Colorectal Cancer Professional Development Webinar Series:

Evaluating Progress and Sharing Best Practices

June 28, 2016

12:00pm-1:30pm

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DCPCA DISTRICT OF COLUMBIA PRIMARY CARE ASSOCIATION

American Cancer Society

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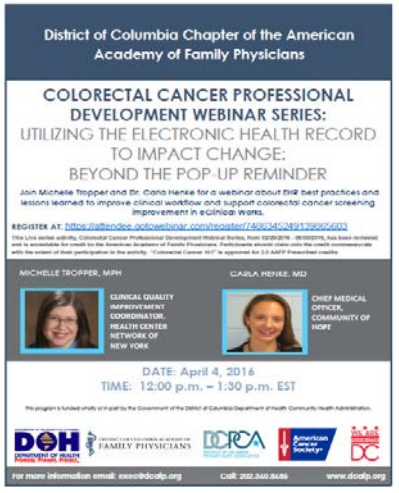
Colorectal Cancer Professional Development Webinar Series

For more information contact exec@dcafp.org; www.dcafp.org

COLORECTAL CANCER 101
2.0 CME Credits

PATIENT ENGAGEMENT
1.5 CME Credits

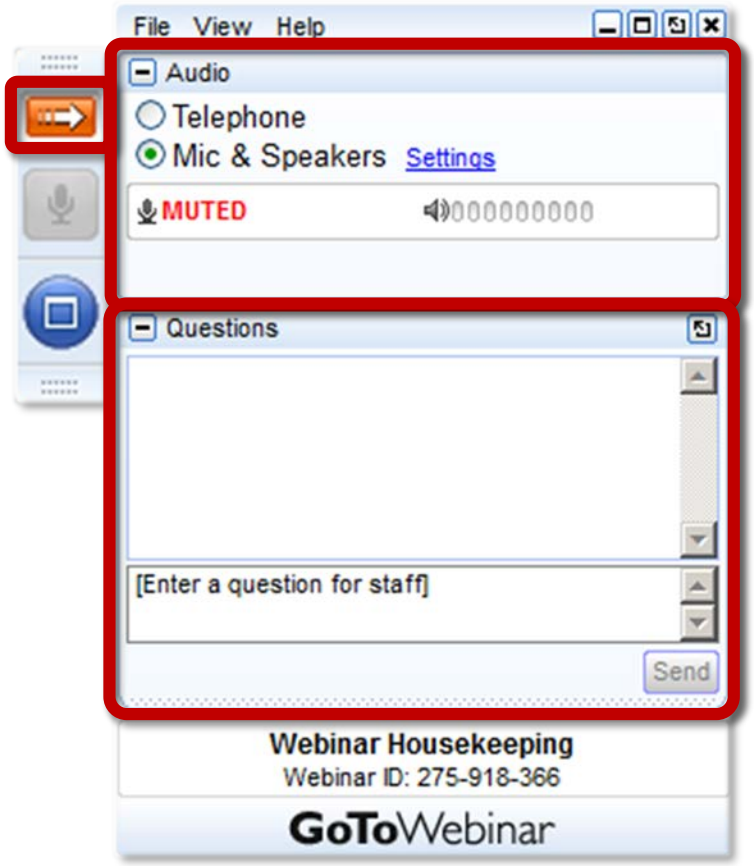


EHR BEST PRACTICES
1.5 CME Credits

CLINICAL CARE TEAM
1.5 CME Credits

EVALUATING PROGRESS
1.5 CME Credits

GoToWebinar Housekeeping: attendee participation



Your Participation

Open and close your control panel

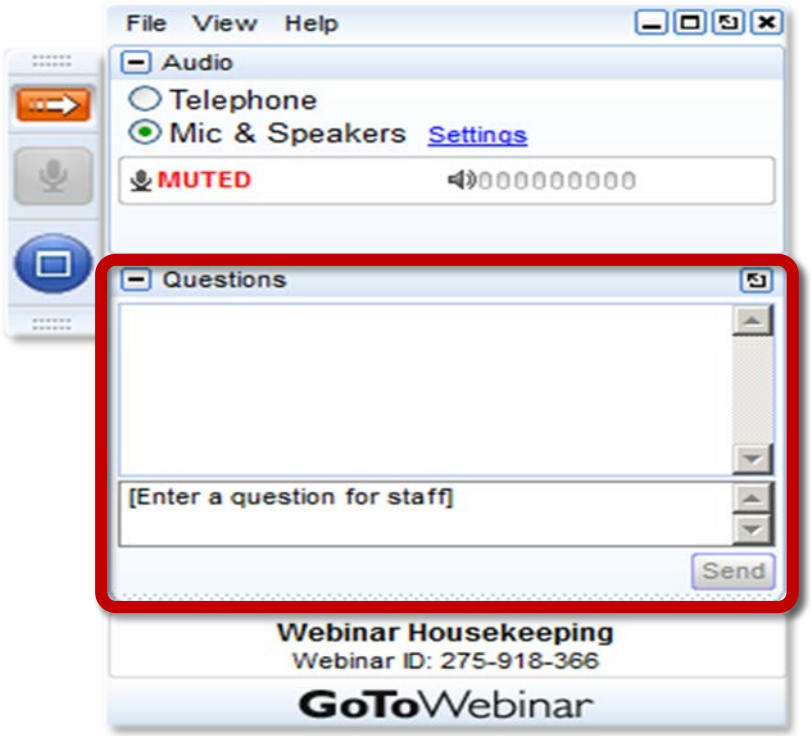
Join audio:

- Choose “Mic & Speakers” to use VoIP
- Choose “Telephone” and dial using the information provided

Submit questions and comments via the Questions panel

Note: Today’s presentation is being recorded and will be archived at dcafp.org.

GoToWebinar Housekeeping: time for questions



Your Participation

- Please continue to submit your text questions and comments using the Questions Panel

For more information, please contact Finie Richardson, MPH via email at [exec@dcafp.org]

Note: Today's presentation is being recorded and will be archived at dcafp.org.

Evaluating Progress and Sharing Best Practices

AUDREY WHETSELL, MA, CPHIT, NCQA PCMH

CO-FOUNDER
RESOURCE PARTNERS, LLC
MEDICAL HOME DEVELOPMENT GROUP, LLC

Poll Questions: Clinical Quality Measures

1. What are common screening options for detecting colorectal cancer?
2. What is the age requirement for annual colorectal screening?

Colorectal Screening Quality Reporting Equals Quality Care

Audrey J. Whetsell, MA, CPHIT, PCMH CCE
Medical Home Development Group
A Division of Resource Partners, LLC

