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# Promoting Strategies to Overcome Low Health Literacy and Improve Patient Understanding in Outpatient Setting

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# Promoting Strategies to Overcome Low Health Literacy and Improve Patient Understanding in Outpatient Setting

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# Problem: High prevalence of low health literacy among patients, contributing to poorer health outcomes and increased healthcare costs.

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## Definitions:

- *Health literacy*- The degree to which individuals have the capacity to obtain, process and understand basic health information and services.<sup>1</sup>

## Epidemiology:

- Over **36%** of all US adults have basic or below basic health literacy.<sup>1</sup> Low health literacy is more common among:<sup>2</sup>
  - Elderly
  - Men
  - Racial and ethnic minorities
  - Low socioeconomic status

## Impact:

- Low health literacy is a barrier to patient understanding in patient-provider interactions.
- Low health literacy has been found to correlate with poorer health outcomes, greater chances of medication errors, lower rates of treatment adherence, higher hospitalization rates, worse overall health status, and higher mortality rates.<sup>1</sup>
- Low health literacy perpetuates health disparities.<sup>1</sup>
- Low health literacy is associated with increased costs for patients and communities.<sup>3</sup>

# Public Health Costs & Considerations in EMMC Center for Family Medicine & Residency

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## Costs of Low Health Literacy:

- Low health literacy is associated with increased costs for individuals and communities:
  - Additional expenditures per year per person with limited health literacy compared to persons with adequate health literacy range from **\$143-\$7,798**.<sup>4</sup>
  - Meta-analysis estimates that additional costs of limited health literacy range from **3-5%** of total health care system cost per year.<sup>4</sup>

## Community Considerations:

- EMMC Center for Family Medicine and Residency serves a population with demographics at high risk for low health literacy.
  - 11% of patients are >65 years old
  - 49.6% of patients are male
  - 77 patients prefer a non-English language
  - Many patients are of low socioeconomic status
- In general, medical providers have trouble determining which patients have low health literacy:
  - In a study of residents, only 10% of patients were identified as having poor health literacy, yet the actual number was >30%<sup>4</sup>
- Thus, use of strategies to improve patient understanding should be encouraged and used universally<sup>5</sup>.
- Health Literacy and strategies to improve and assess patient communication are not currently a regular part of EMMC CFM residency program's education curriculum.

# Community Perspective

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## Interviewees include:

- **Dr. Eric Brown, MD**- Family Medicine physician and resident educator at EMMC Center for Family Medicine and Residency
- **Laurie Chadbourne, RN, BSN**- population health nurse with Beacon Health
- **Dr. Jesse Guasco, DO**- completed Psychiatry residency and currently training as Neuromusculoskeletal & Osteopathic Manipulative Medicine Fellow
- **Bonnie Irwin, LPN, TTS-C, CWWPM, AE-C**- Certified Asthma Educator and Maine In-Home Asthma Education Program Coordinator, City of Bangor - Public Health & Community Service

## What do you see as barriers to patient understanding?

- “Patients want you to be happy. They’re going to yes you to death. They will steer residents down these rabbit holes because they don’t want the resident to be upset.” – Dr. Brown
- “Education level is a big one. The state that [the patient’s] in, mentally. Bias, on the part of either the doctor or the patient....Language. We talk a different language. You have to turn it off... the worst thing you can do is go into more jargony detail. Now they’re less likely to ask again.” – Dr. Guasco
- “Probably 8/10 of the patients are more apt to not understand any medical jargon...Some are too proud to admit that they didn’t understand what the doctors are saying”- Laurie Chadbourne
- “Every patient I’ve seen, whether it be a child or caregiver or adult. No one is using their medication correctly. That tells us right there how important the reinforcement is... They don’t retain as much as I’d hoped they’d retain... and if they don’t feel comfortable, and they don’t feel confident, they’re not going to do it.” – Bonnie Irwin

# Community Perspective, cont.

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## What strategies do you find helpful to improve patient understanding?

- “I ask them, ‘how do you like to receive your health information?’ They’re very good at telling you, ‘I don’t want all of those materials’, or ‘I will read that’. Everyone is different. Ask them.” – Bonnie Irwin
- “I try to gauge [understanding] by the questions. I use open ended questions. I try to keep it simple... Teach back.... definitely, especially with the inhalers. Even medications. I have sat off to the side and we’ve lined them up and I’ve observed them, ‘can you show me how you would fill your pills?’” – Laurie Chadbourne
- Jesse: “I make sure I sit at their level. I make sure I talk directly to them. Make sure my spiel isn’t very long. If it’s long, I break it up and have them repeat back to me. ‘Tell me what you understood from that?’ or ‘What are you going to do when you go home?’ Teach-back. Making sure they understand what they’re going to be doing.” – Dr. Guasco

