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Improving Patient-Clinician Conversations During Annual Wellness Visits

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Abstract

Background—In 2010, the Patient Protection and Affordable Care Act instituted dedicated reimbursement for Annual Wellness Visits (AWVs) in primary care, requiring the use of comprehensive health risk assessment (HRA) that covers specific health content. HRAs have been implemented and studied for decades in various settings, but little is known about the effect of introducing HRAs on the dynamics and content of patient-clinician conversations during AWVs and if the effective use of HRAs requires additional training and resources.

Methods—We used established technology to video-record 40 AWVs conducted by 5 faculty in an academic family medicine residency practice. A comprehensive HRA-Health Planner report was implemented in these practices over a 3-month baseline period without additional training or resources. Subsequently, three of the five clinicians received a brief, low-intensity intervention to use the HRA to support patient behavior change. Patients received a 5-minute orientation on the purpose of the enhanced AWV and advice on how to communicate their needs and preferences more effectively. Twenty-two pre- and post-intervention visit recordings were carefully matched on known covariates and were explored by several evaluators using Conversation Analysis techniques to describe the dynamics and content of conversations. Short exit interviews with patients and clinicians were evaluated by standard content analytic techniques.

Results—Six overarching themes emerged that described the dynamics of AWV conversations. Patients and clinicians sub-optimally utilized the HRA report and missed many opportunities for promoting behavior change. However, a low-intensity, multi-component intervention significantly decreased the proportion of clinician talk time per visit by 9% ($p < 0.001$), while it increased the proportion of patient talk time by 7% ($p < 0.001$), robustly increased the number and duration of “change talk” by 639% ($p = 0.0007$), increased the number of patient cut-ins by 237% ($p = 0.04$) and tended to increase the number and duration of clinician “advice talk” ($p = 0.065$). The total number, duration, and proportions of conversational turn types, “goal setting talk”, “education talk”, and “prescriptive talk” did not change. The majority of patients and clinicians had a positive experience. Patients felt more informed, empowered, and motivated by the HRA-enhanced wellness visit. Clinicians emphasized that the HRA report helped them construct and follow a visit agenda more effectively and that it facilitated the convergence of the patients’ goals with evidence-based recommendations suggested by the HRA report.

Conclusions—Our study suggests that HRAs introduced without proper framing, education, and additional resources may not allow patients and clinicians to optimally leverage AWVs for health planning and improvement. A low-intensity, multi-component intervention may help patients and clinicians improve the quality of HRA-supported health conversations and realize the potential of AWVs.

Keywords

annual wellness visit; primary care; health risk appraisal; health planning; conversation analysis

Introduction

The Patient Protection and Affordable Care Act of 2010 (ACA) instituted annual wellness visits (AWVs) and implemented a new payment structure for Medicare AWVs.¹ Payment for AWVs has been tied to addressing specific clinical content and implementing a health risk assessment (HRA) that covers 34 required elements, including demographics, health status, psychosocial and behavioral risk factors, activities/instrumental activities of daily living, and the development of a personalized health plan.² When the ACA incorporated systematic financial support for longitudinal health planning and prevention in AWVs, it created a long-awaited opportunity for primary care practices to more effectively align their mission (improving the health and well-being of a community) with the sustainability of their organization. Although payment for Medicare AWVs is a step in the right direction, much work needs to be done to identify and test effective approaches to implementing AWVs in community settings.

There are numerous gaps in our knowledge pertaining to the role and effective participation of patients in AWVs, the types and specific content of HRAs that may improve process and health outcomes, how AWVs should be structured, what resources and education clinicians and practice staff might need to make AWVs effective, how patients can be empowered to meaningfully participate, what personalized wellness plans should include and how these plans can be communicated to others, how wellness plans and care goals can be documented in a problem-oriented medical record, how practices can efficiently and appropriately respond to complex behavioral health needs emerging from AWVs, and how systematic patient follow-up can be provided to reach the goals set in AWVs.

