

Rapid Adoption of Telehealth at an Interprofessional Student-Run Free Clinic

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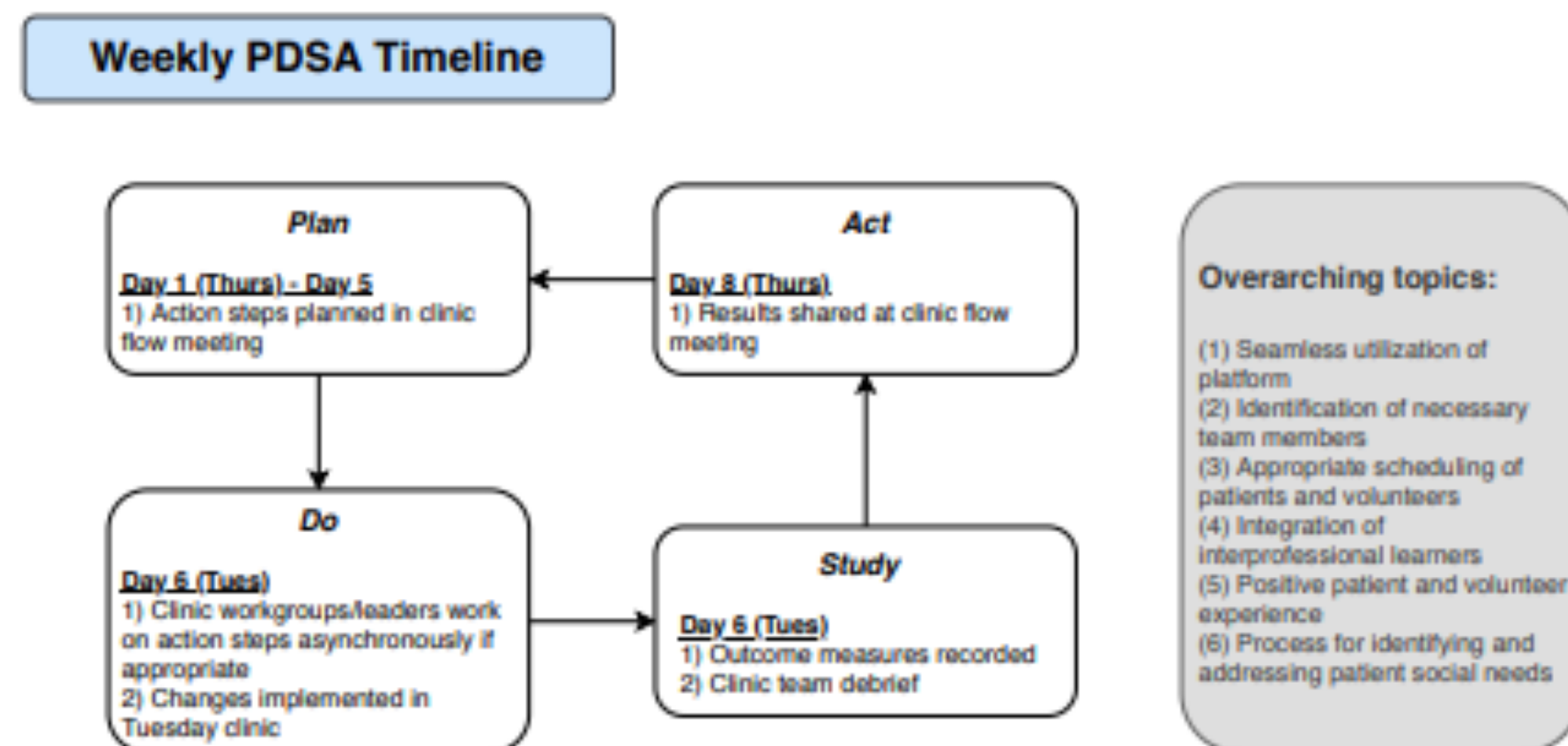
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Introduction

