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ORIGINAL CONTRIBUTION

Social care practices and perspectives among U.S. pediatric emergency medicine fellowship programs

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Abstract

Background: The emergence of social emergency medicine—the incorporation of social context into the structure and practice of emergency care—has brought forth greater embracement of the social determinants of health by medical professionals, yet workforce practices and training have remained elusive. Academic literature particularly in the field of pediatric emergency medicine (PEM) fellowship training is lacking relative to general pediatrics and adult emergency medicine.

Methods: The primary objective of this study was to assess the social care knowledge, perspectives, and training of PEM program directors (PDs) and fellows across a national cross-sectional sample. A secondary aim was to uncover key actionable areas for the development of social care curricula in PEM training programs. A social care practices assessment tool was developed via snowball sampling interviews among clinician researcher experts and disseminated to PEM PDs and fellows nationally in accredited academic PEM training institutions.

Results: A total of 153 participants—44 PDs (49% response rate) and 109 fellows (28%)—completed the assessment tool. Responses among PDs and fellows were highly concordant. Only 12% reported regular use of a standardized social needs screening tool. The majority felt unprepared to assist families with social needs and less than half felt comfortable talking to families about social need. At the same time, social care was highly valued by 73% of participants. All participants felt that providing social care training during PEM fellowship would be beneficial. PDs and fellows identified five priority areas for PEM curricular development.

Conclusions: PEM PDs and fellows have an overall favorable perception of social care yet report significant deficits in current practice organization and training. This study is part of a larger national collaborative advocacy project to organize and advance social care delivery across academic PEM training institutions through evidence-based approaches, best practices, and expert consensus.

KEYWORDS
pediatric emergency medicine fellowship, social care, social determinants of health

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INTRODUCTION

Increased social needs screening in emergency departments (ED) is supported by recent literature reporting high rates of unmet social needs, their health and wellness impact, and numerous policy statements on poverty by the American Academy of Pediatrics (AAP).[1-13] Pediatric emergency physicians report a high perceived value of social needs screening and intervention, yet few feel prepared to address this need largely due to lack of time and training.[11,14,15] Rather than looking to advocacy efforts provided by individual health care workers, there is now a call for the integration of social care—services that address health-related social risk factors and social needs—into clinical practice and training at the health care system level.[16]

In the area of systems-based practice (section IV.B.1.f), the Accreditation Council for Graduate Medical Education (ACGME) requires that pediatric emergency medicine (PEM) fellows demonstrate an awareness and responsiveness to the social context of health as well as "the ability to call effectively on other resources to provide optimal health care."[17] Currently, there is a scarcity of data on not only PEM fellow but also PEM program director (PD) perspectives on social care training in fellowship. Expansion of research in this underaddressed area may help direct curricula development, assessment tools, and collaboration across PEM fellowship programs. Outside of PEM, pediatric and emergency medicine residency programs separately have demonstrated progress in social care curricular methods, including the integration of trainee needs assessments,[18] reflection journals,[18,19] poverty simulations,[20,21] community health worker partnerships,[18,22] social history–taking video vignettes,[23] and social care–themed didactic conferences.[22] Training of PEM fellows as health care leaders, community advocates, and members of an interprofessional team represents a key opportunity in a health equity–centered process toward addressing unmet social needs in the ED.

The purpose of this study was to characterize the current trends of social care training and practice across academic PEM programs in the United States. The primary objective of the study was to describe and identify differences in social care knowledge, perspectives, and training of PEM fellows and PDs. A secondary objective was to recognize key actionable areas for the development of PEM fellow curricula and ED-wide social care interventions.

