

Test Bank for Health Promotion and Aging - Practical Applications for Health Professionals 7th Haber

Clinical Preventive Services

CHAPTER SUMMARY

The doctor/patient relationship is an important one, and an annual physical may be justified on that basis alone. I would dedicate that one visit, though, to the overall health of the patient: a review of what the patient does to live a healthy lifestyle or manage a chronic condition; and what the patient will do in the coming year to improve his or her health or to manage a chronic condition.

As far as medical screenings go, annual physicals are no longer justified, despite the fact that some physicians and patients believe in the need for annual screenings. They have been replaced by periodic screenings unique to specific areas of health. The online *Guide to Clinical Preventive Services* provides the evidence-based standards to guide these periodic medical screenings. *The Guide*, however, is far from self-explanatory in deciding what to do. Screenings can vary in sensitivity and specificity and, even if superior in both of these areas, may still not be effective.

Take the mammogram controversy as an example. At first, it focused on whether routine mammograms were effective at all, and it raged for 2 years; then it died down just as suddenly with the major screening recommendation unchanged. Then it was stirred up again in November 2009, by the United States Preventive Services Task Force (USPSTF) recommendation that women in their 40s, and women aged 75 and older, should *not* routinely have annual mammograms. They should be done biannually between the ages of 50 and 74, and after that age in consultation with a physician as to frequency or termination.

Then, politics raised its ugly head. Republicans were quick to decry this science-based recommendation as rationing and tried to use it as a tool to thwart the Democrat's health care reform legislation. The Democrats were equally conscious of politics and quick to overlook the evidence for reconsidering the timing of mammogram screenings. They too demanded that all women over 40 be reimbursed for annual mammograms.

The controversy over hormone replacement therapy (HRT) flared up just as quickly, with the USPSTF recommendation that women should be encouraged to reduce the dose or duration of HRT, or even eliminate it, primarily because of the increased risk for breast cancer and blood clots. Also, routine prostate cancer screenings in old age became a controversial research issue once again, as the USPSTF cited evidence against it while many in the medical professions continued to support it.

Blood pressure screenings are unquestionably valuable and routinely performed. Perhaps too routinely and perfunctorily, that is, without sufficient counseling. As people age, uncontrolled hypertension continues to be increasingly common. There is also the surprising finding that people over age 80 live longer when their high blood pressure is not lowered.

Osteoporosis screenings are increasing in frequency, but follow-up activity continues to lag behind, despite the availability and effectiveness of medications, vitamin/mineral supplements, and weight-bearing exercise. While bisphosphonates are effective, the FDA warns against the long-term use of these types of drugs.

Cholesterol screenings are increasingly leading to statin interventions as physicians hold little faith in lifestyle changes. Questions about affordability, and consequently compliance, linger. Affordability is a societal issue, since new, even more expensive, statins for lowering low-density lipoprotein (LDL) among those most at risk have been approved by the FDA. The five-figure annual cost for these medications is for a *lifetime* drug.

Speaking of expense, Sovaldi has been a wonderful breakthrough for hepatitis C, but it costs \$84,000 for a 12-week treatment.

Lung cancer screenings have been approved for Medicare beneficiaries below age 77, but false positives are up to an unacceptable 50%.

Colorectal cancer screenings remain unpopular as the public waits for a less invasive scanning procedure, such as a stool sample or a blood test that can definitively detect colorectal cancer.

Cervical cancer can be reduced substantially through a human papillomavirus (HPV) vaccine named Gardasil. But only 38% of girls had received the three-dose series. A DNA screening test for human papillomavirus is strongly recommended to supplement the Pap test for women ages 30 to 65, but needs greater compliance.

Routine screening for thyroid cancer was a disaster in South Korea and warns us of the danger of over-screening, which some already conclude (this author included) takes place with other Medicare-subsidized screenings.

Hearing, vision, and oral health screenings continue to fall outside the purview of Medicare, whereas diabetes screening is increasingly within its coverage. This section concludes by noting, with a bit of humor, that medical screenings may be going to the dogs.

There are racial disparities in immunization adherence that can lead to a multifaceted discussion of the causes. A more powerful flu vaccine is now available for older adults but is not yet widely administered. A new pneumonia vaccine, Prevnar 13, is to be used in conjunction with the traditional Penumovax 23, and compliance needs to be increased as well. A vaccine for shingles in people aged 60 and older is effective but it too lags in implementation.

Medicare prevention benefits keep growing in number, influenced in equal parts by research results, good intentions, and lobbyists. Table 2.1 summarizes Medicare prevention.

CHAPTER 2—DISCUSSION QUESTIONS AND ANSWERS

The following set of questions and answers pertains to the sidebars in Chapter 2.

What would you say to a client who is asking you for advice on whether to get a mammogram? Why would you answer that way?

