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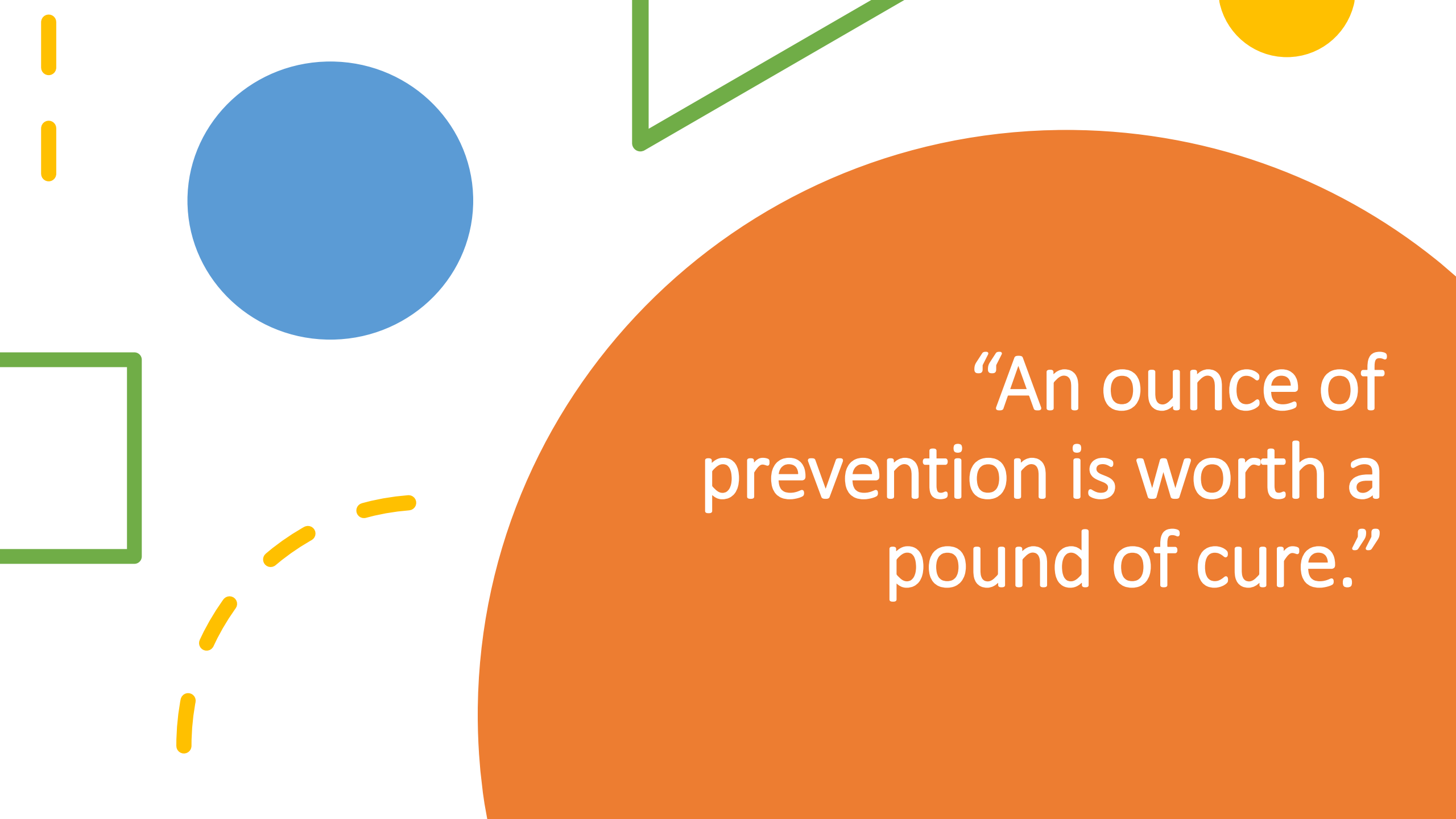
Preventive Healthcare Patient Education in Primary Care

Anna Chamby

Family Medicine Clerkship, April 2021

Newtown Primary Care

Faculty mentor: Eurica Chang, M.D.



“An ounce of prevention is worth a pound of cure.”

