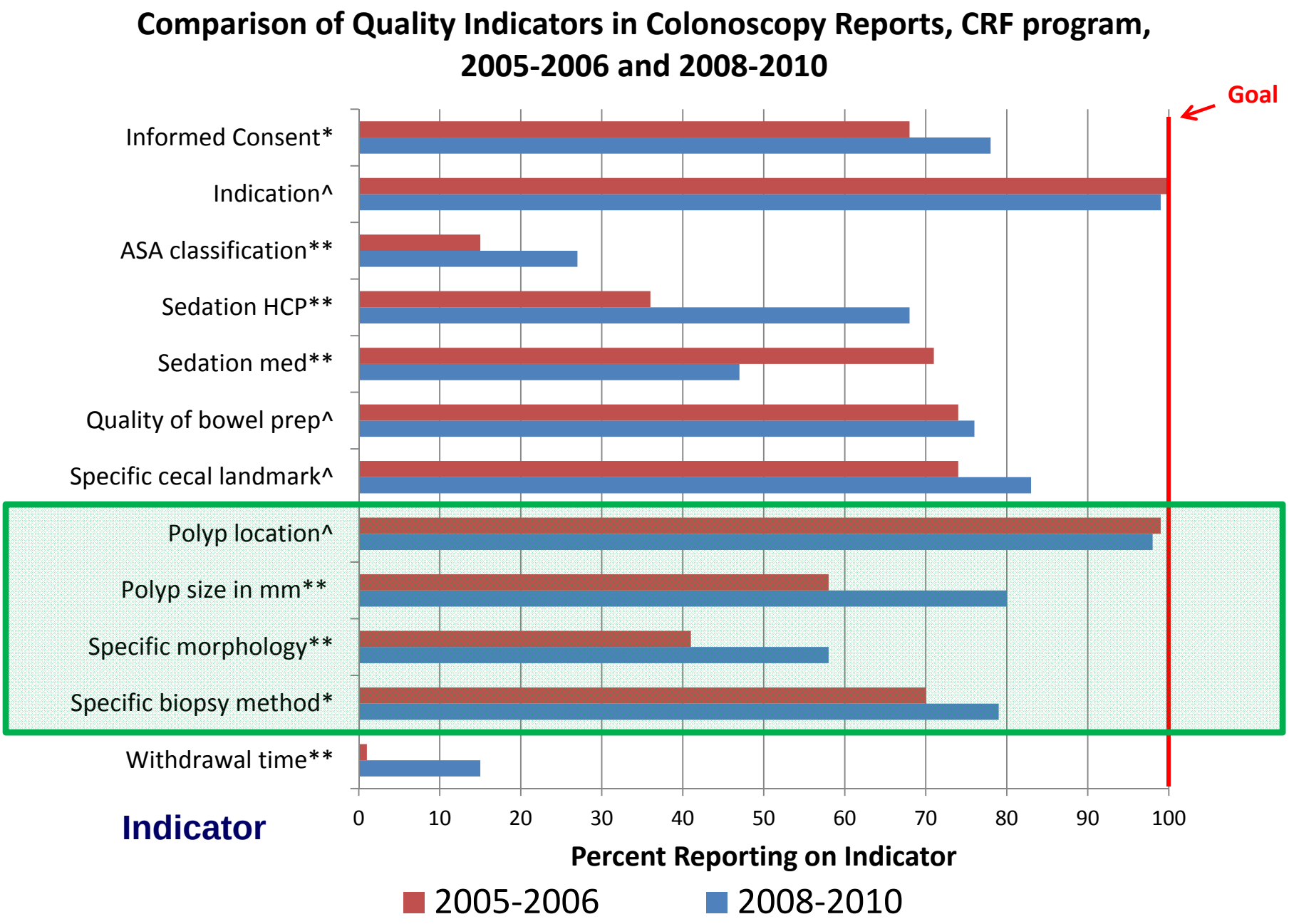
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Indicator
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10
20
30
40
50
60
70
80
90
100
Percent Reporting on Indicator
2005-2006
2008-2010

