

# Retroactive Review of the Prevention, Rehabilitation and Conditioning (PRC) Protocol: A Quality Improvement Initiative

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## PROBLEM STATEMENT

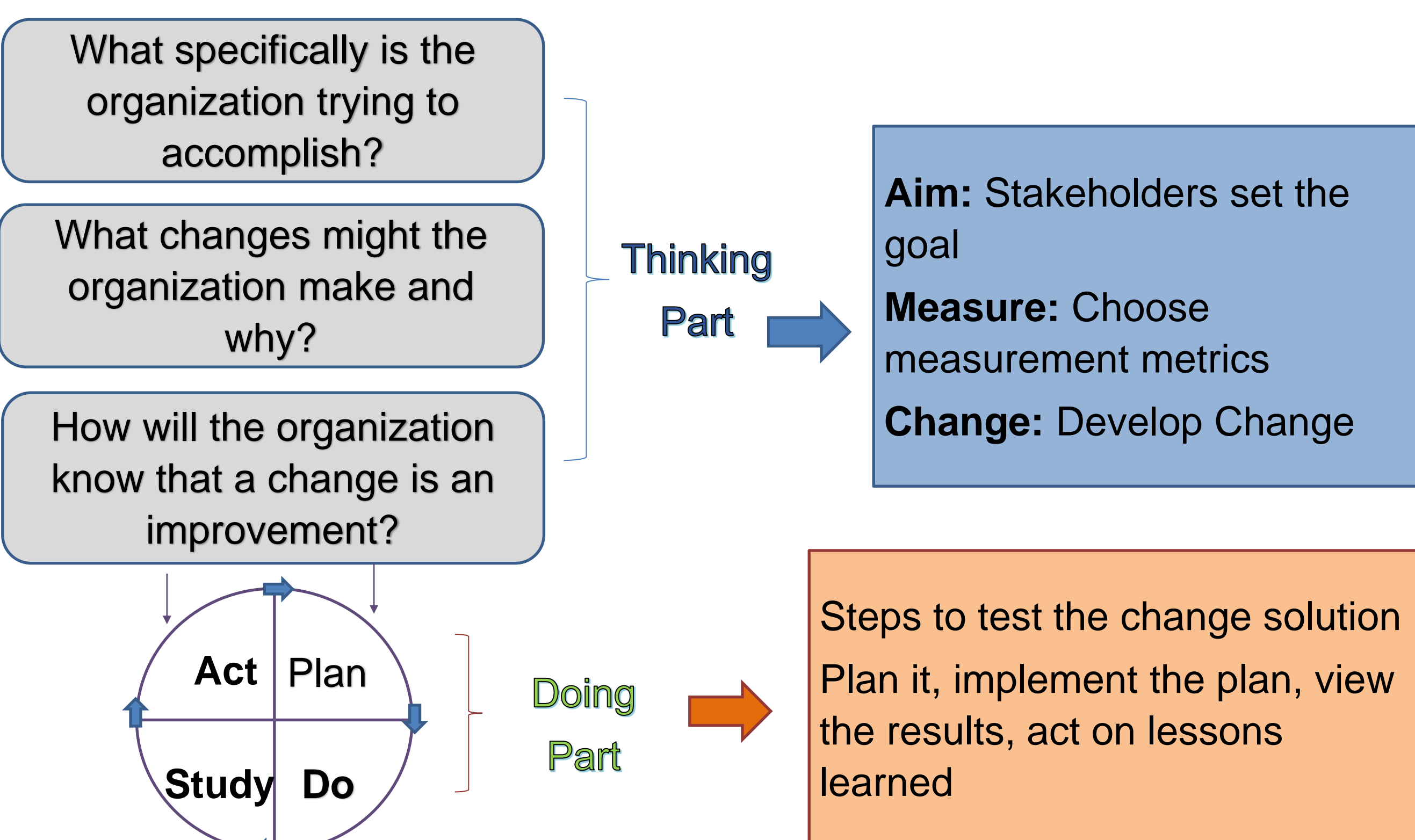
Unintentional musculoskeletal injuries can severely degrade a military mission's success. The impact on highly skilled Service Members (SMs) who are required to deploy to extreme environments can be devastating. The Joint Communications Support Element (JCSE) must acquire strategies to optimize and enhance service member performance so they are able to meet their assigned mission.

