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Managing Medications: Promoting Awareness of the Importance of Accurate Medication Lists

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What Seems To Be The Problem?

- In addition to being one of the most rural states in the nation, Maine is the oldest state by median age.[3]
- 15.9% of Mainers are 65 or older, and 61.3% live in a rural area—as per the 2010 U.S. Census.[3]
- Also—due to a large concentration of Baby Boomers—Maine is aging at an increased rate. As a result, 25% of Maine's population will be older than 65 by 2030.[3]
- Currently, 80% of Mainers that are 65 or older are on at least one prescription medication, and this doesn't take into account vitamins or over the counter medications.[3]
- Clearly, the potential for a high volume of extensive and unwieldy medication lists is on the horizon in Maine.
- Although the elderly are at risk, accurate medication lists should be pursued in all demographics.

The Cost and Effect

- One study showed that patients in a study population with a median age of 80 were on an average of 10 medications, 6 of which were prescription drugs.[5]
- Therefore, there are foreseeable complications due to a long medication list. In particular, multiple medications can lead to adverse effects, and having an inaccurate list can compound these issues of polypharmacy.
- With older populations, comes more medications per person. It is estimated that these complications result in $1.3 billion worth of costs.[2]
- Miscommunication was listed as a major cause of complications due to multiple medications, and 45% of preventable adverse drug events (ADEs) were a result of poor medication surveillance/monitoring.[2]
- In a state that is aging rapidly—and therefore using more medications—focusing on improving the accuracy of medication lists should be a priority. By starting early, the job will be easier as the population ages and lists grow.

Unique Perspectives In The Community

- Discussion with Muhidin Libah, Executive Director of the Somali Bantu Community Association of Maine
  - Has found medicine reconciliation to be a problem in his community.
  - Does about 50 home visits per month that consist of organizing meds and disposing of old meds.
  - Funded through ME Health Access Foundation as a pilot program, and hopes to expand this program by incorporating more health professionals (e.g. social workers or nurses).
  - Idea for improvement: Open a line of communication between these patients and their PCP.
- Discussion with Jennifer Fish, L.S.W. MSM-HCA
  - Medication reconciliation is a known problem within the community.
  - Services exist for people if they qualify for them like United Ambulance or Androscoggin Home Care that come to homes and help with daily tasks.
  - Believes there are people that get left out because they don't qualify for services.
  - Information and help exists, like myHealthLink (online med management), and Safely Home (post-discharge clinic visit) but are felt to be under-utilized.
  - The existence of services and resources within the community—as well as knowledge of helpful personal practices—needs to be conveyed to patients in the community.
  - Idea for improvement: having walk-in afternoons for patients to discuss medication concerns.

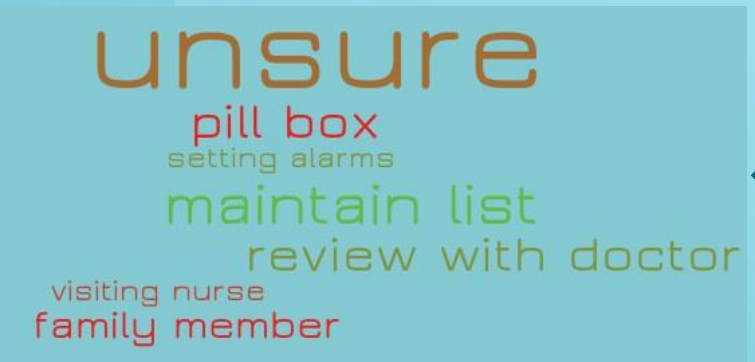
Intervention and Methods

- Created a survey that addressed questions about managing medications and the patient's perspective on challenges and what has worked for them in the past.
- Incorporated the thoughts of patients in the community, the two community member interviews, and advice from the literature to create an informational pamphlet.
- The pamphlet included examples of questions patients should ask providers, examples of resources in the community that can help with medications at home, websites devoted to providing information about medications (e.g. pill shape and disposal centers), and a blank medication list that the patient could fill out.
- This pamphlet was presented to patients in the context of the clinic's waiting room, and if the topic came up during patient encounters the pamphlet was discussed and given to the patient if they were interested.
- An electronic copy was sent to the project mentors for further use at their discretion.

"WHAT DO YOU THINK IS THE BIGGEST CHALLENGE?"