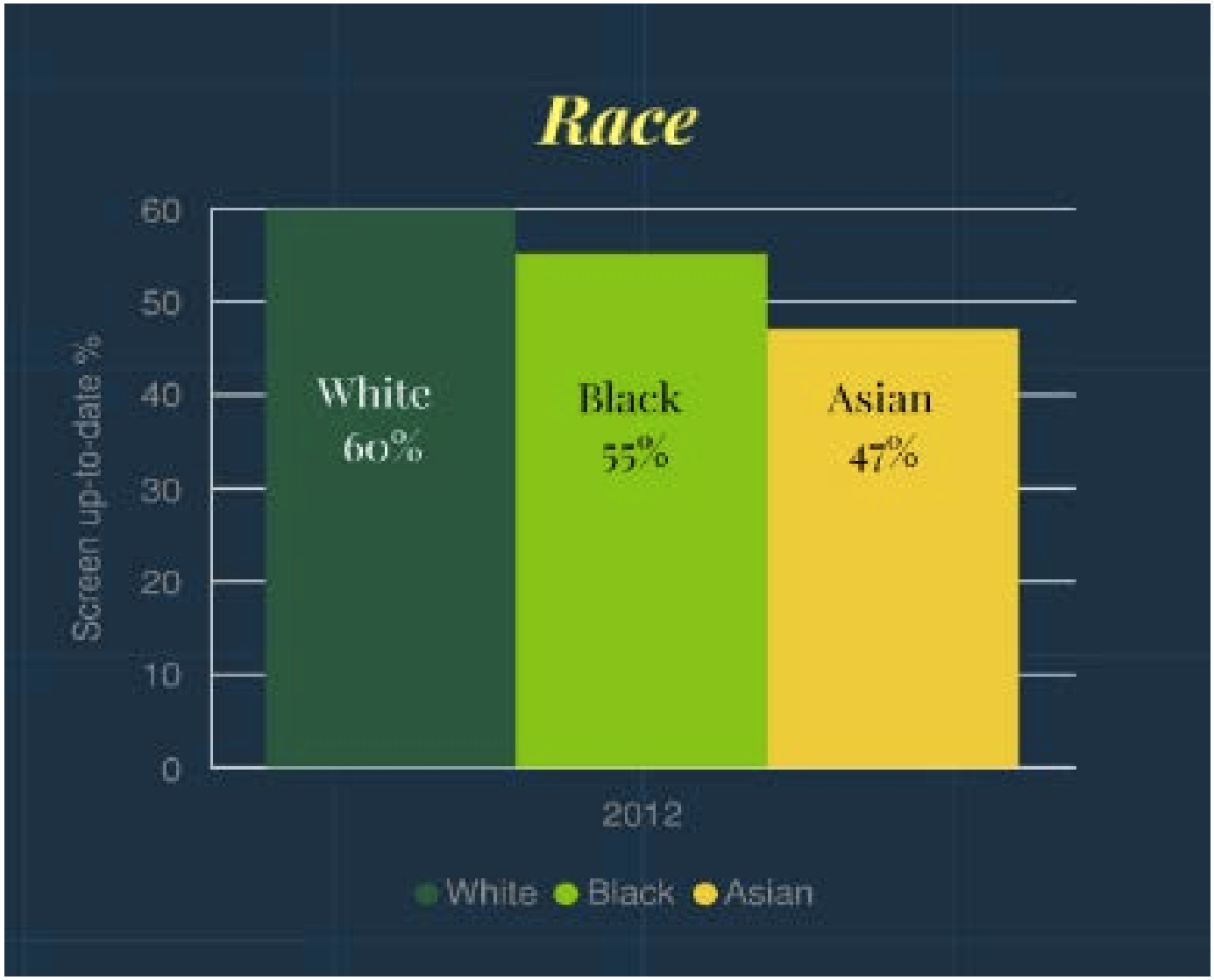
Colorectal Screenings

- Colorectal cancer (CRC) is a leading cause of cancer mortality worldwide.
- Colorectal cancer mortality has declined slightly in the last 10 years, and the decrease appears to be accelerating.
- This decline is due in large part to screening and early detection.

Screening Options

- Fecal occult blood testing (FOBT) remains a mainstay of average-risk screening despite limitations in sensitivity and specificity.
- Colonoscopy - cost of colonoscopy is coming down, cost-benefit models suggest that the yield from colonoscopy may be significantly greater than the difference in cost among the various surveillance methods.
- Colonoscopy is increasingly recommended more strongly as a screening alternative.

Breakdown of Screening Data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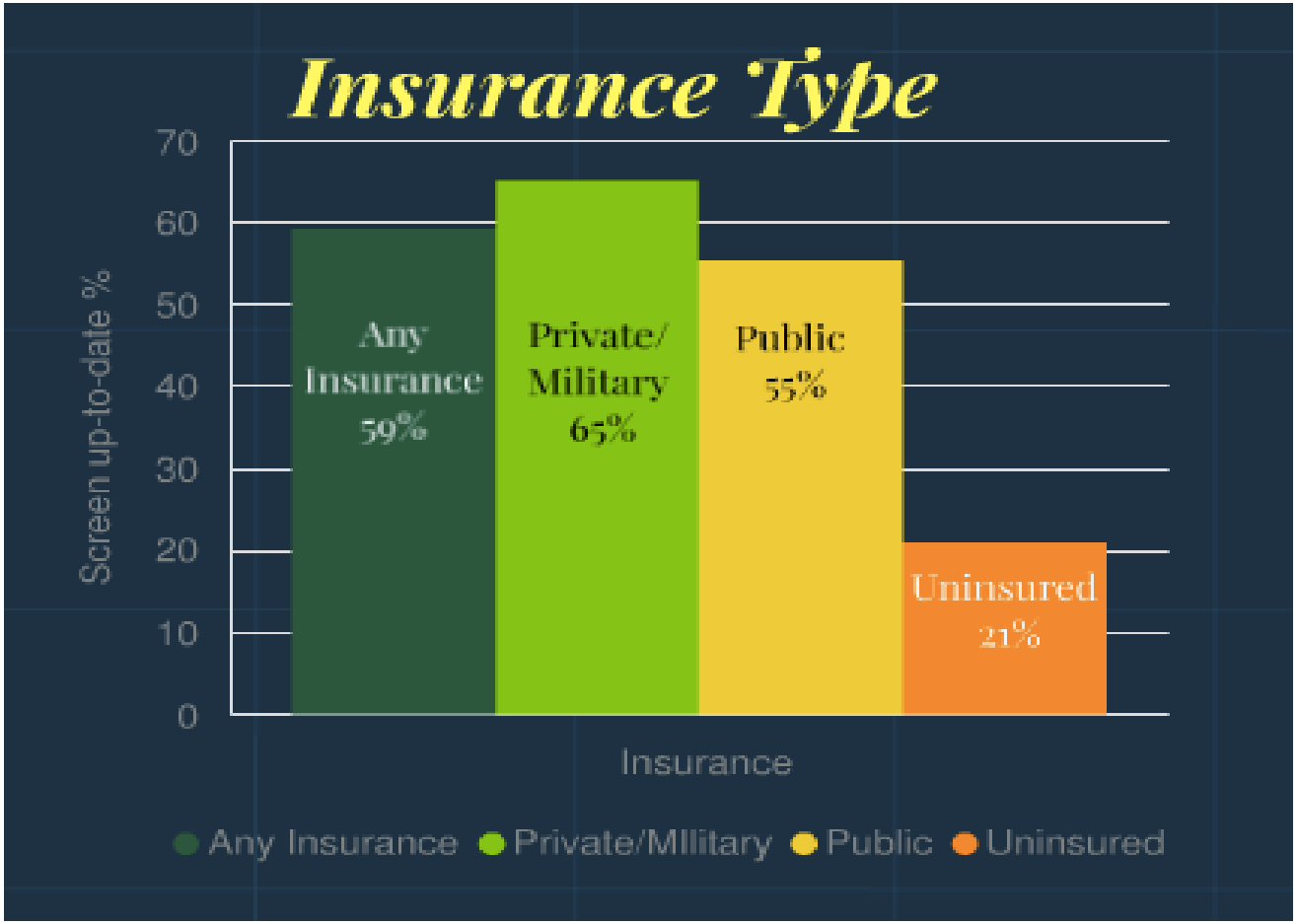
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Public 55%
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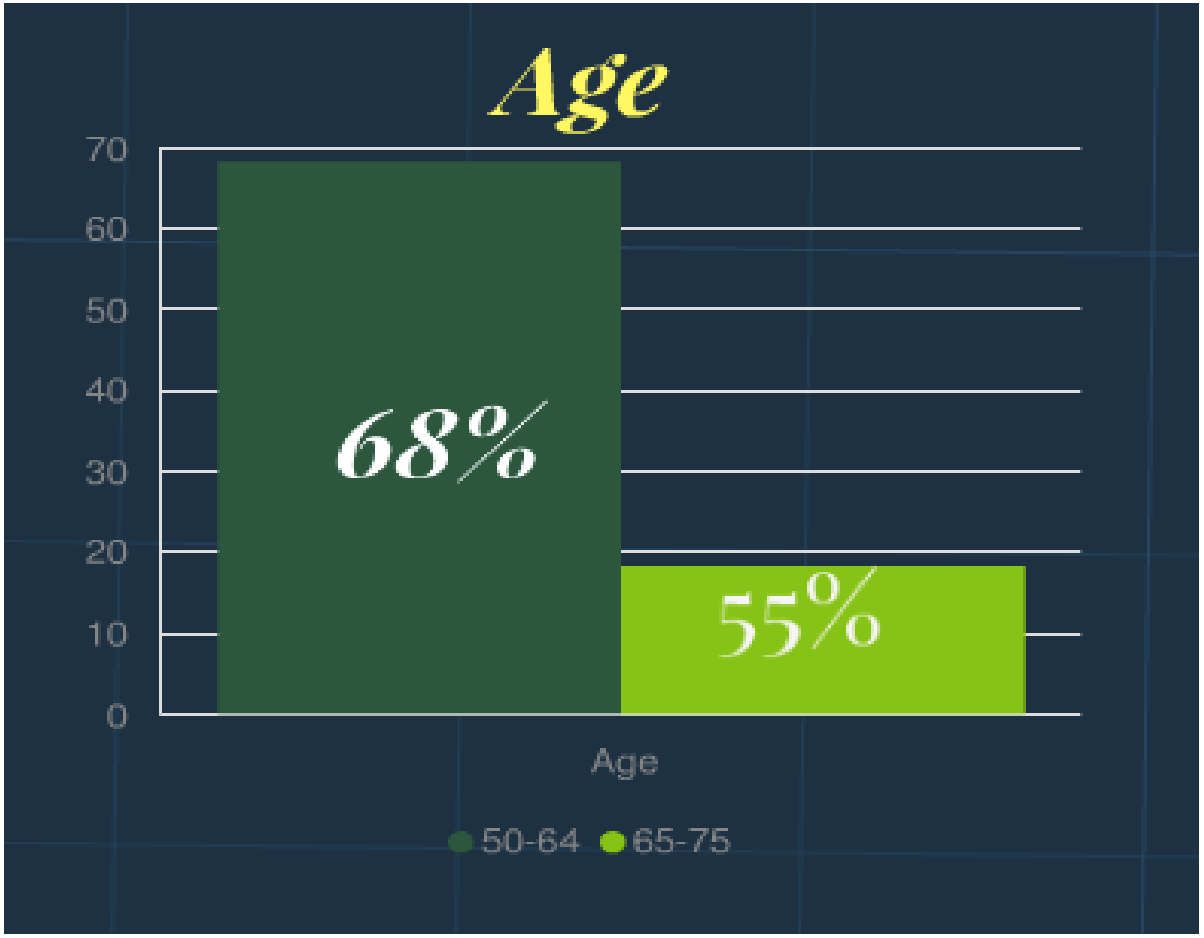
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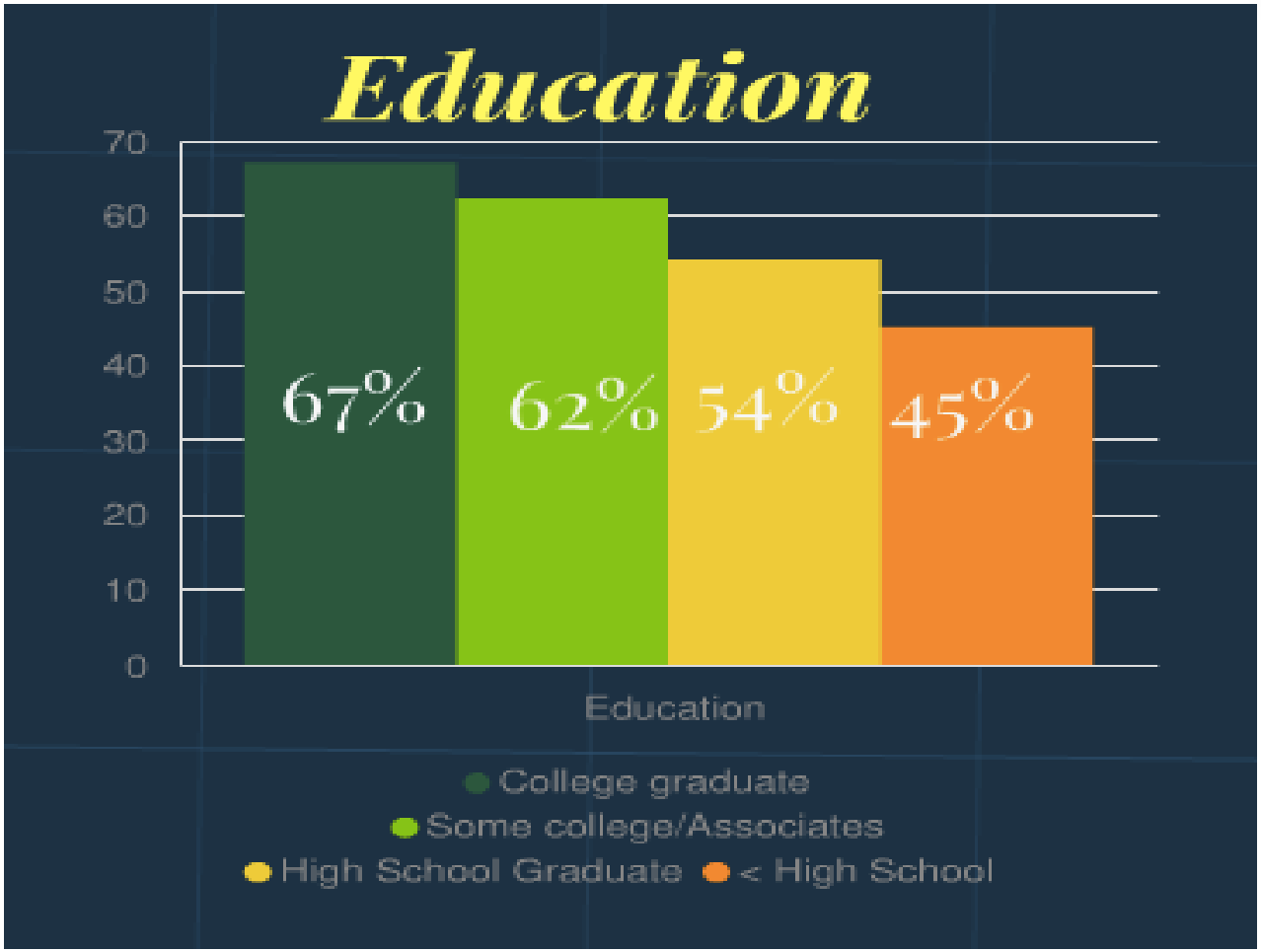
300%-<400%
400%-<500%
>500%