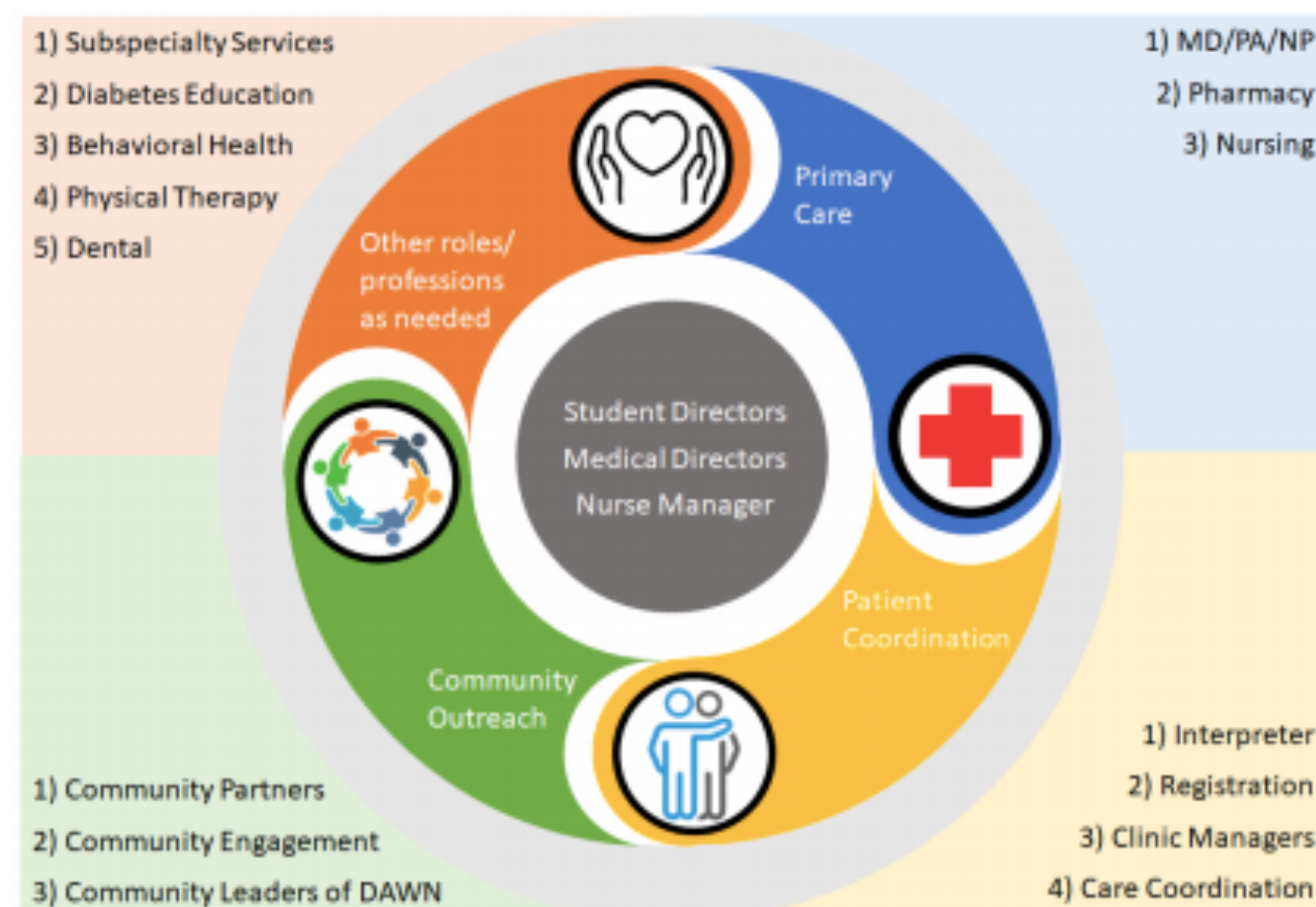
- Student-run free clinics (SRFCs), essential primary care homes to many underserved populations, are present at 75% of AAMC member institutions with 74% of 2019 medical school graduates participating.^{1,2}
- The DAWN (Dedicated to Aurora's Wellness and Needs) SRFC in Aurora, Colorado integrates licensed interprofessional providers with over 500 student volunteers per year from dental, medicine, nurse practitioner, nursing, physicians' assistant, pharmacy, physical therapy, pre-health, and psychology programs.
- In March 2020, medical schools nationwide withdrew students from clinical duties and transitioned to remote learning.
- In March 2020, displaced DAWN students initiated development of an interprofessional telehealth model and recorded the systematic approach and initial outcomes from implementation to support other SRFCs desiring to initiate telehealth.