In this pilot study, which was part of a medical student research experience program, our team aimed at bridging some of these gaps by observing, analyzing and improving HRA-based health planning conversations in primary care settings.

Methods

Three medical students and an MD graduate were trained as research assistants (RAs). They consented 5 physician faculty working in 3 residency practices of the University of Oklahoma Health Sciences Center (OUHSC) Department of Family and Preventive Medicine (DFPM) to participate in an AWV study from April through July of 2015. The RAs reviewed the electronic medical records of patients who were scheduled for an AWV and applied a set of inclusion/exclusion criteria. Inclusion criteria included: the patient is

established in the practice (at least 2 visits in the past 12 months), the patient's health status allows participation in the study, and the patient is 85 years old or younger (to ensure that there is a tangible benefit from general preventive services). Patients were excluded if they were institutionalized, had a level of cognitive impairment that prohibited the administration of informed consent, or they were so overwhelmed by acute medical problems that it was difficult to focus on preventive care. Preliminary lists were compiled for each physician to review in order to ensure that patients who were no longer in the practice or could not benefit from participation were removed. The RAs invited eligible patients via phone (using a standardized call script) to participate at the time of their scheduled AWV and briefly explained the project to obtain verbal consent.

The RAs then administered a signed, informed consent to 40 distinct AWV patients in the waiting room and assisted them to complete a validated, web-based HRA tool³ that our team has developed and implemented before the study via a touch-screen enabled, handheld computer or a desktop computer setup on a cart. The complete HRA covered all 34 elements required by the CMS Final Rule. The completion of the web-based HRA took about 20 minutes for most participants. Patients who agreed to participate were asked to arrive about 30 minutes before their original appointment time to complete the HRA and other, study-related data collection steps. In addition to office-based completion, patients could also complete the HRA online, before they came to the office. At the end of the HRA, a tailored health planner report was printed and given to the patient to briefly review before the physician entered the exam room. The patient and his/her physician then discussed the HRA report during the visit and agreed upon a personalized wellness plan based on the report. Although the HRA and the report were saved electronically for future AWVs, patients were asked to keep the HRA report as part of their records.

About 30 days before the end of the study, three of the participating clinicians and their AWV patients were selected to receive a low-intensity educational intervention. Clinicians received a 30-minute, high-quality, web-based introduction to motivational interviewing (MI) and collaborative goal setting, a 15-minute orientation on the HRA report and how it can be used for health planning, and a 1-page, visual MI administration aid that was adapted from an existing tool used in pediatric settings.⁴ Clinicians also received coding support to help them optimize reimbursement for the AWVs and avoid triggering additional patient co-pays unnecessarily. Patients received a 5-minute pre-visit orientation by the RA to help them think about their health priorities and more effectively communicate with their physician about the HRA report. AWVs were respectfully recorded using professionally installed video equipment, such as family medicine residency programs have been using routinely for resident education as part of their behavioral health curriculum.⁵ The cameras were angled, so that they showed only the consultation area of the exam room, excluding the exam table. Patients explicitly agreed to the recording in writing and also verbally at the time of the visit. They also had the option to ask the physician to terminate the recording at any time during the visit. The RAs followed the visits on a privately placed, small video screen and listened to the conversation through a headset in order to make observations and to start or stop the recording as necessary. Participating physicians were accustomed to the camera and often seemed oblivious to being recorded due to the routine use of the equipment in medical training.

