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Medical-Legal Partnerships: Assessment of Mental Health & Substance Abuse Patients and Social/Legal Needs

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Project Title: Medical-Legal Partnerships: Assessment of Mental Health & Substance Abuse Patients and Social/Legal Needs

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Abstract

A medical-legal partnership (MLP) is a model which brings together health and legal services in the form of a multidisciplinary team that works to address medical and legal issues. Currently, Legal Aid of Nebraska is partnering with Bluestem Health, a local federally qualified health center (FQHC) located in Lincoln, Nebraska, to identify legal issues and provide civil legal aid services through a screening and referral process. The purpose of this capstone project was to assess the characteristics and determine the types of social/legal needs of FQHC patients referred to Legal Aid of Nebraska. Data collected was utilized to assess whether mental health and/or substance abuse patients have greater social/legal needs than their counterparts without similar issues. Chi-Square analysis was utilized to examine associations, if any, between mental health/substance abuse issues and magnitude and types of legal needs. The long-term focus of the MLP project is to improve health outcomes for FQHC patients through identifying and addressing legal needs.

Introduction

Determinants of health encompass many varying factors such as income and social status, education, physical environment, social support, genetics, health services, and gender. Social determinants of health embody the concept that health is impacted by environmental conditions in which people are born, grow, live, and work. These determinants of health play a large role in health inequities that occur, particularly for low-income populations, who are at higher risk for mental health conditions and substance abuse issues (World Health Organization, 2019). Many low-income individuals have at least one unmet legal need, which can have negative impacts on health (Paul et al., 2009).

The aims of the capstone study are:

1. To examine demographic and socioeconomic characteristics and disease burden of patients, specifically substance abuse and/or mental health issues
2. To determine types of social and legal needs of the Bluestem Health patients referred to Legal Aid
3. To evaluate whether mental health and/or substance abuse patients have greater social/legal needs than patients without these types of issues, as defined by number of cases per client.

The purpose of this evaluation is to assess the extent of the relationship, if any, between having a mental health and/or substance abuse issue and types and magnitude of legal needs, as measured by number of legal cases per client.

The Agency for Healthcare Research and Quality (AHRQ) reports on progress and opportunities for improving health care and decreasing disparities. The report speaks towards

national trends, with a focus on priority populations such as racial and ethnic minorities, low-income groups, women, children, older adults, residents of rural areas and inner cities, and individuals with disabilities and special health needs. It is reported that minorities and low-income populations receive worse care than their counterparts. Low-income individuals received worse care than high income people for about 80% of core measures (Agency for Healthcare Research and Quality, 2010). According to the Health Resources and Services Administration (HRSA), a federal agency that funds FQHCs, the patient population served within these health centers diverse, and includes many of the vulnerable populations previously mentioned. Table 1 below shows data for 2016, 2017, and 2018. More than 50% of the patient population at health centers are racial and/or ethnic minorities, with roughly 23% best served in a language other than English. Over the past several years, the total number of mental health and substance abuse patients served at FQHCs has increased by 461,299 and 81,821, respectively, from 2016 to 2018. Approximately 70% of patients are at or below 100% of the federal poverty guideline (FPL). Comparatively, Bluestem Health Center's patient population is 41% racial/ethnic minority, 30.7% are best served in language other than English, 97% are below 200% FPL, and 68.9% are below 100% FPL. In 2018, 4.67% of Bluestem patients have a mental health diagnosis, and there is no reported data for substance abuse at this time (HRSA, 2018).

Studies have shown that low levels of household income are associated with several lifetime mental disorders and suicide attempts (Sareeen, Afifi, McMillan & Asmundson, 2011). The trends and data are similar when looking specifically at the Bluestem Health Center population, as shown below. There are various interrelated factors involved in social determinants of health within vulnerable populations, thus it is critical to address unmet social and legal needs that can improve access to care and health outcomes.