Methods

Figure 1: PDSA Cycle Overview



DAWN Virtual Clinic Leadership



Results

Figure 2: Clinical Care Workflow

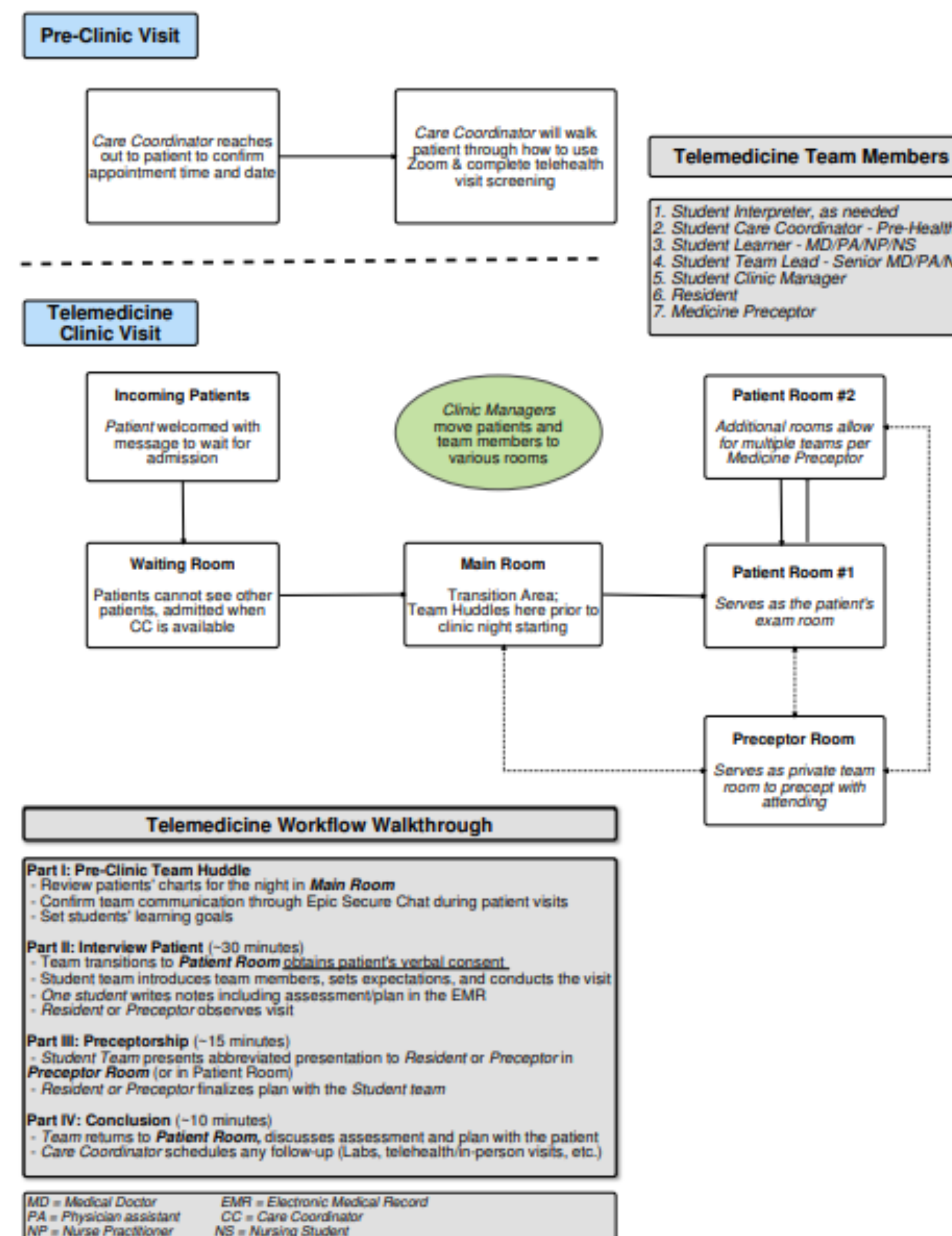
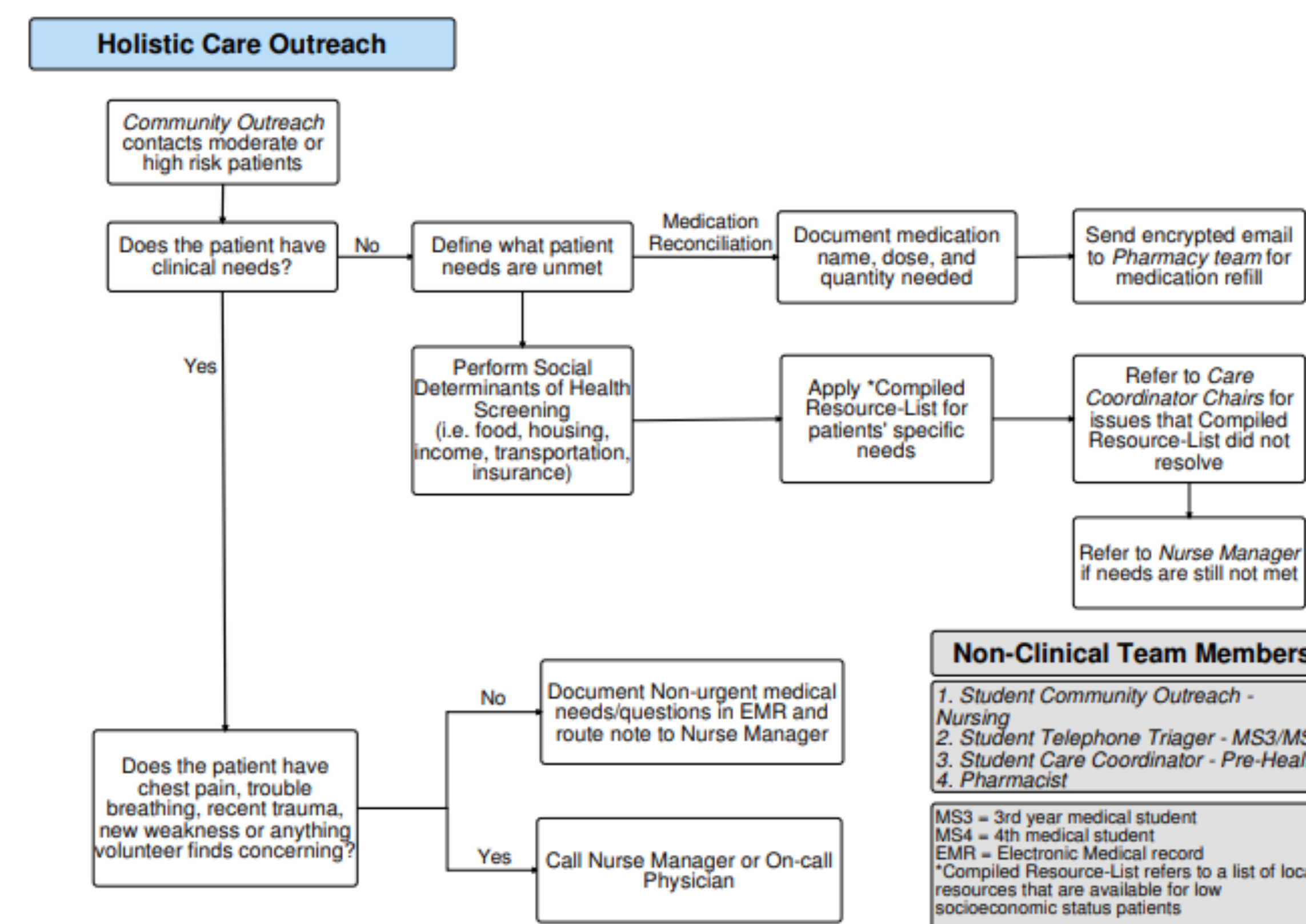


