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Personalizing Population Health Education in Residency: Panel Management Curriculum in an Internal Medicine Resident Clinic

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Background

- Panel management (PM) is a proactive approach to managing attributed populations by identifying patients who have unmet preventive and/or chronic condition needs and performing outreach or coordinating care.¹
- A care gap is a disparity between health care needs and services.
- Residency panel management curricula have shown:
 - statistical improvements in quality measures²⁻³
 - completion of metrics⁴
 - improved sense of patient ownership⁵.
- To our knowledge, no previous curricula have allowed resident autonomy to choose an individualized topic or care gap of interest with interval feedback every clinic week utilizing electronic medical record (EMR) data tools.

Goals & Objectives

To implement a personalized population health curriculum for internal medicine residents in an ambulatory clinic that provides the following:

- Meets the core Academic Council for Graduate Medical Education (ACGME) competencies: practice-based learning improvement (PBLI) and system-based practice (SBP) milestones
- Individualized feedback with direct access to panel registry and care gap data using Epic reports
- Evidence-based guidelines for chronic disease management and preventative care
- Promotes interprofessional or a team-based approach to care
- Allow residents autonomy to choose topics or care gaps of interest or specific to their given panel

We will survey residents with a pre and post survey as well as weekly surveys to:

- Identify successes and barriers of the curriculum
- Assess care gap completion rates and resident experiences, behavior change, and comfort with PM