Table 1. FQHC Data: National and Bluestem Health Center

	2016	2017	2018	Bluestem 2018
% of Racial and/or Ethnic Minority Patients	62.27%	62.72%	62.89%	41.10%
# of Racial and/or Ethnic Minority Patients	15,228,089	16,157,234	16,825,443	5,139
% of Patients Best Served in a Language Other Than English	23.55%	23.72%	23.63%	30.71%
# of Patient Best Served in a Language Other Than English	6,090,644	6,446,929	6,706,410	4,368
% of Patients at or below 200% of Federal Poverty Guideline	91.95%	91.48%	91.33%	96.99%
Number of Patients at or below 200% of Poverty	17,180,779	17,836,567	18,607,652	11,135
% of Patients at or below 100% of Federal Poverty Guideline (included in above)	70.02%	69.15%	68.23%	68.99%
# of Patients at or Below 100% of Federal Poverty Guideline (included in above)	13,083,637	13,483,840	13,899,913	7,921
% of Mental Health Patients	6.92%	7.54%	7.93%	4.67%
# of Mental Health Patients	1,788,577	2,049,194	2,249,876	665
% of Substance Use Disorder Patients	0.55%	0.62%	0.79%	No data
# of Substance Use Disorder Patients	141,569	168,508	223,390	No data

As care teams increasingly recognize the importance health determinants, it is critical that aspects such as employment, housing, and safety are addressed, which are often best addressed through civil legal aid. Many low-income families experience some civil legal needs related to government entitlements and health care, safe housing, and personal family stability. Nationally, it is estimated that these families experience at least one civil legal need per year, which oftentimes, goes unaddressed (Tobin, 2017). In a 2011 study by the Robert Wood Johnson Foundation, it was found that 85% of medical providers surveyed said that unmet social needs directly lead to worse health outcomes for patients. (Robert Wood Johnson Foundation, 2011).

According to the United Nations, access to justice, defined as "ability of individuals to seek and obtain a remedy through formal or informal institutions of justice for grievances," is one of the fundamental principles of the rule of law. This process typically requires individuals to obtain legal representation or advice. Without assistance, individuals can struggle to navigate the complexity of the legal system, resulting in potential loss of housing, children, jobs, and income. Lack of affordability limits access to justice, as evidenced by a recent study, highlighting that approximately 80% of low-income individuals cannot afford legal assistance and would otherwise not have access.

The focus of MLPs is to ensure that legal issues which have influences on health are implemented and enforced, especially among vulnerable populations, such as those served by FQHCs. Barriers to improved health outcomes include income and employment, housing conditions, and personal stability and safety. (Cohen et al., 2010). MLPS strive to identify and address legal problems that may impact health outcomes, typically at little to no cost, for populations who would otherwise face barriers in access to justice.

The capstone study will assess patient characteristics including demographics and socioeconomic factors, such as income, and determine the types of civil legal needs of FQHC patients referred to Legal Aid of Nebraska. Examining MLP programs is critical, as it has been proposed as an avenue to address social determinants of health and improve health outcomes, especially for vulnerable populations consisting of racial/ethnic minorities and/or low-income patients, and those with mental health issues, who face health disparities.

Background and Literature Review

Complex social and environmental issues perpetuate health inequities, such as food insecurity, education and employment barriers, and poor housing conditions. MLPs integrate legal aid in health care settings to address social/legal problems that contribute to poor health outcomes and exacerbate disparities. Currently, over four hundred health care organizations have medical-legal partnerships, including hospitals, health systems, federally qualified health centers, veterans affairs (VA) medical centers, and public health departments, to name a few (Regenstein, Trott, Williamson, Theiss, 2018). Over the span of many decades, federal and state governments have enacted laws and regulations in attempts to address social determinants of health. However, these efforts are undermined when patients do not receive benefits for which they qualify. Hardships associated with poverty include hunger, safety, utility shutoffs, and substandard housing. These types of issues also generally constitute as legal needs and are, in and of themselves, barriers to health. In example, a patient may not have access to adequate food, which is seen as a "social" need. However, if the patient is denied a benefit, such as Supplemental Nutrition Assistance Program (SNAP), the social need overlaps with legal need. Health care providers are in a unique position to identify patients who may have legal needs (Sandel, Hansen, Kahn, Lawton, Paul, Parker, Morton, Zuckerman, 2010).

