Addressing Disparities in Colorectal Cancer Screening

NCQA: Recognizing Innovation in Multicultural Health Care Awards

November 13, 2007

Harvard Pilgrim Health Care

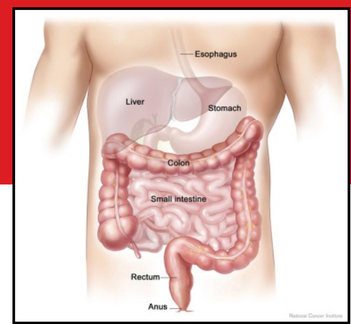
- Most experienced managed care organization in New England; first members enrolled in 1969
- Not-for-profit health plan providing a variety of insurance plan options and self-funding arrangements
- Over 1 million members in MA, NH and ME
- Network of over 135 hospitals and 28,000 doctors/clinicians
- Rated #1 health plan in the United States by NCQA and U.S. News and World Report for the past 3 years

Problem Statement

- Colorectal Cancer (CRC) is the 3rd leading cause of cancer death in U.S. and a leading cause of cancer morbidity among all races/ethnicities
- CRC screening is an effective tool to identify CRC, which is highly curable when detected early
  - Removal of precancerous polyps contributed to 10-yr decline in incidence rate of CRC among both men and women[1]
  - CRC death rates also declining, likely due to detection at earlier stage[1]
- Despite information on screening and recommendations from experts, many HPHC members not getting screened
  - Baseline CRC screening "defect rate" of 34% meant opportunity for improvement among all Harvard Pilgrim members.
  - Disparities in CRC screening among Hispanic members and those living in communities with lower education & income levels

[1] *Annual Report to the Nation on the Status of Cancer, 1975-2004" appearing in the November 15, 2007 issue of Cancer.*

CRC Screening Initiative



- Goals
  - Improve Harvard Pilgrim's Colorectal Cancer (CRC) screening rate overall
  - Reduce the observed disparity in CRC screening among Hispanic/Latino members
  - Address language and literacy issues that contribute to disparities
  - Identify barriers to CRC screening among member sub-groups