METHODS

Survey design

Survey questions were designed iteratively based on the social care published literature and targeted interviews with individual field experts. These individuals were clinician researchers in the fields of general pediatrics, emergency medicine, and PEM who had extensively published on social care interventions and/or had contributed to national health surveys; directors of community and public health associations on social care and social intervention research and consulting networks; PEM fellowship PDs in academic centers leading social care interventions; and leaders from medical professional associations with published statements on social care advocacy (the American Academy of Pediatrics [AAP]). Further experts were recruited based on the recommendation of an initial group of 12 in snowball sampling fashion. A total of 17 experts agreed to take part in semistructured interviews lasting 60–90 min. Participants were asked to share information on the organizational strategies, successes, and challenges of local social care programs conducted with health care–affiliated stakeholders. Participants provided specific feedback on survey item content and structure as well as ability to evaluate overall primary objectives. Interviews were stopped when saturation of social care strategies and survey feedback were reached as determined by two nonblinded study researchers, with consensus among experts on the appropriateness of individual survey items maximizing the survey content validity.

The final survey was piloted among a group of PEM fellows and PDs (n = 8) distinct from the main study group to evaluate readability, relevance to topic, and respondent burden. Minor edits were made based on comments, but overall content remained unchanged with overall pilot participants indicating positive face validity of the measurement instrument. The survey was then independently reviewed by the national PEM-PD Survey Committee of PEM faculty members with minor revision and then disseminated via the national PEM-PD listserv to academic PEM centers. This study was exempt from review by the primary author's institutional review board.

Survey items

Social need was defined as a barrier patients and families may face in areas including food insecurity, housing insecurity, transportation, public benefits, paying utilities, immigration assistance, child services/childcare, and parent education/job training. *Social care* was defined as the set of services that identify and address these needs. Survey items fell under four main domains: knowledge/skills, perspectives, training, and education in social care. The final 28-item survey is included in Appendix S1. Basic demographic information was also collected.

Knowledge content assessed participants' understanding of how social needs were identified and referrals made in their institution. Participants were asked about their own practices around social care in the ED and their ability to assist families with social care if a social worker was unavailable. *Perspectives* content assessed comfort in performing social needs screening, importance of social care in the ED, barriers to social care, and opinion in social care delivery. *Training* content assessed prior education in social determinants of health (SDH) and social needs screening, including training prior to beginning fellowship (i.e., during medical school or residency). Finally, *education in social care* items asked participants to select specific social care educational topics that were felt to be beneficial in fellowship and rank the importance of social care training in fellowship.

Study population

All PEM fellowship PDs in the United States were eligible to participate in the online survey. PDs were asked to forward the survey to all of their current fellows. The survey was disseminated to PDs via three weekly recruitment emails in August 2021. The data collection period lasted a total of 4 weeks. Data collection was via anonymous electronic survey on REDCap (v11.0.3).

Data analysis

Frequency distributions were calculated for the overall sample and by clinical position (PEM fellow and PD). Likert scaled responses for select survey items were collapsed from originally five into three categories (i.e., positive, neutral, and negative response) to facilitate analysis. Chi-square analyses or Fisher's exact tests were conducted as appropriate to assess differences in social care knowledge, perspectives, and training between fellows and PDs. Missing data in this sample were minimal and assumed to be missing completely at random. All analyses were conducted using SAS software Version 9.4 of the SAS System for Windows.

RESULTS

A total national sample of 153/472 (32%) contacted participants completed the online survey. Of these, 44/89 (49%) PDs participated, and 109/383 (28%) PEM fellows participated in the study. Demographic characteristics of participants are displayed in Table 1.

Social care knowledge

Only one-third of participants reported having a systematic workflow in their ED for addressing patient/family social needs, defined as an organized approach to consistently screen and/or refer the majority of patients seen in the ED (Table 2). PEM PDs and fellows reported that current social needs screening was performed by nurses (41%) and community navigator or social worker (39%). However, 35% of participants did not know who performed screening in their ED. Our sample population reported that community navigators or social worker (82%) and physicians (30%) were the most common groups to make referrals to community resources in the ED. A moderate amount of participants (39%) reported performing no screening activity during their last five shifts. Of the 61% who performed any amount of screening, only 20% reported using a standardized screening tool.