The first MLP was developed at Boston Medical Center in 1993. The model has not been rigorously evaluated; however, it shows promise for improving care and supporting disease management. The central premise of many MLPs is that a high proportion of low- and moderate-income families face legal challenges that adversely affect the quality of life and impact disease management (Williams, Costa, Odunlami, & Mohammed, 2008). The goal of MLPs is to ensure that laws which impact health are both implemented and enforced. This model attempts to address and resolve legal issues before they require litigation. Given that those who are in poverty experience at least one legal problem, a multidisciplinary approach that incorporates lawyers can promote health and diminish disparities. While this model originated in pediatrics, it is also relevant to other fields of medicine, especially for those that serve large indigent populations. MLPs can help patients with chronic disease maintenance, reduce stress, and improve quality of life. While MLP education programs have received positive trainee evaluations, more systematic evaluations must be completed to assess impact (National Center for Medical Legal Partnership, 2020). HRSA has recognized legal services as 'enabling services' that can be included under federal grants. Core elements of MLPs include: formal agreement between health care organization and legal services provider; target population, often those who face barriers to health; strategy to screen patients for legal need; legal staffing supplied by legal services partner and staff from healthcare organizations; a lawyer residence (lawyers available on-site few days per week); training for clinicians to know when to refer to legal services; information sharing between healthcare and legal staff; and designated resources to operate effectively. 38% of partnerships are funded, in part, by healthcare organizations; however, grants, foundation funding, community benefit funds, and other charitable donations are also common. Legal organizations usually contribute most of the financing for operational activities

(Regenstein, Trott, Williamson, Theiss, 2018). We will now consider populations that may benefit from an MLP and evidence that indicates improvements in social conditions can affect health, particularly in vulnerable populations, such as those who experience poverty, and have chronic diseases and/or mental health or substance abuse issues.

Data show that MLPs can increase access to health care and improve the patient's and family's sense of well-being. According to a report from the Legal Services Corporation, the average low-income household in the U.S. had 1.3-3.0 legal needs per year; however, legal assistance was received for fewer than 20% of these problems (Huston, Zinn, & Leal-Castanon, 2011). In the United States, at least 60% of health outcomes are attributable factors beyond medical care (Paul, Curran, Tobin, Elizabeth 2017). Social determinants are associated with worse physical and mental health. Despite importance of these factors, healthcare providers do not screen for, nor address these issues.

Research has shown that some chronic diseases, such as asthma, can be treated, but recur upon return to the home environment, thus, leading to multiple hospitalizations that do not improve long-term overall health. Social workers within healthcare settings advocate for patients; however, they sometimes lack tools necessary to tackle social determinants of heath that impact patients. In example, an MLP in New York City proved to be effective in helping patients better control asthma through environmental improvements in housing. Emergency department visits of these asthmatic patients decreased 91%, from 22 emergency department visits and 11 admissions to 2 emergency department visits and 1 admission (O'Sullivan et al., 2012). In another study, 295 parents with 313 children having asthma were referred for legal assistance. Of the 295 parents/ guardians, almost 50% were at or below 100% of the federal poverty level (FPL). Out of a total of 1,390 social problems identified, 450 problems could be resolved with

legal interventions, indicating a need for assistance in low-income populations, especially those with chronic diseases (Pettignano, Bliss, Caley, & McLaren, 2013). In a 2009-2010 National Survey of Children with Special Health Care Needs, it was found that children who have increased risk for chronic physical, developmental, behavioral or emotional condition are more likely than other children to rely on government-sponsored support, such as insurance and supplemental income, and educational programs for those with disabilities. Despite a need for support, only 43% of families had sought help from community agencies or organizations for issues of housing, education, and financial support and only 28% had sought help directly from a lawyer. Only 30% had discussed these issues with their child's medical provider. Evidence from observational and intervention studies suggest that addressing social determinants of health through MLPs can significantly improve the health of children and reduce cost. Despite many years of evidence that socioeconomic status and other social conditions affect health, progress in improving these conditions has been sluggish (DeJong et al., 2015). A contributing factor to the persistence of disparities in the U.S. is the small proportion of health care expenditures spent on social services compared other developed countries (Paul, Curran, Tobin, & Elizabeth, 2017).