Project Team

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CRC Screening Interventions

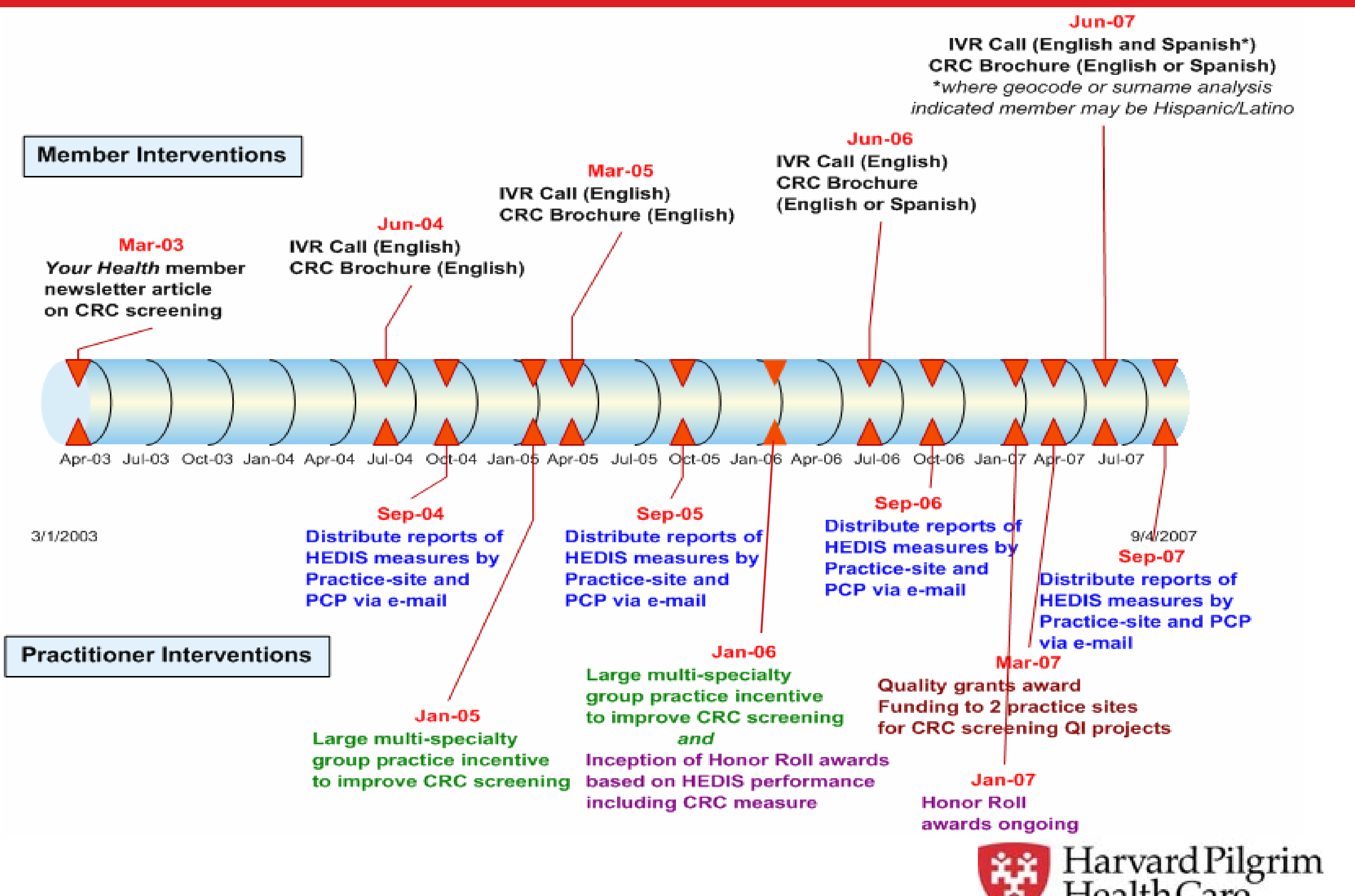
- Direct-to-member, population based outreach, based on age criteria, beginning in 2004
- High-risk component targeted to Hispanic/Latino members, identified using geocoding and surname coding, added in 2005
- Use IVR to outreach to members
  - Personalized interactive voice response (IVR) phone technology using voice only (no touch pad)
  - Caller ID boxes display Harvard Pilgrim name/phone
  - Provide information about the importance of CRC screening, including culturally appropriate motivational statements for members flagged as Hispanic or Latino
  - Collect information on member behavior, including barriers to care
  - Direct patients to their PCP for test selection
- Supports Provider-directed initiatives to improve CRC screening
  - Defect lists, P4P, Performance by R/E, Honor Roll, Quality Grants

Why IVR calls?