Conclusions

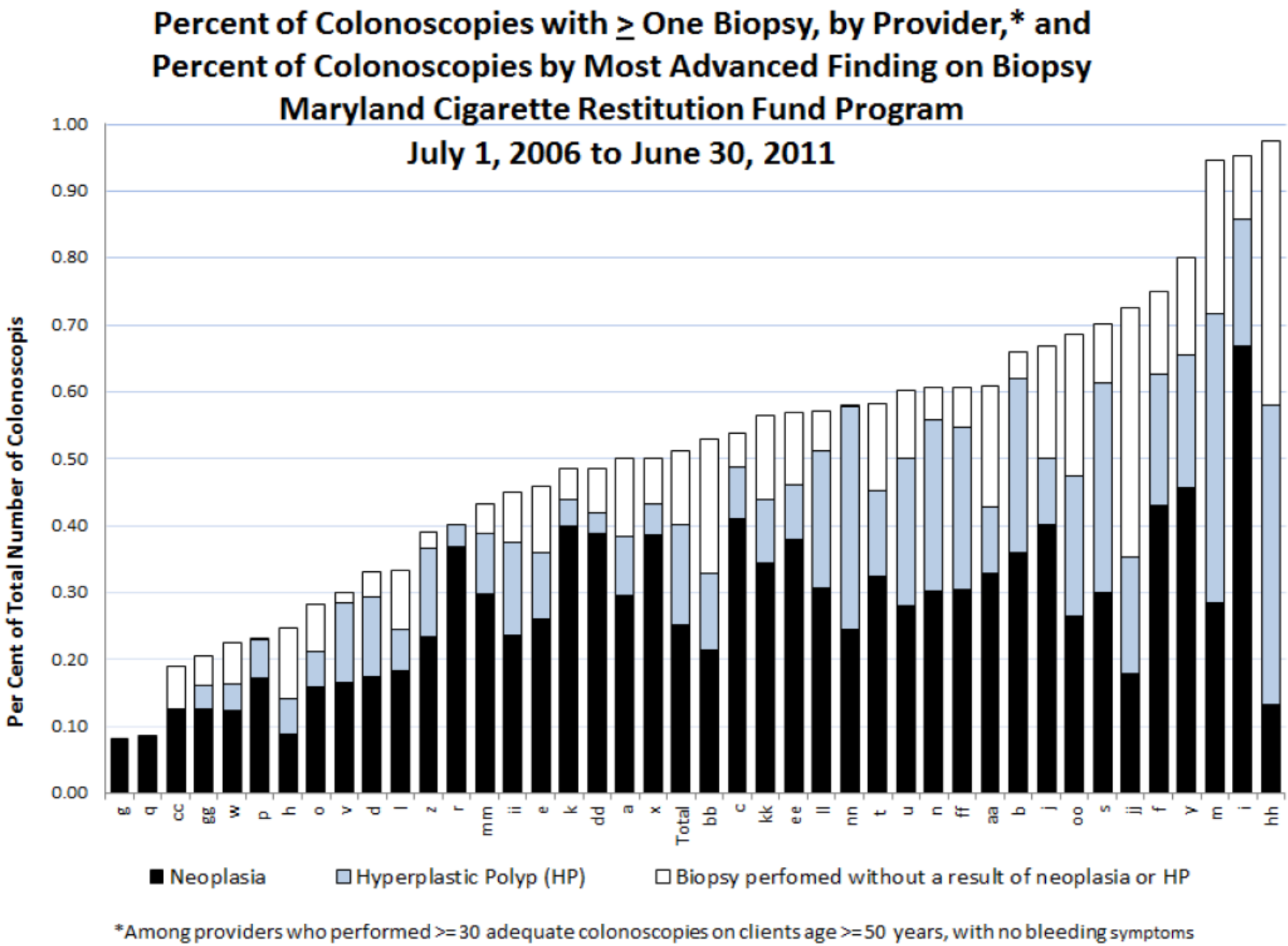
- Variation in the reporting of key quality CO-RADS indicators

  BUT improved between 2006 and 2010!
- More detailed reporting of quality indicators will:
  - Improve quality: "What gets measured, gets done!"
  - Allow for quality assessment
  - Improve overall supporting documentation for recall interval

