

Identification of Caregiver-Reported Social Risk Factors in Hospitalized Children

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OBJECTIVES: Although health systems are increasingly moving toward addressing social determinants of health, social risk screening for hospitalized children is largely unexplored. We sought to determine if inpatient screening was feasible and describe the prevalence of social risk among children and caregivers, with special attention given to children with chronic conditions.

METHODS: Caregivers of pediatric patients on the hospitalist service at a children's hospital in the Pacific Northwest completed a social risk survey in 2017. This survey was used to capture items related to caregiver demographics; socioeconomic, psychosocial, and household risks; and adverse childhood experiences (ACEs). Charts were reviewed for child demographics and medical complexity. Results were tabulated as frequency distributions, and analyses compared the association of risk factors with a child's medical complexity by using χ^2 tests.

RESULTS: A total of 265 out of 304 (87%) caregivers consented to participate. One in 3 families endorsed markers of financial stress (eg, difficulty paying for food, rent, or utilities). Forty percent experienced medical bill or insurance troubles. Caregiver mental health concerns were prevalent, affecting over one-third of all respondents. ACEs were also common, with 38% of children having at least 1 ACE. The presence of any ACE was more likely for children with chronic conditions than those without.

CONCLUSIONS: We found that social risk screening in the inpatient setting was feasible; social risk was uniformly common and did not disproportionately affect those with chronic diseases. Knowing the prevalence of social risk may assist in appropriate alignment of interventions tiered by social complexity.

ABSTRACT

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Social risk factors, such as unstable housing, food insecurity, and unemployment and underemployment, have been linked to poor health outcomes and premature death.^{1–6} As a result, both pediatric and adult health systems are increasingly moving toward addressing social risk within the context of clinical care to improve health outcomes and quality of care and optimize health care delivery.^{7–14} Children, particularly those with chronic and complex medical conditions, have less agency than adults to modify social risk and, consequently, are more vulnerable to the impact of social determinants of health. The ability to effectively intervene, however, relies on the accurate detection and ongoing visibility of social risk across the spectrum of health care delivery systems.¹⁵ Given the potential value of identifying and intervening on modifiable factors, it is imperative that the field explores the feasibility of expanding social risk screening across informants (eg, caregivers) and settings (eg, inpatient).

Increased attention to social factors has resulted in improved understanding of both social risk prevalence and magnitude, but many studies rely on methods with notable shortcomings. Current approaches to understanding social risk are only as valuable as the processes used to systematically gather and summarize such information, which commonly involve the electronic health record (EHR). Social risk data in the EHR, if available, are often hidden in problem lists, social histories, and diagnoses.^{16,17} Clinicians and researchers relying on the EHR may miss important aspects of pediatric social risk. Given these shortcomings, there may be benefits to understanding pediatric social risk based on caregiver report.

Although screening for caregiver-reported social risk factors in pediatric patients is becoming more prevalent in primary care clinics and is being refined for disease-specific conditions,^{6,18–28} screening for social risk in hospitalized children is largely unaddressed.^{29–31} Potential contributing factors to this scarcity of screening include a keen focus on meeting acute medical needs and a tendency to maintain a high

census that may overwhelm patient care resources (eg, case managers, social workers, and behavioral health providers) even when social risk factors are identified.³⁰ Despite these challenges, inpatient social risk screening may be particularly valuable because these children likely represent a vulnerable group. Pediatric inpatient services are caring for a growing population of children with chronic or complex medical conditions that require frequent, lengthy, and costly hospitalizations and whose families bear high burdens of financial and psychosocial stress.^{32,33} Indeed, the hospitalization of any child may be a sign of overall poor health, inadequate access to preventive care, difficulty with disease management, and new health care costs.³⁴ Thus, a failure to screen for social risk in inpatient families during a time in which they are a “captive” audience, potentially available for both assessment and intervention, may be a lost opportunity to better understand the weight and scope of social risks on health outcomes.