Problem Identification

- Primary and secondary prevention are vitally important mainstays of primary care.^{8,11}
- Every well visit at Newtown Primary Care involved some discussion of preventive health screening and services and relied on patient recall or EHR document search for last screening/intervention dates.
- However, patient-provider time is especially constrained in primary care visits, where providers are under increasing pressure to handle numerous administrative requirements, manage multiple medications and chronic conditions, and follow various preventive health recommendations.
 - According to a recent study, primary care physicians spend an average of 18 minutes with their patients.¹¹
- Appointment overrun and patient wait times are common in medical practice.⁹
- We aimed to find ways to make use of wait times for in-office visits that could also potentially improve efficiency during patient encounters and help educate patients about preventive health measures.

Public Health Cost

- Chronic diseases are the leading drivers of healthcare costs in the US.
- In 2016, total direct costs for healthcare treatment of chronic diseases were more than \$1 trillion.¹⁰
 - This does not include consideration of lost economic productivity due to chronic disease.
- Cancer is the second leading cause of death in the US.⁷
- Cancer screening can reduce deaths, increase life expectancy, decrease the number of people diagnosed with late-stage cancer, increase survival rates, and save money.⁷
 - Take breast cancer, for example.
 - Compared to no screening, screening every 2 years reduces breast cancer deaths by 26% for every 1,000 women screened.⁷





Community Perspective

- “The more awareness [patients] have [about preventive health services], the more armed they’ll be to look out for their own health. It provides a roadmap for how to make sure to stay healthy as the years go on.” – Eurica Chang, MD, Newtown Primary Care
- “We have discussions around the screenings day in and day out in primary care. Providing some materials to the patients is an excellent jumping off point for conversations targeting questions that really matter to patients.” – Nya Rossi, PA-C, Newtown Primary Care



Intervention and Methodology

We created a double-sided pamphlet outlining pediatric screenings on one side* and common adult screenings discussed at well visits on the other – to be handed out at check-in, in anticipation of the upcoming visit with provider.

*This portion of the project was completed by Amberly Lao.

Preventive Screenings at an Adult Well Visit

Colorectal Cancer Screening

Screening can prevent colorectal cancer by identifying abnormal growths (precancerous polyps) so that they can be removed before they develop into cancer.

How should I be screened?

- **Colonoscopy** is the gold standard.
- There are other visual exams or stool-based tests available but any abnormal test must be followed up with a colonoscopy.

When should I be screened?

- Most current recommendations state that people at average risk of colorectal cancer should begin screening at **age 50**.
- The American Cancer Society (ACS) has recently updated their guidelines to begin screening at **age 45**.
- Screening should continue at regular intervals (as determined by your provider) until the **age of 75**. You do not need to be screened over the **age of 85**.
- You may need to be tested earlier or more often if you are at increased risk of colorectal cancer.

Cervical Cancer Screening

How should I be screened?

- **Pap test:** detects pre-cancerous changes to cells in your cervix
- **HPV test:** looks for infection by high-risk types of human papillomavirus (HPV), the most important risk factor for developing cervical cancer

When should I be screened?

- The American College of Obstetrics and Gynecology (ACOG) recommends screening for anyone with a cervix starting at age 21
 - **Age 21 to 29 – Pap test** every 3 years
 - **Age 30 to 65 – one of three options:**
 - **Pap + HPV** every 5 years
 - **Pap** only every 3 years
 - **HPV** only every 5 years
- You do not need to be screened over the **age of 65** if you have no history of abnormal test results.

Other screenings

Your provider will discuss other important preventive screenings with you, depending on your sex, age, and risk factors.

Update your provider with any recent screenings or changes to your health.

Breast Cancer Screening

How should I be screened?

- **Mammogram** (X-ray of the breast) is the gold standard.
- **Breast MRI** and **ultrasound** are also available for those at higher risk.

When should I be screened?

- Most guidelines state that women should have the choice to start screening at **age 40**.
- By **age 50**, women at average risk should be screened annually or once every two years.
- By **age 75**, you may choose to stop screening, though some guidelines recommend continued screening.
- Different screening guidelines are suggested for women with risk factors, such as family history or genetic mutations.

Prostate Cancer Screening

Screening for prostate cancer in anyone with a prostate is controversial. Before you decide whether to be screened, you provider should discuss the potential benefits and harms of screening.

How should I be screened?

- **Prostate specific antigen (PSA)** blood test
- **Digital rectal exam (DRE)** is no longer commonly used for primary screening

When should I be screened?

