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A Faculty Development Graduate Medical Education **Retreat to Teach and Address Social Determinants** of Health

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ABSTRACT

BACKGROUND: Social determinants of health (SDH) account for a large percentage of health outcomes. Therefore, ensuring providers can address SDH is paramount yet curricula in this area is limited.

AIM: The authors aimed to raise awareness, identify learning opportunities, foster positive attitudes, and equip educators to implement SDH curriculum.

SETTING AND PARTICIPANTS: This retreat occurred at a large academic institution and had over 130 participants who represented 56 distinct training programs and over 20 disciplines.

PROGRAM DESCRIPTION: The retreat was titled "Social Determinants of Health: Walking in Your Patients' Shoes." The retreat was holistic and used a multidimensional approach that included traditional learning, team-based learning, reflective practice, and prompted action.

PROGRAM EVALUATION: The evaluation of this retreat included electronic surveys and both qualitative and quantitative data. The retreat's quality and effectiveness at improving participants' knowledge and skill in addressing SDH was highly rated and resulted in numerous programs, including surgical and subspecialty programs reporting adopting SDH curricular and clinical workflow changes.

DISCUSSION: The retreat was successful and reached a wide and diverse set of faculty educators and can serve as an education model to the graduate medical education community on how to start to develop "physician-citizens."

KEYWORDS: Health disparity, social determinants of health, graduate medical education, faculty development

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Introduction

The social determinants of health (SDH) refer to the many social, economic, and environmental factors that affect health and well-being. They include the conditions of how we are born, grow up, live, work, and age.1 Social determinants of health account for 60% of health outcomes as opposed to clinical care which accounts for only 10%.² Numerous studies have supported this association, demonstrating that SDH are inextricably linked to adverse health care use as well as significant morbidity and mortality.3-5 Therefore, ensuring health care providers have sufficient knowledge about SDH and their health impact is paramount. To mitigate the deleterious health effects of SDH, clinicians need to be equipped with the skills to both recognize and address SDH.

Awareness of SDH among physicians is increasing but specific content knowledge is challenged by limited curricula. There is an even greater dearth of curricula focusing on

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physician skill and competence in integrating SDH into the clinical management of patients and communities. Lack of knowledge about resources to manage SDH, skills in patient communication, and physician comfort in this content area have been identified as significant priority areas for education.^{6,7} It has also been shown that negative physician attitudes about the importance of SDH in patient care and beliefs about the health effects of SDH further interfere with the delivery of equitable health care.8-10

Despite the growing importance of SDH, it has been difficult to quantify the amount of SDH education that physicians receive. A major challenge has been the breadth of SDH topics which are often not explicitly labeled as SDH; instead, are found in curricula under umbrella terms like "population health," "community-based care," "service-learning," "marginalization and vulnerability," "social justice," and "advocacy."6 Most published curricula targets undergraduate medical

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education¹⁰⁻¹² rather than graduate medical education (GME),¹³ and those GME-level educational programs that do exist are mostly embedded in pediatrics training programs and do not target faculty.¹⁴⁻¹⁷

To enhance physician knowledge, skills, and attitudes specific to SDH, the Office of Academic Affairs at Northwell Health and the Zucker School of Medicine at Hofstra/ Northwell sought to create a 1-day retreat for clinician-educator faculty to focus on SDH. The goals of the overall retreat were to (1) raise awareness of the impact of SDH on health outcomes, (2) identify learning opportunities for GME faculty to teach SDH in their training programs, (3) foster positive attitudes toward integrating SDH into clinical care, and (4) equip clinician-educators with tools and resources to support impactful SDH curriculum. The retreat targeted all residency and fellowship programs, irrespective of specialty, and included educational leaders with the capacity to influence curricula and training across the institution.

Setting and Participants

Northwell Health and the School of Medicine has nearly 140 accredited residency and fellowship programs with over 1600 trainees, placing the GME program as one of the largest in the nation. Northwell Health, where the residents complete their clinical training, is the third largest secular integrated health system in the nation with 15 teaching hospitals. Given the large catchment area, Northwell Health providers deliver care to a large ethnically and linguistically diverse patient population.

To address physician gaps in learning around SDH, an innovative educational retreat focused on SDH was developed in 2017. This faculty development retreat also served as a response to the Accreditation Council for Graduate Medical Education's (ACGME) Clinical Learning Environment Review (*CLER*) recommendations. Specifically, it addressed health care quality pathway recommendation #5 that asks for formal activities to educate faculty members on reducing health care disparities.¹⁸ The aim of the retreat was to provide an innovative education model that could target large numbers of faculty across multiple specialties, to provide faculty with skills and resources in SDH, and to serve as a venue for faculty to network, teach, and present scholarly work in this area. There were 134 registered participants (Table 1). They represented 56 distinct training programs and over 20 disciplines from multiple sites of care delivery.