Education
70
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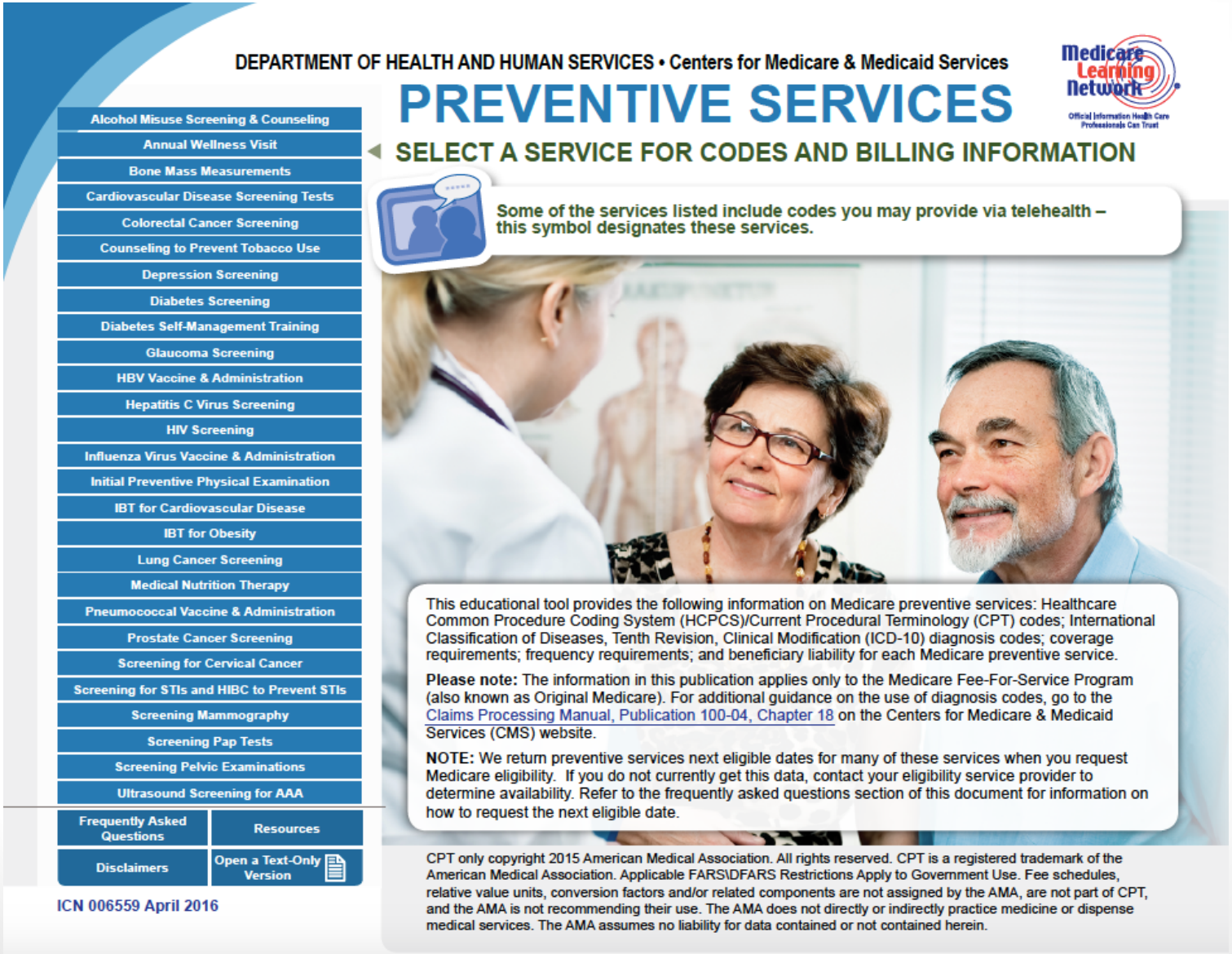
67%
62%
54%
45%
Education
College graduate
Some college/Associates
High School Graduate
< High School

Preventive Services Resource



Interactive Resource Guide

DEPARTMENT OF HEALTH AND HUMAN SERVICES • Centers for Medicare & Medicaid Services

Medicare Learning Network — Official Information Health Care Professionals Can Trust

PREVENTIVE SERVICES

SELECT A SERVICE FOR CODES AND BILLING INFORMATION

- Alcohol Misuse Screening & Counseling
- Annual Wellness Visit
- Bone Mass Measurements
- Cardiovascular Disease Screening Tests
- Colorectal Cancer Screening
- Counseling to Prevent Tobacco Use
- Depression Screening
- Diabetes Screening
- Diabetes Self-Management Training
- Glaucoma Screening
- HBV Vaccine & Administration
- Hepatitis C Virus Screening
- HIV Screening
- Influenza Virus Vaccine & Administration
- Initial Preventive Physical Examination
- IBT for Cardiovascular Disease
- IBT for Obesity
- Lung Cancer Screening
- Medical Nutrition Therapy
- Pneumococcal Vaccine & Administration
- Prostate Cancer Screening
- Screening for Cervical Cancer
- Screening for STIs and HIBC to Prevent STIs
- Screening Mammography
- Screening Pap Tests
- Screening Pelvic Examinations
- Ultrasound Screening for AAA

Frequently Asked Questions | Resources | Disclaimers | Open a Text-Only Version

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Colorectal Cancer Screening

Effective January 1, 2016, use CPT code 81528 when billing for the Cologuard™ test (note that your MAC will accept HCPCS code G0464 for claims with dates of service on or before December 31, 2015).