If you are younger than 50 years old or older than 74, you need to talk with a clinician who is knowledgeable about your medical status, up-to-date on mammogram recommendations, and understands evidence-based medicine. Only the physician knows your family history and other risk factors, and can make informed referrals.

Why not do annual screenings from age 40 and older, with no upper age limit, just to be on the safe side? Because there are risks involved with mammograms (versus the red herring political stance that a “more restricted recommendation for mammogram screenings is a plot to ration health care services”). Breast screenings can turn up abnormalities that are lesions like DCIS that would never progress to mortality. Thus, unnecessary biopsies, surgeries, radiation, and chemotherapies might be performed.

Because of dense breast tissue, it is problematic to screen women in their 40s. It is estimated that more than 1,900 women would have to be screened for a decade to save a single life, while many of these women would have biopsies and other risks engendered by false positives. Annual mammogram beginning at age 40 and continuing perhaps up to 50 years, raises questions about the accumulation of this amount of radiation.

What would you say to a client who is asking you for advice on whether to start HRT? Why did you answer that way?

See a physician who has HRT as one of his or her areas of specialization. We know there is increased risk with HRT, but that it is small. We know that some women have severe menopausal symptoms that interfere with their relationships and with their work. And we also know that while dietary supplements work no better than a placebo, a placebo may work sufficiently well for some women.

But only a physician who specializes in this area will make the best recommendation as to whether a woman should use HRT. And, if HRT is recommended, at what age should you begin it, what is the lowest possible dose that you can take and still have it be effective, and what is the shortest duration that will suffice? HRT has been debunked as an intervention that can improve women’s health, but it has not been debunked as a

useful intervention for women whose menopausal symptoms interfere with their lifestyle. Everyone deserves the advice of an expert in this area.

There has been a trend toward lowering the threshold for intervention from medical screenings such as blood pressure, blood glucose, and cholesterol. This can allow people to take action before the problem gets too serious. It can also lead to more people being on medications and the greater medicalization of health care. What do you think?

From an individual's perspective, I see nothing wrong with getting more information and getting it earlier. Nevertheless, I may be personally uninformed and wind up relying on the questionable advice of others. As the medical screenings increasingly lead to intervention, a medically-oriented practitioner with little confidence in lifestyle changes can increase the financial cost, and possibly physical cost, to both, individuals and society.

It is obvious that the side effects of exercise and good nutrition, for instance, are only positive, whereas the side effects and interaction effects of medications and the consequences of medical interventions can offset the benefits of lowering the threshold and can even be dangerous to your health. Unfortunately, getting people to make lifestyle changes is difficult and many medical practitioners prefer to offer medical strategies only.

Until the day when a health educator is part of the medical team, I have mixed feelings about this trend.

What do you believe accounts for the racial disparity in immunization rates, and what can be done about it?

As noted in Chapter 11, there is some controversy over whether socioeconomic status or ethnicity counts the most for the differences in health behaviors. The evidence points more toward socioeconomic status, which includes both the influence of income and education on health behaviors.

In this instance, education is more of a factor than income, because Medicare pays for immunizations for older adults. Education would also inform older adults that the flu shot does not cause the flu, which is a common belief among older minorities.

Of course, all of this is not to deny the existence of discrimination and subsequent distrust, which disproportionately affects ethnic groups and builds up over the generations. Many African American elders, for instance, have heard about the Tuskegee study where African Americans were denied penicillin for syphilis. Hispanic Americans were and continue to be subjected to periodic sweeps for deportation. Japanese Americans were rounded up and placed into internment camps in the 1940s.

Ethnic elders also have stronger beliefs and practices than nonminority elders toward the use of folk medicine and religious healing. Spiritual advisors, home remedies, and traditional beliefs about illness can work against compliance with recommendations from Western allopathic practitioners.

Although education is the answer, it has to include patience for increasing the trust among older minority adults.

The additional discussion questions below can be used to provoke dissenting opinions and interesting class discussions. They may also be used as test questions for examinations:

If a screening test has good sensitivity, specificity, and reliability, will it be effective? Explain your answer.

I added "explain your answer" because students frequently err in answering this question. Does it really matter if the screening is sensitive, specific, and reliable, if following through, on an intervention carries more risk than possible benefit? An accurate test does not necessarily mean an effective test.

This chapter provides a good rationale for choosing a physician who is knowledgeable about preventive medicine. There is a rapidly growing body of research knowledge that physicians need to know regarding medical screenings and immunizations. A knowledgeable physician will make some recommendations forcefully, whereas other recommendations will not be clear-cut and require discussion.

Why were so many women (for so long) misled by the HRT research that influenced physician recommendations?

