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Preventive Medicine Screening Measures

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CVMMC Preventative Medicine

FM Community Project 2022

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FM ROTATION, MARCH 2022

Problem Identification & Description of Need

- ▶ It is widely recognized that long-term success in community health depends greatly upon the implementation of robust preventative medicine strategies.
- ▶ Yet, patient knowledge of these preventative strategies remains an issue. Too often, patients are unaware of available screenings, or are insufficiently aware of the significant health outcome disparity between those who screen and identify disease early and those who do not.
- ▶ What we need, therefore, is to reach a broad spectrum of the population with quick and simple information regarding the need for screenings, and to provide them with next steps they can take to prioritize their health and take preventative steps themselves.

Barre, VT, Public Health Cost and Considerations in Preventative Screenings

- ▶ In the town of Barre and surrounding area, metrics have consistently shown a disparity in population health, ranking significantly worse than the rest of VT.
- ▶ For example, obesity is at 36.7% in Barre compared to 33.7% in VT, but whereas 38% of people in VT are trying to lose weight, only 32.3% of those in Barre have the same goal. It is not surprising therefore that 11.3% of those in Barre have diabetes, compared to 8.0% in VT
- ▶ Further, while 56.3% of Barre residents smoke cigarettes, only 42.5% of those in VT smoke.
- ▶ As another screening disparity, Barre residents have an HIV testing rate of only 34.7%, as compared to 40.2% testing in VT
- ▶ The additional cost associated with these health and screening disparities is potentially very significant. For example, in 2010, a study conducted by the HealthPartners Research Foundation found that use of such preventative screenings in the U.S. “would result in total savings of \$3.7 billion, or 0.2 percent of U.S. personal health care spending.”

Community Perspective & Support

- ▶ Community perspective and support for additional health screening information availability was obtained by means of interviewing a local family medicine physician and the director of the Barre Senior Center.
- ▶ Family Medicine Physician at CVMC
 - ▶ In discussion with this physician, he shared the significant local need for patients to be made aware of screenings for which they might qualify. While physicians should also be tracking these needs, having the patients on board creates personal ownership and awareness and so makes their compliance more likely
- ▶ In an effort to gain input from outside the family medicine clinic, we reached out to the Barre Area Senior Center. Unfortunately, they were unavailable for comment. We then arranged an interview with an individual representing the Central Vermont Council on Aging, but he unfortunately did not follow through with the interview.

Intervention & Methodology

- ▶ Addressing the need for increased preventative health screenings in the Barre area, we designed an intervention with the goal of identifying the most important screenings and presenting clear and simple information about these in areas likely to reach our target population.
- ▶ Specifically, we designed an eye-catching and easy-to-read poster to place in the patient rooms at our family medicine clinic. This poster covered four important screenings about which patients are often unaware or have preconceived ideas about the pain or embarrassment or importance of procedures such as colonoscopies.
- ▶ The poster presents information on screenings for diabetes/pre-diabetes, colon cancer, lung cancer, and breast cancer.

Results & Response

- ▶ Results will be collected in a quantitative manner, by analyzing the number of screenings performed for Barre patients for those conditions listed on the poster: Diabetes/pre-diabetes, colon cancer, lung cancer, and breast cancer.
- ▶ In order to gather this quantitative data, we will utilize the data collection methods available in conjunction with patients' Epic health records to generate de-identified data sets on numbers of screenings before and after our intervention.

Evaluation of Effectiveness & Limitations

- ▶ The quantitative data collected as described on the previous slide will then be evaluated according to principles of medical statistics to assess whether the numbers of screenings performed for these four conditions changed after initiation of our intervention.
- ▶ Possible limitations:
 - ▶ Impact of COVID on screenings. In the past two years, the risk of COVID has turned many patients away from screenings they otherwise would have performed. It is possible this has resulted in a surge of catch-up screenings as COVID has become less of a threat and more patients are vaccinated. This surge could then falsely skew our numbers to indicate that the presence of a poster increased screenings performed.
 - ▶ Phone use. The vast majority of patients now carry phones with them to health appointments, and when waiting in the clinic rooms will use their phones to fill that time instead of reading posters on the wall. This could mean fewer patients see the poster and therefore would render the initiative less successful.

Recommendations for Future Interventions & Projects

- ▶ Presenting screening information in the form of a highly visible poster is a good step toward better community health. However, this method remains limited in the population reached, as there may be a significant segment of the population who do not see the posters. Specifically, the middle-aged working class is less likely to come to their doctor, often due to subjectively feeling healthy or being busy with work and children.
- ▶ Future projects could be designed specifically to reach these patients by disseminating the information via alternative methods such as TV ads or radio messages on popular local stations.

References

- ▶ Barre health statistics: www.city-data.com/health-nutrition/Barre-Vermont.html
- ▶ HealthPartners Research Foundation study: Maciosek MV, Coffield AB, Flottesmesch TJ, Edwards NM, Solberg LI. Greater use of preventive services in U.S. health care could save lives at little or no cost. *Health Aff (Millwood)*. 2010 Sep;29(9):1656-60. doi: 10.1377/hlthaff.2008.0701. PMID: 20820022.

Signatures

- ▶ Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.

- ▶ Consented Yes_____
- ▶ Name: [signature pending]_____
- ▶ Name: N/A – see Slide #4 _____

- ▶ Did NOT Consent N/A_____
- ▶ Name: _____
- ▶ Name: _____

4 SIMPLE SCREENINGS

Do you need these? Ask your doctor today

1. Diabetes

Are you aged 35+ and overweight? One blood test today can show signs of pre-diabetes, allowing you to treat or even reverse this condition early



2. Colon Cancer

First colonoscopy is now recommended at age 45. Screening early can reduce your chance of getting cancer by 89%¹

Not ready for a colonoscopy? Ask about other options, such as a simple stool test



3. Lung Cancer

If you are aged 50-80 and currently smoke or quit in the past 15 years, you may need imaging of your lungs to detect early signs of lung cancer



4. Breast Cancer

Mammograms can detect breast cancer while it is small and much easier to treat

If you are 50-74 years old and female, we recommend a mammogram every two years. Women aged 40-49 may also benefit

Screenings are typically covered by insurance