Development of a novel interprofessional telehealth infrastructure for people experiencing homelessness

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Introduction

The COVID-19 pandemic has disproportionately disrupted healthcare delivery to marginalized groups, particularly people experiencing homelessness (PEH). The UCSF Shelter Clinic is a student-run free clinic that has historically provided on-site healthcare and referral services to residents of Multi-Service Center South (MSC-South), Northern California's largest homeless shelter, since 1991. In March 2020, COVID-19 related shelter-in-place restrictions suddenly reduced shelter residents' access to urgent care and referral services in the context of increased reliance on telehealth. With the concurrent closure of the UCSF Shelter Clinic, we aimed to restructure our services to continue delivering safe and effective healthcare to MSC-South residents while providing service-learning opportunities for students.

Objectives

- **Aim 1:** To implement a student-led telehealth clinic that addresses reduced access to urgent care and referral services for homeless shelter residents during the COVID-19 pandemic
- **Aim 2:** To provide service-learning opportunities for health profession students, physicians, nurses, and pharmacists to care for PEH.
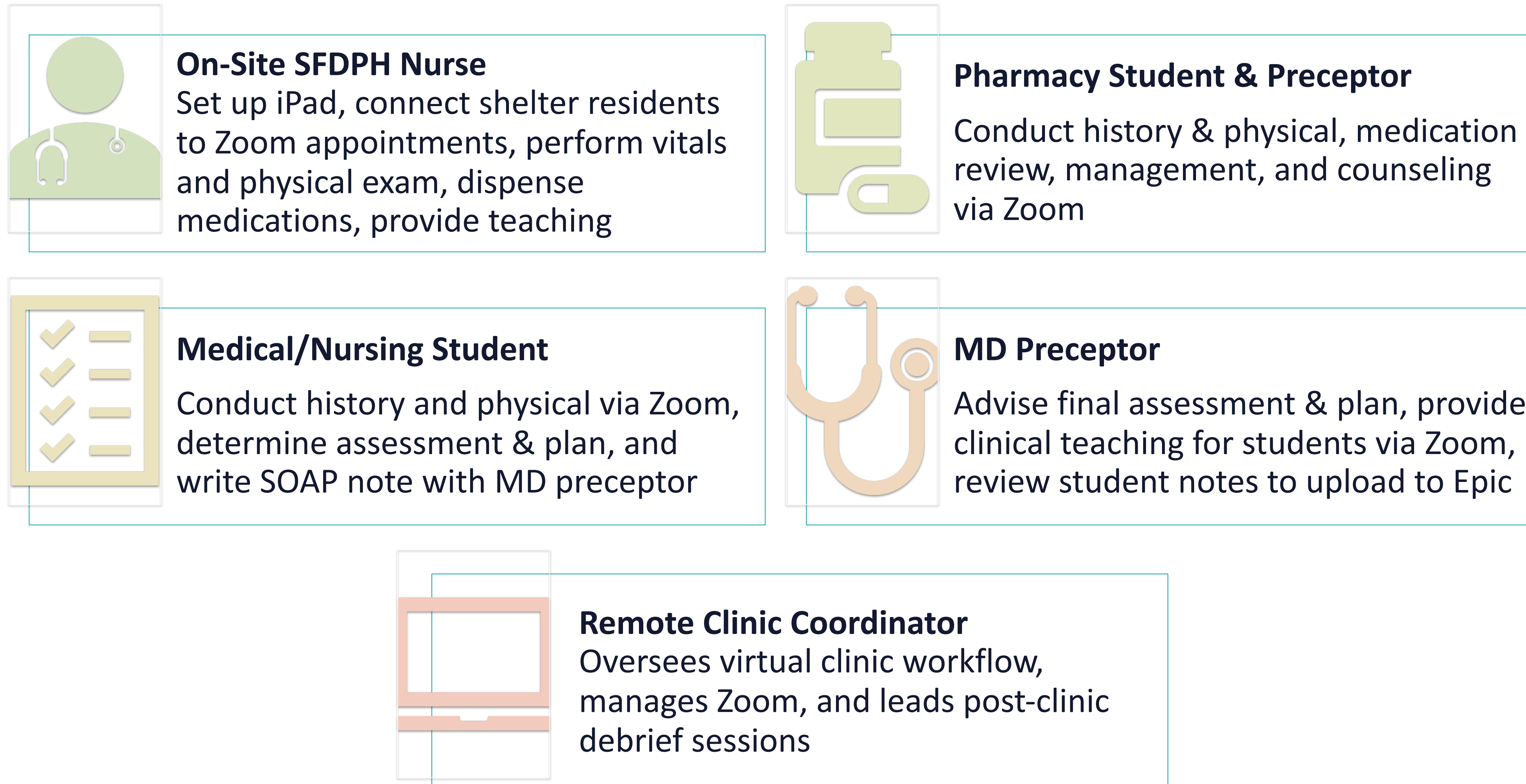
Process