Program Description

This full day retreat was titled "Social Determinants of Health: Walking in Your Patients' Shoes." Content of the program was designed to affect physicians' "hearts (reflection) and minds (knowledge)" and to identify skills faculty and trainees need to address SDH. The retreat's intention was to go beyond learning just about *what* SDH are, *how* they came to be and also *what* can be done to mitigate SDH. There were 5 main learning objectives for the retreat's participants. Participants should be able to (1) engage educational leadership in identifying Table 1. Registered participants (n = 134).

	% (N) ^a
Female	54 (73)
MD	75 (101)
DO	7 (10)
PhD	2 (4)
Other	14 (19)
Emergency medicine	6 (8)
Family medicine	10 (13)
Medicine and medical subspecialties	28 (38)
Obstetrics and gynecology	2 (3)
Other clinical specialty	7 (9)
Pediatrics and pediatric subspecialties	16 (20)
Psychiatry	4 (5)
Radiology	4 (6)
Surgery and surgical subspecialties	13 (18)
Urology	2 (3)
Non-clinical	8 (11)

^aColumn may not add up to 100%; given numbers were rounded to nearest integer.

learning variables that affect trainees' exposure to SDH, (2) illustrate the effects of SDH, (3) demonstrate methods used to screen for SDH, (4) describe educational approaches to teaching SDH, and (5) participate in best practices that will provide educational innovations to support GME in addressing SDH.

The retreat day started with an interactive team-based learning session on SDH. Reflective videos^{19,20} were used to introduce the concept of SDH. The videos were then followed by prompting questions to allow faculty to talk about the importance of SDH awareness and develop feelings of empowerment to be actively engaged in SDH dissemination. Concrete and relevant local health disparity data were shared to connect the videos to the health needs of the community the faculty serve.²¹

Next, small-group methods were employed among the participants to create mini curricula from a menu list of content that relates to health equity. The listed content topics included health disparities, SDH, cultural competency/humility, linking equity to quality initiatives, patient mistrust, "-isms" (ie racism, sexism, ageism, etc), community engagement, health literacy, use of interpreters, and care of lesbian, gay, bisexual, transgender, queer populations. To facilitate the creation of mini curriculae, each group was given an instructional worksheet which outlined a 4-step process on creating curricula and a handout on Bloom's²² taxonomy of learning domains and verbs. As part of the 4-step curriculum development process, modified from Kern's 6-step approach,²³ educators were challenged to focus on curricula that

Table 2. Adva	antages and bar	riers to teaching s	ocial determinants	of health.
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	ADVANTAGES	BARRIERS
Patient	Ensure patients receive appropriate treatment	Lack of community linkages
	Better connection with patients (enhance trust and communication)	
	Start to change practice patterns	
Trainees	Well-rounded residents who understand the environment of health care they will be entering	Lack of interest
	Makes residents more sensitive (empathic, compassionate) to patients' needs	Content experts
	Create global thinkers	Competing demands
System/Society	Result in health equity, decreased hospital costs	Resources (time, teachers, money)
	Important social issues that need government-level change	
	Allows our institution to establish itself as a leader in this field	
	Meeting our regulatory (ACGME, CLER) requirements	

Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; CLER, Clinical Learning Environment Review.

would lead to skill development and patient/community needs. The 4 steps included the following: (1) choosing a goal, (2) writing learning objectives that were S.M.A.R.T. (specific, measurable, achievable, relevant, and timely), (3) outlining specific tasks that would transmit the desired knowledge, and (4) planning a method to measure whether or not learners, and if possible patients, benefited from the teaching.²⁴ The final step followed Kirkpatrick's²⁵ 4 levels of evaluation: (1) reaction, (2) knowledge, (3) behavior, and (4) patient (learner) outcome. The curriculum from each group was then collected and compiled for distribution to all registered participants (Supplemental Appendix B).

The morning session concluded with a keynote address titled "Beyond the Bedside: SDH Residency Training and Outcomes" and a presentation titled "Educate to Empower: Gateway to Social Equity." The keynote was delivered by a pediatrician who is a nationally recognized SDH content expert, and the presentation was delivered by our Chief Community Health Investment Officer. This was followed by short talks and workshops that were selected by a planning committee based on their alignment with the SDH theme (Supplemental Appendix A). All retreat content attempted to go beyond just awareness of SDH and also include ideas on how to take actionable items to mitigate the effects of SDH.

The theme of "Social Determinants of Health: Walking in your patients' shoes" was woven throughout all events of the retreat. Stories that illustrated how SDH affected their patients were submitted by housestaff and displayed during lunch. As a tangible contribution, each participant was asked to bring a new pair of shoes to donate.

