

Adaptation, Implementation, and Evaluation of Exercise is Medicine into a Student-Run Free Clinic

Susan M Glockner MD; Borsika A Rabin, PharmD, PhD, MPH; J Kevin Dayao, BS, Giovanna O McLaughlin, BS; Michelle L Johnson, MD; Natalie Rodriguez, MD; Sarah E Linke, PhD, MPH

BACKGROUND

- Inadequate physical activity (PA) is a major risk factor for morbidity and mortality
- Exercise is Medicine (EIM) addresses primary care provider (PCP) barriers to PA promotion
- UCSD has tech-assisted decision support built into EMR to enable PCPs to integrate PA assessment, discussions, prescriptions, and referrals to health coaches into routine care
- Implementation science aims to reduce health inequities in areas like PA
- To improve the digital divide access and cultural differences, adaptations to EIM are necessary with multi-stakeholders for communities like the Student Run Free Clinic Project-SRFCP

STUDY OBJECTIVES

 To catalogue and analyze adaptations for implementing EIM into SRFCP using Framework for Reporting of Adaptations and Modifications Extended,-Implementation Strategy (FRAME-IS)

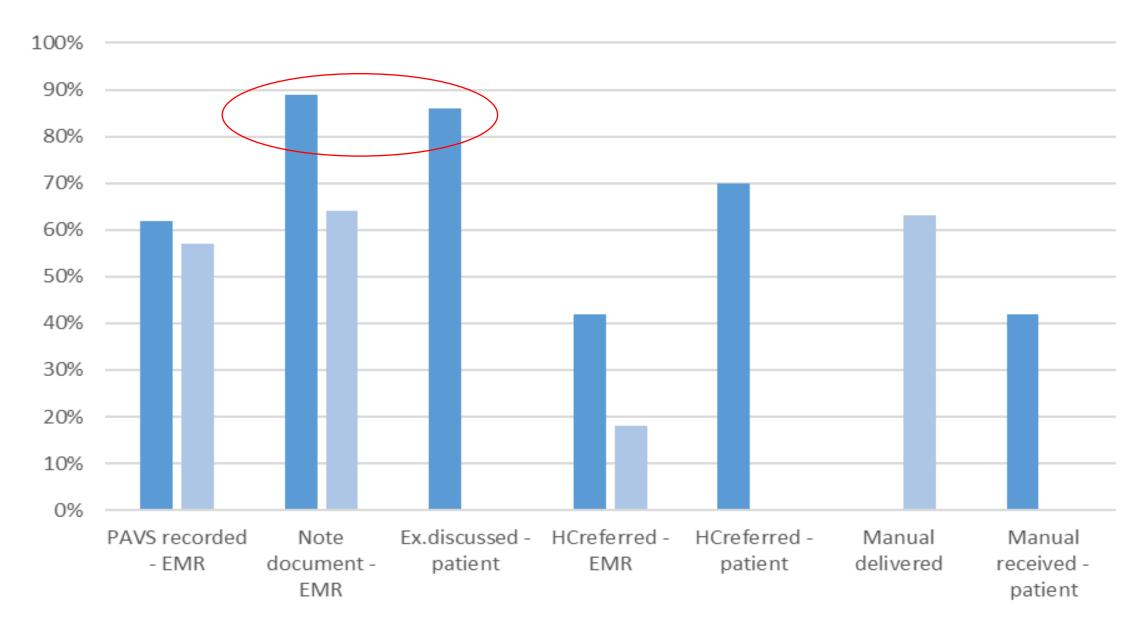
- To plan and evaluate this implementation through RE-AIM approach with an equity lens
- To engage all stakeholders students, patients, and implementation team in development

METHODS

- Catalogue adaptations in real time into Excel spreadsheet by reviewing meeting agenda
- Use structured format of FRAME and FRAME-IS with minor modifications
- Pre (starting 1/21) through initial (6/2021) until postimplementation (1/22)
- Track provider level data from EPIC (10/1/2021 -4 months and 1/26/2022 - 8 months)
- Student surveys from their SRFCP pre-/post
- Patient opinions from survey (phone calls from promotoras)
 in summer 2021
- Assess viewpoint from implementation team (n=6) with Weiner scale questionnaire
- O Post-implementation meeting in 1/2022