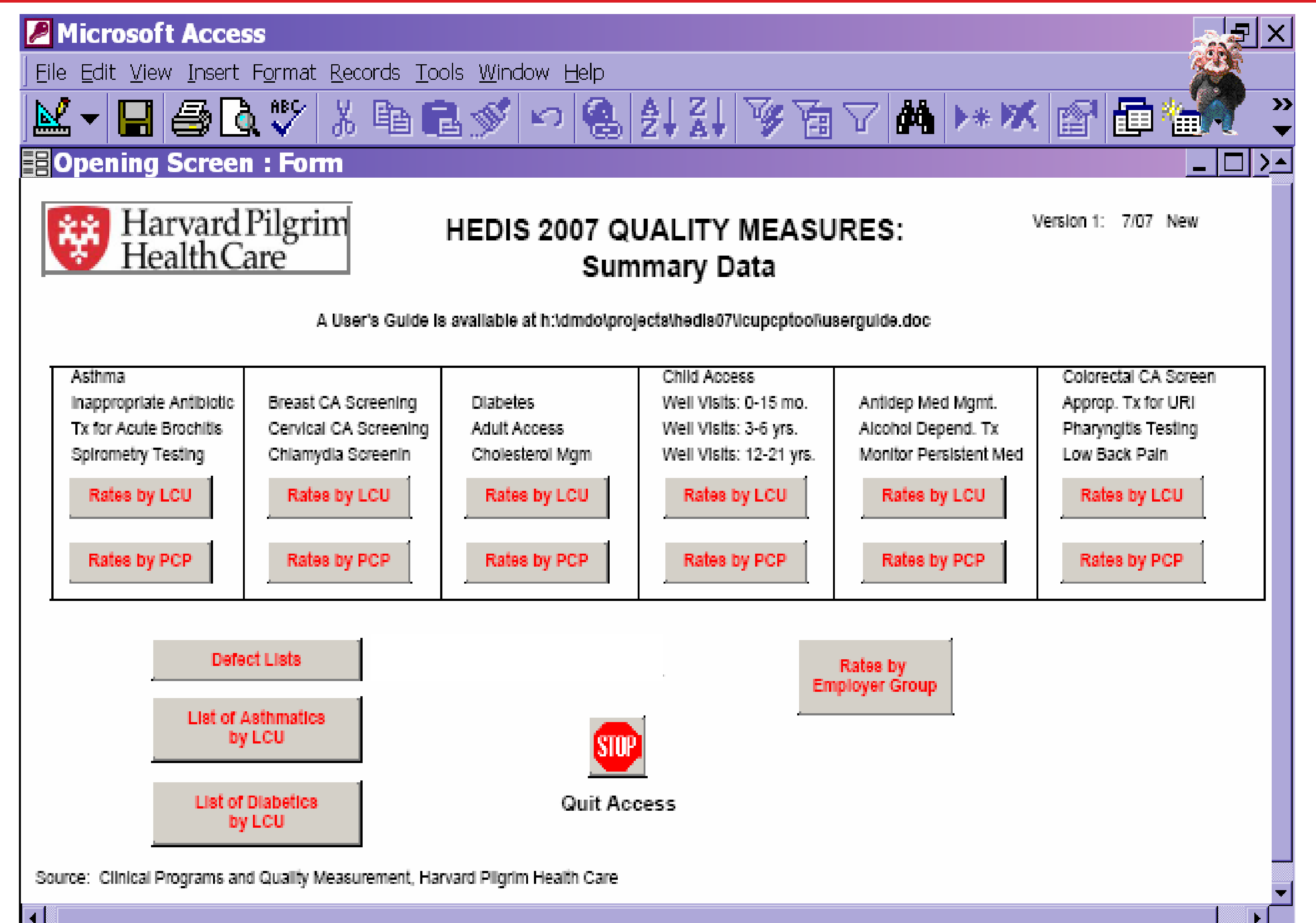
- Rationale
  - IVR provides an opportunity to question as well as educate members
  - Members may elect to call a toll-free number to hear the information at a time that is more convenient for them.
  - Spoken messages may achieve better comprehension by individuals with a low literacy level. Members can ask to have statements and questions repeated as often as necessary.
  - Advances in IVR technology enable calls in Spanish language.
  - Previous IVR initiatives showed a large percentage of members were reached and stayed on the phone to hear and respond to the messages. (Similar data are not available for mailed outreach.)
  - Computer generated messages may be perceived as less threatening than a personal discussion.[2]
  - Information reported by patients through IVR is as reliable as that obtained through structured clinical interviews.[2]

[2] Piette JD. Interactive voice response systems in the diagnosis and management of chronic disease. *Am J Managed Care*. 2000:6:817-827.

