

Barriers and Facilitators to Universal HIV Screening Among Internal Medicine Residents

Meghan Brennan, MD^{1,3}, Joshua Barocas, MD¹, Christine Kolehmainen, MD^{1,3}, Christopher Crnich, MD^{1,2}, Carol Isaac, PhD³, and James Sosman, MD¹

Department of Medicine, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin¹ · William S. Middleton Memorial Veterans Hospital, Madison, Wisconsin² · Center for Women's Health Research, University of Wisconsin, Madison, Wisconsin³

BACKGROUND

HIV screening rates remain low among Internal Medicine physicians despite the 2006 CDC guidelines and 2009 ACP guidelines recommending universal screening^{1,2}. A national survey of internists reported only 61% offered HIV screening regardless of risk³. In 2008, 44.6% of Americans aged 18- 64 reported ever being tested for HIV; another survey reported that 17% of adults say a physician or health-care worker has ever suggested an HIV test^{4,5}.

In 2010, our internal medicine residency program introduced HIV screening to an annual chart review focused on meeting preventative health guidelines. After its introduction, resident screening rates increased from 18 to 44%. This improvement prompted us to design a qualitative study examining current barriers residents encountered and facilitators they developed to increase HIV screening rates.

METHODS

Fifteen internal medicine residents, representing 20% of the training program, volunteered to participate in one of three focus groups exploring barriers and facilitators to routine out-patient HIV screening. A trained facilitator led the groups using a standardized interview guide. Questions were formulated based on 1) a knowledge-attitude-behavior framework for physician non-adherence to guidelines, 2) existing reports of barriers, and 3) informal discussions with residents and recent graduates regarding their experiences⁶. Focus groups were audio recorded, transcribed, and de-identified. Two investigators used a hybrid-thematic analysis of 1) deductive codes from the original knowledge-attitude-behavior framework and 2) inductive, HIV-specific, codes derived from the focus groups themselves to code the transcripts line-by-line⁷. Inter-rater reliability was 95%. Discrepancies and main themes were discussed until consensus was reached.

PARTICIPATING RESIDENT DEMOGRAPHICS

Characteristic	Residents (n=15)
Year of training	
First	1
Second	8
Third	6
Anticipated Specialty	
Primary Care	5
Subspecialty	9
Undecided	1
Primary care clinic site	
University clinic	11
VA clinic	4
Gender	
Male	5
Female	10

Familiarity with guideline and awareness of its details

- "I was pretty sure everyone needed an HIV test, but I didn't know the timing and frequency until I read the guidelines. Actually solidifying the knowledge made me believe."

Agreement with guidelines

- "[HIV screening] meets all the requirements of a screening test. You have to have a way to test, it has to have a reasonable prevalence in the population, and you have to have a way to intervene. HIV seems to fit."
- "[At] the population level, it's going to prevent spread by people finding out they have it. So, it's good for the population and my individual patients."

Motivation/ Inertia of practice

- Resident motivation
- "It just rolls in with all of my other questions about sexual behavior."
- "It's a routine question for me to ask the patient if they've ever been screened for HIV."

External barriers

- Patient factors
- Patient's perception of risk
- "I never really have a problem screening because they always expect the test to come back negative..."
- "Patients don't feel they need this screening."
- "It's usually along the same lines, 'I haven't done anything wrong. I've only had one partner:'"
- "Most people think [sex] is dangerous for everyone else."
- Patients' attitudes toward screening
- "I have been surprised by the number of people who are married and very willing to get HIV tested. I always feel like I'm saying something about them or their spouse, but I haven't found that."
- "I've had some patients get very defensive in the past. 'Why do I need to get screened? Then it becomes kind of uncomfortable.'"
- "It's associated with being a bad person."
- Ability to reconcile patient preference with guideline recommendations
- Normalizing
- "Everybody in my clinic seems to have diabetes, so they know what an A1C is . . . I have one patient who just understands it that way- like any other chronic condition, you just have to screen for it."
- "I think one of the benefits of trying to make [HIV testing] more routine and mainstream is normalizing it as a screen. . . The more we try to put it out there and make it a more normal thing. . . makes it easier for everybody, including the patients. They don't get as scared."
- Referring to an expert authority
- "...I say the 'CDC recommends that all adults have screening for HIV, and I think it's very important.'"
- "It is helpful to say that the institution I am working for is asking me to ask you this."

KNOWLEDGE

ATTITUDES

BEHAVIOR

HIV SCREENING ACCOMPLISHED

Outcome expectancy

- Resident's perception of patient's risk
- "I think it's very helpful 'cause I think I probably have a fair share of patients that don't tell me their full sexual or drug-use history."