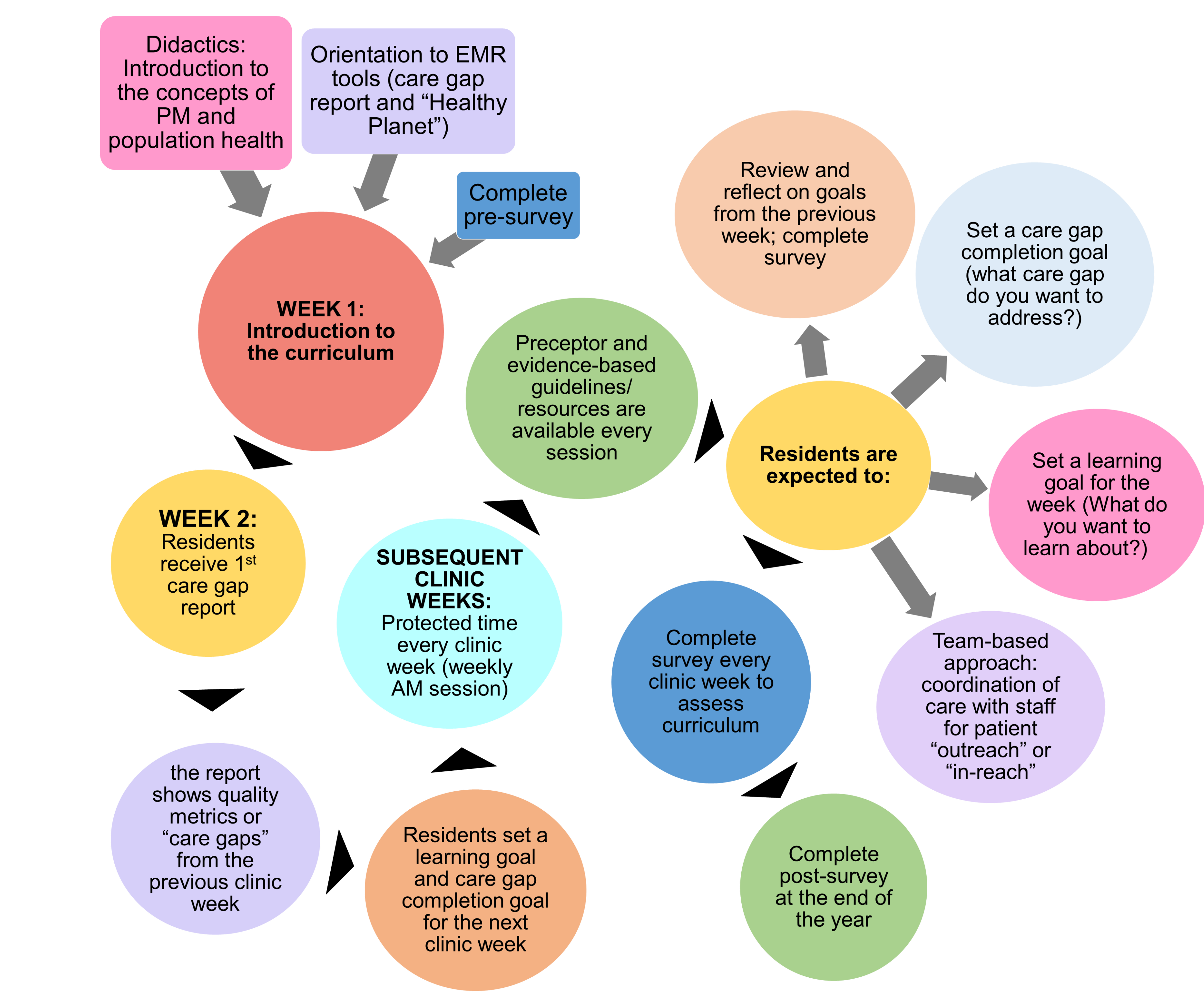
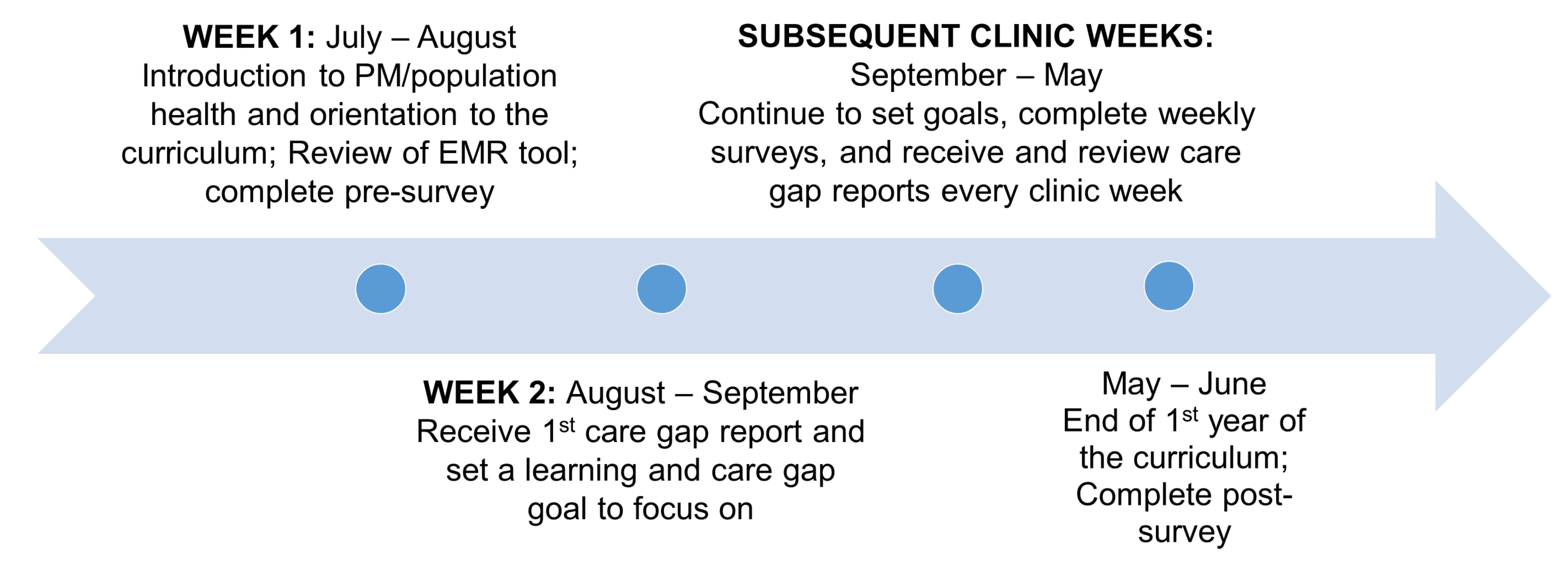
Methods

Design:

- Qualitative and descriptive analysis of resident responses from surveys to assess:
 - Themes in learning and care gap goals
 - Curriculum reception/feedback
 - Additional barriers/successes not previously identified
 - Measures of success (i.e improved metrics, teamwork, patient outreach/in-reach, confidence in practicing PM, care gap completion rates)
- Pre-post comparison of quality metrics

Setting: Annual panel management curriculum implemented at an academic internal medicine resident clinic in Vermont, US
Participants: 35 IM residents, PGYs 1-3

Curriculum Overview



Example of a Care Gap Report Summary

| HMTopic | Total Visits: | Due at Visit | Care Gaps Closed | % Closed |
|--|---------------|--------------|------------------|----------|
| ADVANCE DIRECTIVE | 5 | 3 | 1 | 33% |
| BEHAVIORAL HEALTH SCREEN | | 1 | 1 | 100% |
| COLON CANCER SCREENING COLONOSCOPY | | 2 | 0 | 0% |
| FOOT EXAM | | 1 | 0 | 0% |
| HEPATITIS B VACCINE | | 1 | 0 | 0% |
| LIPID PROFILE SCREENING (CHOLESTEROL) | | 2 | 1 | 50% |
| MICROALBUMIN/CREATININE RATIO | | 1 | 0 | 0% |
| PILL COUNT | | 1 | 0 | 0% |
| PREVENTIVE CARE VISIT | | 4 | 1 | 25% |
| SHINGLES IMMUNIZATION | | 4 | 0 | 0% |
| Social Determinants of Health (SDOH) | | 5 | 1 | 20% |
| URINE DRUG SCREEN | | 1 | 1 | 100% |
| VERMONT PRESCRIPTION MONITORING SYSTEM | | 1 | 0 | 0% |