RESULTS: REACH & ADOPTION

EIM Components EMR versus
Patient Recall over Time



RESULTS:

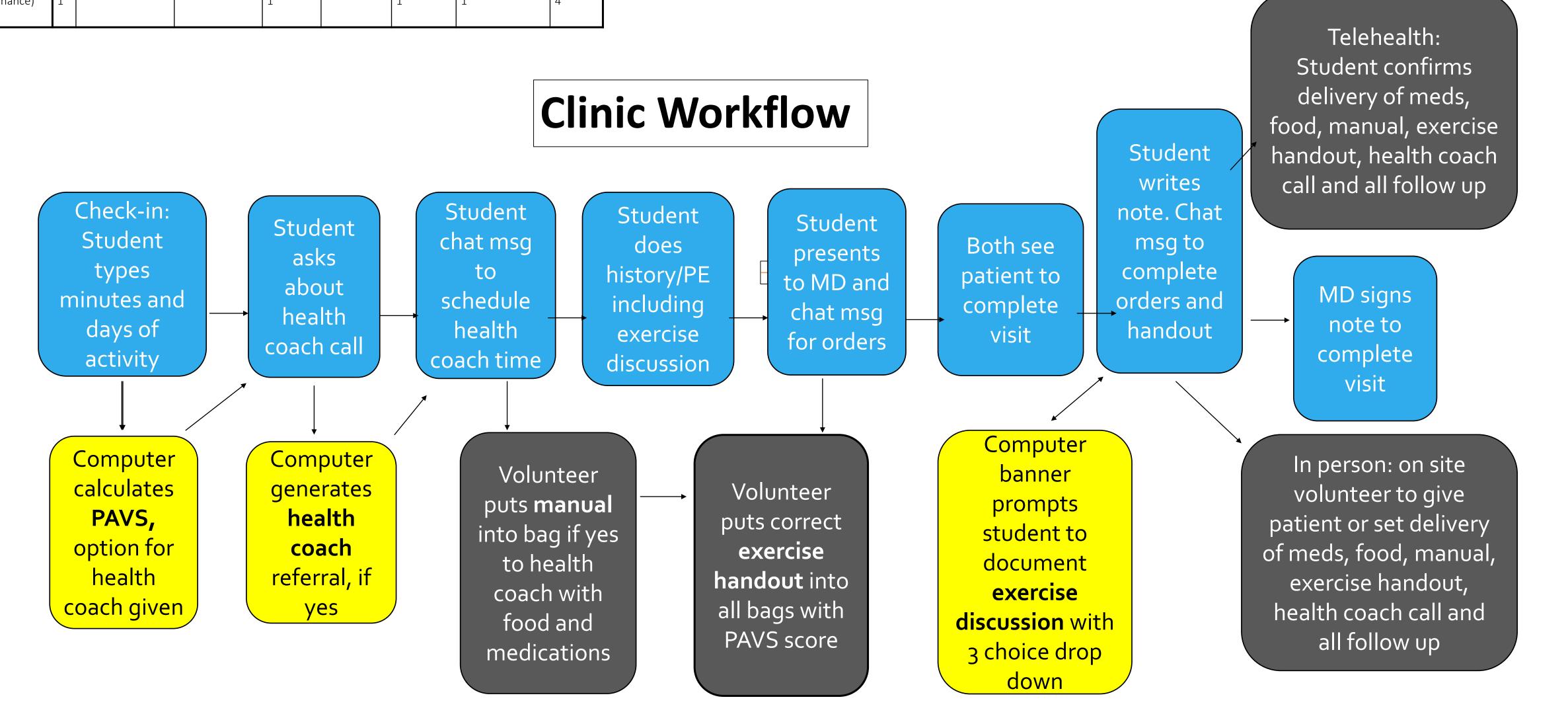
ADAPTATIONS

	EI M	Bicultural Manual	Bicultural Coach	Make HC appt	Deliver Manual/Rx	Phone Survey	Medical Student as Provider	Total
Which component and/or int	erven	 tion strategy is adapt	l ted?					
Component- Discussion	1							1
Component- Manual	+	1						1
Component-Health Coach	+		1				+	1
IS - Facilitation	1			1	1	1		3
IS - Training							1	1
WHAT is modified?								
Setting						1	1	2
Other: Workflow	1			1	1	1	1	5
Other: Translation/		1	1					2
Culture/Language								
What is the NATURE of the co	ntent	l t, evaluation, or train	<u>l</u> ing modificatior	<u> </u>				
Tailoring to individuals		1	1					2
Condensing a component	1			1				2
Integrating with other programs	1			1	1	1	1	5
What is the GOAL?								
To enhance impact		1	1					2
To improve fit	1			1	1	1	1	5
What is the LEVEL for the m	odific	ation?						
Organizational	1					1	1	3
Implementer				1				1
Clinician			1	1	1			4
Patient		1			1			2
WHO coordinates the decisio	n to n	nodify?						
Entire or most of team					1			1
Administrator	1			1		1	1	4
Researcher	1	1	1	1				4
HOW widespread is the mod	ificatio	on for whom/what?						
Patients		1	1					2
Clinic unit	1			1	1	1	1 (5
Organization What is the IMPACT?								1
Reach		1	1		1			3
Adoption	1			1		1		3
Efficiency (maintenance)	1			1		1	1	1

