

# Medical-Legal Partnerships Facilitate Patient-Provider Cost of Care Conversations: A Multisite Qualitative Study in the U.S.

Jean S. Edward, PhD, RN<sup>1</sup> ,  
Kimberly D. Northrip, MD, MPH, FAAP<sup>1</sup>,  
Andrea Welker, JD<sup>1</sup>, and Julia F. Costich, JD, PhD<sup>1</sup>

Clinical Nursing Research  
2022, Vol. 31(8) 1500–1509  
© The Author(s) 2022



Article reuse guidelines:  
sagepub.com/journals-permissions  
DOI: 10.1177/10547738221120339  
journals.sagepub.com/home/cnr



## Abstract

This study examines the impact of medical-legal partnerships on facilitating and managing outcomes of patient-provider cost of care conversations. We conducted 96 semi-structured interviews with 18 patients and 78 medical-legal partnership personnel from 10 states between March and November of 2020. The presence of legal staff helped strengthen interdisciplinary collaborations and build confidence among providers around addressing health-harming legal needs through effective cost of care conversations. Medical-legal partnerships with well-established provider training opportunities reported effective cost of care conversations, improved patient outcomes, and increased return on investment for health systems. Lack of time, knowledge, and training were identified as barriers to clinicians engaging in cost of care conversations. Positive patient outcomes included improved access to public benefits, health benefits, financial benefits, special education services, stable housing, and food. Medical-legal partnerships facilitate effective patient-provider cost of care conversations that improve patients' medical, legal, and social service outcomes.

## Keywords

social determinants of health, health harming legal needs, cost of care conversations, medical-legal partnerships

*Cost of care (CoC) conversations* are discussions between patients and providers that address any type of cost that patients might face, including not only direct costs such as out-of-pocket healthcare costs, but also indirect costs such as loss of income, food access, transportation expenses, and need for childcare (Seidman et al., 2020). These conversations can also be an effective strategy to identify and address social disadvantages that may negatively affect a patient's health. Known as *negative social determinants of health (SDoH)*, these factors might include poverty, poor access to education, lack of employment opportunities, unhealthy housing, or other general disadvantages.

Cost of care conversations can also identify legal needs that negatively affect an individual's health or access to healthcare, also known as *health-harming legal needs* (Ko et al., 2016; Sandel et al., 2010). Health-harming legal needs affect 47% of low-income and 52% of moderate-income households in the U.S and include the need for essential public benefits, improved housing conditions, education or employment, or circumstances involving guardianship or immigration which are better remedied

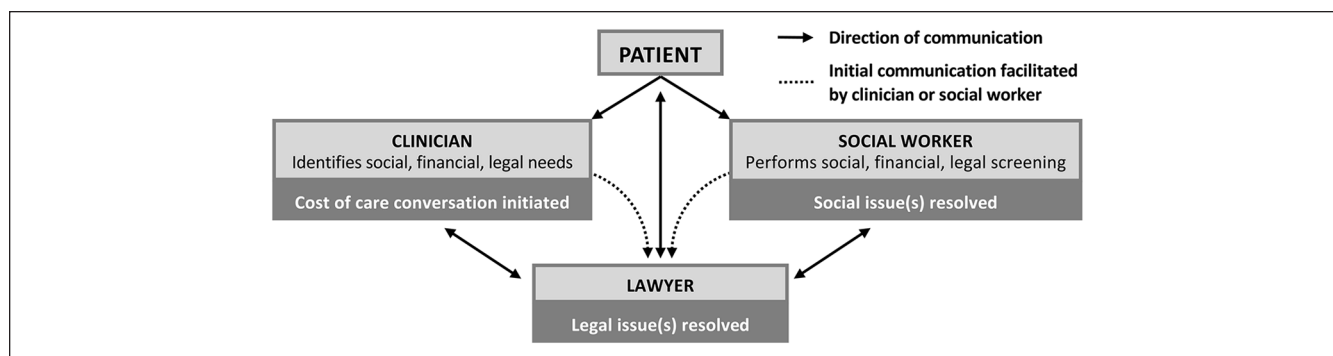
through collaborations between legal services and health-care (Legal Services Corporation, 2017; Mead, 2016).

Clinicians are often unable to engage in CoC conversations and unequipped to address the social, financial, and legal needs identified in those conversations (Rubinstein et al., 2019). Social workers have been central to helping screen for these needs but are limited in their ability helping resolve certain social or financial issues, especially if they require legal interventions or solutions. However, lawyers are well-positioned to assist, advocate for, and empower families with the resources to overcome financial barriers by increasing access to social supports that help mitigate health-harming legal needs (Sandel et al., 2010). Therefore, partnerships between medical and social providers and lawyers via Medical Legal Partnerships (MLPs) could serve as a model

<sup>1</sup>University of Kentucky, Lexington, USA

## Corresponding Author:

Jean Edward, College of Nursing, University of Kentucky, 751 Rose St., Room 557, Lexington, KY 40536, USA.  
Email: Jean.edward@uky.edu



**Figure 1.** Preliminary model showing movement of patients through the medical-legal partnership model.

to both facilitate CoC conversations and manage the outcomes of those conversations by connecting patients to needed social, financial, and legal resources (see Figure 1).