The majority of participants (74%) reported 24-hour access to a social worker or navigator in the ED. Participants were asked if they could assist families with any of six specific referrals if they did not have a social worker or navigator available, and in total among fellows and PDs, 63%–88% reported they could not. There was some

TABLE 1 Frequency distribution of demographics among PEM fellows and PDs, total and by position type

	Overall	Fellow	PD
National population invited to participate	472	383	89
Participating national sample	153 (32)	109 (28)	44 (49)
Demographics			
Age group (years)			
26 to 35	99 (65)	98 (90)	1 (2)
36 to 45	35 (23)	11 (10)	24 (55)
46 to 55	14 (9)	0 (0.0)	14 (32)
>55	5 (3)	0 (0.0)	5 (11)
Gender			
Male	50 (33)	33 (30)	17 (39)
Female	102 (67)	76 (70)	26 (59)
Prefer not to say	1 (1)	0 (0)	1 (2)
Race/ethnicity			
Asian or Asian American	20 (13)	14 (13)	6 (14)
Black or African American	5 (3)	4 (4)	1 (2)
Hispanic or Latinx	6 (4)	3 (3)	3 (7)
Middle Eastern or North African	5 (3)	5 (5)	0 (0)
Non-Hispanic White	107 (70)	76 (70)	31 (70)
Two or more races	5 (3)	5 (5)	0 (0)
Prefer not to say	5 (3)	2 (2)	3 (7)
Region			
West/Northwest	32 (21)	26 (24)	6 (14)
Midwest/Central	45 (29)	30 (28)	15 (34)
South/Southeast	36 (24)	26 (24)	10 (23)
East/Northeast	40 (26)	27 (25)	13 (30)
Fellow only			
Fellow year			
First	–	42 (39)	–
Second	–	32 (29)	–
≥Third	–	34 (31)	–
Prefer not to say	–	1 (1)	–
Fellow core training			
Emergency medicine	–	11 (10)	–
Pediatrics	–	98 (90)	–
PD only			
Clinical experience posttraining (years)			
≤10	–	–	20 (45)
11 to 15	–	–	12 (27)
16 to 20	–	–	6 (14)
>20	–	–	6 (14)
Years of employment at current institution			
≤4	–	–	6 (14)
5–10	–	–	18 (41)
>10	–	–	20 (46)

Note: Data are reported as *n* (%).

Abbreviations: PD, program director; PEM, pediatric emergency medicine.

TABLE 2 Social care knowledge among PEM fellows and PDs, total and by position type