CLINICAL EFFECTIVENESS

Change in PAVS Over Time by Gender, Diabetes, Hypertension, and Acceptance of Offer for Health Coaching

Demographics	PAVS Scores Over Time (among patients with 2 PAVS)						
And Diseases	Initial PAVS	Last PAVS (SD)	Change in Minutes	p- value			
Overall	134 (116)	156 (124)	22	.012*			
Gender:							
Female	132 (120)	149 (124)	17	.079			
Male	141 (104)	179 (129)	38	.061			
Diabetes							
Yes	135 (110)	152 (127)	17	.118			
No	133 (124)	161 (124)	28	.048*			
Hypertension							
Yes	124 (110)	149 (110)	25	.021*			
No	153 (125)	170 (129)	17	.260			
Health Coach Accepted							
Yes	124 (110)	137 (127)	13	.112			
No	141 (118)	164 (120)	23	.081			
missing	145 (135)	196 (134)	51	.275			



Acknowledgements

I would like to thank Dr. Linke for developing such a comprehensive physician friendly EIM intervention and her constant drive for excellence. Thanks to Dr. Rabin for sharing her passion for all things D&I and offering such encouragement. Drs. Johnson and Rodriguez exemplify what it is to be a physician-teacher: intelligent, caring, and resourceful – they have inspired thousands of students. Students like Kevin Dayao and coaches like Giovanna McLaughlin always go the extra step for their patients and research. Nothing could occur without our resilient kind patients and staff, especially Carol Eames. Finally, thank you to my family and friends for their love and support throughout my life.