Only laboratories authorized by the manufacturer to perform the Cologuard test may bill for this test.

HCPCS/CPT Codes

00810 – Anesthesia for lower intestinal endoscopic procedures, endoscope introduced distal to duodenum

81528 – Oncology (colorectal) screening, quantitative real-time target and signal amplification of 10 DNA markers (KRAS mutations, promoter methylation of NDRG4 and BMP3) and fecal hemoglobin, utilizing stool, algorithm reported as a positive or negative result

82270 – Blood, occult, by peroxidase activity (eg, guaiac), qualitative; feces, consecutive collected specimens with single determination, for colorectal neoplasm screening (ie, patient was provided 3 cards or single triple card for consecutive collection)

G0104 – Flexible Sigmoidoscopy

G0105 – Colonoscopy (high risk)

G0106 – Barium Enema (alternative to G0104)

G0120 – Barium Enema (alternative to G0105)

G0121 – Colonoscopy (not high risk)

G0328 – Fecal Occult Blood Test (FOBT), immunoassay, 1-3 simultaneous

G0464 – Colorectal cancer screening; stool-based DNA and fecal occult hemoglobin (e.g., KRAS, NDRG4 and BMP3)

ICD-10-CM Codes

See the CMS ICD-10 webpage for individual CRs and coding translations for ICD-10 and contact your MAC for guidance

For Cologuard Multitarget Stool DNA (sDNA) Test, use Z12.11 and Z12.12

Who Is Covered

For colorectal cancer screening using Cologuard — a Multitarget Stool DNA (sDNA) Test:

All Medicare beneficiaries:

- Aged 50 to 85 years;
- Asymptomatic; **and**
- At average risk of developing colorectal cancer

For screening colonoscopies, FOBTs, flexible sigmoidoscopies, and barium enemas:

All Medicare beneficiaries:

- Aged 50 and older who are at normal risk of developing colorectal cancer; **or**
- At high risk of developing colorectal cancer

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ICN 006559 April 2016

Colorectal Cancer Quality Measure

Measure #113 (NQF 0034): Colorectal Cancer Screening – National Quality Strategy Domain: Effective Clinical Care

2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:
CLAIMS, REGISTRY

DESCRIPTION:
Percentage of patients 50-75 years of age who had appropriate screening for colorectal cancer

INSTRUCTIONS:
This measure is to be reported a minimum of **once per reporting period** for patients seen during the reporting period. There is no diagnosis associated with this measure. Performance for this measure is not limited to the reporting period. This measure may be reported by clinicians who perform the quality actions described in the measure based on services provided and the measure-specific denominator coding.

Quality Reporting Sample Calculations

Reporting Rate =

Performance Met (a=3 patients) + Performance Exclusion (b=2 patients) + Performance Not Met (c=2 patients) = 7 patients / 8 eligible patients = **87.50%**

Performance Rate =

Performance Met (a=3 patients) / Reporting Numerator = 7 Patients – Performance Exclusion (b=2 patients) = 3 patients / 5 patients = **60%**

Pathways to Quality Reporting

Thinking outside of the box:

Chronic Care Management

- Patient with 2 or more chronic conditions placing patients at risk of serious complications or death
- Non face to face encounters
- NP/PA/Midlevels/RN/LPN can call once a month 20 minutes
- Proactive approach to reduce rep
- Monthly revenue impact could be $42

Chronic Care Management

- Works very well with MIPS pathways as patient with multiple comorbidities are identified
- Reflects complexities of care with likelihood of increasing benchmark expenditures
- Annual revenue impact could be close to $210,000 for 500 patients

Advance Care Planning

- Every Medicare patients should be given opportunity of understanding ACP thru MDs
- Now billable and reimbursed
- Revenue impact could be close to $140 depending geographical location and variables
- May need to be done more than once if patient's condition or social circumstances change

Transitional care management

- For any patient discharged from hospitalization, need to be seen within a week or contact to be made via phone.
- Needs to be seen multiple times to prevent risk of rehospitalization.
- On 30th day 99495 or 99496

Smoking cessation

- Identifying tobacco smoking is one of the PQRS measures
- For those known to be nicotine users, smoking cessation counseling is one of the PQRS intervention needed to be reported
- Multiple encounters may be needed, reimbursable depending on duration of encounter

Chronic Care Management and Payment Reforms

- CCM is organizing framework to address health at individual level and population health.
- Covers non face-to-face services.
- Multiple chronic conditions (at least 2 or more)
- Chronic conditions placing patient at risk of death
- Comprehensive care services plan established, revised or modified as needed
- The higher the number of conditions, the higher the cost of care

Labwork

Impression

- Chronic ischemic heart disease
- Cancer of Lung - Reviewed all available workup.
- Cancer.

Plan

- CAD(ischemic heart disease): Care plan formulated and disease-relevant materials shared. Monthly reassessment, chest pain/dyspnea symptoms, clinical status, physician/ER visits, and medication compliance, to be performed. Care coordination, including symptom management, in conjunction with primary physician and cardiologist.
- All active and current medical problems, medication list, allergies, smoking status and vital signs, were reviewed and taken into account for the formulation of the comprehensive care plan.
- CCM program details were shared with the patient.
- Improved access, medication, and disease management through the CCM program was discussed with the patient.
- Lifestyle modification for primary, and secondary, disease prevention was carried out in detail.
- Medication reconciliation was performed.
- Patient agrees for the plan of action.
- Patient agrees to participate in the CCM program and is enthusiastic about the collaborative nature of the program.
- Performance status was reviewed.
- Smoking cessation counseling and life style modification for primary and secondary disease prevention was carried out in detail.
- Age appropriate cancer screening and prevention measures were discussed.
- Cancer: Care plan formulated with patient. Disease-related materials shared on prior visit during therapy plan formulation. Monthly reassessment to be done for clinical status and medical compliance. Care coordination to be performed with primary physician as needed.

Chronic care management (CCM) and payment Reforms: Nothing to lose; all to gain

Process	Cross cutting into Payment reforms	APM	MIPPS-VBC
Cross sectional care across providers	Reduced ER visit/hospitalization	✓	✓
Comprehensive care plans	IOM Care plan (APM,OCM)	✓	✓
Structured data recording	EHR-MUII	✓	✓
Expanded access to care	OCM requirement; reduces cost	✓	✓
Multiple chronic conditions	Appropriates for additional cost of care (from $2000 to $36,000)	✓	✓
Direct patient contact	Improves satisfaction	✓	✓

Organizing CCM

- Comprehensive care plans
- Consent
- Capture all eligible patients weekly
- Make list of all enrolled patients
- Divide call list between clinical care team
- Maintain call logs

Current Pilots with Actual Practice

- **BCBS Pilot:**

PMPM care coordination fees, 29 patients since October 2015. Additional cognitive service codes reimbursements (Advance care planning, patient education, genetic counseling, weekend extra rates, nutrition services)

- **CCM:**

Over 600 patient enrolled, with seamless coordination of care; monthly revenue stream (over $20K; reduced ER visits and registering higher severity of case leading to increased allowance for spend

- **In talks with two other major payers**

Non E/M cognitive services can be additive

- Meets PQRS reporting requirement (Tobacco cessation, depression and alcohol use screening)
- Reflects true complexities of care
- Increases possible benchmark expenditure allowance
- Reduced re-hospitalization
- Revenue impact could be between $700-1000 annually

Rewards of Whole Person Care
Non E/M Services

CPT Code	Description	Reimbursement
99490	Chronic Care Management	$42
99495 – 96	Transitional Care Management	$168 - $238
99497 – 98	Advance Care Planning	$140
99406 – 07	Smoking Cessation Counseling	$14 - $33
G0442 – G0444	Depression and Alcohol Use Screening (Counseling)	$17 - $25

Thank You

Q & A

Evaluating Progress and Sharing Best Practices

JUSTIN CROSS, MD

MEDICAL INFORMATICS FELLOW
OFFICE OF THE NATIONAL
COORDINATOR FOR HEALTH IT

Poll Questions: Clinical Documentation

1. Documentation in the electronic health record (EHR)…
2. How long should a clinician's progress note be able to be left "open" prior to "signing"?