Social care knowledge	Total	Fellow	PD	p-value
Systematic workflow for ED social needs screening/referral				<0.001
Yes	51 (33)	36 (33)	15 (34)	
No	50 (33)	26 (24)	24 (55)	
Do not know	52 (34)	47 (43)	5 (11)	
Screens for social needs in the ED[a]				—
Physician	51 (33)	33 (30)	18 (41)	
Nurse practitioner or physician assistant	30 (20)	18 (17)	12 (27)	
Nurse	62 (41)	38 (35)	24 (55)	
Community navigator or social worker	59 (39)	40 (37)	19 (43)	
Ancillary staff	18 (12)	14 (13)	4 (9)	
Self-screened	6 (4)	6 (6)	0 (0)	
Do not know	53 (35)	48 (44)	5 (11)	
None of the above	17 (11)	8 (7)	9 (20)	
Makes community referrals in the ED[a]				—
Physician	46 (30)	31 (28)	15 (34)	
Nurse practitioner or physician assistant	30 (20)	21 (19)	9 (21)	
Nurse	15 (10)	8 (7)	7 (16)	
Community navigator or social worker	125 (82)	86 (79)	39 (89)	
Ancillary staff	4 (3)	4 (4)	0 (0)	
Automated referral platform	5 (3)	2 (2)	3 (7)	
Do not know	23 (15)	22 (20)	1 (2)	
None of the above	4 (3)	4 (4)	0 (0)	
Percentage of patients screened for social needs in the last five shifts				—
0%	60 (39)	44 (40)	16 (36)	
1%–25%	80 (52)	56 (51)	24 (55)	
26%–75%	10 (7)	6 (6)	4 (9)	
51%–75%	3 (2)	3 (3)	0 (0)	
76%–100%	0 (0)	0 (0)	0 (0)	
Frequency of using standardized screening tool to assess social needs[b]				0.69
Always	2 (2)	1 (2)	1 (4)	
Sometimes	17 (18)	13 (20)	4 (14)	
Never	74 (80)	51 (78)	23 (82)	
24-h access to social worker				0.76
Yes	113 (74)	79 (72)	34 (77)	
No	33 (22)	24 (22)	9 (20)	
Do not know	7 (5)	6 (6)	1 (2)	
Able to identify local available resources for:				
Housing insecurity	31 (20)	21 (19)	10 (24)	0.63
Food insecurity	56 (37)	41 (38)	15 (34)	0.68
Accessing public benefits	31 (20)	23 (21)	8 (18)	0.68
Assistance paying utilities	19 (12)	15 (14)	4 (9)	0.43
Transportation	43 (28)	30 (28)	13 (30)	0.80
Immigration assistance	18 (12)	15 (14)	3 (7)	0.23
ED equipped with community referral resource list				0.03
Yes	32 (21)	21 (19)	11 (25)	
No	25 (16)	13 (12)	12 (27)	
Do not know	96 (63)	75 (69)	21 (48)	
Frequency of using resource list to refer patients/families[b]				0.47
Always	2 (6)	1 (5)	1 (9)	
Sometimes	18 (56)	11 (52)	7 (64)	
Never	12 (38)	9 (43)	3 (27)	

Note: Data are reported as *n* (%).

Abbreviations: PD, program director; PEM, pediatric emergency medicine.

[a]Variable is based on check all that apply and, therefore, the sum % of response is larger than the sample of the population.

[b]Subquestion with smaller *n* than main question stem.

variability depending on the type of referral—for example, 37% of fellows and PDs did know how to help families with food insecurity, compared to 12% knowing how to help families needing immigration status assistance. While 25% of PDs reported having a community resource list available in their ED, overall most participants (63%) did not know if such a list existed (69% fellows, 48% of PDs, p = 0.03).

Social care perspectives

Participants were then asked who they felt was best positioned to ideally *perform* social needs screening and referral and were allowed to select more than one group to accommodate a range of perspectives. Community navigator or social worker (62%), nurses (48%), and self-screening modalities (48%) were perceived by PEM PDs and fellows as the groups best positioned to perform screening in the ED, with physicians composing only a minority (18%; Table 3). As seen in Table 3, participants reported a range of comfort in asking patients and families about their social needs: 46% reported comfort, 23% were neutral, and 31% were uncomfortable asking these questions. There was no statistical difference between fellows and PDs in comfort level. However, when asked *why* they would not screen patients for social needs, by far the most common response was not having enough time to perform screening (45%) followed by limited training (16%).

TABLE 3 Social care perspectives among PEM fellows and PDs, total and by position type