To analyze recordings, we leveraged a Conversation Analysis (CA) approach^{6, 7} which helped us derive themes and categories incrementally from each visit that characterized the dynamics of the encounter, participation of the actors, communication content and modalities, and the effectiveness of the shared decision-making and goal-setting process. CA includes the following steps: (1) selecting a sequence of interest in the recording – in our case the entire recorded sequence; (2) characterizing the actions seen in the sequence; (3) considering how the speakers package their message or their mode of action; (4) measuring the time of various actions or taking turns in conversations; and (5) observing the ways the actions are accomplished and how actions may impact shared decision-making. At least two evaluators reviewed each AWV recording on a computer and carefully coded them in 30-second segments. Intercoder reliability was enhanced by training all evaluators together, followed by group exercises of coding, discussing segments of several AWVs, and arguing them to consensus. Coders used a standardized Excel database to record their observations. Qualitative notations were recorded in an “Actions” table that allowed the coders to characterize the communication, describe how messages were packaged, what the potential implications of the communication might be pertaining to shared decision-making and goal setting, and which talk category the communication represented. A note field was also available to record other observations and thoughts about each segment. The coders then reviewed each recording again to conduct a “Turns Analysis”. They separated the AWV into natural conversation units or turns (periods when a participant “has the ball”) and examined them to determine how the turn was obtained (question, response, initiation of a new topic, or rapid-exchange communication), who was speaking (patient, clinician, other), how long they spoke, and whether they cut into each other’s talk. Representative samples of Actions and Turns Analyses are shown in Table 1. The entire process of scheduling, recording, and analyzing AWVs was “beta-tested” and iteratively improved in a separate clinician practice in five wellness visits before data collection was initiated.

In order to address some of the limitations of the quasi-experimental design of the pilot study, 22 pre- and post-intervention recordings were carefully matched on known covariates that included the clinician, clinic location, visit duration, patient demographics, and the number of conversational turns per visit (see Table 2). This subset of recordings was then explored separately by three evaluators using CA techniques to describe the dynamics and content of patient-clinician conversations in an integrated-methods framework and argued to consensus. Short exit interviews with patients and clinicians were evaluated by standard content analytic techniques that included consensus-based development of codes and iterative formation of themes. Recordings and exit interviews were supplemented by RA field notes about the general process of care, the practice workflow, and administrative information to better understand the setting and circumstances of findings.

As a representation of emerging themes, the analytic team, which consisted of a faculty mentor and 4 RAs, constructed a conceptual model to represent and summarize findings from recordings and draw conclusions pertaining to health planning conversations.

All digital recordings were collected and kept securely on DVDs in a locked research data room in the DFPM Research Division. Only the RAs and the mentor had access to the

recordings and dedicated computers in the same room to review and analyze patient visits. De-identified data were kept in controlled-access file repositories.

Quantitative data (frequencies and proportions) were analyzed by Fisher's exact test or Mann-Whitney U Test, as appropriate. The study was approved by the OUHSC Institutional Review Board.

Results

The 40 patient participants reflected the group of AWV patients seen by faculty in most covariates. The average age was 53 years, 72% were female, and over 50% were non-Caucasian. Half of the participants had one or more chronic conditions and 17% had 3 or more chronic conditions. On average, patients had 15 years of education, 30% indicated that they had a median household income of \$40,000 or less, 22% were current or former smokers, and 40% described themselves as sedentary or insufficiently active. The age of clinicians ranged from 35 to 63 years with an average of 52 years and 60% of them were female. Their time in practice ranged from 8 to 38 years with an average of 27 years. The average length of AWVs and total talk time per AWV were the same in pre- and post-intervention groups, 24 minutes and 15 minutes, respectively. Only 10% of patients completed the HRA at home or some other location, although about 20% of them told the RAs on the phone that they intended to complete it in advance.