While the impact of MLPs on improving the health-harming legal needs of underserved populations is well-documented, there is limited evidence on leveraging these partnerships to enhance CoC conversations between patients and members of the healthcare team (County Health Rankings & Roadmaps, 2019). We examined best practices and successful models of integrated medical and legal services via MLPs to facilitate effective patient-provider CoC conversations and address health-harming legal needs. The research question guiding this study was, What are best practices and successful models of integrating MLP services to facilitate and enhance patient-provider CoCs and address health-harming legal needs?

## Methods

We used a qualitative, grounded theory approach guided by the Consolidated Framework for Implementation Research (CFIR) to conduct 96 key informant interviews at 10 national organizations leading the field in MLP integration (Damschroder et al., 2009). A grounded theory qualitative research approach was used in this study as little is known about the relationship between MLPs and CoCs (Strauss & Corbin, 1990) and our goal was to develop an interdisciplinary model to guide future research (see Figure 1). The CFIR was selected because it is effective in developing and evaluating the implementation of complex interventions and it emphasizes contextual changes over time in intervention design. Using this framework also allowed the research team to use findings from this study to inform the future design, development, and implementation of a collaborative model for enhancing CoC conversations. This study was approved by the University of Kentucky's Institutional Review Board (#57238).

We invited 8 to 10 key personnel, including patients, providers, and staff from each of 10 MLPs to participate in key informant interviews. A study consultant from the National Center for MLPs helped us identify and recruit 10 participant

sites by making email introductions to site coordinators at the 10 different MLPs. We selected sites that had been established for at least five years with a focus on underserved pediatric and oncological populations. We selected sites that varied in programmatic structure to gain insights from a broad range of partnership arrangements. The site coordinators connected us to their MLP personnel and patients who received assistance through the MLPs. Prospective study participants were then recruited by the research team via email or phone. Written informed consents were obtained from interested participants after review of the detailed informed consent with a member of the research team.

Semi-structured interviews with the consented key informants were conducted online via Zoom or phone by three members of the research team. Participants were asked 18 questions representing the five domains from the CFIR Interview Guide, specifically, intervention characteristics, outer setting, inner setting, characteristics of individuals, and process (Table 1). The same interview guide was used for all participants. All interviews were audiotaped, transcribed, and analyzed using NVivo version 12 for Mac (QSR International, Melbourne, Australia). Descriptive coding techniques were used to organize, categorize, and contextualize data. Analytic coding using line-by-line analysis was employed to identify emerging patterns and categorize concepts and themes (Strauss & Corbin, 1990). Content analysis was used to analyze the presence, definitions, and relationships between CoC and MLP concepts (Carley, 1990). Data was coded independently by two coders (who also collected data and maintained participant observation notes) before themes were merged in NVivo. Themes and subthemes were discussed by the coders using participant observation field notes, and inconsistencies were resolved based on this discussion as well as interrater reliability scores where Kappa coefficients between .80 and 1 for all subthemes were retained. Subthemes mentioned by 30 or more sources (participants) and references (quotes) were included in the final analysis (Table 2). Rigor was maintained via credibility using a reflexive data collection and coding process, and by using participants' own words in results (Lincoln & Guba, 1991). The use of purposive sampling methods and detailed

**Table 1.** Consolidated Framework for Implementation Research Domains, Variables and Sample Provider, and Patient Interview Guide Questions.

Domain	Constructs	Sample <i>provider</i> questions from provider and patient interview guide	Sample <i>patient</i> questions from provider and patient interview guide
Intervention characteristics	Evidence, strength, and quality; Design, quality, and packaging; Cost	What costs were incurred when implementing the MLP? Have you been able to show any ROI?	What types of resources were provided to you to help you understand the services? Such as online resources, brochures, informational sheets, etc.
Outer setting	Patient needs and resources; External policies and incentives	To what extent or how well do you think the MLP meets the needs of the individuals served by your organization?	What are your overall experiences with getting help from staff in this MLP? To what extent or how well do you think the services provided met your needs?
Inner setting	Networks and communication; Structural characteristics; Readiness for implementation	What kind of training did you and your colleagues have to take to be involved in the MLP? What types of continued training is expected or required?	
Characteristics of individuals	Knowledge and beliefs; Self-efficacy	How confident do you think your clinical and/or legal partners are in identifying health-harming legal needs and having conversations related to finances/costs with patients?	How did you feel when you were first approached or introduced to the MLP program? Were you confident that you would have your problem resolved?
Process	Planning; Executing; Engaging; Reflecting; Evaluating	What was/is your communication or education strategy for getting the word out about the MLP to key stakeholders and patients?	What kind of information has the staff/team asked from you about your experiences with the program?

Source. Consolidated Framework for Implementation Research Interview Guide Tool: <https://cfirguide.org/guide/app/#/>.

Note. MLP = medical-legal partnership.

description of the sample with varying experiences from multidisciplinary MLP staff and clients enhanced transferability. Dependability was achieved by having two independent coders review the data and validate themes. Reflexive journaling via participant observation field notes and audit trails on data collection and analysis process supported confirmability.