Social care perspectives	Total	Fellow	PD	p-value
Best positioned to perform screening in the ED[a]				—
Physician	28 (18)	20 (18)	8 (18)	
Nurse practitioner or physician assistant	23 (15)	14 (13)	9 (21)	
Nurse	73 (48)	47 (43)	26 (59)	
Community navigator or social worker	95 (62)	65 (60)	30 (68)	
Ancillary staff	49 (32)	44 (40)	5 (11)	
Self-screened	74 (48)	56 (51)	18 (41)	
Do not know	12 (8)	7 (6)	5 (11)	
Best positioned to make referrals in the ED[a]				—
Physician	30 (20)	23 (21)	7 (16)	
Nurse practitioner or physician assistant	23 (15)	19 (17)	4 (9)	
Nurse	22 (14)	18 (17)	4 (9)	
Community navigator or social worker	140 (92)	98 (90)	42 (95)	
Ancillary staff	14 (9)	12 (11)	2 (5)	
Automated referral platform	46 (30)	39 (36)	7 (16)	
Do not know	5 (3)	5 (5)	0 (0)	
Comfort asking patients/families questions on social needs[b]				0.82
Very comfortable/comfortable	71 (47)	51 (47)	20 (45)	
Neutral	35 (23)	26 (24)	9 (20)	
Somewhat uncomfortable/very uncomfortable	47 (31)	32 (29)	15 (34)	
Importance to provide social care in the ED[b]				0.43
Very important/important	112 (73)	83 (76)	29 (66)	
Neutral	17 (11)	11 (10)	6 (14)	
Somewhat important/not at all important	24 (16)	15 (14)	9 (20)	
Reasons to forgo asking patients about social needs				—
Someone else does the screening	23 (15)	17 (16)	6 (14)	
Patients not interested	0 (0)	0 (0)	0 (0)	
Worry about stigmatizing patient/family	14 (9)	9 (8)	5 (11)	
Not enough time to screen	69 (45)	52 (48)	17 (39)	
Not well trained to screen	24 (16)	17 (16)	7 (16)	
Not relevant to ED visit	6 (4)	3 (3)	3 (7)	
Worry about jeopardizing provider–patient relationship	4 (3)	2 (2)	2 (5)	
No community social services/resources available	4 (3)	2 (2)	2 (5)	
Other	9 (6)	7 (6)	2 (5)	

Note: Data are reported as *n* (%).

Abbreviations: PD, program director; PEM, pediatric emergency medicine.

[a]Variable is based on check all that apply and therefore, the sum % of response is larger than the sample of the population.

[b]Likert scale variables collapsed into three categories.

The group best positioned to generate ED-based referrals according to PEM PDs and fellows was community navigators or social worker (92%), with ancillary staff (registrants and medical assistants, 9%) being the least favorable. Overall, social care in the ED was felt to be of high value with 73% of participants viewing social care as a very important or important aspect of clinical care.

Social care training

The majority of both fellows (80%) and PDs (70%) felt unprepared to assist families with social needs (Table 4). In contrast to PDs, most fellows reported having previously received training in SDH (52% vs 82%, respectively, $p < 0.001$). Of those fellows who received

training, most occurred in medical school or residency, while among PDs, most reported receiving training as faculty members. Likewise, a large number of fellows reported receiving training in social needs screening and referral for social need (46%) compared to PDs (7%, $p < 0.001$), the majority of which took place during residency.

Forty-one percent of PDs reported that their current social care training model addressed education in local social care resources as well as broad social care issues. However, 34% of participating PDs reported that there was no current curricular material on social care in their fellowship programs. All participants felt that providing social care training during PEM fellowship would be beneficial, with 52% feeling that it would be very or extremely beneficial.

Education in social care

Fellows and PDs reported similar priorities for social care training in fellowship (Table 5). The most popular topics for fellowship

TABLE 4 Social care training among PEM fellows and PDs, total and by position type

