TAKE ME!
After 15 minutes of cell phone chatter and day-time TV, a colonoscopy will be a relief!
Hey Frank, how was your colonoscopy?

IN AND OUT!
Why a colonoscopy?

• Colon cancer is 2\textsuperscript{nd} leading cause of death in US and is \textit{preventable}
• \(\sim 56,000\) deaths per year
• \(\sim 130,000\) new cases diagnosed every year
• Colon cancer develops in \(\sim6\%\) of the US population
• Lifetime risk similar for women and men
Why a colonoscopy?

• Prevention or screening examination for colon cancer, initiated at age 50
• Symptoms
  – Anemia or rectal bleeding; abdominal pain; altered bowel habits, weight loss
• Other medical conditions
  – Previous history of colon cancer or polyps
  – Family history of colon cancer
  – Inflammatory bowel disease
What is a colonoscopy?

- Flexible scope that allows direct visualization of the 5 feet of colon or large intestine
- Sedated procedure, so minimal pain or discomfort
- Lasts about 20 minutes
- Allows removal of colon polyps, biopsies, and accurate diagnosis
What does a polyp/cancer look like?

- **Hyperplastic polyp** (no cancer potential)
- **Adenoma** (pre-cancerous polyp)
- **Colon cancer**

Polyps occur in ~30% of patients, and majority can be safely removed at time of colonoscopy.
Risks and Limitations

• Reaction to sedation
  – Allergic or adverse reaction to medications
  – Closely monitored during procedure
  – Inform doctor of previous anesthesia reactions
• Bleeding
  – At site of polyp removal, occurs < 1% of cases
• Perforation (tear or hole in bowel wall)
  – Fewer than 1 per 1000 cases
  – May require surgery to repair the injury
• Missed lesion
Alternatives to colonoscopy

- Fecal occult testing
  - Test for blood in stool, done yearly
- Flexible sigmoidoscopy
  - Looks at the lower half of the colon
- Barium enema
  - Not recommended, can miss polyps ~ 50% of the time
- Virtual colonoscopy
  - Radiation exposure, still need the prep, not paid for by insurance in most cases, colon perforation (less common than colonoscopy)
  - Current practice is not to report polyps < 6 mm to make the test cost-effective

Your primary provider can assist you in making the best choice for colon cancer screening if you elect not to proceed with colonoscopy
Alternatives: Virtual Colonoscopy

- Done in radiology department (CT or MRI)
- Standard bowel preparation
- Tube inserted into rectum, colon insufflated with room air or CO₂
- Non-invasive, but a bit painful
- Radiation exposure with CT scan
- Perforation (less common than colonoscopy)
- Currently, polyps < 6 mm are not reported to make test cost-effective
Where is the colonoscopy performed?

- Oregon Clinic – Portland Division
- Ambulatory Surgery Center (ASC)
- 1111 NE 99th, Suite 302
- Located on 3rd floor of this building
  - Accessible by elevator or stairs
- Parking available in South parking lot
Ambulatory Surgery Center

- Open Monday – Friday
- Procedures scheduled from 7:30 AM through 4:30 PM
- Must arrive 45 minutes prior to your procedure
- Most procedures last ~ 20 minutes
- Plan on being here for about 90 minutes
Additional Instructions

- Do not bring valuables to your procedure
- Friends and family may not watch your procedure
- Your ride must come to Suite 302 to pick you up
- There is $100 charge for appointments not kept or not cancelled 48 hours in advance.
Why the driver?

- Sedated procedure with IV Fentanyl (pain medication) and Versed (short acting sedative)
- Although you may feel alert after the procedure, it can stay in your system for 24 hours
- Since your judgment may be impaired, no driving for 24 hours
Preparation for your procedure: Countdown

• 10 days prior
  – Stop all iron supplements and vitamin E
  – Stop herbal supplements such as ginger, garlic, fish oil, valerian root

• 7 days prior
  – Stop Plavix (Aspirin and NSAIDs are ok to continue)

• 5 days prior
  – Stop Coumadin or Warfarin or other blood thinners, be certain to check with your doctor
Countdown

• 3 days prior, please eliminate
  – All seeds
  – Multigrain breads, cereal, poppy seeds, sesame seeds
  – All fruits and jams with seeds (tomatoes, cucumbers), popcorn and nuts
The dreaded bowel prep

- Considered the worst part of the exam
- Clear liquid diet all day
- What is a clear liquid?
  - Coffee without milk, tea, water
  - White grape juice, OJ without pulp, white cranberry juice
  - Broth (chicken, beef, vegetable)
  - Jell-O (green, yellow or blue)
  - Boost, Ensure (no fiber), Glucerna
  - Gatorade or any vitamin water, crystal light
Miralax prep

- **5PM (day before your procedure)**
  - Take 2 dulcolax pills, 10 mg total
- **6PM**
  - Drink 10oz bottle of Magnesium Citrate
- **7PM**
  - Mix bottle (238gm) miralax with 64 oz of any clear liquid (gatorade, crystal light, vitamin water)
  - Drink 32 oz or 4x8 oz glasses over 2 hours
Miralax Prep (continued)

• You may start having diarrhea after this initial portion of the prep, but it’s ok if you don’t. Please stay close to a bathroom!
• 6 hours before your procedure
  – Take additional 2 dulcolax tabs (10 mg)
  – Drink remaining 32 oz of miralax, 4 x 8 oz of Miralax mixture over 2 hours
  – Phone office if you don’t have diarrhea after this 2nd portion of the prep
• OK to continue drinking any clear liquid up until 2 hours before your procedure
Golytely Prep