## Results

For the study, 18 patients and 78 MLP personnel (legal aid staff, attorneys, health and social service providers, and health administrators) were interviewed. Geographically, participants represented 10 states in five U.S. regions. The MLP personnel were predominantly White (80.8%), less than 50 years old (61.6), and held a master's degree or higher (87.2%; Table 3). Most were attorneys/legal staff (28.3%) or social workers/case managers (21.8%) and had been in their roles for an average of 8 years. Three participants were registered nurses working in case manager or health system administrator roles. The majority (74%) had no formal training in screening for SDoH or health-harming legal needs or engaging in CoC conversations. Roughly 39% of the patients interviewed were White, 39% were racial/ethnic minorities (Black/African American and/or Hispanic), and a majority were 50 years or older (72.2%), unemployed (55.6%), with incomes <\$34, 999 (50.1%). Health-harming legal needs of

patients were related to health and public benefits (Medicaid, Supplemental Security Income, Social Security Disability Insurance, health insurance, and food stamps), housing and utilities (mold, rent, and eviction), guardianship, expungement, and advanced directives/power of attorney. Five key themes emerged from the qualitative data analysis and each theme was evident at all 10 MLP sites. Table 2 provides an overview of themes and corresponding CFIR constructs.

### *Theme 1: For Clinicians, Lack of Time, Knowledge, Confidence, and Training Serve as Barriers to Engaging in Effective CoC Conversations*

Clinicians were described as prioritizing medical care, leaving inadequate time to assess for or discuss SDoH or health-harming legal needs. Limited knowledge and understanding about these topics served as a barrier to initiating CoC conversations and stemmed from a lack of formal training on how to identify and intervene on these issues.

Because we find a lot of doctors, especially the newer ones, don't understand Medicaid. They don't understand the social circumstances that families live in because a lot of them came from very privileged backgrounds. So we're really trying to help them understand the social context of their clients, because nobody else will ever say it out loud to them. (Female, Attorney, Mid-Atlantic Region)

**Table 2.** Themes Extracted From Cancer Program Staff (N=96).

CFIR constructs	Theme	Subthemes	No. of participants quoted	Total no. of quotes
Knowledge and Beliefs; Self-efficacy	I: For clinicians, lack of time, knowledge, confidence, and training serve as barriers to engaging in effective CoC conversations	Clinicians are focused on medical care and do not have time for CoC conversations	55	101
		Limited knowledge and confidence in identifying SDoH/health harming legal needs to initiate CoC	43	82
		Lack of formal training on SDoH/health harming legal needs and CoC conversations	46	57
Networks and communication; Self-efficacy Readiness for implementation	II: Interdisciplinary teamwork facilitates CoC conversations	Interdisciplinary communication and teamwork	61	98
		Confidence in identifying and intervening on health harming legal needs	37	55
		Social workers lead CoC conversations	36	67
Structural characteristic; Design, quality, and packaging; Readiness for Implementation	III: Training and education on SDoH and health-harming legal needs facilitate CoC conversations	Medical residents trained to identify SDoH/health harming legal needs	51	105
		Training and education on SDoH and health harming legal needs	53	79
		Ongoing and on-the-job training	62	83
Patient needs and resources; Evaluating	IV: Patient financial and health outcomes improved	Housing and utilities	60	95
		Public benefits	52	75
		Health benefits	33	48
		Special education services	34	48
Evidence, strength, and quality; Cost; Evaluating	V: Health systems experienced a positive ROI	Return on investment and financial benefits reported	58	113
		Return on investment measurement challenges	51	73

I just knew from my own experience as a physician that there were several times when I'd be interviewing families and they'd talk about these problems and I had no idea what to do or how I could help. Problems from housing issues, kids with asthma who had rodents in the house and all these other issues, mold, kids with educational issues who had IEPs [Individualized Educational Plan]. (Male, Physician, Mid-Atlantic Region)

Colleagues in my specialty, developmental and behavioral needs would be good at [engaging in CoC conversations], because interdisciplinary care is really common to our training. My other colleagues, [such as] neurologists, I wouldn't think they're quite as nuanced about understanding those things because it's just not part of their training. The pediatricians that I worked with at that hospital understand SDoH very well. But I believe if you to make the MLP very efficient, understanding when you should make that referral is really important. . .It's definitely worth some training for everybody. (Male, Physician, Southeast Region)

### **Theme II: Interdisciplinary Teamwork Facilitates CoC Conversations**

The role of interdisciplinary teamwork in facilitating CoC conversations was pivotal as it helped strengthen

collaborations and build confidence among providers around identifying health-harming legal needs through effective CoC conversations. Having a lawyer physically present in the healthcare setting facilitated direct communication and referrals between healthcare team members. As a result, clinicians had opportunities to discuss patient socio-legal needs with legal staff and better understand ways to address them, leading to increased confidence in being able to help resolve these issues. Despite the strong interdisciplinary approach where all members of the team had the ability to refer to legal staff directly, social workers were identified as taking the lead in screening and referring across many sites.

You know, just to be honest, like when I first started, I was like, 'why is there an attorney here in the clinic?' I don't think I had any idea of how important the partnership would be. I was made aware of the program and given information on the types of cases they could help with. They do a great job of marketing themselves within the clinic. They're super engaging and worked so well with the [healthcare] team that a lot of the education has just come from the day-to-day involvement with them. (Male, Physician, Midwest Region)

It's a really rich environment to practice in. As a lawyer, [the MLP] made me a better lawyer. Being able to access medical