The objective in this study was to develop and pilot a caregiver-reported social risk survey in the pediatric inpatient setting to better understand the lived experiences of children and their families, with the long-term goal of using the findings to inform future interventions. We sought to (1) determine if screening was feasible (ie, whether caregivers would be open to screening that was focused on potentially sensitive issues while inpatient) and (2) describe the prevalence of social risk in children and caregivers in an inpatient setting, with special attention given to children with chronic and complex medical conditions.

METHODS

Study Design, Participants, and Eligibility Criteria

This was a cross-sectional study of child-caregiver dyads admitted to a pediatric hospitalist service in a children's hospital in the Pacific Northwest during July to December 2017. Eligibility criteria included parents or legal guardians 16 years or older with English or Spanish proficiency and who accompanied an admitted child <18 years of age. Those excluded were caregivers of

children in state custody or discharged to another facility (rehabilitation, psychiatric hospital, etc).

Setting

This hospital is an academic children's hospital with a catchment area that includes 4 states in the Pacific Northwest.³⁵ The pediatric hospitalist service is staffed by pediatric hospitalists, residents, and medical students; has access to a case manager and social worker; and tallies an average daily census of 15 patients and 1300 to 1500 admissions per year. The service typically includes children with chronic medical conditions, unless managed by other inpatient teams (eg, surgical subspecialties, cardiology, renal, gastrointestinal, and endocrine specialties).

Study Procedures

Child-caregiver dyads meeting eligibility criteria were identified by the treating physician and study team, using the active inpatient hospitalist patient census. Dyads were approached consecutively for daily enrollment by trained research assistants (RAs) Monday through Sunday, on the basis of study team availability. Medical team providers were not involved in the consent or administration of the survey. Caregivers provided signed consent to participate, which included authorizing an EHR review of their child's chart and completing a self-administered social risk questionnaire either electronically or by paper (per caregiver preference) before discharge. The RA then left the computer or paper survey with the caregiver. If >1 caregiver was present, only the self-identified primary caregiver was surveyed. The RA returned at a predetermined time to retrieve the computer or paper survey. All participants received a \$5 gift card after survey completion. For caregivers who indicated on their survey a desire to consult social work, this was provided per institutional practice. All data were stored in the institutional Research Electronic Data Capture (REDCap). Child EHRs were reviewed after discharge for additional child-level demographic variables and medical. Child medical complexity was assigned by using the Pediatric Medical Complexity Algorithm

(version 3.0) on the basis of *International Classification of Diseases, Ninth Revision* and *10th Revision* codes on the child's problem list or discharge diagnoses.^{36,37} Medical complexity was categorized as no chronic disease, noncomplex chronic disease, and complex chronic disease (C-CD).³⁶ All study procedures were approved by the institutional review board.

Survey Development

Development of the survey was shaped by existing social screening tools from the literature, adapted for the needs of this study and population of interest.^{22,38-41} The English version of the survey instrument is available from the corresponding author on request. Respondents provided demographic information such as sex, race and ethnicity, age, and education level. Twenty-six root questions were used to capture medical and social risk factors. Items about medical factors assessed caregiver perception of child health, previous health care use (ED/Readmission in past 12 months), and care coordination, whereas social factors items assessed child and caregiver behavioral and psychological concerns, caregiver social support, and family social risk. These social factors questions were based on published items from the National Survey of Child Health,⁴² Children's HealthWatch Survey,³⁸ and social risk batteries created by Gottlieb et al²² and Harris et al.^{39,41} These items were organized into domains of common issues affecting families: socioeconomic (financial strain, housing concerns, medical bills and insurance coverage, and employment-related issues) and household (number of people in the household, caring for other children or pets, and having reliable transportation) risk. Each social risk was coded in a binary format as either 0 (negative disclosure) or 1 (positive disclosure). Items in a separate section for the child's mental health and adverse childhood experiences (ACEs)⁴⁰ were similarly coded with an additional "prefer not to answer" option. Before implementation, the survey was reviewed and edited by hospital and primary care physicians, research staff, pediatric psychologists, and parent advocates. The

survey was written for a fifth-grade reading level and available in English or Spanish.