Curriculum Overview (continued)

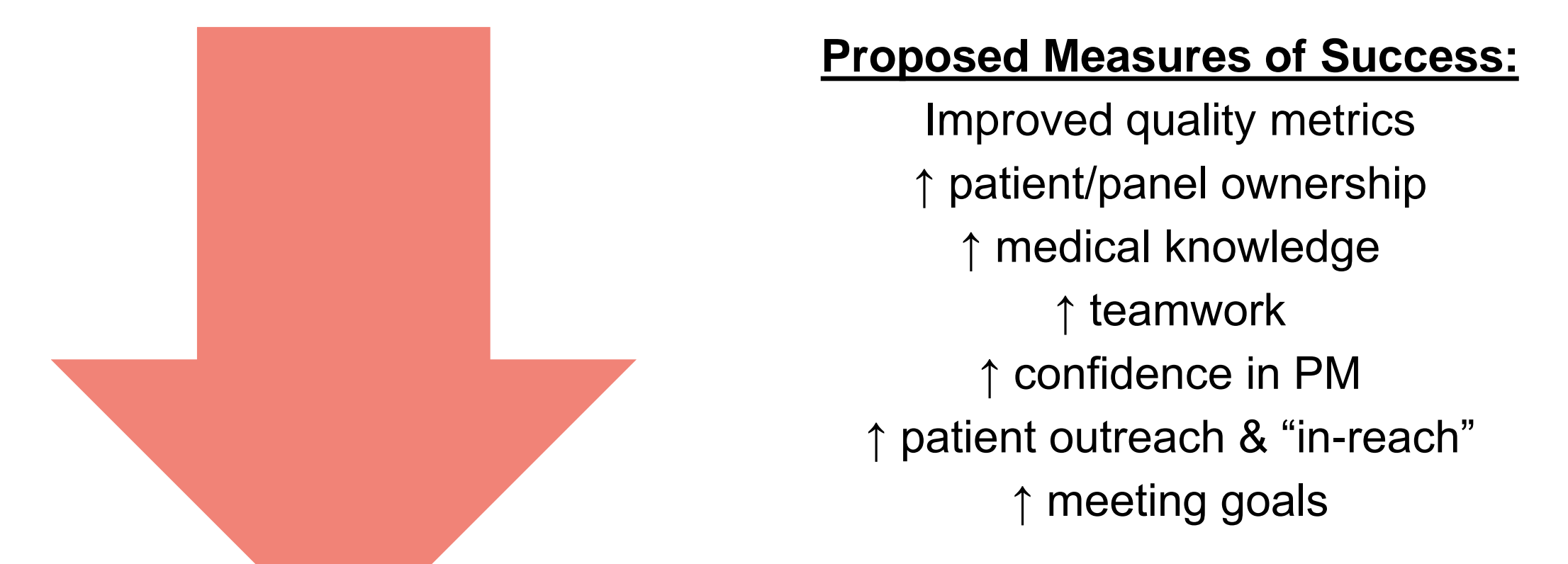
HEALTH MAINTENANCE TOPICS AVAILABLE FOR GOAL SETTING:

| | |
|--|-----------------------------------|
| Asthma action plan | HIV screening |
| Pneumococcal conjugate vaccine | Lung cancer screening |
| HPV vaccines | Lung function test |
| DTAP/Tdap/Td | COPD action plan |
| Lipid profile screening | Current opioid misuse measurement |
| Hemoglobin A1c | Cervical cancer screening |
| Eye exam | Colon cancer screening |
| Foot exam | Shingles immunization |
| Behavioral health screen | Influenza immunization |
| Breast cancer screening | Falls risk screening |
| Osteoporosis screening | Pill count |
| Urine drug screen | VPMS monitoring |
| Pneumococcal immunization 65+ | Opioid prescription agreement |
| Pneumococcal vaccine 19-64 years old ↑ | Opioid informed consent risk |
| Advance directive | |

Discussion

Our curriculum was integrated into resident curriculum July 2019 and will tentatively run annually over the next three years. We expect to have data from the first year at the end of the academic year in 2020 that addresses:

- Successes and barriers of the curriculum
- Resident experiences and care gap completion rates
- Pre and post quality metrics
- Ease of use of EMR tool and care gap reports



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