**Table 3.** Participant Characteristics.

Characteristic	Partnership (N=78)	Patients (N=18)
	n (%)	
Age		
<40	28 (35.9)	3 (16.7)
40–49	20 (25.7)	2 (11.1)
50–59	21 (26.9)	7 (38.9)
60+	9 (11.5)	6 (33.3)
Sex		
Female	63 (80.7)	12 (66.7)
Race/ethnicity		
White	63 (80.8)	7 (38.9)
Black	7 (9.0)	6 (33.3)
Asian American	5 (5.1)	1 (5.6)
Hispanic	3 (5.1)	4 (22.2)
US region		
Mid-Atlantic	16 (20.5)	13 (37)
Midwest	38 (48.7)	5 (14)
Northeast	9 (11.5)	–
Northwest	8 (10.3)	–
Southeast	7 (9.0)	–
Highest degree		
High school diploma		4 (22.3)
Some college		7 (38.9)
Bachelor's degree	10 (12.8)	4 (22.2)
Master's degree	24 (30.8)	3 (16.7)
JD	25 (32.1)	
PhD	4 (5.1)	
MD	15 (19.2)	
Occupation		
Director of MLP or legal aid	7 (9.0)	
Program coordinator or manager	7 (9.0)	
Attorney or legal staff	21 (28.3)	
Health system administrator	11 (14.1)	
Physician	7 (9.0)	
Social worker or case manager	17 (21.8)	
Unemployed		10 (55.6)
Other	7 (9.0)	8 (44.4)
Years in role		
<1	3 (3.9)	
1–4	26 (33.3)	
5–10	27 (34.6)	
>10	22 (28.2)	
Training		
No formal training	58 (74.4)	
Formal training as part of orientation or residency	10 (12.8)	
Informal on-the-job training	10 (12.8)	
Annual income		
\$0–\$14,999	n/a	5 (27.8)
\$15,000–\$34,999	n/a	4 (22.3)
\$35,000–\$74,999	n/a	6 (33.3)
>\$75,000	n/a	3 (16.7)



professionals in service of our clients is worth so much. That makes a real big difference in our ability to understand our patients medical conditions, understand what kind of help and services they need. I've had doctors come to IEP meetings and SSI hearings. Being able to access all of that knowledge and experience really enhances what we can do for our clients. And being able to have medical students and residents sharing in conversations about the legal issues that clients face deepens their understanding of the whole person. . . I think it's reinforcing for them to hear about our clients from our [legal] perspective and for them to engage in joint problem solving. (Female, Attorney, Southeast Region)

### ***Theme III: Training and Education on SDoH and Health-Harming Legal Needs Facilitate CoC Conversations***

Participants noted that training and education about SDoH and health-harming legal needs encouraged healthcare team members to engage in CoC conversations with patients. Medical-legal partnerships with well-established and ongoing provider/staff training opportunities that included medical residents reported more effective patient-provider CoC conversations resulting in positive patient socio-legal and health outcomes. Six sites had implemented formal curriculum-based training and education programs, and medical residents who had undergone these trainings were more likely to initiate effective CoC conversations with patients when assessing for needs. Participants also emphasized the importance of relevant ongoing and on-the-job training for all members of the healthcare team.

I think that there has been a lot of progress in the area [engaging in CoC conversations] recently because of all of the trainings around SDoH, because there is such a push at [our organization] and our providers know you don't work at an FQHC and not see those things every single day. They want to help our patients and I think that the MLP really gives them the tools to do that. MLP was such a foreign concept to [providers] and I really was tasked to explain what the MLP was and what we were able to offer, and they became very excited because of all of these additional resources that they didn't have before. And we saw a bunch of their patients getting referred to us because they knew that these patients had these needs, they just didn't know how to address it before. (Female, MLP Project Coordinator, Midwest Region)

We believe that these trainings are bolstering strength-based practice skills because if we think of a Russian nesting doll, every social need, every legal need is surrounded by social, economic and environmental needs and then structural racism and historical trauma. We are identifying common barriers to accessing a range of benefit services and legal protections. And then we are identifying role appropriate scope of practice aligned with problem solving strategies [providers] can offer patients. And that can open up space between them and patients around financial problem solving. (Female, Director of MLP, Northeast Region)

In my medical education training, [MLPs] never came up. There was never a class, seminar or a course on how much more effective a health care provider you could be by creating a MLP in your practice or advocating for that type of service. So this is all new to me. . . That's why it's important that we keep receiving this ongoing training every year, that [MLP staff] have a platform at our staff meetings and at least three or four times a year they have an agenda item to really and truly be the focus of our meeting to provide us. . . a refresher of existing law or even if there's a new law. (Male, Physician, Mid-Atlantic Region)

### ***Theme IV: Patient Financial and Health Outcomes Improved***

Access to safe and affordable housing, support for utilities, and public and health benefits were improved by MLP services. Unsafe or unsanitary housing conditions were a major socio-legal need that led to infections and exacerbation of respiratory illnesses such as asthma. Patients often had to make difficult choices between paying for their healthcare or medication costs and paying for utilities and other necessities. Medical-legal partnership services helped patients secure access to Supplemental Nutrition Assistance Programs, Supplemental Security Income, Social Security Disability Insurance, and other benefits which helped stabilize income and increase access to food sources, safe housing, and other resources to facilitate access to care and improve health outcomes.

