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INCREASING AWARENESS OF LOW HEALTH LITERACY AND STRATEGIES TO OVERCOME IT

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PROBLEM: OVER 36% OF U.S. ADULTS HAVE BASIC OR BELOW BASIC HEALTH LITERACY WHICH MAKES IT DIFFICULT FOR THEM TO UNDERSTAND AND ACT ON HEALTH INFORMATION¹.

- Health literacy is defined as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services.”¹
- Many providers are unable to accurately assess patients’ level of health literacy based on observation. In a study of residents, only 10% of patients were subjectively identified as having poor health literacy, yet the actual number was >30% when tested formally.²
- The American Medical Association and the Agency for Healthcare Research and Quality recommend using health literacy precautions, like using simple terminology and providing reader-friendly written materials, with **ALL** patients, as clear health communication strategies have been shown to improve patient care.¹
- Many of the patients served at the Center for Family Medicine (CFM) have risk factors for low health literacy³ and could benefit from a focus on clear communication.
 - Elderly- 11% of CFM patients
 - Men- 49.6% of CFM patients
 - 77 patients whose preferred language is not English
 - Low socioeconomic status – while specific data for the clinic is not available, the median household income in Bangor, ME is \$17,385 less than the national median and 25% of the population lives in poverty compared to 13.%% nationally⁶.
- While 78% of providers at CFM surveyed know about Teach-Back, an evidence-based communication technique that assesses patient understanding by asking patients to repeat back healthcare instructions ***in their own words***, only 1 provider stated that s/he used it in >25% of patient encounters and none used it in >50%. In studies, Teach-Back has been shown to improve health outcomes like glycemic control⁵.

PUBLIC HEALTH COST

- Low health literacy leads to¹:
 - Greater chance of medication errors
 - Lower rates of treatment adherence
 - Higher hospitalization rates
 - Worse overall health status
 - Higher mortality rates
 - Increased health disparities
 - Increased health costs
- Limited health literacy is estimated to cost an additional **\$143-7,798** per person per year and makes up **3-5%** of total healthcare cost per year⁴.
- While statistics specific to CFM are not available, anecdotal data suggests that CFM health team nurses deal with multiple calls a day from patients unsure of follow-up steps or medication instructions.
- CFM is a residency clinic, with care provided via a health team format to allow flexibility for residents' educational commitments. Consequently, patients see multiple providers at CFM and close follow-up by one provider is not always possible. Thus, it is especially important for providers to ensure that their patients understand necessary health information and are empowered to take responsibility for their health and carry out follow-up steps.

“We must close the gap between what health professionals know and what the rest of America understands...The health of our country depends on our understanding of basic health information in order to lead a healthy life.”

- Former U.S. Surgeon General Dr. Richard Carmona

COMMUNITY PERSPECTIVE

There is a need for resident education and reinforcement about communication techniques.

Dr. Eric Brown, a full-time faculty member at CFM, shared a social experiment he conducted where he sat in the hallway outside of exam rooms and interviewed patients post-visit asking them to name three things discussed during the visit. Upon comparing these with what the resident stated was discussed, he noticed a significant disconnect.

Dr. Jessica Bloom-Foster who runs much of the resident education curriculum, stated a need for more consistent programming regarding health literacy year-to-year. Currently, health literacy is only briefly discussed as part of an Intro to Patient Education lecture which is delivered approximately every 1.5 years and thus only twice during an individual resident's training.

"I got burned a bunch of times, and [patients] came back and hadn't done anything. It felt like [the last visit] had been kinda a waste...They need to know what they have to do when they leave the office...The worst thing is to have somebody leave thinking s/he obviously didn't get me."

- Jesse Guasco DO, Board certified in Psychiatry and OMM Fellow at EMMC

"[Patients don't retain] as much as I would have hoped they would retain [after office visits]. Every single patient I've seen, no one is using their medications properly. That tells you right there, how important reinforcement is. So if every time a patient comes in, they were asked to bring in their meds and asked 'show me how you're using it'...if they don't feel comfortable and confident about it, they're not going to do it."

- Bonnie Irwin, Certified Asthma Educator at Bangor Public Health & Community Services

COMMUNITY PERSPECTIVE

There are multiple ways to improve patient understanding. Practitioners in the community who excel at patient communication shared some techniques with us.