Social care training	Total	Fellow	PD	p-value
Prepared to assist families with social needs				—
Very prepared/prepared	12 (8)	8 (7)	4 (9)	
Neutral	23 (15)	14 (13)	9 (20)	
Unprepared/very unprepared	118 (77)	87 (80)	31 (70)	
Previously received training on SDH				<0.001
Yes	112 (73)	89 (82)	23 (52)	
No	33 (22)	14 (13)	19 (43)	
Do not remember	8 (5)	6 (6)	2 (5)	
When received training on SDH[a,b]				—
Medical school	77 (69)	73 (82)	4 (17)	
Residency	88 (79)	82 (92)	6 (26)	
Fellowship	31 (28)	23 (26)	8 (35)	
Faculty training	18 (16)	1 (1)	17 (74)	
Self-directed	31 (28)	24 (27)	7 (30)	
Other	1 (1)	1 (1)	0 (0)	
Previously received training in screening for social needs				<0.001
Yes	53 (35)	50 (46)	3 (7)	
No	79 (52)	47 (43)	32 (73)	
Do not remember	21 (14)	12 (11)	9 (20)	
When received training in screening for social needs[a,b]				—
Medical school	24 (45)	24 (48)	0 (0)	
Residency	45 (85)	45 (90)	0 (0)	
Fellowship	10 (19)	8 (16)	1 (33)	
Faculty training	4 (4)	1 (2)	3 (100)	
Self-directed	5 (9)	5 (10)	0 (0)	
Other	1 (2)	1 (2)	0 (0)	
Education fellows received (PD only)[a,b]				—
Evidence-based social care screening tools	—	—	5 (11)	
Local social care resources	—	—	18 (41)	
National social care resources	—	—	3 (7)	
Local social care challenges	—	—	9 (20)	
Review of broad social care needs/challenges	—	—	18 (41)	
Other	—	—	1 (2)	
None	—	—	15 (34)	

Note: Data are reported as *n* (%).

Abbreviations: PD, program director; PEM, pediatric emergency medicine.

[a]Variable is based on check all that apply and, therefore, the sum % of response is larger than the sample of the population.

[b]Subquestion with smaller *n* than main question stem.

education were local social care resources (90%), local social care challenges (70%), and access to evidence-based social care screening tools (68%). Participants were also asked about their individual interest in various social care training topics. Overall the top five were model for integrating social care into clinical logistics (57%), guide on how to document local existing resources (56%), access to standardized pediatric social needs screening tools (54%), access to social care evidence/resource library (48%), and communication skills for asking sensitive questions (48%).

DISCUSSION

The intersection of social justice with emergency medicine in both adult and pediatric literature has gained widespread attention, backed by moral and practical arguments on the ED's integral role in community health and social risk navigation.[3,15,24-26] The ED—"the window into a community"—is the safety net health access point for those without a primary care provider, the uninsured, the unhoused, and the impoverished as well as those with limited health care literacy and those who have been exposed to violent crimes.[26,27] This study found a high perceived value of social care practice and social care training shared among PEM fellows and PDs, while the majority of both groups acknowledged poor preparedness and/or training to assist families with social needs. This aligns with prior literature in both pediatrics and emergency medicine.[8,9,14,15,28,29] This study utilizes a needs assessment to further interrogate both *how* PEM physicians believe social care should be integrated into the ED workflow as well as *what training* they believe PEM physicians need to provide effective social care in the ED, a prompt to PEM PDs for social care curricular development during fellowship training.

Findings from this study shed insight on the potential impact of integrating social care into organizational team–based practice rather than an additional clinical duty of the individual medical practitioner. The survey noted discrepancy between reported current screening and referral practices and preferred (or ideal) practices. Physicians were reported as one of the most common groups currently performing referrals, yet both fellows and PDs believed they were poorly positioned to do so. Nearly half of fellows and PDs indicated a preference for self-screening of social needs and an even larger proportion in favor of community navigator or social worker for screening *and* referral duties. Notably, while only 4% of participants report self-screening as their hospital's current practice, 48% believed that this should be standard practice. Furthermore, 30% were in favor of an automated electronic referral platform for social care. Over half of the PDs reported having no current systematic workflow for social needs screening in their ED. Together, these findings demonstrate a discord between existing systems and providers' perceived value of social care delivery in the ED. It is argued in the literature that pediatrics must evolve to address upstream care—care that addresses underlying social risk through strategic partnerships with community organizations—to help avoid potential adverse childhood events.[30-33] A crucial step in that evolution is better equipping the ED to address patient social needs in an organized fashion of systematically screening and referring in coordination with community resources.

