



Early Detection Testing?

Chance of Harm Is 100%

Chance of Benefit Is < 1 in a 1000

The lifesaving benefit from the early detection of cancer is over-exaggerated and the harms are way understated. At the very most, the reward you may gain by testing will be to reduce your chance of dying from a cancer, in the far distant future, by one death for every one to two thousand examinations. But the harms caused to you begin the very moment you allow the medical testing businesses to enter your life. Common examples of early detection methods are: prostate specific antigen (PSA) blood tests for prostate cancer, mammograms for breast cancer, and colonoscopies for colon polyps and cancers. A positive result from any of these exams will be immediately followed by a biopsy in order to make the diagnosis. Simply identifying the cancer will change your life for the worse, and maybe forever. This article will not be addressing the even more egregious damages from the treatments—surgery, radiation, and chemotherapy—that follow the biopsy specimens revealing cancers, but rather the injuries caused by the testing alone.

Right now at this moment your day is going along just fine. After a filling breakfast you kiss your spouse goodbye. Everyone at the office this morning is friendly and offering you compliments on the success of your recent project. You notice not a single ache or pain in your entire body. At 11 AM today you have your annual exam with your doctor. Your physical includes a breast examination performed by your doctor (in the case of a man a digital rectal exam of his prostate). You are embarrassed and made uncomfortable by the doctor's probing fingers, but nothing important was found, so no real harm was done. At the end of your half hour visit your doctor conscientiously reviews his findings with you. Your current state of health is excellent. You think, "I've passed with flying colors and I will be on my way." Not so fast. Your doctor now wants to look for "invisible disease." He/she recommends that you have a mammogram and a colonoscopy. If you are a male patient, the recommendation is for a PSA and a colonoscopy.

It is now 11:30 AM; your thoughts have turned ugly. "Do I have cancer? Could it be advanced? What other tests will I have to undergo? I now have to miss more days of work to get these tests done. I know a young woman who had her colon perforated during a colonoscopy—she died the next day. I won't accept chemotherapy, even if I have cancer. If I become sick from the treatments I will not be able to work or care for my children. Will my husband still love me with one breast? My wife will be so alone without me. What will life be like without erections? I won't be able to get new life or health insurance. Every body pain I get will make me think that the cancer has come back. I am so anxious that I cannot work or face my friends and family. When my friends and family find out I have cancer they will think of me as a victim. I will become isolated from the rest of the world. Why can't I get these tests done today, so I can get on with my life? It will be more than a month before the final results are in. Then I can stop worrying—if the results are negative. I must force a smile."

Think about it: just the recommendation to have either of these two tests performed has already changed your life for the worse. Considering the trauma already produced, in the end the rewards had better be extraordinary.

The Day of the Mammogram

You arrive at the breast-imaging center and after filling out forms and a short wait in a cold stark waiting room, you are next moved into the room with the mammogram machine. Each of your breasts is placed individually within its "jaws," and compressed. All that squeezing hurts. Overall, 81 percent of women experience discomfort during mammography. As many as 46 percent of women classify that discomfort as pain, and seven percent say the pain is severe.^{1,2}

Pain may not be the only consequence of all that compressing. There is also the real possibility that the compression of the breast during the test may cause cancer cells to spread.³⁻⁶ Animal research has shown that the degree to which a cancer spreads can be increased by as much as 80 percent merely by mechanical manipulation of the tumor. In one study, women under 55 who underwent mammograms experienced a 29 percent increase in the number of deaths from breast cancer during the first seven years following the test. During that particular study protocol, the mammographers used "as much compression as the woman could tolerate." Under compression, precancerous cells (a condition called ductal carcinoma in situ) may be spread outside of the milk ducts into the surrounding tissues and blood vessels, turning a noncancerous state into an invasive deadly cancer.

The risk of radiation is not insignificant either. In the past, researchers have largely discounted the damaging effects of the low dose radiation used in mammography. However, newer findings suggest that mammography may be four or five times more likely to induce breast cancers than was once believed, and that the risk vs. benefit of mammography may need to be re-examined.^{7,8} The harmful effects of radiation are particularly important for younger women and those with a higher risk for developing cancer (women with BRCA mutations).

The risk of having a false positive test is over 56% for women having a mammogram every other year after the age of 50 (a total of 10 mammograms).⁹ Of every 1,000 U.S. women who have mammograms, about 10 to 15% will be called back for further tests. About 10 of these patients will be referred for a biopsy. On average, 35% of these biopsies will show cancer. The mental anguish doesn't stop even after a good result from the biopsy; 26% of women report worries and anxieties 3 months after they have been told they don't really have breast cancer.¹⁰ The distress caused by a suspicious mammogram has been so overwhelming that women have been known to commit suicide as a result.¹¹

The Day of the Prostate Biopsy

You may think of the PSA test as an innocent prick from the phlebotomist's needle. This is a high risk

test—there is a 10% chance the results will be positive, leading to the next test; a series of biopsies of your prostate gland, which will show prostate cancer, on average, 30% of the time, depending on your age. In the US the rate of microscopic prostate cancer is found in 8% of men in their 20s, 30% of men in their 30s, 50% of men in their 50s, and 80% of men in their 70s.^{12,13}