Some tips from Jesse Guasco, DO who uses Teach-Back on a regular basis:

- Try to avoid putting patients on the spot
- Be aware of your body language and tone of voice – *“You’re going to reduce bias with body language, to show you’re perceptive to them. Don’t speak in an overly aggressive tone, don’t sound or act rushed or exacerbated, use open ended questions.”*
- Practice! – *“Part of my agenda was to do this at the end of patient visits...write down a question, e.g. ‘What did we talk about?’, to remind yourself...Eventually and especially when you’re tired or overwhelmed you’ll just do what you were trained to do.”*

Remarks from Dr. Eric Brown, a family doctor for 35yrs and CFM faculty member who has a background in sociology and has mentored many residents:

- *“I think being critiqued and asking for critique helps you get better. Especially asking patients, ‘What did I do well?’, ‘What did you not like about this encounter?’”*
- Challenges faced by residents – *“[Patients] want you to be happy. They will yes you to death. They will steer you down these rabbit holes because they don’t want the residents to be upset.”* and *“Dealing with biases that residents come in with – maybe you don’t verbalize it but your body language states it.”*

Advice from Bonnie Irwin, Certified Asthma Educator at Bangor Public Health & Community Services:

- *It’s important to build that relationship with patients and family. Do a little less at that time, and then build on it at the next visit...I don’t think providers understand how much what you say to patients, they respect you for that and take it to heart. For you to say it’s important for me, I really care about you and want you to get better means a lot to them.”*

INTERVENTION & METHODOLOGY

- We prepared a 20 minute presentation on health literacy and communication techniques for improving patient understanding and presented it to residents and faculty at the weekly education conference.
- The presentation included research and techniques obtained through a review of the current literature as well as those suggested by the community practitioners we interviewed. We presented health literacy statistics and implications of low health literacy, gave a general overview of helpful communication strategies, and focused on Teach-Back as an implementable tool providers could take away from the presentation.
- During the presentation we facilitated discussion amongst residents and faculty about techniques they are already using, in an effort to create an open forum for sharing effective strategies.
 - 89% of those surveyed stated that they had learned communication strategies through informal observation of other providers, yet our interview with Jesse Guasco, DO suggested that it isn't necessarily something that is often talked about amongst peers. This presented an opportunity to further foster this model for learning and reinforcement of techniques in conjunction with the more formal presentation.
- A pre-survey was administered and collected prior to the presentation. A post-survey was created to evaluate the effectiveness of the intervention, but unfortunately was unable to be adequately administered due to time constraints.

PRE-SURVEY RESULTS

- Provider confidence scores averaged 7.6/10 regarding how confident they were that patients understood new instructions they gave to them.
- While CFM providers are using a caring tone of voice, comfortable body language, and plain language, many are not using other elements of patient education like explaining and checking patient understanding, and using reader-friendly print materials.

Elements of Patient Education	Percentage of Providers Using
Caring tone of voice and attitude	100%
Comfortable body language, making eye contact and sitting down	100%
Use plain language	100%
Ask patient to explain in their own words	33%
Open-ended, non-shaming questions	67%
Avoid yes or no questions	33%
Taking responsibility for making sure I was clear	78%
Explain and check again if patient is unable to explain what they were told	33%
Reader-friendly print materials	44%

- “Informal observation of other providers” was the most common way that providers had learned about communication strategies. “Patient feedback” was the least common.
- 78% of CFM providers know about Teach-Back, but none used it in >50% of patient encounters within the past week.

Pre-Survey

1. Reflecting on the last week, how confident were you, on average, that when you gave a patient new instructions, they understood them?

1 2 3 4 5 6 7 8 9 10

(Not confident) (Very confident)

2. Check all the elements of patient education you have used more than half the time in the past work week.

- Use a caring tone of voice and attitude
- Display comfortable body language, make eye contact, and sit down
- Use plain language
- Ask the patient to explain, in their own words, what they were told
- Use non-shaming, open-ended questions
- Avoid asking questions that can be answered with a yes or no
- Take responsibility for making sure you were clear
- Explain and check again if the patient is unable to explain what they were told
- Use reader-friendly print materials to support learning

3. In what ways have you previously been taught how to implement strategies to increase patient understanding?

- Medical School Course
- Residency Lecture
- Informal observation of other providers
- Patient feedback
- Never
- Other _____