Forty AWVs were recorded over the study period and 6 overarching themes emerged that characterized the dynamics of AWV conversations. These included: Communication, Goals and Focus, Care Delivery Process, Wellness Plan Barriers, Patient Experience, and Readiness for Change. As expected, the **Communication** domain related both to patients and clinicians. In the patient sub-domain, enabling and empowerment through education and resources were the main factors that seemed to influence the effectiveness of patient communication, while clinician communication was linked mainly to professional skills and experience. The **Goals and Focus** domain was characterized by the ability to participate in goal-setting and focus on personalized care strategies. Here, in the patient sub-domain, a sense of the purpose and framing of the AWVs (how they were different from regular, problem-focused visits) emerged as key factors. Proper framing of AWVs became a barrier for some patients without re-orienting them toward planning for the future. Expected factors emerged from the **Care Delivery Process** domain which was linked to facilitators and barriers of care provision, including patient factors (e.g., level of health literacy, self-efficacy, trust, etc) and systemic factors (workflow, clinical pathways, insurance policies, etc).

The analyses of AWV recordings also highlighted **Wellness Plan Barriers**, which included obstacles to creating a personalized wellness plan. This domain was linked to the ability of patients to leverage the HRA report (usability of technology and understanding the report), the clinician's access to resources (e.g., clinical data or decision aids), and clinician skills to facilitate health planning. **Patient Experience** seemed to permeate every area of AWV conversations. Past experience with wellness visits and technology-aided decision-support were particularly helpful. Since a substantial portion of HRA recommendations pertained to

the improvement of unhealthy behaviors, **Readiness for Change** emerged as a pivotal component of conversations that was able to further shared decision-making. Here, the level of patient activation and general attitudes toward behavior change emerged as important factors that influenced conversations.

Analyses of AWVs indicated that at baseline, patients and clinicians sub-optimally utilized the HRA report and missed many opportunities for shared decision-making and behavior change. They also tended to drift away from general health conversations and healthcare planning and moved toward addressing specific clinical problems. Clinicians often dominated the conversation and set the agenda while they frequently educated patients and provided salient advice. Time constraints (e.g., starting an AWV when the clinician was already running behind) remained a significant barrier over the entire study. Periodically, both patients and clinicians seemed to struggle with the framing of the AWV and what its structure and content should be, compared to other types of office visits. Clinicians had variable skills to facilitate behavioral health conversations and effectively move conversations toward change. Based on the analyses of AWVs, the evaluators defined 5 notable “talk types” that are summarized in Table 3. During the baseline period, only 54% of AWVs included “change talk” which was defined as a clear verbalization of an intent or strategies for improving health behaviors either by the patient or the clinician. Only one of the 11 baseline visits included “goal setting talk” (conversation about setting a Specific-Measurable-Achievable-Realistic-Time-bound or S.M.A.R.T. goal⁸ to address a health issue). Other types of conversations included “education talk” (general patient education) and “prescriptive talk” (clinicians telling patients what to do) which occurred in 100% and 45% of visits, respectively.

The low-intensity intervention significantly decreased the proportion of clinician talk time per visit by 9% (from 45% to 41% of the total talk time; $p < 0.001$), while increased the proportion of patient talk time by 7% (from 54% to 58% of the total talk time; $p < 0.001$), robustly increased the number and duration of “change talk” segments by 639% (from 0.54 to 3.45 times per visit; $p = 0.0007$), increased the number of patient cut-ins by 237% (from 3.72 to 8.81 times per visit; $p = 0.04$) and tended to increase the number and duration of clinician “advice talk” (from 1.10 to 2.45 times per visit; $p = 0.065$). The total number, duration, and proportions of conversation turn types (initiations, questions, responses, and rapid exchanges), and some of the talk types including “goal setting talk”, “education talk”, and “prescriptive talk” did not change.