UC San Diego Health

SETTING and SUBJECTS

Students (~120 annually) as physicians at the SRFCP

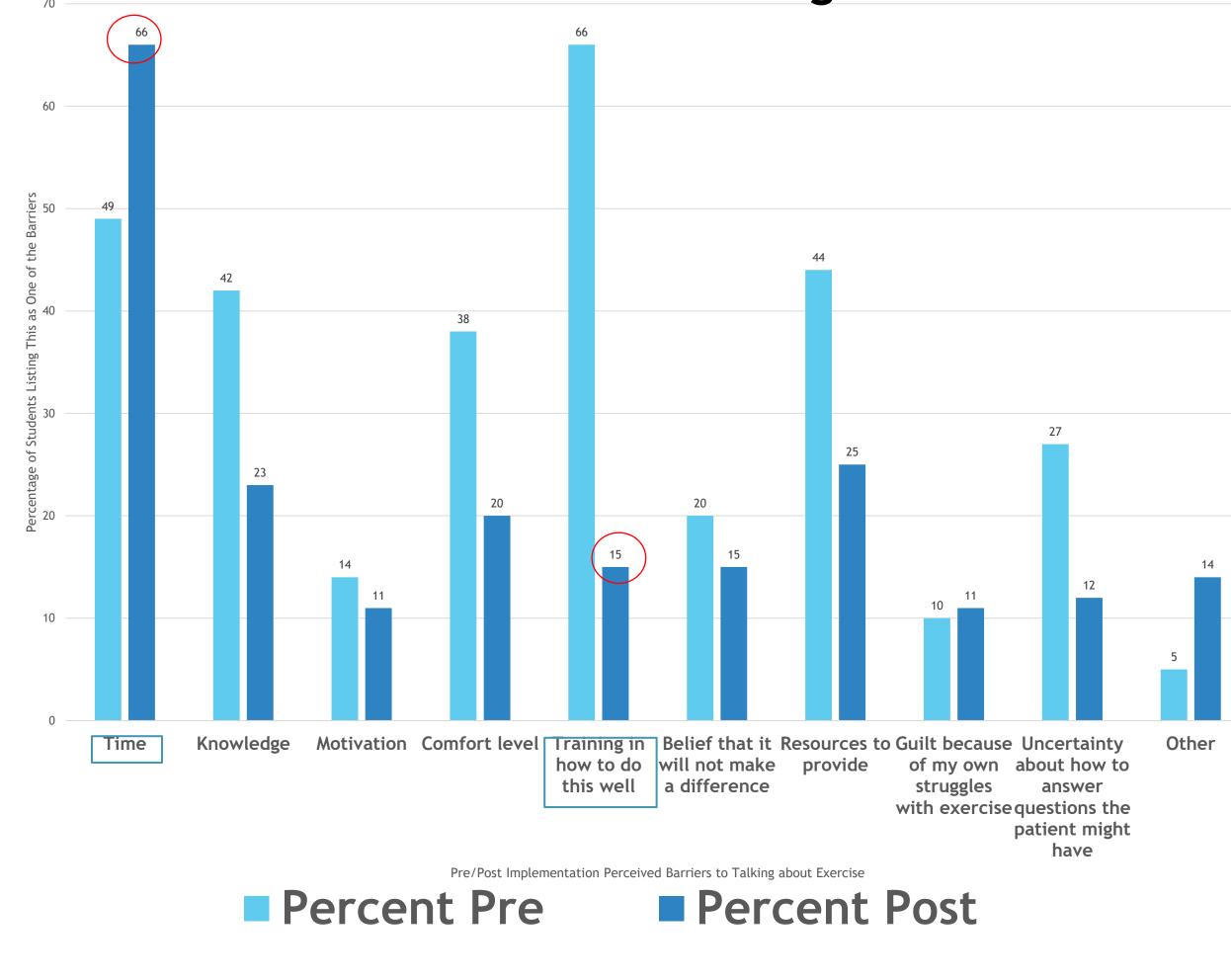
- Medical students supervised by volunteer clinical faculty (primary care and specialty) run a multidisciplinary practice to provide the wrap around healthcare with students from pharmacy, dental, acupuncture, social work, optometry,..
- Two UCSD faculty oversee managers and ancillary providers
- Clinics in San Diego 5 days/week in schools and churches

Patients (~400 served annually) without insurance

- Most (92%) are Hispanic, 75% female, over half with diabetes and/or hypertension (average age 56) – most monolingual Spanish communication, many lower educated
- Low-income workers with transportation challenges while caring for family members
- Most with poor computer literacy and no personal smartphone or household computer

RESULTS: IMPLEMENTION & MAINTENANCE

Perceived Barriers to Talking about Exercise



CONCLUSIONS

- Adaptations catalogued in a blended FRAME-IS were planned in preimplementation focused on streamlining workflow and integrating with other programs to improve fit at the clinic level to maximize reach, adoption, and clinical effectiveness
- Stakeholder goals of improving student's knowledge and decreasing barriers to exercise discussions were met while impacting patients to increase their PA by 22 minutes/week with 64% who found EIM helpful
- Implementation team found EIM appropriate, acceptable, and feasible
 - Reach scaled up to SRFCP and measured contacts with patients
 - Effectiveness maintained fidelity to improving PA of patients
 - Adoption trained students to use EIM consistently
- Implementation worked with stakeholders to smooth workflow
 Maintenance co-created a quality improvement project that can endure