1. Gathered best practices for telehealth for underserved populations via collaboration with UCSF student-run free clinics
2. An interprofessional student team developed a telehealth workflow from Aug to Nov 2020
3. Workflow was vetted by faculty advisors and SF Department of Public Health (SFDPH) liaisons
4. Conducted student & preceptor telehealth trainings
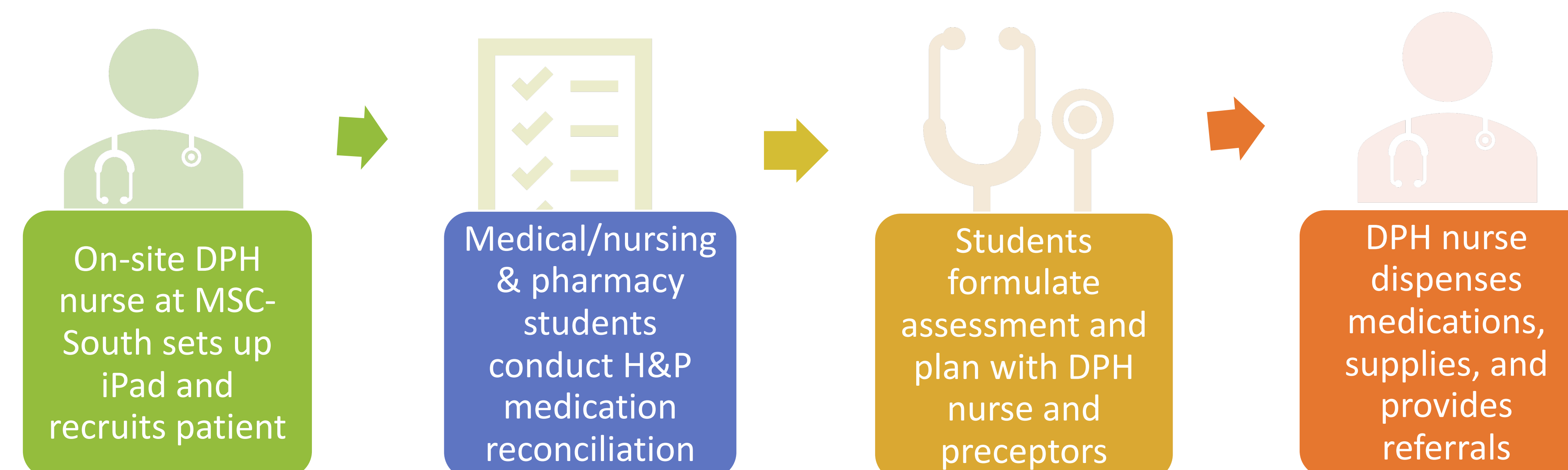5. A pilot clinic was implemented in Dec 2020