I was dealing with medical issues for a long time and social security had denied me despite all medical evidence, so my care coordinator had connected me with the [MLP]. They reviewed my case and decided to take it and help me resolve it. Without them, I would be in a worse situation. I wouldn't have an income. I wouldn't be able to sustain my residence. I would be in worse shape. So I'm really grateful to them. I can't thank them enough. I would have a different life now. (Male, Patient, Midwest Region)

So for my daughter, she has asthma, but the issue was that it was sparking in the apartment that we're living in. I live in a basement unit so there was mold. I believe the mold is what was making her asthma keep coming back-to-back. My asthma coordinator referred me to [the lawyer] and she was telling me what my rights were as a tenant and what I could do to basically get them to fix it because I kept calling and maintenance would never come out and actually fix the problem. . . She was reassuring me: 'that's going to be no problem; it's gonna be okay; don't worry about it. I going to tell you step by step what you need to do'. And so from there, I just trusted her word. I feel like she is just like my guardian angel, like she was specifically sent to help me get through this. (Female, Patient, Midwest Region)

### ***Theme V: Health Systems Experienced a Positive Return on Investment (ROI)***

Along with financial benefits for patients, ROI was a benefit at all 10 sites. Total annual financial impact for one large

MLP was reported as \$18.2 million with roughly \$23,262 recovered per case. Over a 2-year period, another site reported \$738,944 in cost avoidance for patients through assistance with food stamps, Supplemental Security Income, Medicaid, housing and education-related cases. Another site reported a ROI of \$725,000 for the health system, \$469,446 in financial benefits to patients, and 28 to 42 days of avoided hospital admissions over a 2-year period. However, respondents also noted challenges to consistently measuring and reporting ROI, especially related to the difficulties in quantifying metrics for patient experiences, satisfaction, and long-term financial and health outcomes.

Last year our organizational expenses were \$448,000. So that's program [costs] and then also some administrative and fundraising costs. The estimated value of the legal services we provided was over \$1.5 million. We had another approximate \$500k of cost recovery for our clients, meaning that we had things covered by insurance that had previously been denied; money recovered that they had wrongfully had to pay out of pocket. So, if you combine those two and think about \$2 million worth of value conferred, it's a four times ratio from what it costs to do it. (Female, MLP Director, Midwest Region)

I would say by helping keep a roof over a patient's head, it likely may prevent visits to the emergency room or maybe prevent some admissions. But things like that are hard to quantify. I think that's one of the challenges of these programs. Frontline people like me, no question see the benefits. But to be blunt, for bean counters, where does it show up in the balance sheet? That's not obvious; financial benefits to hospitals bottom lines are not readily apparent. . . . I think the difficulty with programs like this is time to quantify. I think that's the big challenge, is getting the message across that it behooves hospitals to put some money into [MLPs] not just as the right thing to do, but probably save you some money, too. (Male, Director of MLP, Northeast Region)

## Discussion

We examined the impact of MLPs on facilitating and managing outcomes of effective patient-provider CoC conversations. Through key informant interviews, the study identified best practices, successful models, and challenges of integrating medical and legal services and provider training. Findings indicate that MLPs could serve as a model to facilitate and manage outcomes of CoC because lawyers are uniquely positioned to assist, advocate for, and empower families with the resources to overcome financial barriers by increasing access to social supports that help mitigate health-harming legal needs.

Barriers for clinicians engaging in CoC conversations identified in our study included lack of time, knowledge, and confidence, which are commonly cited barriers in CoC conversation literature (Alexander et al., 2004; de Kort et al., 2007; Rubinstein et al., 2019; Schrag & Hanger, 2007). Potential solutions to these barriers include ongoing

training and co-located interprofessional care models, which were both associated with enhanced CoC conversations in this and other studies (Ries, 2021). In particular, social workers were identified as key members of the healthcare team in conducting psychosocial screenings to assess for health-harming legal needs, adding to the growing evidence on the use of social workers in enhancing MLPs (Colvin et al., 2012). The physical presence of lawyers in the clinic allowed for ongoing training and feedback for clinicians. Team-based approaches could reduce the workload for busy clinicians as well as provide positive reinforcement for identification of potential socio-legal needs. Interdisciplinary, team-based approaches are needed to integrate CoC conversations effectively across the care continuum, normalize CoC conversations for both providers and patients, and build patient-provider trust (Carroll et al., 2019; Hardee et al., 2005; Henrikson et al., 2019; Warsame et al., 2019).

Our findings identified training of residents (medical trainees) as important for engagement with MLPs and CoC conversations. The impact of education and training for residents regarding SDoH and on identifying and addressing health-harming legal barriers is well established (Klein et al., 2011; Pettit et al., 2019). Further research is needed to understand whether this impact is restricted to the residents who receive the training or if it has broader implications on promoting engagement in CoC conversations within the healthcare team where residents interact. As indicated in our study, ongoing on-the-job training was a facilitator for engaging in CoC conversations. Best practice indicates that establishing MLP education and training as ongoing activities can help address staff turnover, low referral numbers, or lack of understanding about the screening and referral workflow (Marpa et al., 2020).

Another key finding from this study was the positive impact on health outcomes and ROI for both patients and the health system. The financial and health benefits of MLPs have been well documented (Klein et al., 2013; O'Sullivan et al., 2012; Rosen et al., 2019); however, our study was the first to demonstrate how addressing health-harming legal needs of patients as an outcome of having effective CoC conversations could yield improved financial and health outcomes. These findings can also provide opportunities to support sustainability of MLPs and similar programs that promote CoC conversations. As demonstrated in our study, data that are easy to obtain, such as hospital reimbursements related to assistance with Medicaid claims or direct payments to patients in the form of benefits, are commonly reported. However, metrics that are challenging to quantify, like health outcomes, which may be of equal or greater value, are not routinely reported. A challenge with reporting health outcomes is that patients served by MLPs have a variety of health conditions, typically with different objective outcomes. This suggests the need to identify more readily available and generalizable measures of health improvement. Several sites in our study reported an estimate of avoided

hospital admission days resulting from MLP services as a ROI variable. Examples of services to reduce or avoid hospital days include preventing insurers from terminating home nursing visit coverage, approval for durable medical equipment, and advocacy related to changes in managed care policies. Similarly, reduction in emergency department visits and use of preventive care may also serve as a general measure of health outcomes (Martin et al., 2015; Sege et al., 2015).