- The discussion for screening should begin at **age 50** for those at average risk.
- You may need to consider screening earlier if you are at increased risk for prostate cancer.
- The US Preventive Service Task Force (USPSTF) recommends against screening in those **age 70** or older

Immunizations

Your provider will ask you about your immunization status for certain vaccinations, depending on your age and risk factors:

- Tetanus (Tdap)
- Influenza
- COVID-19
- Shingles
- Pneumonia



Pediatric Screenings at a Well Visit



Hemoglobin Screening**

Universal anemia screening begins at **9-12 months**

Child **MAY** be screened again between **1-5 years old** if their history includes:

- History of prematurity or low birth weight
- Lead exposure
- Exclusive breastfeeding beyond 4 months of age without supplemental iron
- Weaning to whole milk or other foods that are not rich in iron
- Feeding issues, inadequate nutrition
- Poor growth

If the child goes to a **CT Public School**:

- Anemia screening begins when entering public school
- Screen again when entering 6th or 7th grade
- Screen again when entering 9th or 10th grade

Obesity⁺ and Dyslipidemia* Screening

Obesity⁺

- BMI used to screen for obesity starting at **6 years old**

Lipids*

- If child has risk factors, lipid screening may be done earlier and more frequently.
- If child has no risk factors:
 - One time screening between **9-11 years old** AND
 - One time screening between **17-21 years old**

⁺ = performed annually

* = involves bloodwork

** = fingerstick

Developmental/Behavioral Health Screening

- **Modified Checklist for Autism in Toddlers (M-CHAT):** one time parent reporting screening tool to assess for Autism Spectrum Disorder in the **18 month old**.
- **Vision screening[†]:** uses a chart and begins at **3 years old**.
- **Hearing screening[†]:** audiometry begins at **4 years old**.
- **Scoliosis screening[†]:** part of the physical exam to assess the curvature of the spine. Begins around **10 years old**.
- **Depression screening[†]:** child fills out a form. Begins at **13 years old**.

Oral Health

Fluoride

- If the home water supply is deficient in fluoride, the child may be recommended a fluoride supplementation starting at **6 months**.
- Fluoride varnish may be applied to the child's teeth if the provider finds it beneficial.

Lead*

- Between **1-2 years old**

Tuberculosis*

- Talk to your provider if at risk



Results / Response Data

- Due to time constraints, the pamphlet was not distributed during the clinical rotation but we anticipate the following results:
- In-office wait times provide an opportunity for patient education on preventive healthcare.
- A document distributed while waiting for provider may prompt patients to recall recent health screenings, vaccinations, and other updates such that face-to-face time with the provider can be spent reporting those, then delving more into discussion and planning.
- Furthermore, a primary care practice that cares for numerous patients of all ages within a family offers a unique opportunity to educate patients not only about their own health but that of their family members also.
- Moreover, patient dependence on EHR and provider documentation for screening/intervention dates may minimize patient proactivity. We anticipate that educational materials such as this pamphlet may guide patients to reclaim proactive behavior.
- Providers expressed support for patient education outside of the clinical encounter.




Evaluation of effectiveness

- Evaluate number of orders and/or referrals for preventive screenings
- Track patient compliance with recommended screenings longitudinally
- Gauge patient knowledge on current screening recommendations and patient due dates with a pre- and post-handout survey to evaluate effectiveness

Limitations

- Handout provides only limited information. Decisions for screenings are patient specific and recommendations cannot be generalized to every patient, requiring extensive patient-provider discussion
- Handout for adult well visits largely focuses on secondary prevention
- Certain screenings are managed by different specialties/providers and recommendations may differ based on practice
- Despite handout's attempt to help patients recall important health screenings, patient reliance on EHR and provider documentation may prevent significant change in clinical encounter



Evaluation of Effectiveness & Limitations

Recommendations for Future Interventions/Projects

- Information on recommended vaccinations by age group and standardizing immunization discussion in all well visits
- Information on chronic disease screening, including diabetes, cardiovascular disease, and hypertension
- Generation of a personalized preventive health plan for each patient (much like those for Medicare Annual Wellness Visits) that allows patients and providers to document dates of screenings in one comprehensive form



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Interview Consent Form

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.

Yes /

Name: Eurica Chang, M.D. (provided verbal consent)

Name: Nya Rossi, PA-C

I consent to the interview questions.

Nya Rossi

Physician Assistant

Newtown Primary Care

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No /

Name: _____

Name: _____