Results and Responses

- The total amount of completed surveys was 24.
- The percent that take a medication list and/or all of their medications to each visit was 13%.
- 35% could not recall how many medications they were taking.
- The average number of medications patients were taking was 6, and 17% were taking more than the average amount (most was 23).
- 63% reported having trouble remembering the name, dosage and/or the reason for taking a medication even though 48% of respondents reported their provider spends at least half of the office visit making sure their medications are up-to-date.
- As is evident in the numbers, communication was the most frequently cited challenge facing accurate medication lists.
- Patients reported certain practices or people that made managing their medications easier, but the most frequent response to "what has made managing your medications easier" was a combination of "no", "nothing", "n/a" or simply left blank. There seems to be a sense of uncertainty about what makes it easier, and perhaps it is just a difficult task



"DOES ANYTHING MAKE MANAGING MEDICATIONS EASIER?"

Results and Responses cont.

- Pamphlet and enclosed medication list was sent to the community members I interviewed for use at their discretion.
- After pamphlet distribution in the clinic, I received several questions about website links and services that were mentioned within the pamphlet.
- At a home visit, the patient was interested in starting a medication list to keep track of their medications.
- The intention of the pamphlet was to promote communication and active participation between provider and patient about medications, and it has already started some conversations about how to improve the process, which is encouraging.

Effectiveness

- As stated, the pamphlet—and even the survey—resulted in several fruitful conversations about how to improve the process or a person's own practices.
- When faced with information about these resources for help with medications, patients were very receptive.
- A good way to further evaluate this intervention would be to monitor the amount of people that sign up for myHealthLink.
- Another good method would be to continue to survey patients in the practice to see if they change and bring in their lists/medications to each visit.

Limitations

- The limitations of the survey and pamphlet is that it assumes the individual is able to read and then act upon the suggestions (e.g. having internet access, transportation, or the ability to read and write in the English language.)
- 13% of the survey respondents reported language as a barrier to managing medications.
- This brings up the fact that this information needs to be available in multiple languages, and it needs to be written or conveyed at an appropriate reading level.
- Also, this information was limited to CMMC, and St. Mary's (another hospital in Lewiston, ME) was not incorporated into the study.

Recommendations For The Future

- Provide information about resources in the community that could help manage medication in several languages that are relevant to Lewiston's community.
- Host medication visits that focus solely on updating medication lists and ways to improve organization at home.
- Flag medication lists in the EMR that exceed a certain amount and send a suggestion to the PCP to talk about this at the next encounter.
- Advertise and host an informal meeting with community members that are interested in improving the issue of medication safety. Hopefully, this could create new ideas and/or connect people to existing programs within the community.
- Encourage patients to sit down with a pharmacist about their medication list.

References:

1. AARP: My Personal Medication Record. (2011). Drugs and Supplements. Retrieved from: http://www.aarp.org/health/drugs-supplements/info-2007/my_personal_medication_record.html.
2. Aitken M, Valkova S. Avoidable Costs in U.S. Healthcare: The $200 Billion Opportunity from Using Medicines More Responsibly. IMS Institute for Healthcare Informatics. 2013.
3. Maine Department of Health and Human Services. (2012). Office of Aging and Disability Services: State Plan on Aging. Retrieved from: http://www.maine.gov/dhhs/oads/policy/documents/Aging-State-Plan.pdf.
4. Nassaralla CL, Naessens JM, Hunt VL, Bhagra A, Chaudhry R, Hansen MA, Tulledge-Scheitel SM. Medication reconciliation in ambulatory care: attempts at improvement. Quality and Safety in Healthcare. 2009 Oct;18(5):402-7.
5. Sarzynski EM, Luz CC, Zhou S, Rios-Bedova CF. Medication reconciliation in an outpatient geriatrics clinic: does accuracy improve if patients "brown bag" their medications for appointments. Journal of the American Geriatrics Society. 2014 Mar;62(3):567-9.
6. Varkey P, Cunningham J, Bisping DS. Improving medication reconciliation in the outpatient setting. Joint Commission Journal on Quality and Patient Safety. 2007 May;33(5):286-92.
7. Wolff CM, Nowacki AS, Yeh JY, Hickner JM. A randomized controlled trial of two interventions to improve medication reconciliation. Journal of the American Board of Family Medicine. 2014 May-Jun;27(3):347-55.
8. USA.gov. (2015). Buying and Using Medicine. Retrieved from: https://www.usa.gov/medicine.