Statistical Analysis

Feasibility of social screening was assessed by examining survey completion rates and reasons for survey refusal. Child health characteristics (caregiver-reported health,

hospitalizations in the previous 12 months, ED or urgent care visits in the previous 12 months, and hours of parental care coordination per week) were calculated as frequency distributions. Descriptive statistics were used to characterize family demographics, socioeconomic risk, household risk, and ACEs. We analyzed the

TABLE 1 Child and Caregiver Demographics (N = 249)

Characteristics	Frequency, n (%)
Child	
Age, y	
<1 ^a	79 (32)
1-4	60 (24)
5-9	41 (16)
10-14	39 (16)
15-18	30 (12)
Sex, female	119 (48)
Race or ethnicity	
White	203 (84)
Black or African American	5 (2)
Asian American	6 (2)
Native Hawaiian or other Pacific Islander	1 (<1)
American Indian or Alaska Native	3 (1)
>1 race or other	23 (10)
Hispanic or Latino ethnicity	51 (21)
Public health insurance	169 (68)
Caregiver	
Median age in years, min-max	35, 16-70
Sex, female	205 (82)
Race or ethnicity	
White	179 (75)
Black or African American	4 (2)
Asian American	9 (4)
Native Hawaiian or Pacific Islander	2 (1)
American Indian or Alaska Native	7 (3)
>1 race or other	33 (14)
Hispanic or Latino ethnicity	53 (22)
Married ^b	139 (56)
Survey language, Spanish	20 (8)
Education	
Less than high school degree	31 (13)
High school or equivalent	99 (40)
Specialized training or associate's degree	59 (24)
College degree or higher	59 (24)
Biological or adoptive parent	238 (96)

Demographics were otherwise evenly distributed among children with or without chronic disease.

^a Children younger than age 1 were more likely to not have any chronic disease ($P < .001$).

^b Caregivers of children with chronic diseases were more likely to be separated, divorced, or widowed compared with those without chronic disease ($P = .004$).

distribution of child health and social risk factors among the 3 groups defined by child medical complexity using χ^2 tests. A statistically significant P value ($P < .05$) indicated if characteristics and risk differed among all 3 medical complexity groups (ie, that at least 1 group differs from the others and medical complexity may be associated with the risk factor). All statistical analyses were performed using SAS version 9.4 (SAS Institute, Inc, Cary, NC) and Stata/IC version 15.1 (Stata Corp LLC, College Station, TX) software for Windows. Missing data were not imputed but excluded pairwise to make use of all available data.

RESULTS

Feasibility of Survey Participation

Regarding feasibility of screening inpatient families, 87% of caregivers (265 of 304) approached during the study period consented to participate. Thirty-nine caregivers declined. Most frequently captured reasons for declined participation included lack of interest in the study (21%), being “too busy” or “stressed” (15%), and discharging soon (15%). Caregivers who declined participation shared similar child demographic characteristics with

those who consented (age, sex, race and ethnicity, and insurance).

Of those consented, 10 caregivers did not complete the survey, and 6 were excluded because of changes in guardianship or discharge to another facility after enrollment. A total of 249 caregiver-child dyads were analyzed for a 94% retention rate (Supplemental Fig 1). Overall missing information was negligible: 0 to 3 responses per survey item, except for the ACEs questions, which had a range of 4 to 11 missing responses. Eight caregivers requested social worker consultation after completion of the survey.

Child and Caregiver Demographic Characteristics

Nearly one-third of children were under the age of 1 year (32%), with a range of 2 days to 17.9 years. The majority were male (52%), non-Latino (79%), and white (84%). This is largely representative of the state's demographics.⁴⁵ Most children were publicly insured (68%). Caregiver respondents were overwhelmingly female (82%), over half had a high school or less education, and 8% used Spanish language surveys. Demographics were evenly distributed

among children with or without chronic disease, except that children under age 1 were more likely to not have any chronic disease ($P < .001$), and caregivers of children with chronic diseases were more likely to be single compared with those without chronic disease ($P = .004$) (Table 1).