History of CRC Screening Interventions



Group & PCP Performance Reporting Tool



Evaluation Methods

- Past success measured by:
  - Improvement in overall CRC screening rate relative to baseline and national 90th percentile
  - Reduction in disparity observed for Latino members relative to benchmark population and national 90th percentile
  - Selected IVR metrics
    - Quantitative data from call tracking records (e.g., # members participating in calls, brochure requests)
    - Qualitative data from recorded calls (i.e., verbatim comments)
- Future success measured by:
  - Percent of all members and Hispanic/Latino members who were reached/not reached via IVR, who remained a Harvard Pilgrim member and received CRC screening within 12 months of their outreach call
- Target population was not engaged in the evaluation

Impact

- Ongoing initiatives resulted in consistent, incremental improvements in overall CRC screening rates since 2003
  - Harvard Pilgrim 2005 performance rate increased 3.7 percentage points over 2003 baseline
- Hispanic/Latino members are still less likely to be screened for CRC than benchmark population, but their screening rate improved and their baseline disparity was reduced
  - Hispanic/Latino members had 4.7 percentage point improvement in screening rate in 2005 compared to 2003
  - Hispanic/Latino members CRC screening rate surpassed the HEDIS national 90th percentile in 2005

Colorectal Cancer Screening Rates by Proxy* Race/Ethnicity

HEDIS 2006 National 90th Percentile (63.5%)

Performance Year	Black	Hispanic	Asian	White/other	ALL Members
2003	69.4%	60.7%	66.1%	66.9%	66.2%
2004	71.1%	63.1%	65.8%	67.0%	68.3%
2005	71.2%	65.4%	66.2%	68.5%	69.6%

Y-axis: Percent Screened (54.0% – 72.0%)

Proxy* Race/Ethnicity

*Racial/ethnic group assigned using geocoding and surname analysis

Colorectal Cancer Screening (FOBT, Flex-Sig, Colonoscopy or DCBE) by Proxy* Race/Ethnicity

	2003	2004	2005
Black	69.4%	71.1%	71.2%
Hispanic	60.7%	63.1%	65.4%
Asian	66.1%	65.8%	66.2%
White/other	66.9%	67.0%	68.5%

Performance Year

= Percentage Point Disparity

Screening rates increased and disparity decreased.

2005 Rate in lowest performing group was above the HEDIS national 90th percentile.

*Racial/ethnic group assigned using geocoding and surname analysis

Colorectal Cancer Screening
Disparity Reduction in Context

	CRC NCQA National 90th*	CRC HPHC Commercial	CRC HPHC Hispanic/Latino
2003 Screening Rate	61.1	66.2	60.7
2004 Screening Rate	61.8	68.3	63.1
2005 Screening Rate	63.5	69.6	65.4
Absolute Defect Reduction	-2.4	-3.4	-4.7
Relative Defect Reduction	-6.2	-10.1	-12.0

Comparison Group

Source: NCQA State of Health Care Quality Reports for 2004 through 2006

Measures of Success: IVR usage

Percent

	2004	2005	2006
% Members reached	55.5%	61.6%	51.0%
% Receiving message	93%	92%	90%
% Requesting brochure	24%	17%	36%

Lessons Learned

- Some members who self-identified as Hispanic or Latino had not been identified as such by geocoding and surname coding
- Members who had been called the previous year, and who had not been screened in the interim, may require stronger messages and different questions

Next Steps

- Offer the option of listening to the call in Spanish to all members identified for the IVR intervention in 2008.
- Tailor messages and questions based on the number of IVR outreach cycles the member has received.
- Ask about whether the member's PCP spoke to them about CRC screening.
- Ask members an open-ended question about other barriers to CRC screening.

Moving Forward

- Resource constraints that could affect sustainability include continuation of funding and results of ROI analyses.
- Intervention could easily be transferable to other health plan or provider settings.
- Information on resources used can be obtained by contacting:
  - NHPC website for geocoding and surname coding tools (www.chcs.org)
  - NCQA for HEDIS measures (www.ncqa.org)
  - ELIZA Corporation regarding ISR technology (www.elizacorp.com)