This study had several limitations. First, it was designed prior to COVID-19 but implemented early in the pandemic. This had the potential to influence discussions around patient needs, workflows, and outcomes. To address this limitation, we incorporated questions about the impact of COVID-19 on all participants. We also asked for copies of publications, aggregated reports, patient materials, and tools to examine data prior to the pandemic. Secondly, this study was undertaken with the intent to apply its findings to create an intervention for improving CoC conversations in a pediatric hematology oncology clinic. Therefore, the National Center for MLPs assisted us in recruiting clinics with strengths in pediatrics and oncology. While many of the participating MLPs serve a wider patient base, this focus on areas of strength has the potential to affect the generalizability of the results to all clinical areas. However, our findings themselves are consistent with the larger body of evidence around MLPs and CoC conversations.

### **Clinical Implications**

The barriers and facilitators identified in this study have broader implications for clinical interventions attempting to engage healthcare team members, including clinicians, nurses, and social workers, and health systems in addressing the social and legal needs of underserved populations when time, money, knowledge, and confidence are often barriers to engagement. While clinicians, social workers, and case manager were identified as having higher engagement in the screening and referral process within MLPs in our study and in the literature (Klein et al., 2013; Pettit et al., 2019; Rubinstein et al., 2019), nurses can and should play a pivotal role in this process due to the diversity and breadth of their roles and their community presence (Weber & Polkey, 2016). Public health nurses, including school nurses and home health nurses, are well-positioned to identify health-harming legal needs related to child neglect, unsafe housing conditions, and educational needs (such as IEPs).

Nurses are increasingly being recognized as potential leaders in establishing MLPs. However, they must be equipped with the knowledge and skills to identify health-harming legal needs, advocate for patients, and build sustainable partnerships with legal entities in order to make timely referrals. Recent seminal reports, including the American Association of Colleges of Nursing's (2021) *Essentials* and the National Academies of Sciences, Engineering, and Medicine's (2021) *Future of Nursing 2020 to 2030*, have created paradigm shifts in nursing education, practice, and

research with an increased emphasis on nursing's role in advancing health equity by addressing the SDoH. Medical-legal partnerships could be a key intervention to model interdisciplinary approaches that are led by nurses to addressing SDoH or health-harming legal needs. Medical-legal partnerships have been shown to improve outcomes for low-income families by removing barriers to healthcare and increasing access to preventive care and social/legal supports, affordable and stable housing, and support for utilities (Pettignano et al., 2011; Rodabaugh et al., 2010; Sege et al., 2015; Weintraub et al., 2010). Positive health outcomes include decreases in stress, hospital admission rates, emergency department visits, and healthcare spending, as well as increases in quality of life, treatment adherence, and reimbursements for public and private payers (Fleishman et al., 2006; Klein et al., 2013; Ryan et al., 2012; Zevon et al., 2007). Medical-legal partnerships have been identified as a public health law intervention with the capacity to operate at and impact both the individual and population health levels (Tobin-Tyler & Teitelbaum, 2019).

### **Conclusions**

Our findings indicate that MLPs can help promote and facilitate patient-provider CoC conversations that address health-harming legal needs and improve patient outcomes. This preliminary research is consistent with and extends the existing literature in clarifying the benefits of, and need to integrate, CoC conversations into patient care workflow using interdisciplinary team-based approaches that incorporate legal services. The next logical step is to better understand the mechanisms and impact of legal innovations, such as MLPs, on CoC conversations and their outcomes in healthcare settings, while establishing sustainability through financial benefits for patients and positive ROI for health systems. Findings from this study were used to develop a patient-centered, interdisciplinary team-based model leveraging MLPs to enhance CoC conversations. We are currently implementing this program in a pediatric oncology and hematology clinic. The evaluation of the program will seek to identify common themes related to effective use of MLPs to train providers, enhance CoC, improve patient outcomes, and document ROI.

### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was funded by the Robert Wood Johnson Foundation (#77293). This research was supported by the University of Kentucky Markey Cancer Center's Shared Resource Facilities (P30 CA177558).