Intervention

Guiding Principles

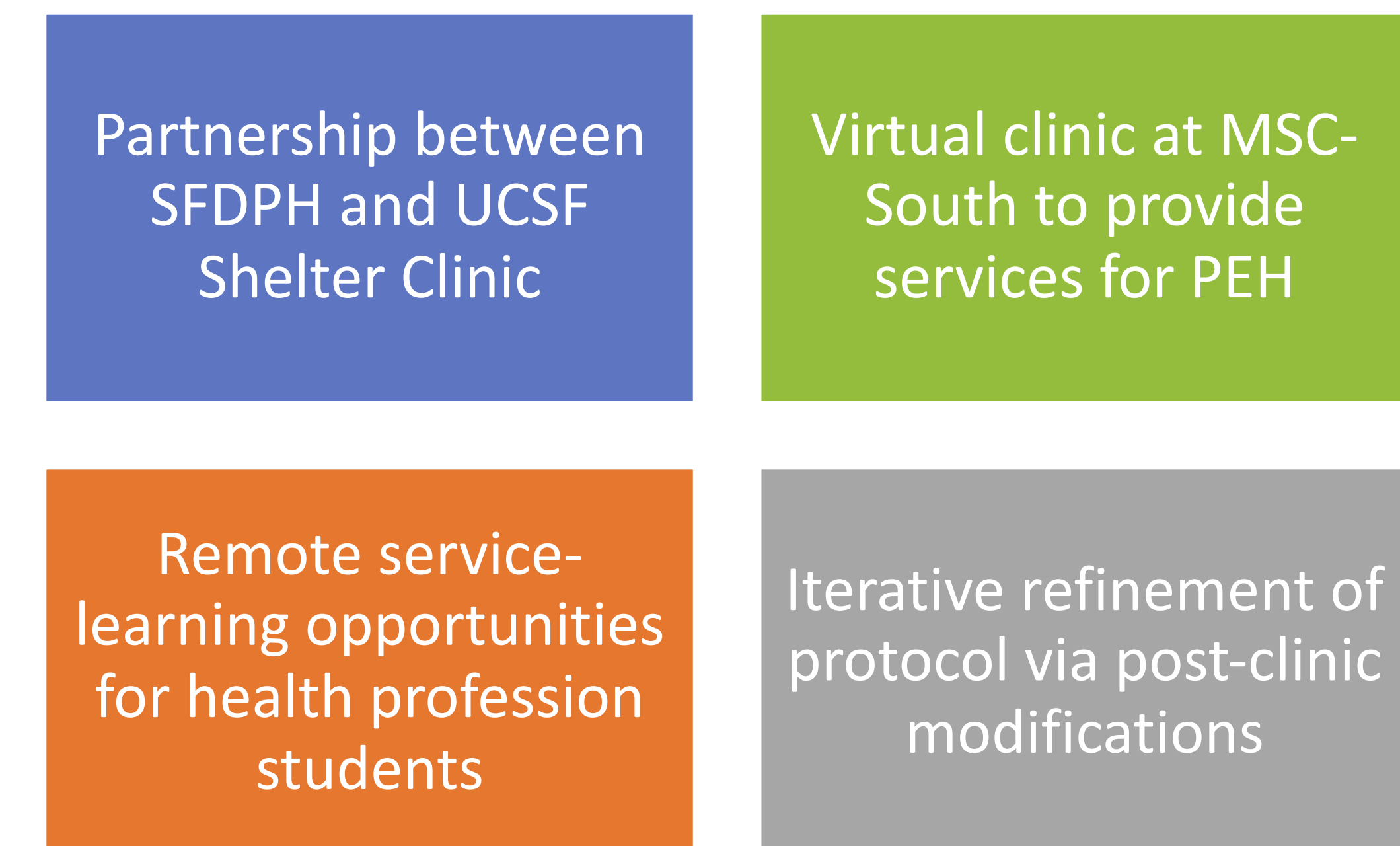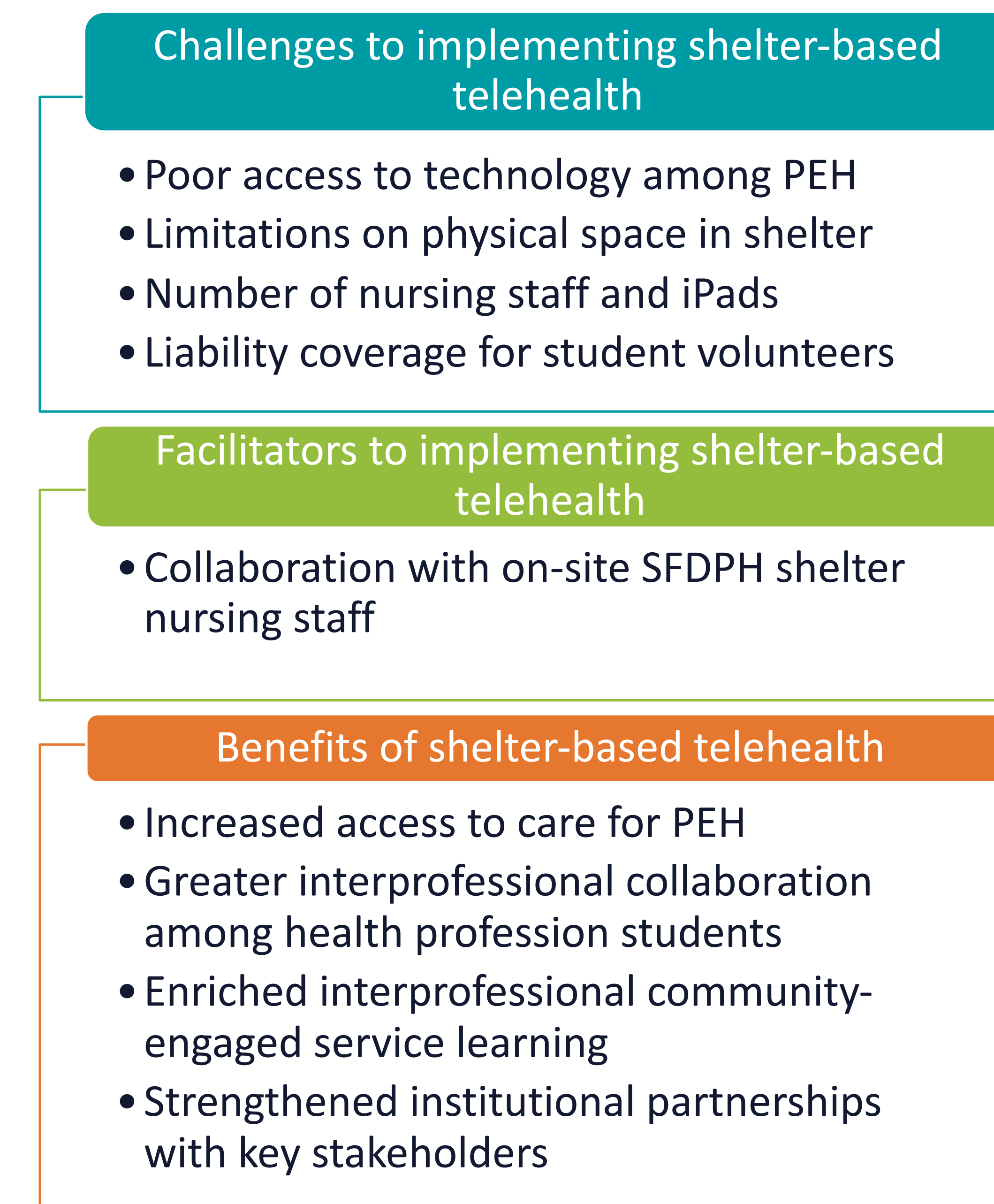| Principle	Implementation
Meet healthcare needs of shelter residents	DPH nurse identifies patients with greatest need for medical care
Minimize COVID risk, with requirement that health profession students remain shelter-in-place	Transform clinic space into 1 patient room for social distancing, with most clinic personnel over Zoom
Leverage interprofessional expertise with PEH to provide comprehensive care and student learning opportunities	Conduct appointments with on-site nursing staff, medical/nursing students, and pharmacy students

