

Evaluation of Physical Activity Counseling in Primary Care Using Direct Observation of the 5As

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Introduction

- ❖ The 5As (Ask, Advise, Assess, Assist, Arrange) are recommended as a strategy for brief physical activity counseling in primary care
- ❖ However, there is no gold standard measurement
- ❖ Patient participation is not well understood

Objectives

- ❖ Develop a coding scheme to measure the 5As using audio-recorded primary care visits
- ❖ Describe the degree to which patients and physicians accomplish the 5As

Methods

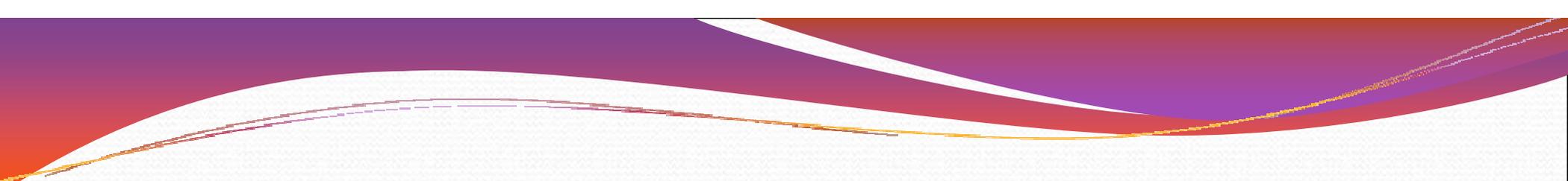
Phase 1 - development of coding scheme

- ❖ Previously published definitions of 5As reviewed
- ❖ Preliminary template of coding scheme drafted
- ❖ Applied to randomly chosen samples of 10 cases; eg, physician-patient discussions (four samples total)
- ❖ Case samples discussed and coding scheme iteratively revised accordingly
- ❖ Physical activity examples for each of the 5As were used to illustrate and operationalize

Methods

Phase 2 - application of coding scheme

- ❖ Applied to a sample of 361 primary care audio-recorded visits with patients reporting low levels of physical activity and 28 of their physicians in Ohio
- ❖ Patients contacted by phone 2-3 days prior to visit and completed survey by phone
- ❖ Physicians blinded to study hypotheses
- ❖ Research assistant sat in exam room during visit with audio-recorder



Coding Scheme

Patient and visit characteristics (n = 139)

Patient Characteristics	<u>n (%)</u>
Age*	54.1 (11)
Race	
White	92(67.1)
Black	35 (25.5)
Other	10 (7.4)
Hispanic	2 (1.5)
Female	103(74.1)
Education	
High school diploma or less	29 (20.8)
Some college	47 (33.8)
College degree	40 (28.8)
Graduate degree	23 (16.5)
Chronic Conditions	
Diabetes	29 (20.9)
High cholesterol	65 (46.8)
High blood pressure	73 (52.5)
Heart disease	7 (5.0)
None of the above conditions	33 (23.7)
Self-reported Health Status	
Excellent	16 (11.5)
Very good	48 (34.5)
Good	47 (33.8)
Fair	22 (15.8)
Poor	6 (4.3)

Visit Characteristic	<u>n (%)</u>
	23.0
Visit Duration (minutes)*	(11.0)
Visit Type	
Acute care	31 (22.3)
Chronic care	66 (47.5)
Well care	42 (30.2)

*Mean (std) reported for continuous variables.

Results

- ❖ 139/361 visits contained some discussion about physical activity
- ❖ 0 examples of recommended guidelines explicitly and completely stated
- ❖ Coding scheme achieved good inter-rater reliability (kappa 0.62-1.0) for each of the As

Results

- ❖ Among the 139 discussions of physical activity ASK occurred 87%
 - Very little specific detail elicited however
- ❖ Readiness to change (ASSESS) was rarely elicited by the physician (24%), but more commonly revealed by the patient (54%)

Results

❖ Ambivalence about increasing physical activity was common

“See the big problem is I work the 3 to 11 shift. And I’ll typically wake up later and then I usually don’t eat before I go to work. I’ll have something at work and then I’ll go home and eat and, I know that’s terrible, cause then I go to bed... You know I, I do understand that (I need to improve exercise), but it’s hard, just hard to break out of routine.”

“I walk the dogs regularly...it’s not enough to get my heart rate up, because you know, they stop and sniff. But what I’m trying to do is use an exercise bike. But I’m minimally successful with that...it’s not a knowledge deficit...I know what I need to do. It’s <laughter>it’s a performance deficit. It’s clear to me that I need more of that moderate exercise.”

Results

- Ambivalence was infrequently followed by physician assistance or exploration
 - In 51% of cases, the physician offered limited assistance
 - Physician: Okay, now are you exercising regularly?
 - Patient: Okay, no.
 - Physician: Oh I guess it's kind of hard with four kids.
 - Patient: If chasing four kids count, then yes. But I know that probably is not on the list.
 - Physician: You know, 30 minutes of dedicated exercise – it would be great if you could put them in a stroller and just go for a walk.

Results

- In 49 % of cases, the physician offered no assistance
 - Physician: are you exercising regularly?
 - Patient: Not like I should. No.
 - Physician: No? All right, I suppose <laughter> that's true for most of us.
 - Patient: <Laughter>
 - Physician: Is that <laughter> is that something that you can start to get into?
 - Patient: <sigh> I'm going to try to do better.
 - Physician: OK. All I ask is that you try, you know, so and then um a quick question for you. It looks like you're coming up due for a mammogram.

Discussion

- Our newly developed coding scheme was robust and reliable
- Patients actively participated in four of the 5As (Ask, Advise, Assess, Assist)
- Physicians rarely assessed patient readiness to change, yet patients frequently provided cues and statements about their readiness
- Ambivalence was common and physician assistance was limited or nonexistent

Limitations and Strengths

- Single cohort of patients and physicians in Ohio
- Cross-sectional data of single office visits
- Use of audio-recorded data
- Larger sample size than is typical for this type of research

Conclusion

- The coding scheme allowed us to identify patterns of ineffective 5As communication and the potential promise of patient participation
- Discussions of physical activity rarely mention specific recommended guidelines
- Future work should explore strategies to improve ASSESS by eliciting patient readiness to change
- Develop physicians' skills to use patient ambivalence to tailor advice, and ASSIST by improving patient engagement and problem-solving

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