Colonoscopy Feedback Reports to Colonoscopists

CRF Screening Program Indicators Overall

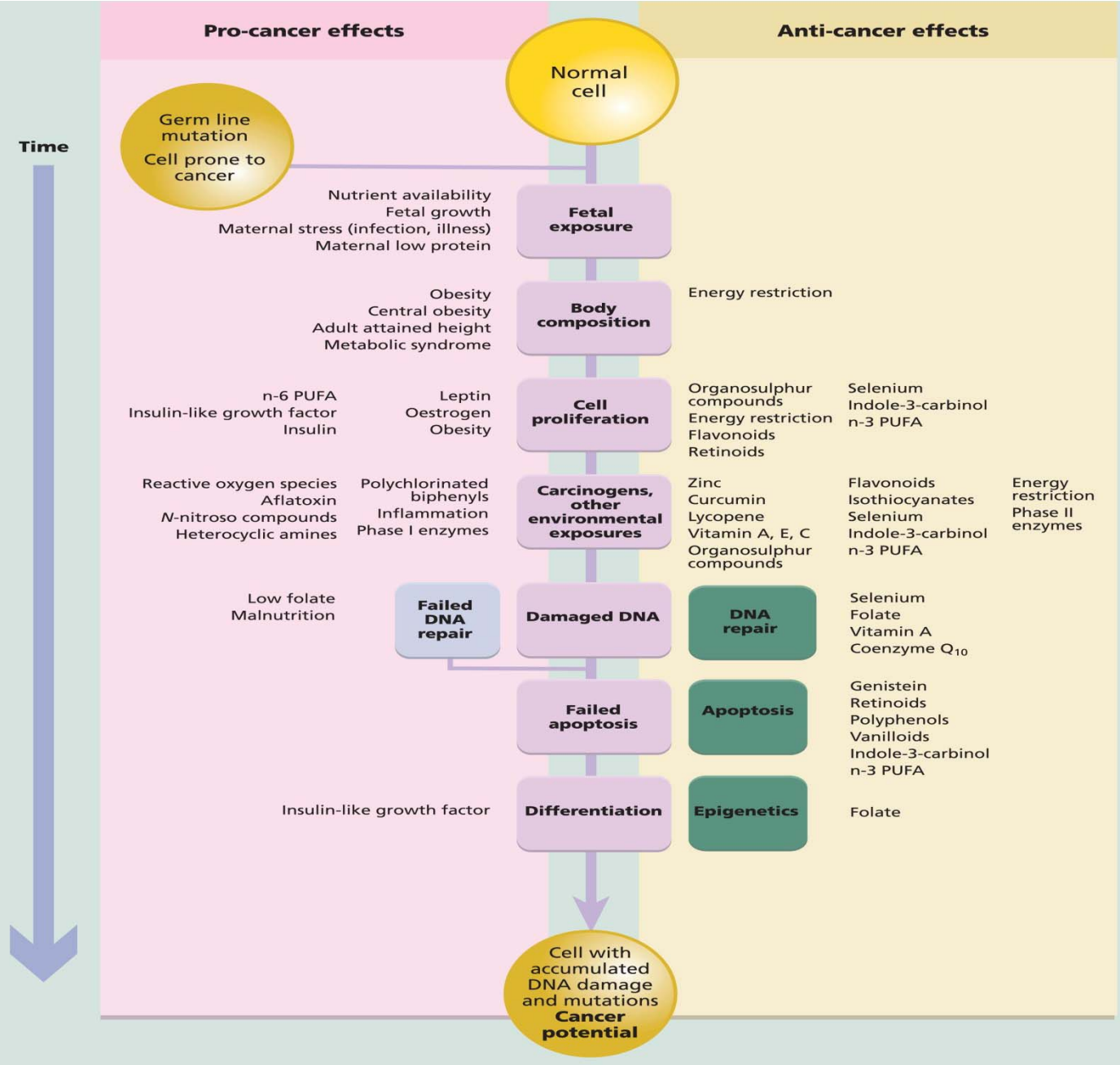
- Adequate Bowel Prep: 93%
- Reached Cecum: 98%
- Adenoma Detection Rate
  - Men: 31.8%
  - Women: 22.1%