Child Health Characteristics

Median length of stay was 2 days; for the C-CD group, median length of stay was 4 days. The majority of children were previously healthy without chronic disease (53%). Twenty-nine percent had C-CDs, and the remainder had nonC-CDs. The most common medical diagnoses among those with chronic diseases were neurologic- (44%) and pulmonary-related (22%) conditions. Caregivers of children with C-CD spent significantly more time providing and coordinating care for their children ($P < .001$), with 53% indicating that they spend >11 hours per week on providing or coordinating care (Table 2).

Socioeconomic Risk Factors

Overall, socioeconomic risk, including financial stress, housing issues, medical insurance, and job insecurities, was

TABLE 2 Child Health Characteristics

Health Characteristics	Overall (<i>N</i> = 249)	No Chronic Disease (<i>n</i> = 133)	Noncomplex Chronic Disease (<i>n</i> = 44)	Complex and Chronic Disease (<i>n</i> = 72)	<i>P</i> ^a
General health status, <i>n</i> (%)					<.001
Not very good or poor	44 (18)	11 (8)	10 (23)	23 (32)	
Hospitalizations in previous 12 mo, <i>n</i> (%)					<.001
0	129 (52)	87 (66)	24 (55)	18 (25)	
1	67 (27)	32 (24)	14 (32)	21 (29)	
2 or more	52 (21)	13 (10)	6 (14)	33 (46)	
Visits to ED in previous 12 mo, <i>n</i> (%)					<.001
0–1	159 (64)	101 (77)	26 (59)	32 (44)	
2–4	74 (30)	27 (20)	16 (36)	31 (43)	
5 or more	15 (6)	4 (3)	2 (5)	9 (13)	
Hours per week providing or coordinating care, <i>n</i> (%)					<.001
<1 h per wk	143 (58)	112 (86)	18 (41)	13 (18)	
1–10 h per wk	44 (18)	11 (8)	13 (30)	20 (28)	
11 or more h per wk	58 (24)	7 (5)	13 (30)	38 (54)	
History or current concern for anxiety and/or depression, <i>n</i> (%)	30 (12)	10 (8)	12 (28)	8 (11)	.002

^a P value from χ^2 test of association between medical complexity and potential risk factor. Cell counts may not sum to column totals in cases of excluded nonresponse ($n = 0$ –4, except child or caregiver histories of behavioral or psychological concern, with 8 and 10 nonresponses, respectively).

common. One in 3 families endorsed at least 1 socioeconomic risk factor. Thirteen families expressed severe housing concerns, including concern for eviction, foreclosure, or homelessness. More than one-third of families struggled with paying health care bills or having health insurance coverage, and 33% of respondents indicated job-related concerns. Twelve percent of caregivers endorsed concerns in all 4 domains. Socioeconomic concerns, in general, did not disproportionately affect those with chronic disease (Table 3).

Household Social Risk Factors

Seventeen percent of caregivers had 4 or more children living in their home, and 37% had 3 or more adults in the home. More than half of the children with chronic disease had siblings with chronic conditions. Missed school days (>10) were common, particularly among those with C-CD. Over one-third of caregivers reported

experiencing their own mental health concern, and 12% reported no emotional or social support; neither of these variables was significantly related to child medical complexity (Table 4).

Adverse Childhood Events

Overall, ACEs were prevalent, with 38% of children having at least 1 ACE, and 9% having 4 or more. Children with chronic conditions were more likely to have experienced an ACE than those without ($P = .017$). Having a separated or divorced parent was the most common ACE (24%); this ACE was also highest among children with chronic diseases (32%) (Table 5).