## What tips do you have for students, residents or attendings trying to improve their patient communication skills?

- “Simplifying directions... take into consideration that maybe some people, a lot of people, don’t have the higher education and understanding of the medical jargon.... Use diagrams... Try one thing at a time.” – Laurie Chadbourne
- “Open ended questions are always going to give you the most information. Any MI (motivational interview) techniques that you can pick up... Anything in writing. I think it’s really important for [patients] to leave with a list of instructions and goals” – Bonnie Irwin
- “Meet people where they are, and very slowly lead them along. Use Teach-Back...it’s a relationship building thing. Knowing they’re as integral to the plan as you are... it empowers them a little bit too.” – Dr. Guasco

# Intervention, Methodology

## Intervention:

- A 30 minute presentation on health literacy and strategies to improve patient understanding, focusing on Teach-Back strategy to assess for comprehension.
  - As low health literacy is common and has significant implications for patient health and healthcare costs, we wanted to create and pilot a resource to educate medical providers on strategies to help overcome low health literacy and improve patient understanding. As Teach-Back has been shown to be an effective method of assessing patient understanding and has been proven to improve chronic disease management<sup>6</sup>, we focused on promoting Teach-Back techniques that providers can implement in clinic.

## Methodology:

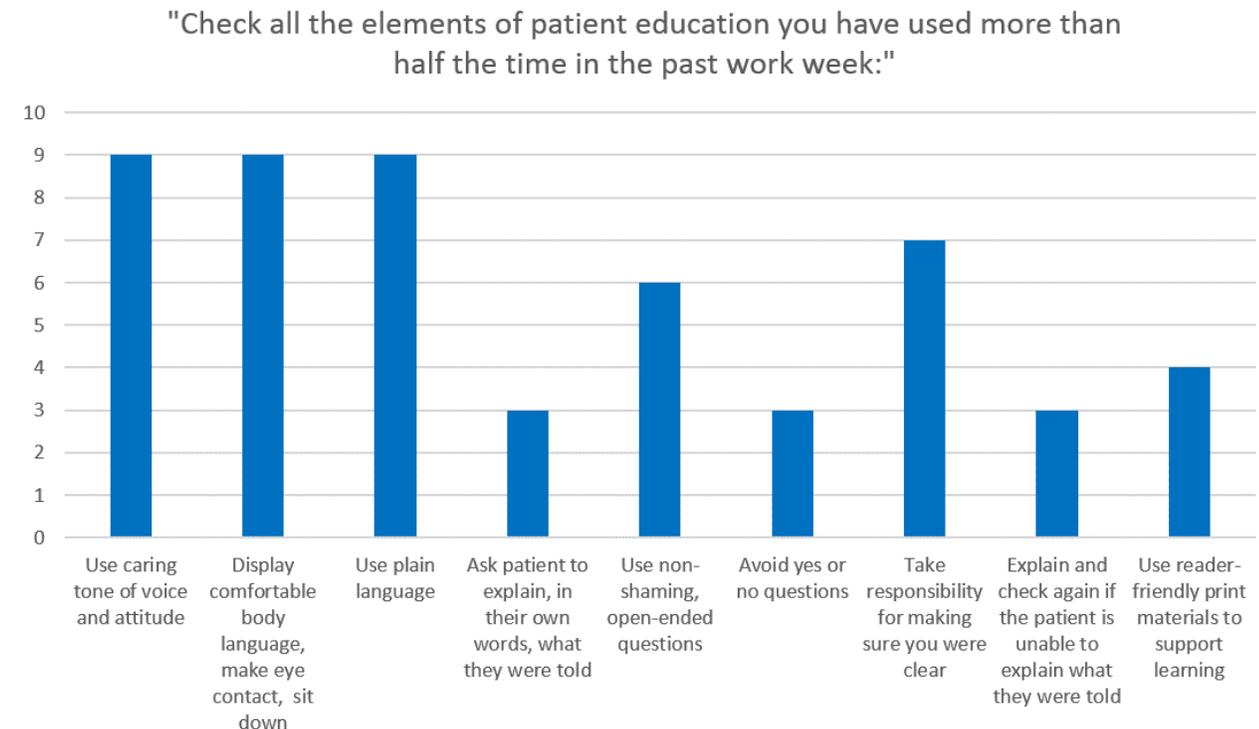
- Composed and presented a PowerPoint presentation on health literacy and strategies to improve patient understanding to residents and attendings at EMMC Center for Family Medicine and Residency, focusing on Teach-Back strategy.
  - PowerPoint **defines *health literacy***
  - **Describes epidemiology, risks and impact** of low health literacy
  - **Promotes strategies** to improve patient understanding:
    - Speak slowly and avoid medical jargon
    - Break information into small, concrete steps
    - Encourage patient participation
    - Provide printed materials
    - Assess for understanding
  - Teaches **Teach-Back** strategy to assess patient understanding
    - *Teach-Back*- asking patients to repeat *in their own words* what they need to know or do, in a non-shaming way . It is presented not as a test of the patient, but of how well *the provider* explained a concept. It is a chance to check for understanding and re-teach if necessary<sup>5</sup>.