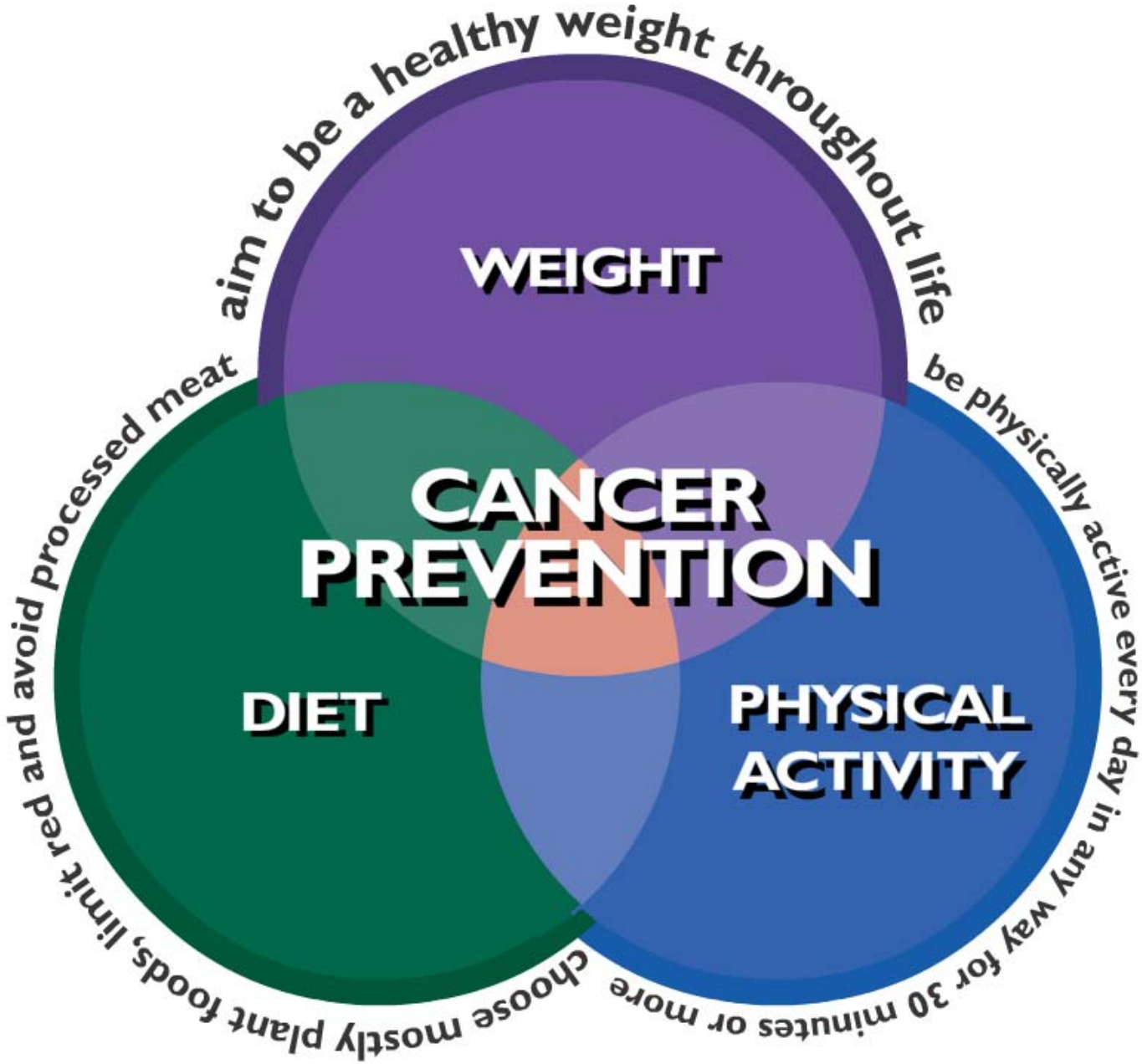
*Among providers who performed >=30 adequate colonoscopies on clients age >=50 years, with no bleeding symptoms