DISCUSSION

In this study, we examined the feasibility of gathering caregiver-reported social risk and the prevalence of social risk factors on a general pediatric hospitalist service. We found that social risk screening in the

inpatient setting was highly feasible, with the vast majority of caregivers (87%) agreeing to participate. Caregivers were not only receptive to completing the survey but were also open to reporting details historically associated with stigma (eg, drug abuse or mental illness).^{44,45} Our findings are consistent with social risk prevalence demonstrated in similar populations (eg, medically vulnerable children) in other settings (eg, primary care).⁴⁶⁻⁴⁹ We identified that social risk was common and well distributed, with some meaningful differences among children with and without chronic disease, including challenges with taking time off work, difficulties with having a regular doctor for their child, and missing school.

We demonstrated that surveying all inpatient families regarding caregiver-reported social risks is feasible, demonstrated by high participation rates

TABLE 3 Prevalence of Socioeconomic Risk Factors

Socioeconomic Risk Factors	Overall (N = 249)	No Chronic Disease (n = 133)	Noncomplex Chronic Disease (n = 44)	Complex and Chronic Disease (n = 72)	P ^a
Financial stress, any, n (%)	85 (34)	39 (29)	19 (43)	27 (38)	.19
Having enough money for food	66 (27)	29 (22)	16 (36)	21 (29)	.14
Paying for utilities and services (gas, water, etc)	64 (26)	28 (21)	14 (32)	22 (31)	.20
Paying rent or mortgage	60 (24)	25 (19)	16 (36)	19 (26)	.05
Working appliances (stove, refrigerator, etc)	47 (19)	25 (19)	9 (20)	13 (18)	.95
Housing concerns, n (%)					
Infestation problems (ie, mold, insects, rats or mice)	19 (8)	9 (7)	5 (11)	5 (7)	.59
Unstable housing (ie, eviction, foreclosure, homelessness)	13 (5)	6 (5)	4 (9)	3 (4)	.44
Medical bills and insurance stress, any, n (%)	91 (37)	44 (33)	20 (45)	27 (38)	.33
Problems paying child's health care bills	54 (22)	29 (22)	10 (23)	15 (21)	.98
Issues paying other family members' health care bills	47 (19)	23 (17)	11 (25)	13 (18)	.52
Caregiver or household member without health insurance	24 (10)	14 (11)	3 (7)	7 (10)	.76
Child without health insurance in past 12 mo	18 (7)	11 (8)	3 (7)	4 (6)	.76
No regular doctor for child or other household member	16 (6)	7 (5)	8 (18)	1 (1)	.001
Employment concerns, any, n (%)	83 (33)	39 (29)	20 (45)	24 (33)	.14
Time off or changing responsibilities to care for a child	52 (21)	19 (14)	14 (32)	19 (26)	.02
Finding a job	28 (11)	15 (11)	5 (11)	8 (11)	.99
Disability interfering with work	24 (10)	10 (8)	8 (18)	6 (8)	.10
Unpaid wages, worker's compensation, discrimination, etc	11 (4)	9 (7)	1 (2)	1 (1)	.15

^a P value from χ^2 test of association between medical complexity and potential risk factor.