Many students have learned in statistics class that correlation does not equal causality. This lesson keeps popping up in this textbook as evidenced by the gerontological fervor you now witness over brain health and the importance of cognitive stimulation to stave off Alzheimer's (see Chapter 8). The good news is that while brain stimulation games may not be worth the money you spend on them, they definitely do not increase the likelihood of breast cancer or cardiovascular problems. The same, however, cannot be said of using HRT.

Correlational research also suggests that: a positive attitude increases longevity (Chapter 8); religiosity improves health and extends life (Chapter 8); dietary supplements lead to all kinds of desirable outcomes, including reversing the aging process (Chapter 6); and diets lead to weight loss and longer life (Chapter 5). Students need to know that randomized, double-blinded clinical trials should be treated with considerably more respect than the correlational studies and other less rigorous research designs that inspire these premature conclusions.

Experimental research designs, however, are not only expensive, but they are also not always realistic or effective when it comes to randomly assigning people to a control group. We rely, instead, on correlational studies and, unfortunately, we tend to impute causality from them.

What are the guidelines for being prehypertensive? If your blood pressure readings were 124 systolic over 82 diastolic, would you be motivated to take any action? Why?

I was told by a nurse recently that my blood pressure was 124/82 and that I was prehypertensive (systolic 121–139; diastolic 81–89). The action, I wanted to take was to tell the nurse to ignore that label at that score, even though she was technically right. If she had asked me, I could have told her that my blood pressure readings were pretty steady over the past few decades and consistently around the recommended 120/80 level.

One could argue that the nurse was acting appropriately because she was alerting me to a danger zone, where rising blood pressure could become a serious risk factor. But she did not ask me about my lifestyle and whether I could benefit from improving it and lowering potential risk factors.

My main concern with the ratcheting down of medical screening thresholds is that health professionals may skip over the step of lifestyle recommendations and begin to prescribe medications earlier than before. This seems to be the case with lowering the threshold for an acceptable cholesterol reading, and many practitioners introduce medications to the patient even earlier because of a belief that lifestyle changes do not work.

I would have been less annoyed by the nurse if she had quickly followed up her prehypertensive comment with encouragement to improve or maintain my exercise and eating practices. This would have reassured me that she was not yet thinking about my progression toward blood pressure medications.

What is the author's opinion of Medicare's prevention coverage? Do you agree? Explain your answer.

I know from firsthand knowledge that the author is pleased that Medicare prevention has expanded considerably over the past two decades, and that the Affordable Care Act is another huge step forward. His (or my) chief objection, however, is the strong emphasis on medical screenings over counseling. This bias is more irritating due to the influence of lobbyists in covering medical screenings beyond what is recommended by the USPSTF.

Focusing on the positive, though, the latest Medicare coverage for smoking cessation, obesity counseling, alcohol misuse counseling, depression counseling, comprehensive wellness for those with cardiovascular disease, and an annual wellness visit, are strong initiatives into the area of counseling for risk reduction. I believe it will soon be time to tackle the biggest challenge of all, whether Medicare-reimbursed counseling for exercise and nutrition should be extended to all older adults.

I also believe that a small reimbursement from the government (with cost-sharing by the patient) for a referral to a health educator is affordable and will be effective for many patients. Nevertheless, even if routine prevention and promotion coverage are not cost-effective overall for Medicare (and the jury is still out on this), a modest investment in health is an expense that is quite compatible with most people's value systems.

EXAMINATION - 2

*Correct Answer

Name _____

Circle or insert the correct letter, number, or word.

1. **If a screening test has good sensitivity, specificity, and reliability, then this means it will be effective as well.**

True *False

2. **What is the difference between sensitivity and specificity?**

3. **When it comes to cancer, which professional organization is more evidence-based in its cancer recommendations:**

- a. American Cancer Society
- b. *United States Preventive Services Task Force
- c. Both professional associations are equally evidence-based when it comes to cancer.

4. **The USPSTF makes recommendations on whether a condition should be considered in a periodic health examination. A “C” recommendation means:**

- a. Good evidence to support the recommendation
- *b. Insufficient evidence for making a recommendation
- c. Good evidence for exclusion

5. **The Affordable Care Act did not do one of the following:**

- a. Eliminate deductibles and copayments for prevention services.
- *b. Provide exercise counseling for sedentary older adults.
- c. Provide screening and intensive behavioral therapy for obesity.
- d. Provide alcohol misuse counseling.
- e. Provide depression screening if there was follow-up treatment and referral in a primary care setting.

6. **Older adults with a long history of heavy smoking are eligible for a free lung cancer screening if they are:**

- a. Medicare-eligible adults over age 65.
- b. Medicare-eligible adults of any age.
- *c. Medicare-eligible adults up to age 77.