The majority of patients and clinicians had a positive experience with “primed” AWVs. Patients felt more informed, empowered, and motivated by the wellness visit when pre-visit components (supportive technology and HRA report, patient and clinician visit framing, education, and conversation-strengthening resources) were in place. Clinicians emphasized that the HRA report helped them construct and follow a systematic visit agenda more effectively and it facilitated the convergence of patient goals with evidence-based health recommendations suggested by the HRA report. The HRA report displayed global health scores, estimates for life and health expectancy and a personalized list of health strengths and challenges, in addition to prioritized health improvement recommendations. A “RealAge” estimate and a Wellness Score displayed on color-coded gauges were particularly

helpful to patients that allowed them to visualize their current health status and how their choices may impact long-term health outcomes. The following quotes represent general sentiments about the AWV process. A patient reflected upon discussing her health report during the visit: “*Wow... I had no idea that smoking has such a big effect on my health!*” Another patient noted: “*We talked about a lot of things that we wouldn’t have before.*” A third patient added: “[The visit] *helped me make my health a priority and organize my thoughts about my health.*” Others expressed that the AWV reaffirmed what they have already known, but in a more interesting and motivating way, while a few patients felt that the health scores and estimates were less favorable than how they perceived their health status which prompted additional conversation with the clinician. A patient noted: “*Dr. [clinician name] always goes over this stuff with me, but seeing my RealAge and my numbers was helpful! We talked about my health in a different way.*”

Discussion

Our pilot study suggests that more work needs to be done to realize the potential of AWVs and enable patients and clinicians to maximize the value of HRA-based health planning. It also suggests that simply inserting an HRA into a patient visit may not improve shared decision-making, goal setting, and unhealthy behaviors. Furthermore, the results indicate that strategically implemented, feasible interventions may significantly improve at least some aspects of health conversations between patients and clinicians.

This pilot study was part of an academic research program for medical students that aimed at immersing them into meaningful family medicine research and enkindling in them a passion for the profession. Our study implemented a quasi-experimental design and our timeline and scope were limited. However, we have taken methodological rigor seriously and ensured that differences in known covariates are minimized by comparing matched pre- and post-intervention AWVs. Although our findings need to be confirmed by a more definitive study, robust effect sizes (about 2.5 – 6.5 times the baseline) that were developed over a 30-day intervention following a 3-month baseline period suggest that a relatively low-intensity, multi-component intervention may effectively improve HRA-based health conversations.

Our past research aimed to develop a 3-step, goal-directed care delivery model^{3, 9, 10} that includes patient and practice preparation for wellness visits (“Ready” step), HRA-based goal setting and health planning during wellness visits (“Set” step) and systematic follow-up to support goal attainment (“Go” step). Although we have learned much from these studies about the first and third steps, our understanding remained limited about the conversation that occurred when the HRA report was introduced and how these conversations could be improved. The current study enables us to further develop our care model by introducing appropriate patient and clinician education, decision-support resources, and supportive technology that are feasible to implement in real-world practices.

Despite a considerable improvement of “change talk” and favorable shifts in health conversation dynamics, our intervention did not improve goal-setting conversations. This might be related to a relative increase in clinician “advice talk” time in the intervention group which could have competed with time available for listening and encouraging patients

to set their own goals, one of the practical techniques in MI.¹¹ Given the limited scope and time of our intervention and that helping patients set SMART goals may require the most time and skilled effort, it is reasonable to suggest that further adjustments in the dose and content of our intervention may enhance goal-setting conversations as well. These adjustments may include additional emphasis on patient empowerment for goal-setting through patient and clinician education and direct feedback to clinicians on selected visits observed by a professional trained in MI and goal-setting. These approaches have been used successfully in family medicine resident education to boost health conversation skills. Our analyses did not measure the occurrence and potential shifts in “sustain talk” which can be conceptualized as part of “change talk” that allows the parties to explore obstacles toward change.¹² This is a more nuanced conversational element in MI which our pilot study was not sufficiently powered to explore.

Our study also underscored that regular wellness visits (even when the full 30-minute time is available) are usually limited to addressing specific health challenges and clinicians often struggle to keep the visit focused on health planning which has clinical and financial consequences (e.g., missing important opportunities of health improvement or increasing the patient’s out of pocket cost by providing or ordering extra services). In this context, it was important that our advanced HRA could present tailored preventive service recommendations that were also prioritized based on their estimated impact on health outcomes (e.g., length of life). This allowed patients and clinicians to put competing needs into context and help streamline the visit agenda.