Program Evaluation

The evaluation of this retreat included an electronic survey made immediately available to participants after the retreat and a 3-month post-retreat survey. The survey responses included both qualitative and quantitative data. The questions assessed the retreat's quality and effectiveness at improving participants' knowledge and skill in addressing SDH. The short-term and 3-month post-survey had a 46% (61 of 134) and 24% (32 of 134) response rate, respectively.

Short-term survey responses highly rated the retreat's quality and effectiveness. All but 2 of the 20 sessions received the highest rating for quality. Most of the respondents (67% or higher) selected the highest score of 5, from a 1-5 Likert-type scale, for the extent to which the retreat allowed them to achieve the prior mentioned participant objectives (see the "Program Description" section).

Open-ended responses mentioned several advantages and barriers to teaching SDH. The responses were grouped into 3 main domains, those advantages and barriers that mapped to patients, trainees, or systems/society (Table 2). The number of reported unique advantages outnumbered the number of barriers reported. The barriers to teaching SDH identified in the short-term and at 3 months were similar and grouped predominantly around resources-time, staffing, and having already developed content. Some specialties (pathology and radiology) did not see the applicability to their area of practice. A representative quote that exemplifies this barrier was "changes that apply to radiology are few and far between."

Nearly 90% of participants planned to enhance SDH training in their GME program. At 3 months, 97% of those who responded to the survey, representing 23% of total registered participants, reported making a change to their curriculum or clinical work flows and 46% of survey respondents reported having accessed 1 or more of the resources provided. Some of the specific changes reported included use of expanded social histories, creating experiential learning through immersion at community-based organizations (CBO), facilitating residentled SDH projects, added content to standing didactics, and creating a SDH learning index. At 3 months, only 1 survey respondent reported they were able to see an improvement in a patient outcome based on the SDH changes they implemented. In the 2 subsequent academic years since the retreat, all of our GME programs, as part of their annual program evaluation, were asked to report on "stand alone or integrated educational activities related to SDH" that their trainees received. In both years, approximately 75% (120 of 160) of our programs reported delivering at least 1 SDH educational activity to their trainees.

Discussion

This innovative retreat successfully used a 1-day format that was inclusive of all specialties and multiple sites within a large integrated health system. The retreat met its established goals of raising awareness of SDH, engaging faculty to identify learning opportunities to introduce SDH curriculum, and equipping educators with tools and resources for implementation strategies. This is evidenced by a large percentage (97%) of our responding participants reporting they had made actual changes to their training program curriculum 3 months post retreat. In addition, the survey results show this program to be feasible and generalizable to many academic settings. Finally, the retreat organizers collected and donated over 200 pairs of shoes to a local partnering CBO.

Several organizations have voiced the importance of addressing health equity, specifically by teaching and addressing SDH.^{18,26,27} These recommendations have prompted a growth of work in this area, yet much more is still needed.^{6,13} Our GME retreat offers an example of how an academic institution can start to bring this knowledge and skillset to a large group of diverse educational leaders, which crosses the continuum of medical education and is inclusive of a variety of medical specialties.

The success of the program arises partly from targeting educational leaders who have the authority and sphere of influence to ensure that programmatic changes occurred. Each leader has the potential to be a multiplier to many. Based on Kirkpatrick's program evaluation pyramid,²⁵ our program was able to achieve levels 1, 2, and 3: satisfaction, learning, and behavior change for faculty role models and ultimately their trainees. This educational intervention did have limitations. The implementation included 1 single institution. The evaluation survey data were based on self-reported measures and did not include a pre-intervention survey. Another limitation is that despite influencing educational practice and clinical workflow for numerous residency programs, we have yet to link this to improvements in patient outcomes.

Yet, our data support that a brief, 1-day faculty development retreat has the capacity to expand ideas and resources on how to address SDH to faculty and trainees. This retreat prompted curricular changes, even among surgical and subspecialty programs. Future recommendations include a "call to action" in developing educational initiatives that link more closely to community-based advocacy and ultimately patient outcomes, as has been recommended in the literature.^{6,13,28}

This faculty development retreat was holistic and included traditional learning, team-based learning, reflective practice, and prompted action. As Sharma et al⁶ stated, "a first step to social change is recognition that such change needs to occur at all." This statement aligns with various ACGME recommendations to address health disparities.^{18,27} This is one academic institution's approach and demonstration of commitment to health equity that can serve as a model to the GME community on how to start to develop "physician-citizens."

Authors' Note

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Author Contributions

JM and ACY had full access to all of the data in the manuscript and take responsibility for the integrity of the data and the manuscript. Concept and design of the program: AF, EF, Martinez, VV and ACY Acquisition, analysis, or interpretation of data: AF, EF, EJK, JM, VV, OTU, ACY Drafting and critical review of the manuscript: JC, AF, EF, EJK, JM, VanHuse, OTU, ACY

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Supplemental Material

Supplemental material for this article is available online.