Among those physicians who reported personally performing social needs screening, very few (2%) consistently utilized standardized screening tools such as the Two-item Food Insecurity Screen, iHELP, PREPARE, SEEK, WE CARE, or institution-specific tool. Lack of time and training were the most commonly cited barriers to performing social needs assessments. The findings of this study also draw attention to the challenges faced by medical professionals—from the level of trainee to faculty—when adding social care as another type of individual clinical duty. It is not surprising that this may result in inconsistent social care implementation, specifically in the uneven use of evidence-based tools for screening and referral to appropriate resources. While there may be variable beliefs about physicians' responsibility for social needs screening, only one of five study participants felt that physicians are well positioned to perform screening or referral services. This may reflect a growing understanding of the real limitations physicians face in providing ED-based social care while also providing acute medical care and how best to tailor resources to meet patient and family needs.

Organizational readiness for social needs screening, including wide-scale training of interprofessional teams, utilization of training modules, and strategic workflow design have been advocated as a more durable, pragmatic, and ethically sound approach to ED-based social care.[33-35] However, even a "perfect" social care system in the ED may fail at times, and most pediatric EDs remain without an integrated social care system as evidenced by our study. Although fellows were more likely to have received formal training in SDH or social needs screening and referral compared to PDs, both groups expressed very similar rates of low comfort with and high value of social care practice. This finding speaks to the growing need to not only train pediatric emergency physicians but also to develop robust systems integrated into ED workflow to assist families with social need. Over 20% of participants indicated that there were times in their ED when they would not have access to a social worker or navigator, which would leave physicians to perform their own social care services. Similar to being able to handle specialized patient medical needs when a subspecialist is not immediately available, PEM physicians require, at minimum, a baseline knowledge regarding social care and the impact of SDH on their patients.

While PEM PD and fellow responses were convergent in the domains of knowledge, perspectives, and education in social care, they diverged in regard to prior training in SDH and social needs screening and referral. This study found a relative lack of formal education during fellowship, a variable level of comfort with social needs screening, and a lack of preparedness to perform social care referrals among *both* fellows and PDs. Most fellows acknowledged obtaining training in SDH in medical school or residency (82% and 92%, respectively); however, only a minority (26%) reported training during fellowship. PDs were less likely to have received this training, and if they did, it was frequently via faculty institutional training (74%). This suggests an ongoing dynamic in SDH education, such that most

TABLE 5 Education in social care among PEM fellows and PDs, total and by position type

Education in social care	Total	Fellow	PD	p-value
Beneficial for fellowship training				—
Extremely beneficial/very beneficial	80 (52)	58 (53)	22 (50)	
Moderately beneficial/slightly beneficial	73 (48)	51 (47)	22 (50)	
Not beneficial at all	0 (0)	0 (0)	0 (0)	
Training topics believed to be useful for PEM fellowship[a]				—
Evidence-based social care screening tools	104 (68)	73 (67)	31 (70)	
Local social care resources	138 (90)	100 (92)	38 (86)	
National social care resources	71 (46)	53 (49)	18 (41)	
Local social care challenges	105 (70)	73 (67)	32 (73)	
Review of broad social care needs/challenges	46 (30)	29 (27)	17 (39)	
Other	2 (1)	1 (1)	1 (2)	
Social care training topics[a]				—
Access to social care evidence/resource library	73 (48)	60 (55)	13 (30)	
Guide on how to document local existing resources	85 (56)	60 (55)	25 (57)	
Communication skills for asking sensitive questions	65 (42)	47 (43)	18 (41)	
Access to standardized pediatric social needs screening tools	82 (54)	64 (59)	18 (41)	
Recommendations for alliance-building with community resources	48 (31)	36 (33)	12 (27)	
Model for integrating social care into clinical logistics	87 (57)	61 (56)	26 (59)	
Technical guide for building social needs screening in EMR	49 (32)	40 (37)	9 (20)	
Training guide for social care navigators	48 (31)	39 (36)	9 (20)	
Funding options for startup and maintenance of social care services	41 (27)	27 (25)	14 (32)	
Translatable research network for implementation of social care	38 (25)	36 (33)	2 (5)	
Other	0 (0)	0 (0)	0 (0)	
None	7 (5)	5 (5)	2 (5)	

Note: Data are reported as *n* (%).