The Office of the National Coordinator for Health Information Technology

Clinical Documentation

6/28/2016

Justin Cross, MD
Medical Informatics Fellow, Office of Clinical Quality and Safety, ONC

Disclosures

- The views expressed herein do not necessarily represent the views of the Department of Health & Human Services or the United States Government (5 CFR §2635.807)
- No other disclosures

Agenda

- Introduction to HHS delivery system reform and ONC
- Importance of Documentation
  - Patient Safety
  - EHR Safety and documentation
  - Program Integrity
  - Value based care & Reimbursement
- Questions

Delivery System Reform: Better, Smarter, Healthier

> *Improving the way providers are incentivized, the way care is delivered, and the way information is distributed will help provide better care at lower cost across the health care system.*

FOCUS AREAS

- Pay Providers
- Deliver Care
- Distribute Information

Source: Burwell SM. Setting Value-Based Payment Goals – HHS Efforts to Improve U.S. Health Care. NEJM 2015 Jan 26; published online first.

A health system that provides better care, spends dollars more wisely, and has healthier people

Focus Areas	Description
INCENTIVES	▪ Promote value-based payment systems – Test new alternative payment models – Increase linkage of Medicaid, Medicare FFS, and other payments to value ▪ Bring proven payment models to scale ▪ Align quality measures
CARE DELIVERY	▪ Encourage the integration and coordination of clinical care services ▪ Improve individual and population health ▪ Support innovation including for access
INFORMATION	▪ Bring electronic health information to the point of care for meaningful use ▪ Create transparency on cost and quality information ▪ Support consumer and clinician decision making

Source: Burwell SM. Setting Value-Based Payment Goals – HHS Efforts to Improve U.S. Health Care. NEJM 2015 Jan 26; published online first.

Health IT Adoption

For ONC, it has been a productive journey where we have seen remarkable progress in the adoption of health IT since 2009, when we began the electronic health records incentive programs.

As of last year:

- 74% of physicians have adopted EHRs
- 96.9% of hospitals have adopted EHRs
- Nearly four in ten providers offered patients access to their electronic medical records, and of that, more than half (55%) accessed these records at least once.

ONC Focus

- ONC focus is on a person centered learning health IT system that enables open flow of health data across the care continuum.
- ONC actions:
  - The Federal Health IT Strategic Plan
  - The 2015 Edition Certified EHR Technology Final Rule
  - Connecting Health and Care for the Nation: A Shared Nationwide Interoperability Road Map
  - The 2016 Interoperability Standards Advisory
- To achieve open, connected care for our communities, our private sector partners must lead in the transformation.

Commitments and Call to Action

- **Consumers** easily and securely access their electronic health information, direct it to any desired location.

- Share individual's health information for care with other providers and their patients as much as permitted by law and refrain from **blocking** electronic health information.

- Implement **federally recognized, national interoperability standards**, policies, guidance, and practices for electronic health information and adopt best practices including those related to privacy and security.

Clinical Documentation

- "If you didn't document it, it didn't happen“
- Record of what happened
  - » Establishes the legal record
  - » Used for billing and reimbursement
  - » Increasingly being opened up to patients - Open Notes initiative
- To improve your organization’s documentation:
  - » Need buy-in of busy clinicians
  - » What are benefits to them? To your patients?
    - – Clinical Decision Support
  - » To succeed, need all parties at the table - clinicians, coders, HIM department, billing

Documentation and Patient Safety

- Patient Safety – proper documentation and coding
  - Referrals - Specialists rely on PMD note
  - Tool for subsequent care and subsequent clinician review
  - Avoids duplication of tests/procedures
  - Prevents unnecessary treatments
  - Prevents clinicians from having to rely on memory
  - As care becomes more complex with more clinicians involved, more detailed documentation is needed

EHR Safety and Clinical Documentation

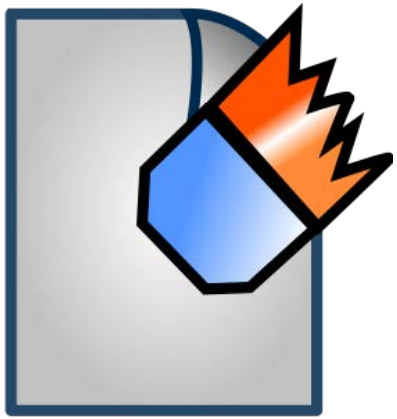
- EHRs are powerful tools but can introduce new opportunities for errors
- Several “hot topic” health IT safety issues to consider:
  - Copy and Paste
  - Patient Identification
  - Test reporting and follow up
  - Problem list maintenance
  - Clinical Decision Support

Documentation and Program Integrity

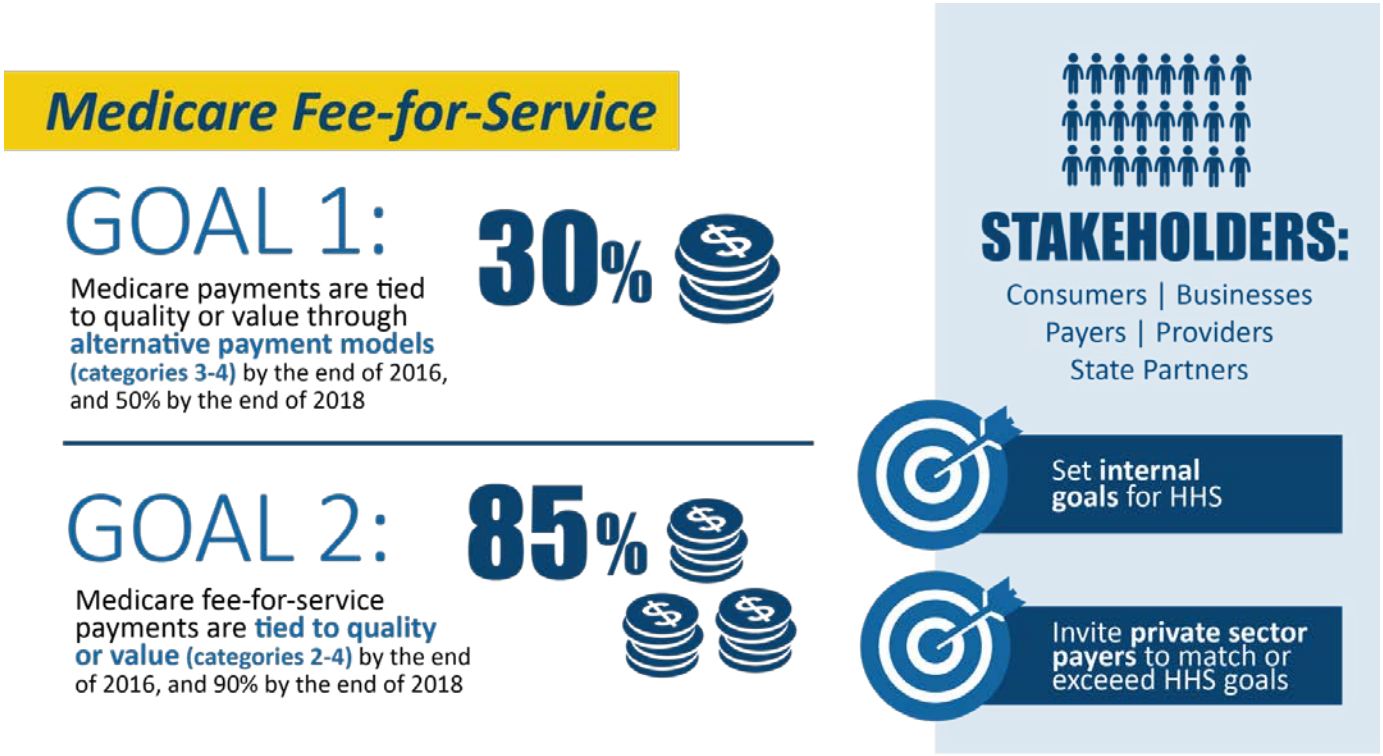
- Medicare and Medicaid
  - An accurate record is necessary for program integrity
  - Fraud - Up-coding, unbundling, billing unnecessary services, billing for services not rendered, billing for worthless services, duplicate billing, lack of documentation
- Must use correct code, not code that provides best reimbursement
- Proper documentation helps to avoid fraud/abuse problems
- EHR tips – practices to avoid:
  - Over documentation / auto populate
  - Cloning records / incorrect use of copy+paste

Documentation change management

- Your EHR should include the following change management abilities:
  - Procedures for signing, time-stamp
  - Proper methods of amending records, while preserving original versions and original author's work
  - Certified EHR systems do not allow back-dating, and institutions should have policies to limit how long a record can be open prior to finalizing



In January 2015, the Department of Health and Human Services announced **new goals** for **value-based payments** and **APMs in Medicare**