Future Directions

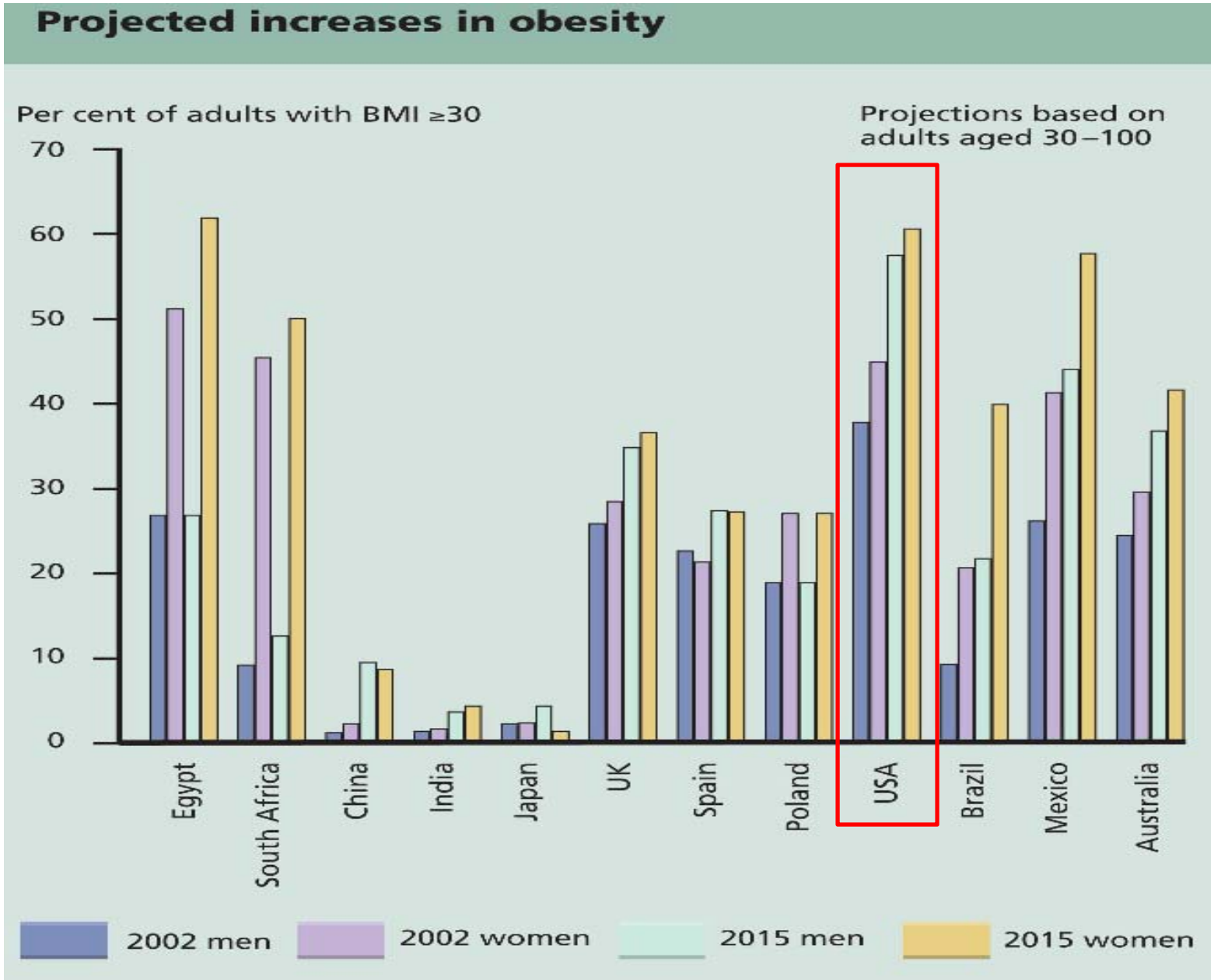
Prevention



http://www.dietandcancerreport.org/cancer_resource_center/er_graphics_display.php?ID=40