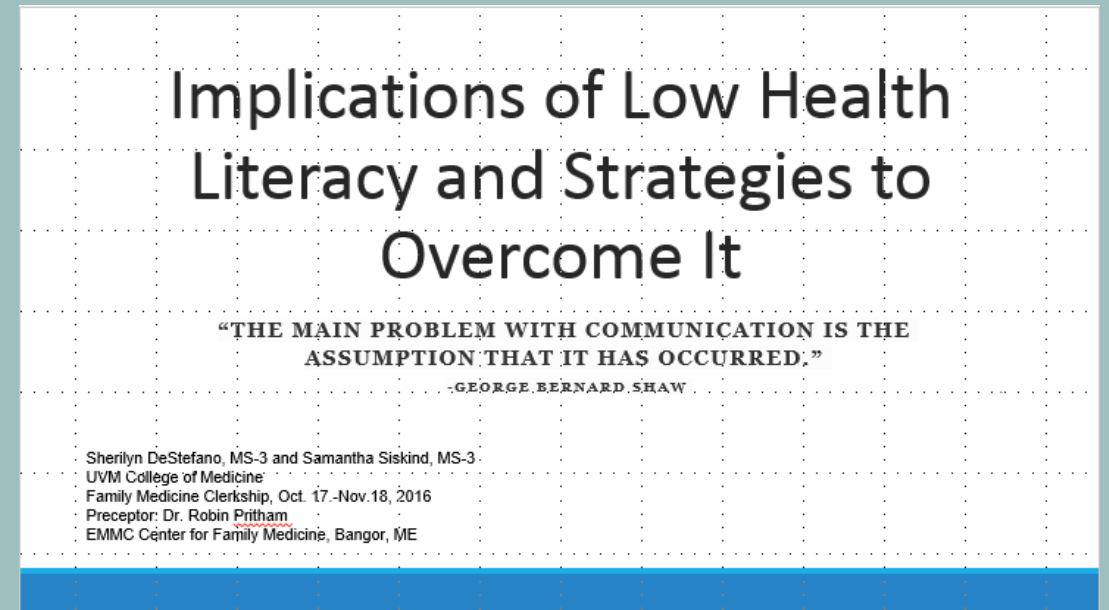
4. (a) Do you know what the Teach-Back strategy is? Yes or No

(b) If yes, how consistently did you use it during patient encounters within the past week?

- 0-25% of the time
- 25-50% of the time
- 50-75% of the time
- 75-100% of the time

PRESENTATION RESPONSE

- On the Family Medicine Residency Program Conference Evaluation Form **100%** of presentation attendees responded “Yes” to the question “Was the activity’s format an appropriate educational method for conveying the activity’s content?”.
- Furthermore, **100%** of attendees responded “Yes” to the question “Did this CME activity increase your knowledge/competence in the activity’s topic area?”.
- Witnessed a provider successfully using Teach-Back in patient encounters after the presentation which created the opportunity to clarify a misunderstanding with a patient on setting a quit date for smoking cessation.
- Positive feedback from presentation attendees - **“Thanks for the presentation. It was a really nice reminder.”** **“Excellent, well thought out.”**



Evaluation of Effectiveness

- We hoped to utilize a pre- and post-survey approach to evaluate behavior change amongst providers at CFM, however, due to time constraints were unable to fully implement this model.
- We recommend distributing pre-surveys immediately prior to the presentation and following-up with post-surveys 2-4 weeks later to allow for practice and increased familiarity with the techniques among providers.
- Video precepting could be used as an additional tool in evaluating behavior change amongst providers.
- Data could be collected tracking number of calls received by health team nurses for clarification of follow-up steps and medication instructions before and after intervention.

Limitations

- We were unable to secure an interview with any CFM patients, thus the patient perspective is sorely missing from this intervention. We believe patients could add valuable suggestions about how they want their providers to discuss health information with them. Their perspective would also be helpful in evaluating provider use of patient-oriented communication techniques.
- Unfortunately due to a scheduling conflict with an OMT conference, there were a limited number of providers at our presentation and these were solely allopathic providers and thus not fully representative of the practice.
- Time constraints prevented us from fully evaluating the effectiveness of our intervention.

FUTURE DIRECTIONS

- Initiating quarterly programming around health literacy and providing consistent reminders, evaluation of effectiveness, and feedback to create an environment where Teach-Back and other communication techniques are the norm.
- Involving staff by training them in similar communication techniques to ask patients about proper medication use at the start or end of each visit.
- Involving and educating patients about the importance of effective patient-provider communication through posters in the exam or waiting rooms or handouts at the start of a visit.
- Conducting further research into the patient perspective by surveying and interviewing patients on their health understanding, preferred education approaches, and the extent to which they see providers utilizing clear communication strategies. This could be implemented on its own or in conjunction with a provider intervention to assess intervention effectiveness.

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