Source: Centers for Medicare and Medicaid Services

PROPOSED RULE: Quality Payment Program

- ✓ **Repeals** the Sustainable Growth Rate (SGR) Formula
- ✓ **Streamlines** multiple quality reporting programs into the new Merit-based Incentive Payment System (MIPS)
- ✓ **Provides incentive payments** for participation in **Advanced Alternative Payment Models (APMs)**

The Merit-based Incentive Payment System (MIPS) **or** **Advanced Alternative Payment Models (APMs)**

- ✓ **First step to a fresh start**
- ✓ **We're listening and help is available**
- ✓ **A better, smarter Medicare for healthier people**
- ✓ **Pay for what works to create a Medicare that is enduring**
- ✓ **Health information needs to be open, flexible, and user-centric**

Source: Centers for Medicare and Medicaid Services

PROPOSED RULE: First Step to a Fresh Start

- ✓ **MIPS is a new program**
  - **Streamlines 3 currently independent programs to work as one and to ease clinician burden.**
  - **Adds a fourth component to promote ongoing improvement and innovation to clinical activities.**

Quality

Resource use

Clinical practice improvement activities

Advancing care information

- ✓ **MIPS provides clinicians the flexibility to choose the activities and measures that are most meaningful to their practice to demonstrate performance.**

Source: Centers for Medicare and Medicaid Services

PROPOSED RULE: What is an Alternative Payment Model (APM)?

APMs are **new approaches to paying** for medical care through Medicare that **incentivize quality and value.**

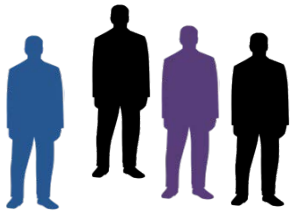
As defined by MACRA, **APMs include:**

- ✓ **CMS Innovation Center model** (under section 1115A, other than a Health Care Innovation Award)
- ✓ **MSSP** (Medicare Shared Savings Program)
- ✓ **Demonstration** under the Health Care Quality Demonstration Program
- ✓ **Demonstration** required by federal law

Source: Centers for Medicare and Medicaid Services

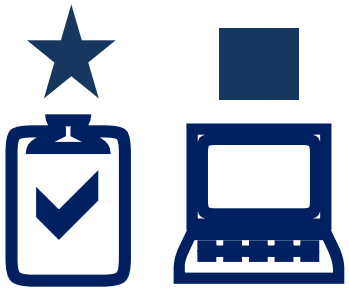
PROPOSED RULE: Who Will Participate in MIPS?

- Affected clinicians are called “MIPS eligible clinicians” and will participate in MIPS. The types of Medicare Part B eligible clinicians affected by MIPS may expand in future years.

Years 1 and 2	Years 3+
	**Secretary may broaden Eligible Clinicians group to include others such as** 
Physicians (MD/DO and DMD/DDS), PAs, NPs, Clinical nurse specialists, Certified registered nurse anesthetists	**Physical or occupational therapists, Speech-language pathologists, Audiologists, Nurse midwives, Clinical social workers, Clinical psychologists, Dietitians / Nutritional professionals**

Source: Centers for Medicare and Medicaid Services

PROPOSED RULE: MIPS Performance Period



MIPS Performance Period (Begins 2017)

- ✓ **All MIPS performance categories are aligned to a performance period of one full calendar year.**
- ✓ **Goes into effect in first year (2017 performance period, 2019 payment year).**

2017	2018	2019	2020	2021	2022	2023	2024	2025
								
Performance Period		**Payment Year**						

Source: Centers for Medicare and Medicaid Services

References

- 2011 OIG HHS presentation on provider compliance training, importance of documentation
  - » https://www.youtube.com/watch?v=44r5Ia-UQo8
- ONC SAFER guides for EHR safety
  - » https://www.healthit.gov/safer/safer-guides
- CMS MACRA Information
  - » https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-MIPS-and-APMs.html

The Office of the National Coordinator for Health Information Technology

Thank you

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Evaluating Progress and Sharing Best Practices

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Poll Questions: Patient Navigation Program

1. When was the first patient navigation program established?
2. Patient navigation programs can address barriers to colorectal screening such as inability to pay for prep and low literacy?

Penn Medicine

Building a Successful Patient Navigation Program for Colorectal Cancer Screening

Carmen E. Guerra, M.D., M.S.C.E.

Associate Professor of Medicine, Perelman School of Medicine

Associate Director and Associate Chief of Staff

Abramson Cancer Center

University of Pennsylvania

the cure is within

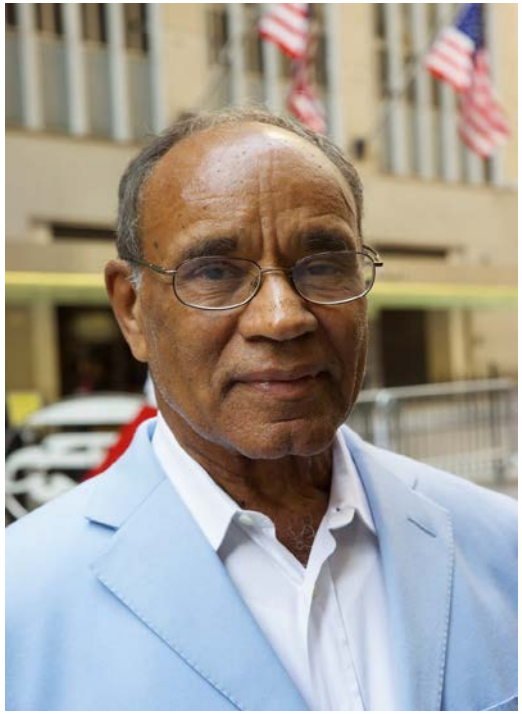
ABRAMSON CANCER CENTER

Overview

- **Patient Navigation**
  - **Definition**
  - **Evidence**
  - **12 key considerations when building a navigation program**
  - **An example from the Abramson Cancer Center of the University of Pennsylvania Health System**
  - **Lessons learned**

What is a Patient Navigation Program?

- First established and described by Harold Freeman in 1990's Harlem Hospital
- Navigation programs identify and eliminate barriers to accessing a life saving test or treatment such as:
  - Low awareness of the benefits/indications
  - Negative beliefs and attitudes
  - Scheduling
  - Low literacy
  - Inability to pay for prep
  - Lack of transportation
  - Lack of access to an escort



CRCS Navigation is an Evidence Based Strategy

- **CRCS navigation programs are evidence-based strategies for increasing CRCS rates**
  - **At least 17 RCTs confirm efficacy**

Author	Year	Design	Test	Location	Site type	N	Findings
Jandorf et al.	2005	RCT	FOBT	East Harlem, NY	PCC	78	N: 42.1% NN: 25% (P=0.086)
Nash et al.	2006	Historical comparison	Colonoscopy	Bronx, NY	Lincoln Medical Center	1767	75.7 per month to 119.0 per month
Christie et al.	2008	RCT	Colonoscopy	Boston, MA	CHC	21	N: 53.8% NN: 13% (p=0.085)
Myers et al.	2008	Single group	FOBT & Colonoscopy	Delaware	PCCs	154	41%
Chen et al.	2008	Cohort	Colonoscopy	NYC	Mt. Sinai Hospital	532	66%
Percac-Lima et al.	2009	RCT	FOBT, FS, BE, & colonoscopy	Boston, MA	Mass General"s Chelsea HC	1223	N; 27.4% NN: 11.9 (p,0.001)
Ma et al.	2009	2 group quasi experimental	NA	NA	Korean Americans thru churches	167	N: 13.1% to 77.4% NN: 9.6% to 10.8%
Lasser et al.	2009	Cohort	FOBT & Colonoscopy	Somerville, MA	CHCs	145	N: 31% NN: 9%
Lasser et al.	2011	RCT	FOBT & Colonoscopy	Cambridge, Somerville, Everett, MA	4 HC/2 public hospital based clinics	465	N; 33.6% NN: 20% (p<0.001)
Lebwohl et al.	2011	Historical comparison	Colonoscopy	NYC	Columbia U	749	11% increase in colonoscopy volume
Paskett et al.	2012	RCT	Colonoscopy	Columbus, OH	8 PCC/4CHC	862	65% difference in arms, p=0.009
Wells et al.	2012	RCT	Colonoscopy	Tampa Bay, FL	PCCs	1267	Did not change timeliness to diagnostic resolution
Reisch et al.	2012	RCT	NA	Denver, CO	Denver Health (Safety net)	993	Shortened timeliness to diagnostic resolution
Myers et al.	2013	RCT	FOBT & Colonoscopy	Delaware	Christian Health Care	945	N:38% NN: 12% (p=0.001)
Myers et al.	2014	RCT	FOBT and/or colonoscopy	Philadelphia	Thomas Jefferson University and Albert Einstein Health Care	764	TN: 38.% SN: 23.7%
Enard et al.	2015	RCT	FOBT, Colonoscopy and FX	Southwestern US	Latino Medicare Enrollees	303	N: 47.3% NN: 32.1% (p=0.04)
Braun, KL	2015	RCT	FS or Colonoscopy	Hawaii	Pacific Islander Medicare Enrollees	488	N: 43% NN: 27.3%