REFERENCES

- World Health Organization. What Are Social Determinants of Health? http:// www.who.int/social_determinants/sdh_definition/en/. Accessed May 20, 2018.
- Schroeder SA. We can do better—improving the health of the American people. N Engl J Med. 2007;357:1221-1228.
- Kneipp SM, Schwartz TA, Drevdahl DJ, et al. Trends in health disparities, health inequity, and social determinants of health research: a 17-year analysis of NINR, NCI, NHLBI, and NIMHD funding. *Nurs Res.* 2018;67:231-241.
- Cook JT, Black M, Chilton M, et al. Are food insecurity's health impacts underestimated in the U.S. population? Marginal food security also predicts adverse health outcomes in young U.S. children and mothers. *Adv Nutr.* 2013;4:51-61.
- Clark M, Utz S. Social determinants of type 2 diabetes and health in the United States. *World J Diabetes*. 2014;5:296-304.
- Sharma M, Pinto A, Kumagai A. Teaching the social determinants of health: a path to equity or a road to nowhere? *Acad Med.* 2018;93:25-30.
- Huddle TS. Perspective: medical professionalism and medical education should not involve commitments to political advocacy. *Acad Med.* 2011;86: 378-383.

- Diversi M, Finley S. Poverty pimps in the academy: a dialogue about subjectivity, reflexivity, and power in decolonizing production of knowledge. *Cult Stud Crit Methodol.* 2010;10:14-17.
- Wear D, Kuczewski MG. Perspective: medical students' perceptions of the poor: what impact can medical education have? *Acad Med.* 2008;83:639-645.
- Hunt JB, Bonham C, Jones L. Understanding the goals of service learning and community based medical education: a systematic review. *Acad Med.* 2011;86: 246-251.
- O'Brien MJ, Garland JM, Murphy KM, Shuman SJ, Whitaker RC, Larson SC. Training medical students in the social determinants of health: the Health Scholars Program at Puentes de Salud. *Adv Med Educ Pract.* 2014;5:307-314.
- Siegel J, Coleman DL, James T. Integrating social determinants of health into graduate medical education: a call for action. *Acad Med.* 2018;93:159-162.
- Klein MD, Alcamo AM, Beck AF, et al. Can a video curriculum on the social determinants of health affect residents' practice and families' perceptions of care? *Acad Pediatr.* 2014;14:159-166.
- Klein MD, Kahn RS, Baker RC, Fink EE, Parrish DS, White DC. Training in social determinants of health in primary care: does it change resident behavior? *Acad Pediatr.* 2011;11:387-393.
- Hoffman BD, Barnes M, Ferrell C, et al; and CHAMP Study Group. The Community Health and Advocacy Milestones Profile: a novel tool linking community pediatrics and advocacy training to assessment of milestones-based competence in pediatric residency training. *Acad Pediatr.* 2016;16:309-313.
- Garg A, Toy S, Tripodis Y, Silverstein M, Freeman E. Addressing social determinants of health at well child care visits: a cluster RCT. *Pediatrics*. 2015;135: e296-e304.

- Accreditation Council for Graduate Medical Education. CLER Pathways to Excellence. https://www.acgme.org/Portals/0/PDFs/CLER/CLER_Brochure. pdf. Accessed May 1, 2018.
- Social Determinants of Health. https://www.youtube.com/watch?v=_11xLlwKgWc. Accessed September 1, 2017.
- Social Determinants of Health: Claire Pomeroy at TEDxUCDavis. https://www. youtube.com/watch?v=qykD-2AXKIU. Accessed September 1, 2017.
- Northwell Health. Office of Community and Public Health. Community Service Plans. https://www.northwell.edu/education-and-resources/communityengagement/community-health-investment/needs-assessment-community-healthimplementation-plan
- 22. Bloom BS. Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain. New York: David McKay Company; 1956.
- Thomas PA, Kern DE, Hughes MT, Chen BY, eds. Curriculum Development for Medical Education: A Six-Step Approach. 3rd ed. Baltimore, MD: Johns Hopkins University Press; 2016.
- Aghera A, Emery M, Bounds R, et al. A randomized trial of SMART goal enhanced debriefing after simulation to promote educational actions. West J Emerg Med. 2018;19:112-120.
- Kirkpatrick DL, Kirkpatrick JD. Evaluating Training Programs: The Four Levels. 3rd ed. San Francisco, CA: Berrett-Koehler Publishers; 2006.
- Healthy People 2020. Social Determinants of Health. https://www.healthypeople. gov/2020/topics-objectives/topic/social-determinants-of-health. Accessed June 1, 2018.
- Accreditation Council for Graduate Medical Education. Common Program Requirements (Residency). Section I-IV. https://www.acgme.org/What-We-Do/Accreditation/Common-Program-Requirements
- Klein M, Beck A. Social determinants of health education: a call to action. *Med.* 2018;93:149-150.