## ORCID iD

Jean Edward  <https://orcid.org/0000-0001-9184-1048>

## References

- Alexander, G. C., Casalino, L. P., Tseng, C. W., McFadden, D., & Meltzer, D. O. (2004). Barriers to patient-physician communication about out-of-pocket costs. *Journal of General Internal Medicine*, 19(8), 856–860. <https://doi.org/10.1111/j.1525-1497.2004.30249.x>
- American Association of Colleges of Nursing. (2021). *The essentials: Core competencies for professional nursing education*. Author. <https://www.aacnursing.org/Portals/42/AcademicNursing/pdf/Essentials-2021.pdf>
- Carley, K. (1990). Content analysis. In R. E. Asher (Ed.), *The Encyclopedia of language and linguistics* (725–730). Pergamon Press.
- Carroll, J. K., Farah, S., Fortuna, R. J., Lanigan, A. M., Sanders, M., Venci, J. V., & Fiscella, K. (2019). Addressing medication costs during primary care visits: A before-after study of team-based training. *Annals of Internal Medicine*, 170, S46–S53. <https://doi.org/10.7326/M18-2011>
- Colvin, J. D., Nelson, B., & Cronin, K. (2012). Integrating social workers into medical-legal partnerships: Comprehensive problem solving for patients. *Social Work*, 57(4), 333–341. <https://doi.org/10.1093/sw/sws012>
- County Health Rankings & Roadmaps. (2019). *Medical-legal partnerships*. Retrieved December 1, 2019, from <https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/medical-legal-partnerships>
- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4, 50. <https://doi.org/10.1186/1748-5908-4-50>
- de Kort, S. J., Kenny, N., van Dijk, P., Gevers, S., Richel, D. J., & Willems, D. L. (2007). Cost issues in new disease-modifying treatments for advanced cancer: In-depth interviews with physicians. *European Journal of Cancer*, 43(13), 1983–1989. <https://doi.org/10.1016/j.ejca.2007.05.017>
- Fleishman, S. B., Retkin, R., Brandfield, J., & Braun, V. (2006). The attorney as the newest member of the cancer treatment team. *Journal of Clinical Oncology*, 24(13), 2123–2126. <https://doi.org/10.1200/JCO.2006.04.2788>
- Hardee, J. T., Platt, F. W., & Kasper, I. K. (2005). Discussing health care costs with patients: An opportunity for empathic communication. *Journal of General Internal Medicine*, 20(7), 666–669. <https://doi.org/10.1111/j.1525-1497.2005.0125.x>
- Henrikson, N. B., Banegas, M. P., Tuzzio, L., Lim, C., Schneider, J. L., Walsh-Bailey, C., Scrol, A., & Hodge, S. M. (2019). Workflow requirements for cost-of-care conversations in outpatient settings providing oncology or primary care: A qualitative, human-centered design study. *Annals of Internal Medicine*, 170, S70–S78. <https://doi.org/10.7326/M18-2227>
- Klein, M. D., Beck, A. F., Henize, A. W., Parrish, D. S., Fink, E. E., & Kahn, R. S. (2013). Doctors and lawyers collaborating to HeLP children: Outcomes from a successful partnership between professions. *Journal of Health Care for the Poor and Underserved*, 24(3), 1063–1073. <https://doi.org/10.1353/hpu.2013.0147>
- Klein, M. D., Kahn, R. S., Baker, R. C., Fink, E. E., Parrish, D. S., & White, D. C. (2011). Training in social determinants of health in primary care: Does it change resident behavior? *Academic Pediatrics*, 11(5), 387–393. <https://doi.org/10.1016/j.acap.2011.04.004>
- Ko, N. Y., Battaglia, T. A., Gupta-Lawrence, R., Schiller, J., Gunn, C., Festa, K., Nelson, K., Flacks, J., Morton, S. J., & Rosen, J. E. (2016). Burden of socio-legal concerns among vulnerable patients seeking cancer care services at an urban safety-net hospital: A cross-sectional survey. *BMC Health Services Research*, 16, 196. <https://doi.org/10.1186/s12913-016-1443-1>
- Legal Services Corporation. (2017). *The justice gap: Measuring the unmet civil legal needs of low-income Americans*. Retrieved December, 2019, from <https://www.lsc.gov/sites/default/files/images/TheJusticeGap-FullReport.pdf>
- Lincoln, Y. S., & Guba, E. G. (1991). *Naturalistic inquiry*. SAGE.
- Marpa, K., Curran, M., Lawton, E., & Rahajason, D. (2020, October). *Types of trainings that help meet patients' needs and strengthen the health care and legal workforces*. Retrieved January 24, 2022, from <https://medical-legalpartnership.org/wp-content/uploads/2020/10/Types-of-MLP-Trainings.pdf>
- Martin, J., Martin, A., Schultz, C., & Sandel, M. (2015). *Embedding civil legal aid services in case for high-utilizing patients using MLP*. Health Affairs Blog: Innovations in Care Delivery. <https://doi.org/10.1377/hblog20150422.047143>
- Mead, A. (2016, October 19). *Bringing law and medicine together to help rural patients*. Rural Health Information Hub. Retrieved January 24, 2022. <https://www.ruralhealthinfo.org/rural-monitor/medical-legal-partnerships/#:~:text=According%20to%20the%20National%20Center,than%20through%20health-care%20services%20alone>
- National Academies of Sciences, Engineering, and Medicine. (2021). *The future of nursing 2020-2030: Charting a path to achieve health equity*. The National Academies Press.
- O'Sullivan, M. M., Brandfield, J., Hoskote, S. S., Segal, S. N., Chug, L., Modrykamien, A., & Eden, E. (2012). Environmental improvements brought by the legal interventions in the homes of poorly controlled inner-city adult asthmatic patients: A proof-of-concept study. *The Journal of Asthma*, 49(9), 911–917. <https://doi.org/10.3109/02770903.2012.724131>
- Pettignano, R., Caley, S. B., & Bliss, L. R. (2011). Medical-legal partnership: Impact on patients with sickle cell disease. *Pediatrics*, 128(6), e1482–e1488. <https://doi.org/10.1542/peds.2011-0082>
- Pettit, J. M., Ryan, A. M., Armin, J., & Weiss, B. D. (2019). Medical-legal partnerships to enhance residency training in advance care planning. *Family Medicine*, 51(4), 353–357. <https://doi.org/10.22454/FamMed.2019.392574>
- Ries, N. M. (2021). Conceptualizing interprofessional working: When a lawyer joins the healthcare mix. *Journal of Interprofessional Care*, 35(6), 953–962. <https://doi.org/10.1080/13561820.2020.1856799>
- Rodabaugh, K. J., Hammond, M., Myszk, D., & Sandel, M. (2010). A medical-legal partnership as a component of a palliative care model. *Journal of Palliative Medicine*, 13(1), 15–18. <https://doi.org/10.1089/jpm.2009.0203>