CRCS navigation is operationalized differently

- Low touch to high touch
- Delivered by different means – telephone, in person
- Across different settings – community, primary care, specialty (GI), hospital systems
- Vary from one time to multiple contacts
- Actual intervention varies from education to overcoming a specific system barrier(s)
- Goal is completion of an approved CRCS test(s)

CRCS Navigation is an Evidence Based Strategy

- **CRCS navigation programs**
  - **Increase CRCS rates compared to controls**
    - **Seen for FOBT, FS and colonoscopy based programs**
    - **Seen across settings and populations**
  - **Increase colonoscopy volumes**
  - **+/- Decrease time to diagnostic resolution**
  - **Limited data on cost-effectiveness**

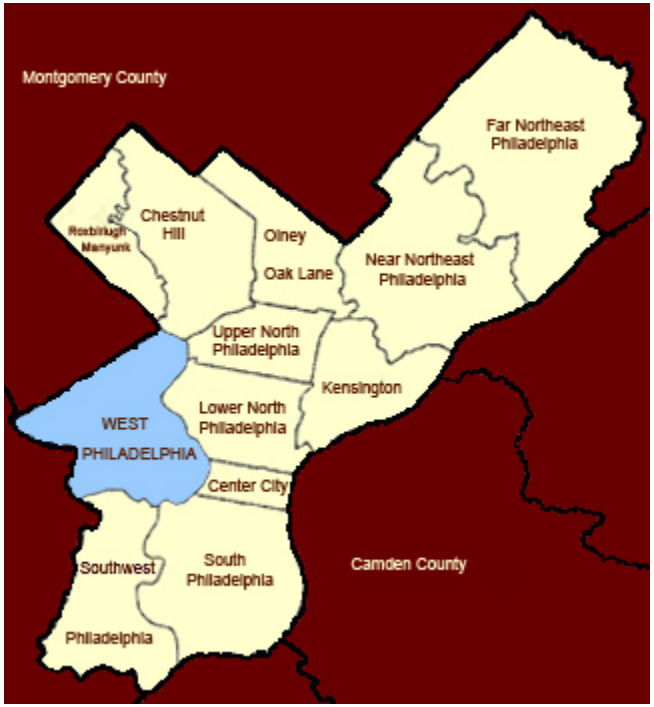
13 Key Considerations in Designing a Successful Navigation Program

1. Set program goals and develop a theoretical framework
2. Specify the population and community characteristics and their unique barriers
3. Determine the setting in which navigation services are provided
4. Establish points of the beginning and end of navigation
5. Determine the background and qualifications of the navigator(s)
6. Determine the services should and should not be provided
7. Select methods of communication between patients and navigator(s)
8. Design the navigator training
9. Define oversight and supervision for navigator(s)
10. Promote the program
11. Evaluate the program
12. Design data systems to support patient tracking and collection of measures to evaluate the program
13. Establish cost-effectiveness

Adapted from DeGroff A, et al. Cancer Prevention. 2014: 15(4): 483-495

An example

The University of Pennsylvania Health System's West Philadelphia CRCS Navigation Program



UPHS West Philadelphia CRCS Navigation Program

- Established at UPHS in Nov, 2011 with gift from anonymous donor and ACS and foundation funding
- Population: West Phila residents that were non-adherent to colonoscopy screening
  - Defined as having missed at least 1 colonoscopy appointment (range 1-13)
- Barriers to CRCS in West Philadelphia residents: Low awareness, low literacy, inability to afford prep, transportation
- Conduct research to determine program feasibility, acceptability, effectiveness, cost effectiveness

West Philadelphia CRCS Patient Navigation Program

- Hired an MA to serve as patient navigator
- Trained at the Harold Freeman Patient Navigation Institute, Bronx, NY
- Resources for program administration (cell phone and service, computer, printer, printing, stationary, software, etc.)
- Resources for patient care (lots of Miralax, crystal light, Dulcolax, Septa tokens
- Created a low literacy prep instructions and video

CRCS Patient Navigation Program Results as of 6/1/16

Response to program	N (%)
No patients contact attempted	1939
Agreed to participate	705 (36.4)
Declined participation	513 (26.4)
Unable to contact after 3-6 calls	721 (37.2)

CRC Patient Navigation Program Demographics

Demographics	N=690 (%)
Age (mean, s.d.)	60.2, 8.3
Female	427 (61.9)
African American	621 (90)
Marital Status	
Single	320 (46.4)
Married	178 (25.8)
Education	
<High School	125 (18.1)
High School	316 (45.8)
Annual Income	
<$10,000	240 (34.8)
10,000-29,999	242 (35.1)

CRC Patient Navigation Program Outcomes

Screening colonoscopy results	(n=477)
Normal/no pathology or hyperplastic polyp(s)	269 (56.4)
At least one adenomatous polyp	179 (37.6)
Adenocarcinoma	4 (0.8)
Repeat	11 (2.3)
Other	14 (2.9)

Outcome: Diagnosed Colorectal Cancers

Diagnosed Colorectal Cancer	N
Stage I	1
Stage III	2
Stage IV	1
Total	**4**

Outcome: Patient Satisfaction

Patient Satisfaction (n=180)	
Overall, I am satisfied with the navigation services I received from the navigator	
Strongly agree	168 (93.3)
Agree	11 (6.1)
Neither Agree or disagree	0
Disagree	1 (0.6)
Strongly disagree	0

Lessons Learned

- Recruitment rate: 3:1
  - Will navigation really end disparities?
- Once enrolled, almost ~ 67% of patients completed colonoscopy
- Navigation for this population is time and labor intensive
  - Average time spent by navigator per patient: 4 hrs 17 min
- Greater than expected adenoma detection rate – 37%
  - Higher than what is reported in the literature (10-20%)
  - Possible reasons are:
    - Racial differences in CRC incidence (90% of participants are AA)
    - Higher prevalence of comorbidity/risk factors for CRC (obesity, diabetes)
    - Differences in behaviors (delay of screening, ETOH and tobacco use)
- Establishes trust

Conclusions

- A patient navigation program for CRCS for UPHS patients who are residents of West Philadelphia and have not previously been able to complete screening colonoscopy is
  - Feasible
  - Acceptable
  - Effective
  - Associated with high patient satisfaction
  - Reduces colonoscopy no shows
  - Builds trust

…and the program was cost-effective

	HUP	PPMC	UPHS Total
Volume	80	40	120
Outpatient Net Revenue	$84,401	$59,557	$143,958
Direct Expenses	$91,955	$45,114	$137,089
Contribution Margin	($7,555)	$14,444	$6,869
Indirect expenses	$30,251	$11,653	$41,904
Net gain (loss)	($37,806)	$2,791	($35,015)
Downstream Contribution Margin	$115,004	($947)	$114,057
Total Gain/Loss including Downstream	$77,198	$1,843	$79,042

Sustainability of cancer screening programs

Cost-Effectiveness Analysis of the First Year of a Colorectal Cancer (CRC) Screening Patient Navigation Program at an Academic Medical Center

Penn LDI Leonard Davis Institute of Health Economics

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Abstract

- **Introduction:** We evaluated the first year of the CRC Screening Patient Navigation Program at the University of Pennsylvania Health System (UPHS), analyzing the costs of the program and cost per patient who successfully completed a screening colonoscopy (SC)
- **Methods:** This is a retrospective cost-effectiveness analysis of data gathered during the first full year (2012) of the navigation program. For this analysis, the outcome of interest was SC completion within 3 months of program enrollment. To perform the cost-effectiveness analysis, the total costs of the navigation program inputs were recorded, and the costs were divided by the number of patients enrolled, scheduled, and screened (both unadjusted and adjusting for an estimate of those who would have completed SC without navigation)
- **Results:** The cost per patient enrolled was $453.76 and the cost per patient screened was $703.54. However, after adjusting for completion without navigation, the cost was $874.50 per additional patient screened. Labor comprised over 84% of the cost per successfully screened patient
- **Conclusions:** Although the navigation program significantly increased the percentage of completed CRCS for this previously non-adherent and underserved cohort, there is a significant cost to this navigation program, driven largely by labor costs. However, such cost-intensive interventions may be beneficial in high-risk populations

Background

- Patient navigation programs have been shown to be effective in increasing colorectal cancer (CRC) screening rates, particularly for underserved populations
- However, the costs required to institute a successful program and the cost-effectiveness of such programs remains less clear

Figure 1: Navigation Program Process

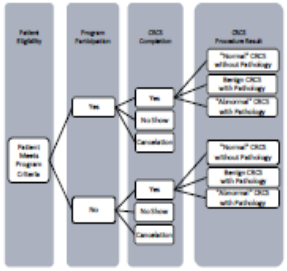
1. Common barriers include poor awareness, negative attitudes, inability to afford the out-of-pocket costs of the prep and lack of transportation
2. Navigation often includes helping patients identify an escort, planning transportation, and providing emotional support
3. Phone reminders, especially the colonoscopy prep procedure review call, are crucial to maximizing the likelihood of successful CRC screening in populations with historically low SC completion rates