7. **Mammograms are covered annually under Medicare, even though the USPSTF reports that the evidence for those aged 40 to 50, and 75 and older, does not support this frequency.**
 *True False
8. **Most deaths from breast cancer occur among women under age 65.**
 True *False
9. **When it comes to routine mammograms (that is, women without a family history of breast cancer), the risks of screening before age 50 exceeds the benefits, according to the USPSTF.**
 *True False
10. **It is preferable to get a sigmoidoscopy over a colonoscopy.**
 True *False
11. **Women with DCIS are less likely to undergo immediate medical intervention if you avoid using what word? _____ (cancer)**
12. **Prostate cancer screenings are covered annually under Medicare. USPSTF reports that the evidence for routine screening for those aged 65 and older does not support this recommendation.**
 *True False
13. **Routine prostate cancer screenings are recommended by the USPSTF.**
 True *False
14. **Benign prostatic hyperplasia can increase the level of the protein-specific antigen (PSA) blood test.**
 *True False
15. **It is a good idea for a 90-year-old person who has been regularly screened, to continue getting screened for colorectal cancer.**
 True *False
16. **Which test does the author and experts recommend for colorectal screening?**
 - a. Fecal occult blood test
 - b. Sigmoidoscopy
 - *c. Colonoscopy
17. **Since sigmoidoscopies only examine 40% of the colon, Medicare does not cover this medical screening.**
 True *False
18. **Which is the most lethal skin cancer?**
 - a. Squamous
 - b. Basal
 - *c. Melanoma

19. If an older woman is no longer having sexual relationships, why should we still be concerned with some of these women undergoing a Pap smear? _____ (many older women have never had a Pap smear, and cancer may first reveal itself at a later age)
20. For decades, the medical profession and the general public thought that HRT not only alleviated menopausal symptoms, but led to better health for women. What accounted for the misleading correlation between HRT and better health? _____ (biased sample)
21. Total cholesterol and HDL ratio and triglycerides can be screened through Medicare every 5 years.
*True False
22. Prediabetes is a condition that can be screened through Medicare every 6 months. It refers to a mg/dL level of:
a. Below 100
*b. 100 to 125
c. Above 125
23. Densitometry screenings relate to:
a. Colon cancer
b. Cholesterol
*c. Osteoporosis
24. Fosamax, Boniva, and Actonel are drugs to treat:
a. Hypertension
b. High cholesterol
*c. Osteoporosis
d. Diabetes
25. The Centers for Disease Control and Prevention recommended that only those boomers, who have had a blood transfusion before 1992 or engaged in risky behavior in the 60s, should be screened for Hepatitis C.
True *False
26. Medicare covers routine hearing and vision screenings.
True *False
27. Medicare covers an annual pneumococcal vaccination.
True *False

28. **What was true about HRT research over a few decades:**
- a. Research results were consistently positive for alleviating symptoms.
 - b. Research results were based on randomized clinical trials.
 - c. Research results were consistently positive for improving health.
 - *d. Both a and c.
29. **Statins are drugs for:**
- *a. High cholesterol
 - b. High blood pressure
 - c. High blood glucose
 - d. Osteoporosis
30. **What was unusual about the Women's Health Initiative?**
- a. The enormous size of the sample.
 - b. The first time the federal government focused a large health grant on women.
 - c. The rigor of the treatment and control group, with random assignment and double-blindedness.
 - *d. All of the above.
31. **Blood pressure values for prehypertension begins at _____ mmHg systolic, and ends at _____ mmHg systolic** 121 and 139
32. **Recommended blood pressure is (insert numbers):**
systolic/diastolic _____/_____ or below (120/80)
33. **To determine if someone has osteopenia or osteoporosis, you need to measure bone _____**
(density)
34. **Which cholesterol carries fat away from the cells to the liver to be processed or excreted?**
- *a. HDL
 - b. DL
 - c. Both
 - d. Neither
35. **According to the latest guidelines, people without a history of coronary heart disease, stroke, or vascular disease are not to be recommended for a statin.**
- True *False
36. **Prediabetes refers to between ____ and ____ mg of glucose per deciliter of blood. (100 and 125)**
37. **Which frequency is impaired by presbycusis?**
- a. Low frequency
 - *b. High frequency
 - c. Both diminish at the same time

38. **Presbyopia is a universal age-related change in vision that cannot be corrected to 20/20.**
True *False
39. **If you had chickenpox as a child, you are unlikely to get shingles as an older adult.**
True *False
40. **While the risk of shingles is lowered about 50% with the immunization shot, only about 25% receive it.**
*True False
41. **The childhood disease that can produce a virus that leads to shingles in later life, is:**
a. Measles
*b. Chicken pox
c. Smallpoxd. Mumps
42. **An annual pneumococcal vaccination is covered by Medicare.**
True *False ____
43. **Aspirin prophylaxis has become more common now that it is associated with lower risk of a second heart attack and colorectal cancer. But it should not be taken without a physician's supervision because of the risk of what _____ (stomach bleeding)**