While ubiquitous patient-facing technologies are used increasingly, especially in specific populations,¹³ older individuals with a higher disease burden and those in a lower socio-economic status may rely more on practice-bound approaches to contribute health information (e.g., waiting room surveys). It may be challenging for practices to implement informative health assessments, since HRAs may add considerable time to visits when completed in the practice and they may require additional patient support. On the other hand, web-based HRAs and other e-Health tools that can inform care “remotely” may also be challenging to deploy due to privacy requirements that necessitate the use of secure online accounts. Completing HRAs in the practice may help alleviate account access problems, but it may ineffectively shift the burden of collecting patient-reported data to practices without additional support. The legal framework for patient data sharing through e-Health technologies is underdeveloped and even when data are exchanged, patient-reported information may not always guide decision-making due to the lack of data integration.

Proper framing of AWVs emerged as a pivotally important factor. Patients have been “conditioned” by the healthcare system to be reactive and problem-focused and it may take a conceptual shift for healthcare teams to implement effective health planning which doesn’t fit well into regular office visits. In this study, we opted to implement patient call scripts that we derived from exemplars to orient patients to AWVs and similar conversations occurred with clinicians. Despite these efforts, some AWVs indicated a continuing struggle with integrating health planning into the usual care delivery approach.

In conclusion, our study suggests that HRAs introduced without proper framing, education, and additional resources may not allow patients and clinicians to optimally leverage AWVs for health planning and improvement. A low-intensity, multi-component intervention may help patients and clinicians improve the quality of HRA-supported health conversations and realize the potential of AWVs. Although more research is needed to find an optimal dose and combination of clinician and patient-facing interventions, our study suggests that even limited investments into improving interactions during AWVs may facilitate effective health improvement in primary care settings.

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Table 1a

Conversation analysis example including coded actions from a segment of an annual wellness visit.

Time Anchor (timestamp)	Characterization of Action (what is accomplished via communication)	Packaging of Action (how messages are communicated)	Potential Implications of Action (impact on decision making or goal setting)	Talk Type
(...)	(...)	(...)	(...)	(...)
10:00	Dr emphasizes that smoking cessation will give most health benefit for this pt	Professional authoritative statements invoking evidence	Pt may be more likely to take steps to quit smoking when the message comes from the Dr	Advice
10:30	Dr asks how much pt is smoking a day	Respectful and tactful initiation of topic	Getting overall idea of pt's desire to quit, if any	
11:00	Pt says smoking cessation is not a goal for him currently, Dr asks him to elaborate	Dr uses motivational interviewing techniques to elicit thinking about behavior	Pt reflects on why quitting smoking is not a current priority	CHANGE TALK
11:30	Pt inquires about benefits of switching to 'healthier' cigarettes/vaping	"I am not ready yet to jump, but perhaps in steps..."	Pt education and moving pt along the continuum of change	CHANGE TALK
12:00	Dr explains research findings, encourages pt to make that small change	Skillful guidance in synergy with authority	Pt education, encouragement to take small steps toward quitting smoking (toward a SMART goal)	CHANGE TALK
12:30	Dr and pt talk about increasing the amount of sleep prompted by HRA recommendation	Dr 'negotiates' w/pt about what a reasonable goal would be in terms of hrs/night	Goal setting, Dr and pt agree on 6.5 hrs/night	GOAL SETTING
13:00	Dr encourages pt to follow the links on the Wellness Portal to receive more education	Effective "time-saving" approach leveraging technology/info pt already has access to	Pt may use Wellness Portal resources to make more successful lifestyle changes	Advice
13:30	Dr and pt talk about how to modify response to stress in pt's life	Empathy and personal reassurance of understanding	Pt is encouraged to change response to stress in an understanding environment	CHANGE TALK
14:00	Dr makes recommendations on how to respond to stress	Coaching/facilitative tone	Pt receives specific strategies for coping w/ stress	Advice
(...)	(...)	(...)	(...)	(...)