# Results & Response

## Results:

○ A pre-presentation survey was administered to residents and attendings in attendance before PowerPoint was presented. Survey showed:

- **Residents and attendings are confident that they are being understood by their patients.**
  - When asked to rank on a scale of 1 to 10 (1 being not confident, 10 being very confident), “Reflecting on the last week, how confident were you, on average, that when you gave a patient new instructions, they understood them?”, average ranking was **7.6**.
- **Residents and attendings are already using many of the promoted strategies to improve patient understanding:**
  - When asked about strategies used with patients during the past week:
    - **100%** endorse using caring tone of voice and attitude, displaying comfortable and receptive body language, and speaking in plain language
    - **67%** use non-shaming, open ended questions
    - **44%** use reader-friendly materials to support learning
- **Residents and attendings are not using Teach-Back strategies as often:**
  - While **78%** endorse taking responsibility for making sure they were clear, only **33%** ask patients to explain in their own words what they were told and **33%** explain and check again to assess patient understanding.



# Results & Response, Cont.

## Results, cont.:

### ○ Pre-intervention use of Teach-Back:

- **78%** of survey takers have heard of Teach-Back, but **86%** of those people use it **only 0-25% of the time**.

### ○ Where have residents and attendings learned to implement strategies to improve patient understanding?

- While some survey takers endorse having learned how to implement strategies to improve patient understanding in formal settings such as medical school and residency program, most endorse learning through informal observation of mentors.

## Response to Intervention:

- On the Family Medicine Residency Program Conference Evaluation Form, all attendees responded that the presentation increased their knowledge/competence in the topic area.
- On Conference Evaluation Form, attendees responded that as a result of the presentation, they will try to incorporate Teach-Back strategy into their practice.
- PowerPoint was requested by Residency Program faculty to incorporate content into future education sessions.

# Evaluation of Effectiveness and Limitations

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## **Evaluation of Intervention:**

- A post-presentation survey was created, but due to time restrictions, was not administered. This survey could be administered to those who attended the presentation after a period of time (e.g. 1 month), to see if there are any changes in participants' subjective confidence about patient understanding after clinical encounters and to evaluate whether they have expanded their communication strategies and are utilizing Teach-Back strategy with increased frequency.
- Post-presentation survey also asks for feedback about what parts of the presentation were helpful, what parts were less helpful, and what suggestions they might have for effectively presenting the information in the future. This could be used to adjust the presentation for future use.

## **Limitations:**

- Due to resident and faculty schedules, only 9 residents and attendings were able to attend our presentation, resulting in a small population for our intervention and survey. A larger population could have provided more accurate data and possibly had a greater impact on patient interactions and patient outcomes in the clinic.
- Due to time restrictions, we limited our presentation to 30 minutes in length. More time, or repeated sessions, could allow for more information about patient communication strategies and Teach-Back, and participants could have the opportunity to practice these skills in role-playing activities, receive feedback, and hone their skills.
- There are many barriers to medical providers incorporating these communication practices into their patient encounters. Further study could be done to assess what these barriers are and how they might be overcome.

# Recommendations for Future Interventions

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- **Post-presentation survey** can be administered to measure effectiveness of presentation as intervention and look for change in providers' use of communication strategies and Teach-Back. If providers are not using recommended strategies, survey can be done to assess for barriers.
- Consider **integrating presentation content into the EMMC CFM resident education curriculum** for use with future residents.
- As Teach-Back as been studied and shown to be an effective way to assess patient understanding and improve health outcomes, and as it has been identified as a useful tool by many of the people who we interviewed, **clinic-wide use of Teach-Back can be encouraged**, making it a standard part of patient-provider interactions.
  - As recommended by Agency for Healthcare Research and Quality<sup>5</sup>, this can be supported by:
    - Identifying a faculty member to champion the implementation of Teach-Back.
    - Encouraging all providers to use Teach-Back. Providing a fact sheet to keep at desk or in pocket to remind providers of the strategy. Holding practice sessions and role-play to help providers become more comfortable with the process.
    - Training all team members at the clinic in Teach-Back method. As Bonnie Irwin recommended during her interview, staff other than physicians can be trained to use the technique and incorporate it into patient encounters. For example, medical assistants can be trained to correctly use an inhaler, and then they can use Teach-Back to educate and assess for correct inhaler use in patients before the physician enters the room.
    - Inform patients and families that Teach-Back is being used, and explain its importance. Patient handouts can displayed in exam rooms to educate patients about strategy and encourage their participation.
- **Collaborate** with community health educators and public health nurses who frequently use Teach-Back and other strategies to assess and improve patient understanding. Invite these health educators to Resident Conference to share their experiences and skills with the residents.

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