- Rosen Valverde, J. N., Backstrand, J., Hills, L., & Tanuos, H. (2019). Medical-legal partnership impact on parents' perceived stress: A pilot study. *Behavioral Medicine*, 45(1), 70–77. <https://doi.org/10.1080/08964289.2018.1481011>
- Rubinstein, J., Pressey, J., & Klein, M. (2019). Expanding the pediatric oncology medical home: Successful utilization of a medical-legal partnership at a pediatric oncology referral center. *Pediatric Blood & Cancer*, 66(5), e27610. <https://doi.org/10.1002/pbc.27610>
- Ryan, A. M., Kutob, R. M., Suther, E., Hansen, M., & Sandel, M. (2012). Pilot study of impact of medical-legal partnership services on patients' perceived stress and wellbeing. *Journal of Health Care for the Poor and Underserved*, 23(4), 1536–1546. <https://doi.org/10.1353/hpu.2012.0179>
- Sandel, M., Hansen, M., Kahn, R., Lawton, E., Paul, E., Parker, V., Morton, S., & Zuckerman, B. (2010). Medical-legal partnerships: Transforming primary care by addressing the legal needs of vulnerable populations. *Health Affairs*, 29(9), 1697–1705. <https://doi.org/10.1377/hlthaff.2010.0038>
- Schrag, D., & Hanger, M. (2007). Medical oncologists' views on communicating with patients about chemotherapy costs: A pilot survey. *Journal of Clinical Oncology*, 25(2), 233–237. <https://doi.org/10.1200/JCO.2006.09.2437>
- Sege, R., Preer, G., Morton, S. J., Cabral, H., Morakinyo, O., Lee, V., Abreu, C., De Vos, E., & Kaplan-Sanoff, M. (2015). Medical-legal strategies to improve infant health care: A randomized trial. *Pediatrics*, 136(1), 97–106. <https://doi.org/10.1542/peds.2014-2955>
- Seidman, J., Ganesan, N., AyoVaughan, M., & Bardin, R. (2020, August). *Issue brief: "Measuring the effectiveness of cost of care conversations."* Avalere Health. Retrieved January 24, 2022. <https://avalere.com/insights/measuring-the-effectiveness-of-cost-of-care-conversations>
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. SAGE.
- Tobin-Tyler, E., & Teitelbaum, J. B. (2019). Medical-legal partnership: A powerful tool for public health and health justice. *Public Health Reports*, 134(2), 201–205. <https://doi.org/10.1177/0033354918824328>
- Warsame, R., Kennedy, C. C., Kumbamu, A., Branda, M., Fernandez, C., Kimball, B., Leppin, A. L., O'Byrne, T., Jatoi, A., Lenz, H. J., & Tilburt, J. C. (2019). Conversations about financial issues in routine oncology practices: A multicenter study. *Journal of Oncology Practice*, 15(8), e690–e703. <https://doi.org/10.1200/JOP.18.00618>
- Weber, E. P., & Polkey, B. (2016). Nurses' roles in healthcare legal partnerships. *Interdisciplinary Journal of Partnership Studies*, 3(1). <https://doi.org/10.24926/ijps.v3i1.119>
- Weintraub, D., Rodgers, M. A., Botcheva, L., Loeb, A., Knight, R., Ortega, K., Heymach, B., Sandel, M., & Huffman, L. (2010). Pilot study of medical-legal partnership to address social and legal needs of patients. *Journal of Health Care for the Poor and Underserved*, 21(2), 157–168. <https://doi.org/10.1353/hpu.0.0311>
- Zevon, M. A., Schwabish, S., Donnelly, J. P., & Rodabaugh, K. J. (2007). Medically related legal needs and quality of life in cancer care: A structural analysis. *Cancer*, 109(12), 2600–2606. <https://doi.org/10.1002/cncr.22682>

### Author Biographies

**Jean Edward** is the Assistant Dean for Diversity, Equity and Inclusion and Associate Professor at the University of Kentucky College of Nursing. Her research is focused on promoting equity in healthcare access, affordability, and health outcomes for underserved communities by intervening on the social determinants of health.

**Kimberly Northrip** is an Associate Professor in Pediatrics at the University of Kentucky College of Medicine. She directs UK HealthCare CECentral which provides continuing medical and pharmacy education to healthcare professionals. She helped develop and is the medical director of Child Advocacy Today, a medical-legal partnership at the University of Kentucky.

**Andrea Welker** is the supervising attorney for the Children's Advocacy Today (MLP) Externship, and an attorney with the CAT office in the Kentucky Children's Hospital at the University of Kentucky.

**Julia Costich** is the Peter P. Bosomworth Endowed Professor of Health Services Research in the Department of Health Management and Policy, College of Public Health at the University of Kentucky and also serves as associate director of the Kentucky Injury Prevention and Research Center. Her research interests focus on health law and policy, particularly as they affect vulnerable populations.