Objectives

1. To determine the cost effectiveness of the first year of a CRC Screening Patient Navigation Program instituted at UPHS

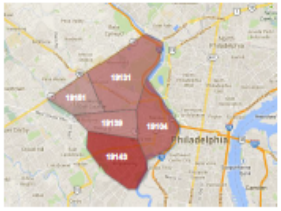
Methods

Figure 2: Cost-Effectiveness Analysis Decision Tree



- The outcome of interest was SC completion within 3 months of program enrollment
- Both program participants and those who declined navigation were followed and the number of cancelled, missed, and completed SC appointments was recorded
- To perform the cost-effectiveness analysis, the total costs of the navigation program inputs were recorded, including the navigator's total compensation and training, office supplies, and patient supplies (free prep materials and public transit tokens)
- The costs were divided by the number of patients enrolled, scheduled, and screened (both unadjusted and adjusting for an estimate of those who would have completed SC without navigation)

Figure 3: Target Population – West Philadelphia



Results

Table 1: Demographics

	Navigated Patients (n=138)	Non-participants (n=133)
Female	66%	67%
Average Age	58.5	59.2
Black or African American	93%	86%
White	4%	12%
Hispanic/Latino	1%	2%
Insurance:		
Medicaid	33%	27%
Medicare	43%	26%
Private	21%	43%

- Patients at UPHS from West Philadelphia (representing prespecified zip codes that historically had low SC completion rates) were targeted for the navigation intervention
- Patients had to be between 50 and 75 years old, live in West Philadelphia, have insurance, have a primary care provider (PCP) in a participating UPHS clinic (3), and have an open SC order
- "Navigated Patients" agreed to participate in the program; "Non-participants" are defined as individuals who declined to participate after being contacted by the navigation program to enroll

Table 2: Clinical Effectiveness Analysis

	Navigated Patients	Non-participants
Total Sample, N	169	319
Average Number of Prior Orders (Range)	1.68 (1-5)	1.30 (1-4)
Patients who Scheduled SC (n)	81.7% (138)	41.7% (133)
Patients who Cancelled Appointments	23.9%	44.4%
Patients who Missed Appointments	11.6%	42.9%
Outcomes, n	138	133
Patients who Completed SC within 3 Months (n)	79.0% (109)	19.6% (26)
Adenoma Detection Rate	40.4%	30.8%

- "Total Sample" refers to the total number of patients contacted who enrolled in or declined navigation. All patients in the total sample fulfill the program criteria outlined above
- "Outcomes" were calculated only for the patients who scheduled SC in each group

Table 3: Cost-Effectiveness Analysis

Inputs (2012 Dollars)	CY 2012 Costs
Labor	$64,531
Training	$1,800
Office Supplies	$5,095
Patient Supplies	$5,260
Total Cost (TC)	$76,686
TC, Excluding Start-Up Costs	$73,329
Variable Cost	$3,838

Outputs (2012 Dollars)	Average Total Cost	Average Labor Cost
Per Patient Enrolled in Navigation Program (n=169)	$453.76	$381.84
Per Navigated Patient Scheduled (n=138)	$555.70	$467.62
Per Completed SC (n=109)	$703.54	$592.03
Per Completed SC, Adjusted (n=88)	$874.50	$736.88

- To calculated the adjusted costs, it was assumed that 19.6% of the navigation group's successful screenings would have completed SC without the program and were removed, as 19.6% of the non-participating patients were successfully screened

Conclusions

- Although the navigation program significantly increased the percentage of completed CRCS for this previously non-adherent and underserved cohort, there is a significant cost to this navigation program, driven largely by labor costs
- However, such cost-intensive interventions may be beneficial in high-risk populations like West Philadelphia patients, given the above-average adenoma detection rate of 40%
- Future efforts may wish to analyze not only the true downstream impact of screening on this population, but also less labor-intensive ways to engage this population.

Limitations

- Since we were only able to recruit about 30% of the contacted patients for the program, our results may be subject to participation bias

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- Colon Cancer Alliance
- Colon Cancer Coalition

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  - Haverford School Checking for Cancer
  - Penn CARES Foundation

Thank you

Questions?

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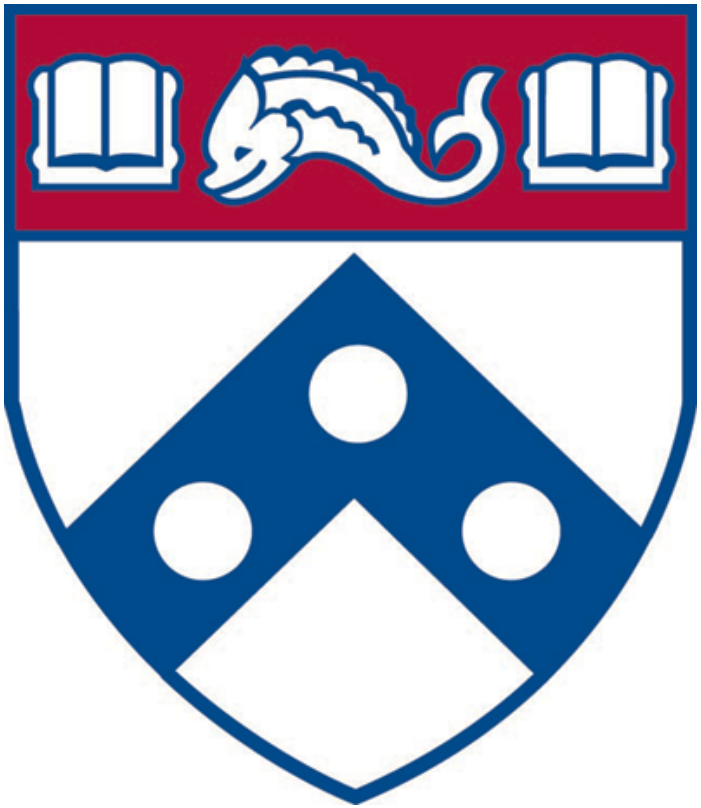

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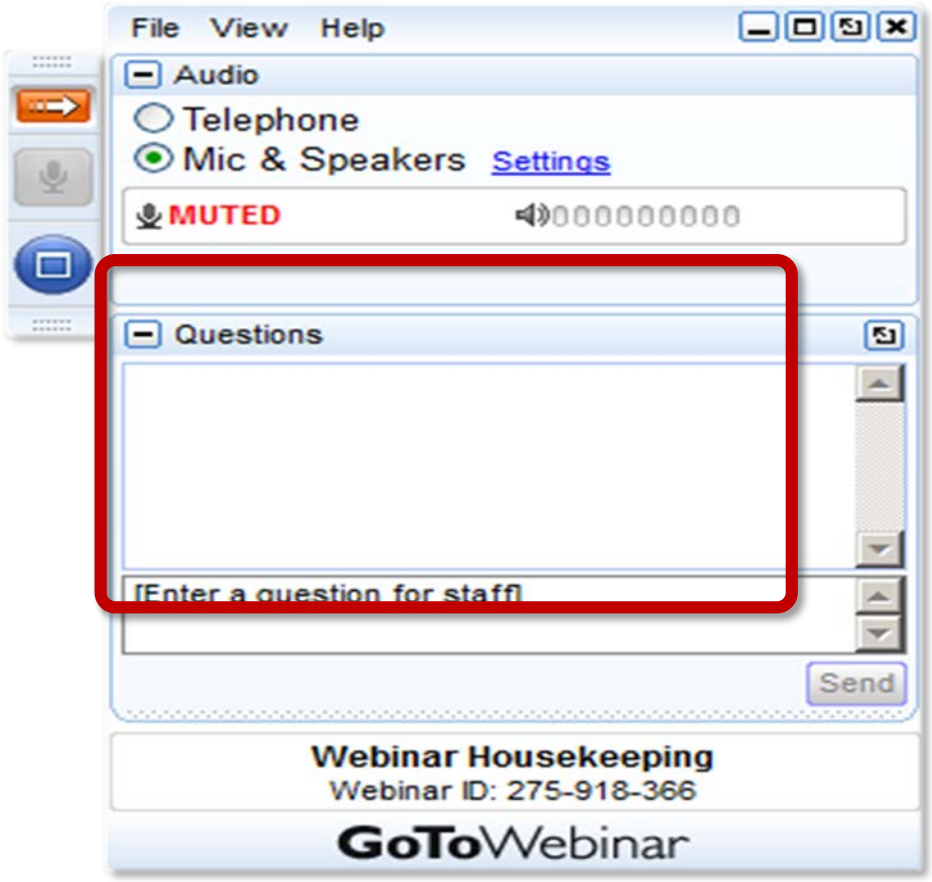
Q&A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