Implementation and Evaluation of the Exercise is Medicine Program in Primary Care

Sarah E Linke, PhD, MPH, Gene "Rusty" Kallenberg, MD, Borsika Rabin, PhD, MPH, PharmD

Herbert Wertheim School of Public Health and Human Longevity Science & Department of Family Medicine, UC San Diego

Introduction

- Insufficient physical activity (PA) is a leading risk factor for most chronic health conditions.
- Identifying patients at higher risk of these conditions due to their insufficient levels of PA is one of the highest priorities given the evidence suggesting that insufficient PA poses as much of a risk to patients' health as other established risk factors that are routinely addressed within the primary care setting (e.g., smoking, hypertension, obesity) and creates a significant financial burden on the healthcare system.
- Numerous interventions effectively increase PA, but few are integrated into primary care clinic workflows.
- Exercise is Medicine (EIM) is a global health initiative committed to the belief that PA is integral to the prevention and treatment of diseases and should be routinely assessed as a vital sign and treated in the healthcare setting.

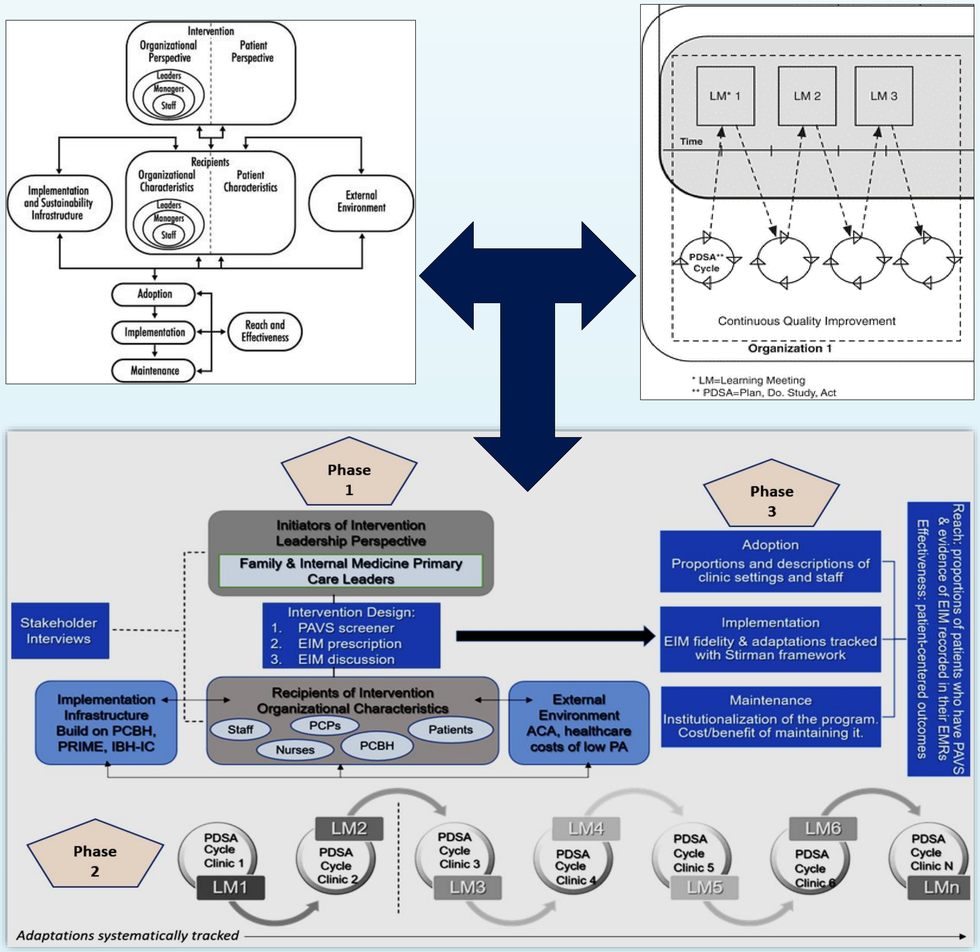
Specific Aims

1. To conduct a pre-implementation evaluation and adaptation of EIM protocol, materials, and delivery strategies
2. To implement the program and use continuous quality improvement methods to refine it
3. To evaluate the EIM program from patient, provider, stakeholders, and healthcare systems perspectives

Approach

- We are combining two health services research approaches:
  - PRISM
  - Learning Evaluation
- We are using measures relevant in real world settings to fit within the evolving needs and priorities of the healthcare system.
- We are using the FRAME-IS model to systematically track adaptations in each clinic.