Self-efficacy

- Awkwardness
- "Things can seem very awkward to talk about, and then you just do it over and over. You get comfortable and it becomes second nature. You also get better at dealing with the weird reactions or responses that do occur at times. I just try to be pretty casual with people and, generally, it seems to go over pretty well."
- "...I expect it to be awkward so I've been pleasantly surprised that people are so receptive. I think people know about HIV. It's not as taboo as it once was so it's not this strange thing."
- "If I think they will be offended, I might ask it in a way that makes them feel awkward because my face turns red."

Environmental factors

- Time
- "If the waiting room is really busy, it might be something that drops off."
- "For me, it's a priority list. In the amount of time for preventative health issues that I can allot, what is the most important for that patient? . . . With the prevalence here, I put it low on my list of things to get through."
- "It's lower on my priority list for, say, a healthy 55 year-old man. I go through all their preventive issues, but if they come in with six chief complaints for a one-hour physical, that's one of the things I may not get to along with a living will or healthcare power of attorney. Those are lower on my preventive screening list, as opposed to cholesterol or colonoscopies. I would say about 25% of the time I don't get to it."
- Electronic medical record cues
- "I added [it] to my preventative health problem list. I would forget if it wasn't there."
- "I have a section on health maintenance [in the EMR] for all my patients. I document when I asked last, what their response was, and if they'd ever been screened before. So I tend to bring it up [with my patients]."
- "We started our own dot phrases. . . They're all different. Some things might be left off and others added, so there's no standardization."

STANDARD FOCUS GROUP GUIDE

Tell me about the last patient you screened for HIV in your primary care clinic. Can you remember a patient you didn't screen but wished you had? Do you think most residents know the 2006 CDC guidelines? How do you approach screening? What works well and what doesn't? Why do you think patients decline screening? Has it ever been awkward? What types of things do you do to keep it from becoming awkward? What are some barriers to screening? What has made screening easier? Do you think the perception that we work with a low prevalence community affects physician's likelihood to screen? What role could the electronic medical record play in HIV screening? According to the annual chart review, HIV screening has gone up quite a bit- almost doubled. How did you guys do it, and what motivated you?

MAIN BARRIERS AND FACILITATORS

Barriers:

1. Some patients were reluctant to accept screening because of perceived low risk or stigma.
2. HIV screening became a low priority in time-limited encounters.
3. Approaches to screening were not standardized.

Facilitators:

1. Residents normalized the screening process and drew analogies to other chronic diseases.
2. Residents referred to an expert authority such as the CDC.
3. Residents developed modifications to their electronic health record templates as a cue to address the topic.

CONCLUSIONS

Internal medicine residents displayed knowledge and positive attitudes toward universal HIV screening. Most barriers were behavioral and some involved a subset of patients who indicated reluctance to undergo testing.

- Physicians wishing to promote HIV screening in primary care should consider utilizing three facilitators in their routine:
 1. Normalizing the topic
 2. Referring to an expert authority
 3. Employing an electronic health record reminder

REFERENCES

1. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. MMWR Recomm Rep. 2006; 55 (RR-4): 1-17.
2. Gleason A, Snow V, Shettle P, Hopkins R, Owens DR. Screening for HIV in health care settings: a guidance statement from the American College of Physicians and HIV Medicine Association. Ann Intern Med. 2009; 150: 125-31.
3. Korubos PT, Berkenstadt CV, Sullivan LE, Cofrancesco J, Cook RL et al. General internist beliefs, behaviors, and perceived barriers to routine HIV screening in primary care. AIDS Educ Prev. 2011; 23 (suppl 7):S3.
4. Vital signs: HIV testing and diagnosis among adults- United States, 2001-2009. MMWR. 2010; 59: 1550-5.
5. Kaiser Family Foundation. Kaiser Public Opinion Survey Brief: Views and experiences with HIV testing in the U.S. Kaiser Family Foundation. 2009. <http://www.kff.org/kaiserpoll/poll042809tq.cfm>. Accessed 6/26/12
6. Cabardo MD, Rand CS, Power NR, Wu AW, Wilson MH et al. Why don't physicians follow clinical practice guidelines? A framework for improvement. JAMA. 1999; 282: 1658-65.
7. Ferrelly J, Muir-Cochran. Demonstrating rigor using thematic analysis: a hybrid approach of inductive and deductive coding and theme development. Int J Qualitative Methods. 2006; 5: 1-11.