Abbreviations: EMR, electronic medical record; PD, program director; PEM, pediatric emergency medicine.

[a]Variable is based on check all that apply and, therefore, the sum % of response is larger than the sample of the population.

fellows can be expected to have SDH training prior to, but not necessarily during, fellowship. Innovative educational interventions and curricular development in pediatric and emergency medicine residency programs back this finding.[18-23] More importantly, our research suggest that current training models do not necessarily lead to preparedness for social care delivery—a call for more practical, targeted fellowship education and training.

There was greater variation among fellows' training in social care screening, suggesting a ripe area for curricular development. Over one-third of PDs reported no current social care education offered in their academic programs. The most popular areas of social care education found in this study may help guide PEM fellowship programs in developing social care curricula. While PEM fellow and PD training perspectives on social care have not been widely studied, PEM fellow preferred educational methods have been described in a limited single-center sample.[28] PEM fellow and PD-specific curricular topic interests as noted in Table 5 reflect growing trends documented in contemporary literature, placing emphasis on advancing social care by means of building a workforce to integrate social care into health care delivery, aided by digital infrastructure and community partnership.[16,30]

LIMITATIONS

This study utilized a convenience sampling design (i.e., nonrandomized sample). Thus, the main limitation is broad generalization of outcomes to all academic pediatric ED faculty and PEM fellows. Nationwide, 49% of eligible PDs and 28% of fellows participated, which may induce selection bias (i.e., unaccounted confounding

factors that influenced participation in this study). Moreover, the sampling design may lead to potential overestimation of the findings compared to the general PD and PEM fellow population. Generalizability of our geographically and demographically diverse national sample (Table 1) to the larger population is supported by a consistency across numerous contemporary studies demonstrating similar findings of a perceived high value, low preparedness in social care among emergency medicine. and general pediatric faculty and trainee physicians alike.[7,14,15,25-29,36-40]

Institution name was not collected to protect respondent privacy, limiting comparisons between participating PDs and fellows in the same academic program. Social workers and nurses were not included and therefore the survey does not completely assess the scope of ED services and potential information gaps between PEM physicians and other ED staff. Our findings are purely descriptive among physicians in academic PEM institutions, limiting conclusions on factors related to increased knowledge, perspectives, and training of social needs. The survey may be implemented more widely among emergency physicians and faculty to more broadly evaluate social care practice and perspectives. This is one of the first studies to assess social care practices and perspectives among PEM PDs and fellows nationally, with an expanded sample size compared to a previous study among PEM fellows alone at a single institution.[28]

CONCLUSIONS

This national study demonstrates a clear alignment between pediatric emergency medicine fellows and program directors, with an overall favorable perception of social care countered by deficits in organization and training. These findings are in line with national trends and contemporary literature on the impact and proposed design of social care as a complement to routine medical care. Overall, EDs would benefit from having social care systematically integrated into medical care and this study outlines priority areas of education in social care shared by both fellows and program directors. The next step in the authors' advocacy work is to perform subanalyses of the national survey data on organizational and training factors associated with provider social care perception and practices. Organization of a multidisciplinary task force is under way with the goal to develop a consensus-guided social care training toolkit on best practices for the pediatric emergency medicine workforce.

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CONFLICT OF INTEREST

The authors have no potential conflicts to disclose.

AUTHOR CONTRIBUTIONS

Dr. Assaf conceptualized and designed the study, developed and piloted the survey, led acquisition of data, and drafted and revised the manuscript. Dr. Barber Doucet designed the study, developed and piloted the survey, and revised the manuscript. Mr. Assaf led data curation, executed the statistical analyses and interpretation of data, and drafted and revised the manuscript. Dr. Graff contributed to the design and implementation of the research, was involved in planning and supervision of the work, and assisted in the overall analysis/interpretation and to the critical revisions of the manuscript. All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work.

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SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

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