TABLE 4 Prevalence of Household Risk Factors

Household Risk Factors	Overall (<i>N</i> = 249)	No Chronic Disease (<i>n</i> = 133)	Noncomplex Chronic Disease (<i>n</i> = 44)	Complex and Chronic Disease (<i>n</i> = 72)	<i>P</i> ^a
No. children under age 18 in the home, <i>n</i> (%)					.21
1–3	204 (83)	108 (84)	33 (75)	63 (88)	
4 or more	41 (17)	21 (16)	11 (25)	9 (13)	
No. additional children in household with a chronic condition, <i>n</i> (%)					<.001
0	137 (56)	92 (72)	21 (49)	24 (33)	
1	85 (35)	30 (23)	16 (37)	39 (54)	
2 or more	21 (9)	6 (5)	6 (14)	9 (13)	
School-aged child missed 10 or more d of school in past year, <i>n</i> (%)	55 (53)	17 (40)	10 (42)	28 (76)	.003
No. people age 18 and older in the home, <i>n</i> (%)					.87
1–2	154 (63)	81 (63)	29 (66)	44 (61)	
3 or more	91 (37)	48 (37)	15 (34)	28 (39)	
Caregiver general health status, <i>n</i> (%)					.96
Not very good or poor	16 (6)	8 (6)	3 (7)	5 (7)	
Caregiver behavioral or psychological concern, <i>n</i> (%)					
Anxiety and/or depression	60 (25)	31 (24)	11 (26)	18 (26)	.96
ADD/ADHD, substance abuse, or other	30 (13)	16 (13)	5 (12)	9 (13)	.98
Caregiver has social or emotional support present	218 (88)	115 (86)	41 (93)	62 (86)	.46
Concerns caring for pet while child is ill, <i>n</i> (%)	23 (9)	13 (10)	3 (7)	7 (10)	.82
General issues with transportation, eg, work, grocery store, etc, <i>n</i> (%)	20 (8)	12 (9)	3 (7)	5 (7)	.80
Transportation is 100% reliable, <i>n</i> (%)	219 (88)	117 (88)	38 (86)	64 (89)	.91

ADD, attention-deficit disorder; ADHD, attention-deficit hyperactivity disorder; —, not applicable.

^a *P* value from χ^2 test of association between medical complexity and potential risk factor.

regardless of medical condition. In addition to successful screening, we were also able to capture family-level factors, including caregiver mental health and household dynamics, which relate to problems with treatment adherence and family engagement and are unlikely to be systematically captured by the EHR.^{50–52} Finally, a large percentage of families demonstrated comfort with endorsing at least 1 socioeconomic risk factor, with a relatively high overall prevalence of ACEs and mental health concerns. That could affect the postdischarge experience.⁵² Knowing that social risk so uniformly affected inpatients shows the benefits of offering screening to all patients to capture the true prevalence of social risk. Expanding screening to the inpatient setting may reach some children who have not had any outpatient screening or do not have social

risk information available in their medical records.

Screening during inpatient stays not only captures potentially more-thorough and more-accurate information, but it may also provide convenient and ideal timing to collect social risk data. For example, surveys were self-administered, ensuring at least caregiver-endorsed accuracy, and missing data were minimal. This is an advantage over social risk data in the EHR, which is dependent on administrative documentation collected for other purposes (eg, insurance status, tobacco use) and provider-entered data and thus may have inaccuracies or high levels of missing information.^{45–47} Also, in this cohort, median length of stay was 2 to 4 days, which allowed ample time to offer and complete social risk screening and offer intervention. In addition to being convenient, this timing may be optimal for collecting social risk

data because screening during inpatient stays allows health care teams to get current information on social risk factors as new stressors arise. Specific findings from inpatient screening could inform aspects of care plans at discharge, such as provision of materials geared toward health literacy of the caregiver, assessment of reliable transportation or a safe home postdischarge, appraisal of appropriate appliances to refrigerate their medications, and acknowledgment of job and school commitments to ensure adherence to follow-up clinic visits.²⁹

There are limitations to this study. The study was performed on an inpatient hospitalist service at a single academic children's hospital, limiting its generalizability to other settings (eg, hospital resources, patient populations, regional factors). Caregiver-reported social risk was not confirmed, so it is possible that reports were biased or