• Based on your medical history, some may need this prep
• 3-5 PM – day prior to exam
  – Mix 4 quarts of tap water in Golytely container, mix and chill in refrigerator
  – Drink one 8 oz glass every 20 minutes until the entire container is empty
• Goal is to have light tea colored diarrhea
  – Phone office if no diarrhea after ¾ of golyte consumed
The day of the procedure

• Once you check-in, you will be escorted to pre-op area
• Pre-op history taken, change into gown and IV started in your arm
• Escorted to procedure room
• Placed on gurney and covered with warm blanket
• You will be given supplemental oxygen and both oxygen level and blood pressure are monitored
• Physician enters room, brief discussion/examination
• IV sedation given and procedure will start
Examination

• Procedure lasts ~ 20 minutes
• You will be then taken to recovery room
• Once awake and drinking fluids, the physician will talk with you and family about findings
• You will receive written discharge instruction with findings
• Be aware the medications may cause you to forget the conversation with physician
Examination (continued)

- Your primary provider will receive copy of report that day
- Removed tissue (polyps) will take about 5 days to receive official report from pathology
- You will be contacted by phone or letter
- The office will arrange follow-up office visits or repeat colonoscopy
  - Typically 5 year interval for pre-cancerous polyps
  - 10 year interval if no pre-cancerous polyps
Filling out the forms!

- Be as complete as possible
- List all medical history
  - Surgeries, anesthesia reactions
  - Medications including herbal formulation and OTC
  - Drug allergies
- List any digestive concerns
- Insurance information is important
- All medical forms will be reviewed by nurse practitioners
- If no concerns, colonoscopy will be scheduled
- If concerns, this may warrant an office visit prior
Questions ?

[Image of a cartoon doctor with a blank expression]

[Image of a cartoon doctor with a blank expression]
Screening for Colorectal Cancer: U.S. Preventive Services Task Force Recommendation Statement

U.S. Preventive Services Task Force*
4 November 2008 | Volume 149 Issue 9
# Screening for colorectal cancer: clinical summary of a U.S. Preventive Services Task Force recommendation

## Screening for Colorectal Cancer
### Clinical Summary of U.S. Preventive Services Task Force Recommendation

<table>
<thead>
<tr>
<th>Population</th>
<th>Adults Age 50 to 75 Years*</th>
<th>Adults Age 76 to 85 Years*</th>
<th>Adults Older Than 85 Years*</th>
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<tbody>
<tr>
<td>Recommendation</td>
<td>Screen with high-sensitivity FOBT sigmoidoscopy, or colonoscopy</td>
<td>Do not screen routinely</td>
<td>Do not screen</td>
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<tr>
<td>Grade</td>
<td>A</td>
<td>C</td>
<td>D</td>
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</table>

For all populations, evidence is insufficient to assess the benefits and harms of screening with computed tomographic colonography and fecal DNA testing.
Grade: I (Insufficient evidence)

**Screening Tests**
- High-sensitivity FOBT, sigmoidoscopy with FOBT, and colonoscopy are effective in decreasing colorectal cancer mortality.
- The risks and benefits of these screening methods vary.
- Colonoscopy and flexible sigmoidoscopy (to a lesser degree) entail possible serious complications.

**Screening Test Intervals**
- Intervals for recommended screening strategies:
  - Annual screening with high-sensitivity FOBT
  - Sigmoidoscopy every 5 years, with high-sensitivity FOBT every 3 years
  - Screening colonoscopy every 10 years

**Balance of Harms and Benefits**
- The benefits of screening outweigh the potential harms for 50- to 75-year-olds.
- The likelihood that detection and early intervention will yield a mortality benefit declines after age 75 because of the long average time between adenoma development and cancer diagnosis.

**Implementation**
- Focus on strategies that maximize the number of individuals who get screened.
- Practice shared decision making; discussions with patients should incorporate information on test quality and availability.
- Individuals with a personal history of cancer or adenomatous polyps are followed by a surveillance regimen, and screening guidelines are not applicable.

**Relevant USPSTF Recommendations**
- The USPSTF recommends against the use of aspirin or nonsteroidal anti-inflammatory drugs for the primary prevention of colorectal cancer.
- This recommendation is available at [www.preventiveservices.ahrq.gov](http://www.preventiveservices.ahrq.gov).

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Incidence Colorectal Cancer US, 2000-2003

From National Cancer Institute, SEER Cancer Statistic Reviews, 2000-2003.
US Mortality Rates for colorectal cancer by age, 1994-2003

From National Cancer Institute, *SEER Cancer Statistic Reviews, 2000-2003.*
Colorectal cancer screening/surveillance – when to stop?

Assumptions:

- ‘Dwell time’ = 5-10 years
  - normal mucosa → 1cm polyp - 5 years
  - 1cm polyp → adenocarcinoma - 5 years

- Risk of subsequent colon cancer dependent on number, size, and histology found on initial exam; small tubular adenoma(s) may represent average risk for future adenocarcinoma
## Life Expectancy Table

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<th>Age (yrs)</th>
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<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
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</table>

From Internal Revenue Service Publication 590, 2000
Colorectal cancer screening/surveillance – when to stop?

Reasonable guideline:

• Continued screening if life expectancy 10 years or greater

• Continued surveillance if life expectancy 5 years or greater
Colon cancer death rate, per 100,000 population

1960: 30.3
1970: 30.0
1980: 28.9
1990: 28.2
2000: 20.0
2005: 17.5

SOURCE: Centers for Disease Control and Prevention