

Annual Health Exam

Charting a Course for Prevention

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Prevention is a cornerstone of family medicine. Patients visit their physician to screen for illness, for counsel about risk factors and to help prevent disease. The inundation of various recommendations poses time challenges when trying to examine a patient during the annual check-up. This article examines how to put evidence-based prevention into practice.



Are preventive health recommendations applied in practice?

The Canadian and US Task Forces on Preventive Health have reviewed and graded recommendations for evidence-based prevention (see Table 1).

Table 1

Grades for preventive services recommendations

- A:** Good evidence for inclusion
- B:** Fair evidence for inclusion
- C:** Inconclusive (benefits vs. harms equivocal)
- I:** Insufficient evidence
- D:** Fair evidence for exclusion
- E:** Good evidence for exclusion

Joel's case



- Joel, 55, is a middle manager at a bank. He rarely visits his doctor, but has come for a full check-up.
- Joel is healthy and takes no medications. He quit smoking five years ago, after 25 years of smoking a half pack/day.
- Weight: 203 lbs
- Height: 5 ft 11 in.
- Body mass index: 28
- Blood pressure: 135/87 mmHg

Case discussion

Joel's doctor completes the Preventive Health Table during the examination and discovers Joel does not exercise and often eats take-out food. A cholesterol profile is ordered and a stool occult blood kit is given.

The assessment reveals that Joel needs to reduce his cardiovascular risk by eating better, exercising more and losing weight. He is not interested in eating better, but may want to exercise more. He is given an exercise prescription and is scheduled to a visit two months later to review his cardiac risk status.

A standardized study involving patients sent to family practices for annual check-ups found only 41% of A/B manoeuvres were offered, and 17% of ineffective, D/E manoeuvres were offered. The study found selective offerings of "A and B manoeuvres to the exclusion of D and

Bill's case



- Bill, 54, is a chemical engineer.
- He periodically visits his physician for symptoms of osteoarthritis.
- He is otherwise healthy.
- An article has interested him to

have a prostate specific antigen (PSA) test to screen for prostate cancer.

- He has no family history of prostate cancer and his family tends to have a long life expectancy.
- Bill has minimal lower urinary tract symptoms and wakes to void only once at night.
- His physical examination is unremarkable.
- A symmetrical and benign feeling prostate is moderately enlarged for his age.
- A discussion of the possible benefits (early detection of prostate cancer at a curable stage) and risks (possible need for biopsy leading to treatment of any detected cancer) includes the fact that there is only limited evidence that a PSA in this situation would decrease prostate cancer mortality.

E manoeuvres was rare.”¹

Family practices need to be organized to offer more A/B manoeuvres and fewer D/E manoeuvres.



Putting prevention in practice: What works?

Several interventions have been found to increase recommended interventions. A meta-analysis found that organizational changes (*i.e.*, a planned preventive care visit) using clinics designed to deliver some screening services (*i.e.*, the Ontario Breast Screening Program for breast cancer) or designating non-physician staff members for specific activity improved the provision of immunization and cancer screening.²

Table 2

Useful Web sites:

- US Task Force on Preventive Health Services: <http://www.ahcpr.gov/clinic/uspstfix.htm>
- Canadian Task Force on Preventive Health Care: <http://www.ctfphc.org/>
- The Preventive Health Tables: <http://individual.utoronto.ca/mgreiver/tables.htm>
- The Preventive Health Questionnaire: http://www.fmpe.org/en/documents/doc_aid_s/aid_prevention_apd1.pdf
- The CPCP Chart Aids: www.cfpc.ca (go to health policy, family practice resources)

Other effective interventions included patient reminders, through letters or phone calls.² Several jurisdictions offer physicians financial incentives for meeting targets for preventive services.

Ensuring enough family physicians are available is an effective strategy. US regions having more care provided by specialists and hospitals have less preventive services.³ In addition, patients who regularly see a family doctor are more likely to get preventive care.⁴

Computer-based reminder systems are very effective; a meta-analysis found that 14 out of 19 studies had positive results.⁵ For practices lacking an electronic medical record, chart aids, such as flow sheets, encounter forms or checklists can be helpful.

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Most family physicians are very familiar with the Rourke record for well-baby visits. In one study, “the chart flow sheet was the resource that was most strongly and consistently related to preventive services provision.”⁶



Too little time, too many things to do? Choose the “As” and “Bs” for your practice

Practising family physicians have limited time and resources available to deliver preventive services. The US Task Force on Preventive Services has stated that “services with adequate evidence of substantial to moderate net health benefit (those with “A” and “B” recommendations) ought to receive the highest priority for delivery in the primary-care setting.”⁷


There are several chart aids available to help put the As and Bs into practice; the age-based Preventive Health Tables, the new College of Family Physicians of Canada Chart Aids or the Preventive Health Questionnaire, which patients can complete before their check-up. Table 2 provides a list of Internet addresses for downloadable charts.



How can evidence-based prevention be implemented?

A practice enlisting staff members to give patients a Prevention Kit ahead of time may work very well. This kit can include:

- the Preventive Health Questionnaire,
- a Stool Occult Blood Kit (A) for all patients age 50 or older,
- a mammogram requisition (A) for all women aged 50 to 69 or
- a urine sample for chlamydia (A) for women aged 15 to 25.

Family physicians make a difference in a patient’s use of prevention and there is evidence that no other specialty is as effective. Preventive health care truly represents family medicine at its best. 

References

1. Hutchison B, Woodward CA, Norman GR, et al: Provision of preventive care to unannounced standardized patients. *CMAJ* 1998; 158(2):185-93.
2. Stone EG, Morton SC, Hulscher ME, et al: Interventions that increase use of adult immunization and cancer screening services: A meta-analysis. *Ann Intern Med* 2002; 136(9):641-51.
3. Fisher ES, Wennberg DE, Stukel TA, et al: The implications of regional variations in Medicare spending. Part 1: The content, quality, and accessibility of care. *Ann Intern Med* 2003; 138(4):273-87.
4. McIsaac WJ, Fuller-Thomson E, Talbot Y: Does having regular care by a family physician improve preventive care? *Can Fam Physician* 2001; 47:70-6.
5. Hunt DL, Haynes RB, Hanna SE, et al: Effects of computer-based clinical decision support systems on physician performance and patient outcomes: A systematic review. *Jama* 1998; 280(15):1339-46.
6. Dickey LL, Kamerow DB: Primary care physicians’ use of office resources in the provision of preventive care. *Arch Fam Med* 1996; 5(7):399-404.
7. Chou R, Clark EC, Helfand M: Screening for hepatitis C virus infection: A review of the evidence for the U.S. Preventive Services Task Force. *Ann Intern Med* 2004; 140(6):465-79.