TABLE 5 Prevalence of Trauma or ACEs

Trauma or ACEs (No. who declined to respond)	Overall (<i>N</i> = 249) <i>n</i> (%)	No Chronic Disease (<i>n</i> = 133) <i>n</i> (%)	Noncomplex Chronic Disease (<i>n</i> = 44) <i>n</i> (%)	Complex and Chronic Disease (<i>n</i> = 72) <i>n</i> (%)	<i>P</i> ^a
Any ACEs reported (4)	92 (38)	38 (29)	21 (48)	33 (46)	.017
4 or more ACEs reported (4)	22 (9)	10 (8)	5 (11)	7 (10)	.70
Parent or guardian divorced or separated (6)	58 (24)	21 (16)	14 (32)	23 (32)	.016
Been involved with Child Protective Services (11)	31 (13)	15 (12)	5 (12)	11 (16)	.73
Lived with anyone who had a problem with alcohol or drugs (7)	27 (11)	13 (10)	7 (16)	7 (10)	.54
Lived with anyone who was mentally ill, suicidal, or severely depressed (6)	25 (10)	12 (9)	7 (16)	6 (8)	.39
Parent or guardian served time in jail (5)	20 (8)	8 (6)	6 (14)	6 (8)	.30
Was a victim of violence or witnesses violence in neighborhood (4)	19 (8)	6 (5)	4 (9)	9 (13)	.12
Saw or heard parents or adults slap, kick, or punch one another (6)	16 (7)	5 (4)	2 (5)	9 (13)	.048
Parent or guardian died (5)	10 (4)	3 (2)	1 (2)	6 (8)	.09
Been involved in the juvenile justice system (6)	10 (4)	5 (4)	2 (5)	3 (4)	.98
Treated or judged unfairly because of his or her race or ethnic group (4)	8 (3)	5 (4)	0 (0)	3 (4)	.40

^a *P* value from χ^2 test of association between medical complexity and potential risk factor.

unreliable; however, this limitation also exists for outpatient screening studies. Some important nonmedical risk factors (eg, high parent-child conflict, family disorganization) could have been undercaptured. Researchers in future studies should employ additional methods to confirm validity and reliability of caregiver-reported social risk in an inpatient setting; include items or scales designed to measure other important constructs, such as resiliency or flourishing^{53,54}; and enroll larger samples across multiple regions and health care systems to increase both the ability to detect meaningful differences and the generalizability of findings.

Finally, large-scale implementation of inpatient social risk screening across a hospital system would require determination of method (eg, electronic versus paper, language), administrator (eg, staff), and means of transmission to and location in the EHR. In this study, once handed the electronic device, caregiver self-administration and electronic transmission of results proved to be a resource-efficient strategy because provider time and training were not needed. Ideally, such screening would take place early in an admission with

electronic alerts sent to relevant providers (eg, social workers, case managers), given caregiver endorsement of specific social risk. Endorsed risk should be easily accessible in a standardized format in the EHR, possibly with individualized considerations and recommendations for staff related to family risk profile. Streamlined processes for risk screening and intervention hold promise to provide psychosocially informed care. Overall, providing children's hospitals with a better understanding of the social risk encountered by their inpatients may provide much needed incentive to expand availability of social risk ameliorating services and further use the inpatient stay as an opportunity to address some of the nonmedical drivers of poor health outcomes, rising health care costs, and provider burnout.¹⁵ Attention to the unintended consequences of screening for social risk, such as unfulfilled expectations for interventions, will require ongoing attention.⁵⁵ This includes ensuring capacity to support children and their families once needs are identified. Identifying spheres of need (economic, legal, psychosocial, etc) in pilots such as this study may lead to

better allocation of hospital resources tiered by social complexity, such as intensive home- and community-based treatment of patients and their families (eg, Novel Interventions in Children's Health Care),^{41,56,57} medical legal partnerships, social needs navigation programs, social work consultation, and solidifying liaisons with community partners. These interventions would need to be operationalized in tandem with widespread screening. Taken together, inpatient screening efforts likely represent a cost-effective opportunity to improve patient care experience, health, and overall quality of life.

CONCLUSIONS

In this study, it is demonstrated that screening for social risk factors on an inpatient service is feasible and captures a high and diverse prevalence of social risk. These results should further inform the development of future inpatient screening tools, advocacy for services that effectively address these social risk factors that affect health outcomes, exploration of how care plans can incorporate social needs, and advancement of hospital-based efforts to better serve vulnerable populations.

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