In addition to the expected anxiety, inconvenience, discomfort, and additional medical expenses, biopsies of the prostate result in some rarely discussed, but common complications. I say biopsies (plural) because a dozen samples, on average, are taken from the prostate with a large bore (16 or 18 gauge) spring-loaded needle during each session. Physical discomfort is reported throughout the procedure. From the transrectal ultrasound, 37% of men experience pain, and even though they have received a local anesthetic, 55% of men experience pain with the biopsies.¹⁴

The most common complications after the biopsy are blood in the urine, pain while urinating, and rectal bleeding. Blood in the semen and erectile dysfunction are often reported following the biopsies. One month after surgery, 41% of men report erectile dysfunction, and after 6 months the problem persists in 15% of men.¹⁵ Male sexual dysfunction following the biopsy often leads to female sexual dysfunction.¹⁶ The anxiety, fear, and trauma from the procedure, and the presence of blood in the semen are some of the reasons for these disturbances to sexual intimacy. However, it is the needles themselves, which damage the nerves involved with male erection, which are the actual cause of this permanent dysfunction. This complication is increasing because doctors are doing more biopsies during a single session and are practicing active surveillance repeating sessions of needling over time. All this suffering is a reason that men diagnosed with prostate cancer have a 40% increase in suicide.¹⁷

The Day of the Colonoscopy

After lying on a table on your left side, a flexible 4 to 6 foot-long viewing instrument, called a colonoscope, is passed through the lumen of your large intestine. During the procedure, tissue samples can be collected (biopsied) and polyps can be removed. Preparation for this exam begins with a low fiber or clear-liquid only diet for one to three days and powerful laxatives to clean the colon of fecal materials. Sedation is given during the procedure in order to reduce the discomfort caused by the twisting and bending of the scope as it advances through the tortuous large bowel. The procedure usually takes 15 to 60 minutes.

Harms may arise from the preparation, the sedation, and the procedure. In the United States, serious complications occur in an estimated 5 per 1000 procedures. When biopsies or polyp removals are performed then the risk of serious complications, including bleeding, increases. One of the most serious hazards, often leading to death, is perforation of the colon, which occurs in about one per 1000 procedures.¹⁸

Virtual colonoscopy, performed with a CT scanner and computers, generates high-resolution views of the

inside of the colon. As with traditional colonoscopy, the bowel must be prepared and cleared prior to the study. Virtual colonoscopy is less invasive than traditional colonoscopy; however, the radiation exposure is significant. A suspicious finding on this exam will usually require the doctor's scope for biopsies and removal of polyps.

Does the Benefit Justify These Miserable Examinations?

The only positive result of early detection exams is an almost undetectable reduction in death. One to two thousand people must be tested in order to prevent one death in each circumstance. Nothing else good comes from these investigations. Afterwards, you don't look or feel any better. Your body are parts no more functional. Your physical performance has not been improved. You are no healthier nor wealthier. However, you should be a bit wiser and more cautious after learning what really goes on in these businesses.

The U.S. Preventive Services Task Force estimates 1904 mammograms for women aged 40 to 49 years and 1339 mammograms for women aged 50 to 59 years must be performed in order to save one life.¹⁹ The Cancer Screening Evaluation Unit, Institute of Cancer Research, Sutton, UK concluded that there may possibly be one less death for every 2512 younger women undergoing annual mammography for 10 years.²⁰

A recent Cochrane Review on the lifesaving benefits of mammography came to a remarkably similar conclusion: "This means that for every 2000 women invited for screening throughout 10 years, one will have her life prolonged and 10 healthy women, who would not have been diagnosed if there had not been screening, will be treated unnecessarily. (Over-diagnosis and overtreatment are the most harmful effects of early detection testing.) Furthermore, more than 200 women will experience important psychological distress for many months because of false positive findings. It is thus not clear whether screening does more good than harm."²¹

The results from screening men for prostate cancer are just as dismal. The recently published Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial found that screening with prostate specific antigen (PSA) testing and digital rectal examination had no effect on the rate of death from prostate cancer.²² About the same time, in 2009, The European Randomized Study of Screening for Prostate Cancer reported that 1410 men would have to be screened and 48 additional cases of prostate cancer would need to be treated to prevent one death from prostate cancer.²³ (This means 47 men would be over-diagnosed and over-treated.)

The results from colon cancer screening programs are about the same: to prevent one death from colorectal cancer 1250 people would need to have a colonoscopy.²⁴ Plus, the benefits of a reduced risk for death are limited to those abnormalities arising from the left colon, but not from the right colon.²⁵ The left colon can be easily examined by the shorter, safer, simpler, and less expensive flexible sigmoido-

scope, passed with a lot less rigmarole.

Tens of millions of these early-detection tests are performed annually at the cost of tens of billions of dollars and that's only to make the diagnosis (no treatments are included in that amount). Early detection is the biggest business builder ever instigated on the believing public, bringing tens of millions of people into doctors' offices, clinics, laboratories, imaging facilities, outpatient surgeries, and hospitals. For a moment set aside the medical expenses and financial burden on our healthcare system created by these scams. Focus only on the human suffering, and decide whether or not "early-detection testing" fits the first rule of medicine, and that is to do no harm.

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