Figure 1. The Combination of the PRISM & Learning Evaluation Models



Program Description

Step 1. Physical Activity Vital Sign (PAVS)

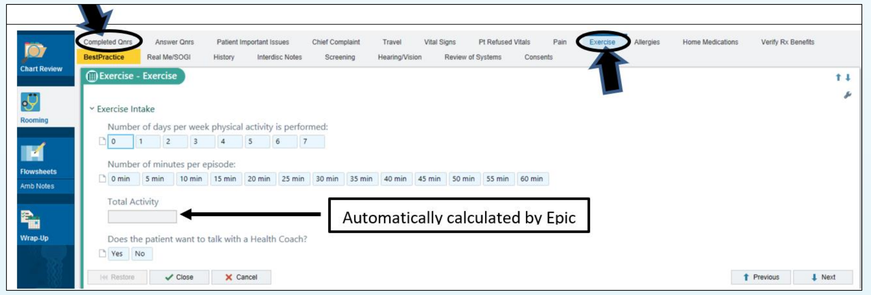
1. On average, how many days per week do you engage in moderate to strenuous exercise like a brisk walk?
2. On average, how many minutes do you engage in exercise at this level?

(days) x (minutes) = total min/week

Step 2. PCP Discussion (<1 minute)
- Recommend increasing PA if not meeting guidelines
- Reinforce PA if meeting guidelines

Step 3: Exercise Recommendations/Prescription
- Recommend gradually increasing PA if not meeting guidelines
- Reinforce PA if meeting guidelines
- Comprehensive PA manual with resources for all patients

Step 4: Referral to Health Coaching (optional)
- Two free 15-minute, telephone-based health coaching sessions offered through healthcare system
- Identify and address barriers, set goals, affirm progress



RE-AIM Outcomes

Epic Data (through April 2021) Reach & Implementation

Clinic	Launch Date – April 2021	Total Eligible Visits	PAVS Completed (%)	.EIM Documentation (%)	Health Coaching Referrals (%)
LWC FM	Oct 2018	29,704	16,013 (53.9%)	5,758 (36%)	649 (4%)
SOR IM	Oct 2019	10,872	6,043 (55.6%)	730 (12.1%)	561 (9%)
SRC FM	Jan 2020	16,899	5,390 (31.9%)	899 (16.7%)	438 (8%)
GEN FM	March 2020	18,521	6,962 (37.6%)	1,640 (23.6%)	754 (11%)
Grand Total		**75,996**	**34,408 (44.7%)**	**9,027 (22.1%)**	**2,402 (8%)**

Patient Perspective: Reach & Implementation

Question (N = 316)	Yes	No	Unsure	N/A
Did you receive the PAVS questionnaire?	226 (71.5)	57 (18)	31 (9.8)	2 (0.6)
Did you complete the PAVS questionnaire?	201 (63.6)	9 (2.8)	10 (3.2)	96 (30.4)
Did you indicate that you wanted to speak to a health coach?	16 (5.1)	173 (54.7)	9 (2.8)	118 (37.3)
Was physical activity addressed? If so, in which way(s)?	230 (72.8)	63 (19.9)	20 (6.3)	3 (0.9)
PCP discussion	150 (47.5)			
Paperwork	19 (6)			
Both	61 (19.3)			

Conclusions/Future Directions

- Results to date suggest that EIM can be successfully adapted and integrated into primary care clinics at UC San Diego Health
- RE-AIM outcomes
  - Reach & adoption high
  - Implementation of components variable
  - Effectiveness and maintenance TBD in the next 3 years

Future Directions
- Implement in additional clinics:
  - Remaining 2 faculty primary care clinics
  - Student-Run Free Clinic
  - Specialty clinics (e.g., orthopedics, geriatric primary care)
- Conduct cost analysis and generate cost-effectiveness models
- Develop implementation toolkits that will assist other health systems with the adaptation and integration of EIM into their primary care practices
- Disseminate EIM to other UC Health Systems and/or other regional health systems

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	Total (N=17,090)	Patients with ≥2 PAVS scores (N=8,457)	Patients with ≥1 Health Coaching (HC) Calls (N=450)	Patients with ≥1 HC Calls & ≥2 PAVS scores (N=331)
Age (Mean, SD)	50.3 (17.5)	52.1 (17.7)	53.6 (16.3)	55.4 (16.3)
Gender (%)				
Female	62.5	64.4	66.4	64
Male	37.5	35.6	33.6	36
Race (%)				
Asian	15.6	13.4	13.6	11.2
Black	4.6	5.7	7.3	7.9
Other or Mixed Race	16	17.3	17.5	17.8
White	62	62.4	60.2	61.9
Ethnicity (%)				
Hispanic	14.1	15.6	14.4	15.7
Non-Hispanic	83.3	82	84.2	83.1
# of recorded PAVS scores (Mean, SD)	2.2 (1.9)	3.4 (2.1)	3.4 (2.8)	4.2 (2.8)