Key Team Members

On-Site SFDPH Nurse
Set up iPad, connect shelter residents to Zoom appointments, perform vitals and physical exam, dispense medications, provide teaching

Pharmacy Student & Preceptor
Conduct history & physical, medication review, management, and counseling via Zoom

Medical/Nursing Student
Conduct history and physical via Zoom, determine assessment & plan, and write SOAP note with MD preceptor

MD Preceptor
Advise final assessment & plan, provide clinical teaching for students via Zoom, review student notes to upload to Epic

Remote Clinic Coordinator
Oversees virtual clinic workflow, manages Zoom, and leads post-clinic debrief sessions

Workflow

On-site DPH nurse at MSC-South sets up iPad and recruits patient → Medical/nursing & pharmacy students conduct H&P medication reconciliation → Students formulate assessment and plan with DPH nurse and preceptors → DPH nurse dispenses medications, supplies, and provides referrals

Measure of Success

As of May 2021:
31 patients served | **22** preceptor volunteers | **52** student volunteers

Findings to Date

- Partnership between SFDPH and UCSF Shelter Clinic
- Virtual clinic at MSC-South to provide services for PEH
- Remote service-learning opportunities for health profession students
- Iterative refinement of protocol via post-clinic modifications

Key Lessons

Challenges to implementing shelter-based telehealth
- Poor access to technology among PEH
- Limitations on physical space in shelter
- Number of nursing staff and iPads
- Liability coverage for student volunteers

Facilitators to implementing shelter-based telehealth
- Collaboration with on-site SFDPH shelter nursing staff

Benefits of shelter-based telehealth
- Increased access to care for PEH
- Greater interprofessional collaboration among health profession students
- Enriched interprofessional community-engaged service learning
- Strengthened institutional partnerships with key stakeholders

Next Steps

- Increase patient volume & days of operation
- Reintroduce undergraduate student volunteers
- Maintain telehealth services as an adjunct service upon reintroduction of on-site clinic

SHELTER CLINIC