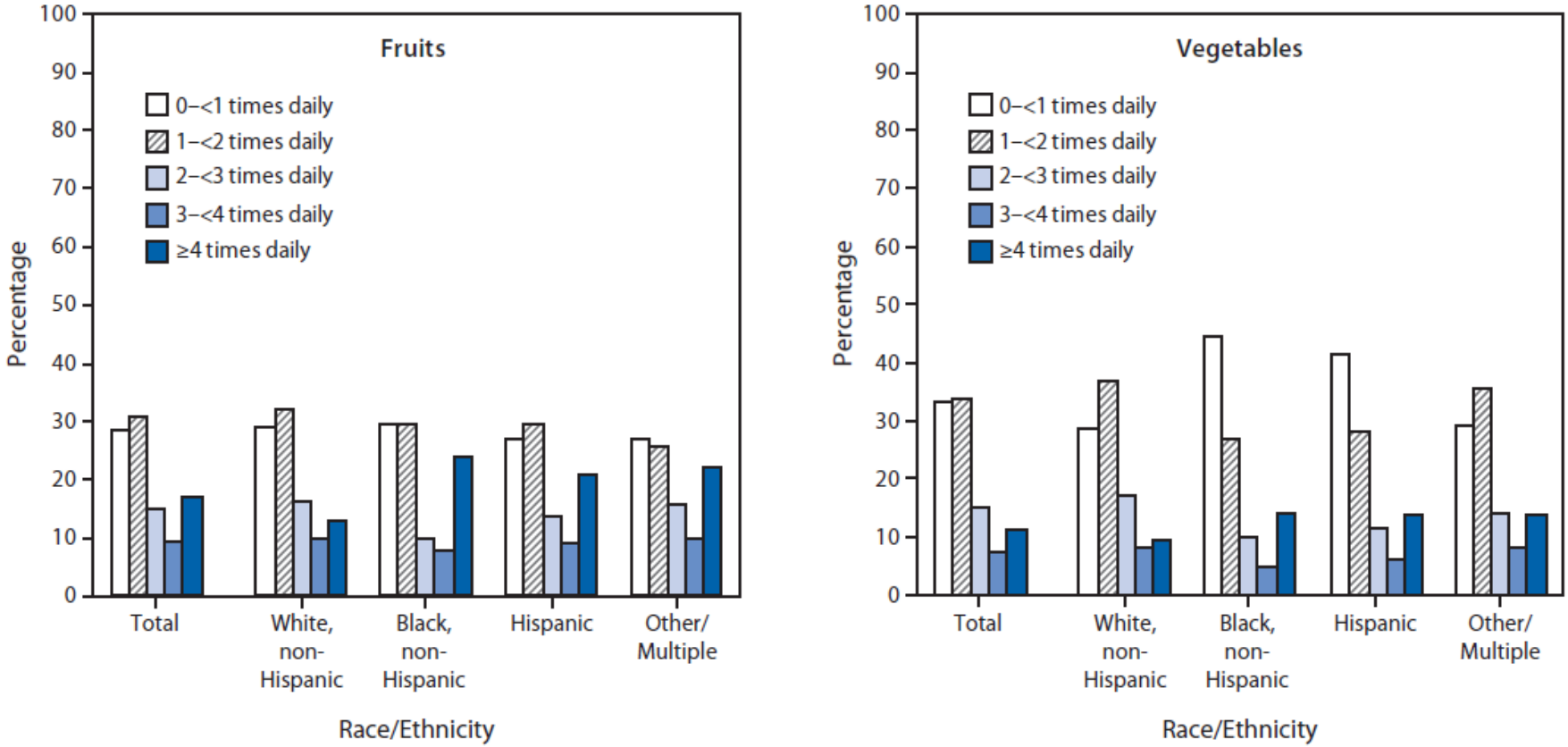
American Institute for Cancer Research: http://www.aicr.org/a-testing/promo/reduce-your-cancer-risk.html



http://www.dietandcancerreport.org/cancer_resource_center/er_graphics_display.php?ID=12

Fruit and Vegetable Consumption Among High School Students — United States, 2010

FIGURE. Percentage of high school students who consumed fruits* or vegetables,† by number of times daily and race/ethnicity — National Youth Physical Activity and Nutrition Study, United States, 2010



* Ate fruit or drank 100% fruit juice during the 7 days before the survey.
† Green salad, potatoes (excluding French fries, fried potatoes, or potato chips), carrots, or other vegetables during the 7 days before the survey.

MMWR, November 25, 2011 / 60(46);1583-1586

Gradually transition from the old American plate...

to a better plate...

to the New American Plate

http://preventcancer.aicr.org/site/PageServer?pagename=reduce_diet_new_american_plate_portion

Future Directions

Treatment

Acknowledgements

- Local Health Department staff
- Local Statewide Academic Health Center staff
- Staff of the Center for Cancer Surveillance and Control
- Grantees of the CDC CRC Screening Demonstration sites and the CRC Control Program
- CRC Medical Advisory Committee
- Minority Outreach and Technical Assistance staff and grantees
- Community Health Coalition members
- Organizations including American Cancer Society, CBOs, and FBOs
- Funding from the Cigarette Restitution Fund Program, State General Funds, the CDC, the NPCR
- Clients of the CRC screening programs
- And many others….

THANKS
for making Maryland
a CRC Success Story