## PROJECT PURPOSE

The ultimate aim of this quality improvement initiative (QII) is to evaluate whether the PRC program improves physical fitness and minimize injuries to new members of JCSE enrolled in Joint Standards & Assessment Course (JSAT-C). The objectives are to:

- Implement and evaluate the PRC protocol
- compare training performance metrics among JSAT-C students participating in JCSE's PRC program (Class 2—002) and JSAT-C students who underwent traditional military training (Class 19-004)
- assess JCSE's PRC rehabilitation process

## MODEL/NURSING THEORY



**Aim:** Stakeholders set the goal  
**Measure:** Choose measurement metrics  
**Change:** Develop Change

Steps to test the change solution  
Plan it, implement the plan, view the results, act on lessons learned

## METHODS

Setting: Joint Military Base, Tampa, Florida

Participants: Total of 18 SMs from Air Force, Army, Marines and Navy attending JSAT-C class 20-002, 23 to 41 years of age, communications career field

Design: Two-part data collection

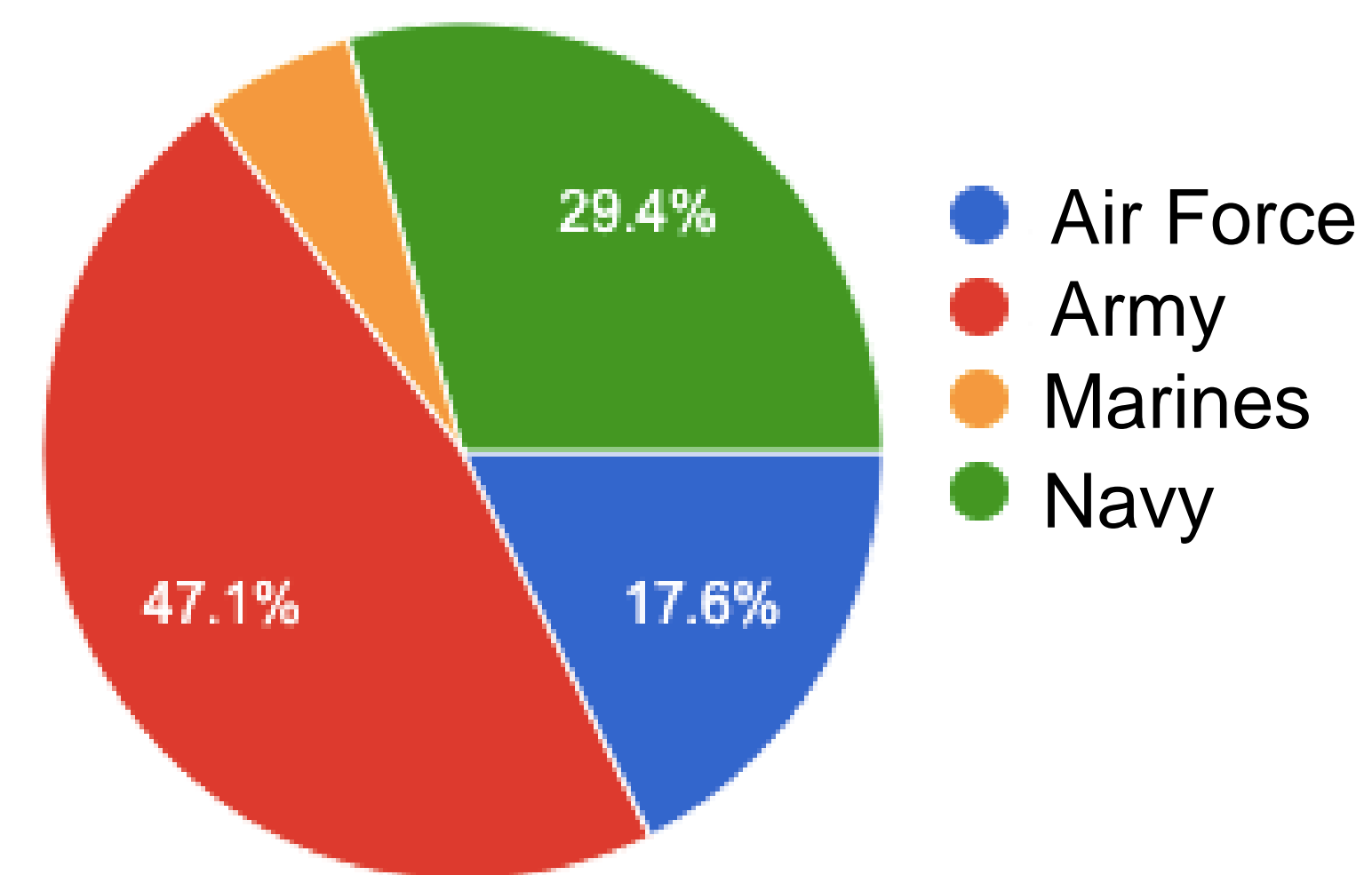
- Self-reporting survey to evaluate demographics, existing injuries, and current workout status
- Joint Physical Fitness Test scores of SMs with PRC compared to classes without PRC