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Conversation analysis example including coded “turns” from a segment of an annual wellness visit. (A “turn” is a natural conversation unit during which a specific speaker “has the ball”).

Table 1b

Conversation Unit (turn sequence number)	How Turn Was Obtained (question, response, initiate)	Who Speaks (pat, clinician, other)	How Long They Speak (approximately in seconds)	Cutting Into Talk (check if yes)	Notes
(...)	(...)	(...)	(...)	(...)	(...)
143	r	p	5		
144	q	c	2	Y	introducing smoking cessation topic
145	r	p	3		
(...)	(...)	(...)	(...)	(...)	(...)
151	r	p	1		
152	q	c	7		“So what I’m hearing is that stopping smoking is not a goal”
153	r	p	2		
(...)	(...)	(...)	(...)	(...)	(...)
159	q-r	p-c	1	Y	
160	r	c	5		
161	q	p	12		“what kind of cigarettes can I smoke”

Characteristics of covariates that were used to match pre- and post-intervention annual wellness visits.

Table 2

Study Phase	Clinicians and Visits	Location of Visits	Talk Time	Number of Turns	Mean Patient Age	Patient Gender	Patient Race & Ethnicity
PRE-Intervention AWVs	Dr. A: 4 visits Dr. B: 2 visits Dr. C: 5 visits	Clinic A: 4 visits Clinic B: 2 visits Clinic C: 5 visits	Total: 9976 sec Per visit: 906 (+/-271) sec	Total: 1179 Per visit: 107 (+/- 57)	50 (+/-18) years	81% Female	45% Non-Caucasian
POST-Intervention AWVs	Dr. A: 4 visits Dr. B: 2 visits Dr. C: 5 visits	Clinic A: 4 visits Clinic B: 2 visits Clinic C: 5 visits	Total: 9882 sec Per visit: 898 (+/-395) sec	Total: 1320 Per visit: 120 (+/-50)	54 (+/-13) years	72% Female	54% non-Caucasian
Difference	NS	NS	NS	NS	NS	NS (p=0.65)	NS (p=0.69)

Table 3

An explanation of five notable “talk types” derived from patient-clinician conversations recorded during annual wellness visit.

Annual Wellness Visit Talk Type	Talk Type Definition	Examples from Annual Wellness Visit Recordings
Change talk	Verbalization of the intent of or strategies for changing health behavior (by patient or clinician)	Patient: “ <i>Do you think it would be healthier if I switched from cigarettes to vaping?</i> ” Clinician: “ <i>Well, vaping still carries health risks, but it may be a step for you in the right direction...</i> ”
Goal setting talk	Discussion of specific (short or long-term) goals for changing behavior (by patient or clinician)	Clinician: “ <i>So, what I am hearing is that you could increase your sleep time by about an hour, so you could sleep at least 6 and a half hours every night? Could you start maybe next week?</i> ” Patient: “ <i>Yes, I think I could do that...</i> ”
Education talk	Providing more in-depth patient education (e.g., explaining mechanisms)	Clinician: “ <i>Physical activity has been shown to improve steadiness and balance by strengthening our muscles and helping us better feel our movements as we walk. This can also help prevent falls.</i> ”
Advice talk	Providing specific and focused suggestions or recommendations (w/o further explanation)	Clinician: “ <i>I encourage you to do the things we have discussed and you said you would do, so we can get your blood sugar under control. I am afraid that if we can't get your sugar under control, you may have to go on insulin.</i> ”
Prescriptive talk	Clinicians simply tell patients what to do without much discussion or explanation	Clinician: “ <i>You really need to see the nutritionist! When we are finished, I am going to go ahead and put in a referral.</i> ” Clinician: “ <i>Your pneumonia shot is due today; I will ask the nurse to give you the shot before you leave.</i> ”

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