Figure 3: Asynchronous Care Workflow



Acknowledgments

Table 1: DAWN Clinic Visit Data and No-Show Rates, January to July 2020

Conducted Visits by Visit Type	January	February	March	April	May	June	July
Medicine, Telehealth *	0	0	0	9	19	24	18
Medicine, In-Person †	65	52	30	3	2	7	20
Pharmacy, Telehealth *	0	0	0	2	4	13	6
Pharmacy, In-Person ‡	13	16	4	0	0	0	0
Total Visits, Telehealth *	0	0	0	11	23	37	24
Visits with Interpreter, Telehealth *	0	0	0	8	16	30	15
All Visits	78	68	34	14	25	44	44
No-Show Rates by Visit Type							
Medicine, Telehealth	0%	0%	0%	29%	22%	9%	5%
Pharmacy, Telehealth	0%	0%	0%	50%	20%	24%	14%
In-Person Visits	28%	25%	6%	50%	50%	30%	9%
All Visits				33%	22%	14%	6%

* Telehealth service unavailable prior to April 2020

† Preceptor-only visits starting March

‡ No In-person services after telehealth was established

Conclusions

- To continue serving the community in the COVID-19 era, SRFCs need immediate telehealth solutions to develop effective models of care.
- DAWN's success with integrating telehealth is the result of the tireless work of a large group of clinic leaders over numerous hours.
- For SRFCs looking to develop their own telehealth model, it is imperative to have dedicated volunteers able to engage consistently over several months coupled with a standardized process for reflection and improvement.
- A notable finding in this review was an improvement in no-show rates to better than pre-COVID rates by the end of the study period.
- Our transition to telehealth is limited in that it is only one clinic site, has limited short-term outcomes due to data extraction options, and is contextual to the local resources and prior clinic model.
- DAWN's answer to the complex needs during this unprecedented era is a model with materials and lessons that can be helpful to other settings and communities.

References

Smith S, Thomas R, 3rd, Cruz M, Griggs R, Moscato B, Ferrara A. Presence and characteristics of student-run free clinics in medical schools. *Jama*. 2014;312(22):2407-2410. <https://doi.org/10.1001/jama.2014.16066>

Association of American Medical Colleges: Medical School Graduation Questionnaire. 2019 <https://www.aamc.org/system/files/2019-08/2019-gq-all-schools-summary-report.pdf>

Acknowledgments

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