Analysis: Descriptive statistics, T-test, and Chi-square were generated with Statistical Package for Social Sciences to identify differences in physical fitness test metrics in relation to injuries.

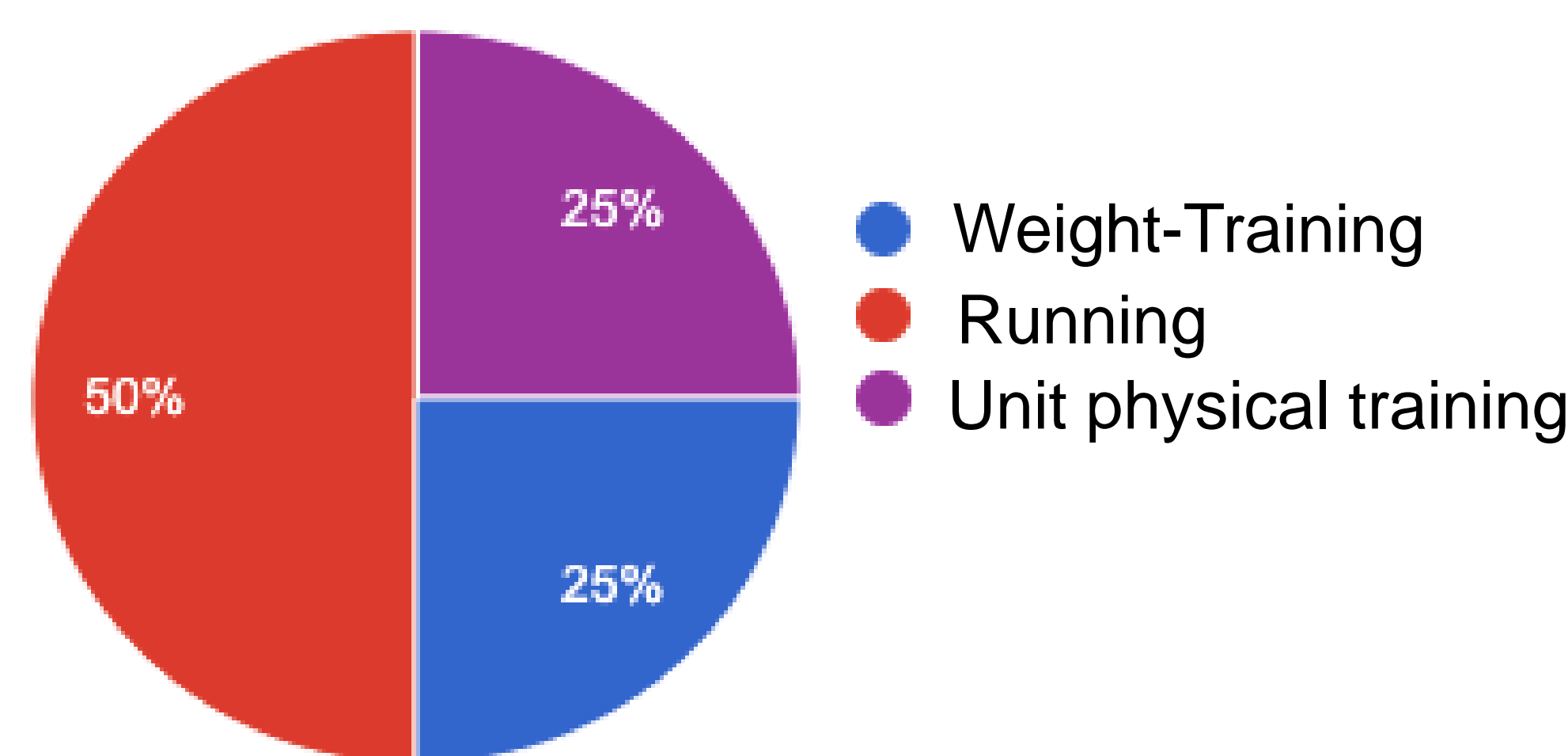


## RESULTS

What is your branch of service?



If injured, specify the cause.



Class 20-002					
	Variable Level	Test 1		Test 2	
		N (%)	Mean	N (%)	Mean
Push-ups	≤40	3 (16.6)	46.6	2 (11.2)	53.2
	41-50	3 (16.6)		2 (11.2)	
	51-60	6 (33.3)		7 (38.8)	
	61-70	4 (22.2)		4 (22.2)	
	≥71	0		2 (11.2)	
	Exempt	2 (11.2)		1 (5.5)	
Sit-Ups	≤50	3 (16.6)	52.2	1 (5.5)	57.1
	51-55			2 (11.2)	
	56-60	4 (22.2)		4 (22.2)	
	61-65	1 (5.5)		1 (5.5)	
	66-70	1 (5.5)		4 (22.2)	
	≥71	6 (33.3)		4 (22.2)	
Exempt	3 (16.6)		2 (11.2)		
Pull-Ups	≤1	1 (5.5)	7.3	2 (11.2)	9.3
	2-4	4 (22.2)		2 (11.2)	
	5-7	2 (11.2)		2 (11.2)	
	8-10	2 (11.2)		2 (11.2)	
	≥11	6 (33.3)		8 (44.4)	
	Exempt	3 (16.6)		2 (11.2)	
2-mile run	≤14:00	1 (5.5)	16:31	2 (11.2)	16:45
	14:01-15:41	2 (11.2)		4 (22.2)	
	15:42-16:30	2 (11.2)		2 (11.2)	
	≥16:31	11 (61.1)		7 (38.8)	
	Exempt	2 (11.2)		3 (16.6)	

## Chi-Square

	Pre-PRC	Post-PRC	Total
Profile*	3	3	6
No Profile*	11	15	26
Total	14	18	32

\* Profiles document injuries or medical conditions that prevent SMs from performing some or all their duties.

## DISCUSSION

The results of this QII study assessed the effectiveness of the PRC Protocol.

- All 18 participants showed an improvement in their overall fitness as indicated by their push ups, sit-ups, and pull-ups.
- SMs with pre-existing injuries (as indicated in the pre-training survey) received modified training plans.
- Class 20-002 sustained 1 injury during training compared to 3 in Class 19-004.

## IMPLICATIONS FOR ADVANCED PRACTICE NURSING

- SMs who obtain early medical care for their injuries can minimize the number of lost man hours.
- Understanding the mission of the population being serviced can help with writing medical profiles.

## SUSTAINABILITY

The PRC protocol has the potential to improve physical fitness outcomes of SMs for many years. Limitations are funding and leadership priorities.

## REFERENCES



Available upon request

PRC Protocol: An innovative way to minimize unintentional musculoskeletal injuries among service members.