Mental health and many common mental disorders are shaped to a great extent by the social, economic, and physical environments in which people live, whereby the greater the inequality the higher the inequality in risk. The poor and disadvantaged suffer at disproportionate rates. Action throughout life stages would provide opportunities for both improving population mental health, and for reducing risk of those mental disorders that are associated with social inequalities. As mental disorders are fundamentally linked to several other health conditions, these actions would also reduce inequalities in physical health (Allen, Balfour, & Bell, 2014). According to the National Survey on Drug Use and Health, 19.7 million Americans had a

substance use disorder in 2017. It is important to note that environmental factors which increased risk of these disorders include unstable home environment, abuse, parent's drug use, peer influences, community attitudes, and poor academic achievement. Those with mental health disorders are at higher risk for drug use and addiction than other populations (American Addition Centers, 2020). When looking at prevention of substance abuse, many interventions proven effective are derived from legal assistance – safe housing, education, health insurance, and food security (Minnesota Department of Health, 2020).

Legal Aid of Nebraska's (LAN) Health, Education & Law Project (H.E.L.P.) seeks to address legal problems that have an impact on health by providing legal education and services in partnership with hospitals, health centers, and medical staff. Partnership with healthcare organizations gives opportunity to identify clients with legal needs that impact health. Services provided by Legal Aid include referrals, advice, self-help services, limited assistance, and representation individuals who are income eligible. This collaboration involves providing legal services to eligible Bluestem Health Center patients and tracking those who have a diagnosed mental health or substance abuse issue. Bluestem Health is an FQHC located in Lincoln, Nebraska and serves over 14,000 patients annually. Bluestem Health Center patients are referred to and receive services from Legal Aid, as a result of the referral process through their MLP program, which has a total expected number of 100 cases, per grant funding. Demographic information collected by Legal Aid will include race, gender, language, income, employment, and mental and/or substance abuse status. Health center patients were administered a screening tool during intake to help identify legal issues and facilitate the referral process from the health center to Legal Aid. Social/legal needs included on the screening fall under these general categories: income, benefits and employment, housing and utilities, and personal family stability.

Any questions to which patients answer “yes”, should result in a referral from the health center to Legal Aid. Legal problems were categorized using the I-HELP™ acronym: Income, Housing & utilities, Education & Employment, Legal status & Personal & family stability (National Center for Medical Legal Partnership, 2020). Using demographic data collected, we were able to examine characteristics of patients who were referred to Legal Aid and evaluate potential associations between legal problems and demographics.

Methods

Data gathered from the screening tool administered to patients, referral form from health center to Legal Aid, and Legal Aid’s intake process will be prepared in Microsoft Excel and exported to IBM SPSS software for analysis to assess relationship between variables. Patient characteristics were measured and calculated. Chi-square analyses were completed to measure associations between legal needs (income versus personal stability) and other variables including gender, age, race, language, mental health status, employment/income, and poverty level.

Demographics assessed include gender (male vs female); age group (<19-39, 40-64, 65+); race (white vs. other); language (English vs. other); diagnosed mental health issue (yes vs. no); employment (employed/retired vs. no income/benefits only); poverty (<100% FPL, 100-199 FPL, and >200% FPL). Legal problems of patients were categorized using the I-HELP™ acronym: Income, Housing & utilities, Education & Employment, Legal status & Personal & Family Stability (Table 1).

Table 2. I-HELP Legal Needs Categories

Social Determinant of Health	**How Legal Services Can Help Examples**
Income: Resources to Meet Daily Basic Needs	Appeal denial of food stamps, health insurance, cash benefits, and disability benefits.
Housing & Utilities: Healthy Physical Environment	Housing subsidies, improve substandard conditions, prevention evictions, protect against utility shut-off
Education & Employment: Quality Educational & Employment Opportunities	Secure specialized education services, unemployment denial appeals, enforce workplace rights,
Legal Status: Access to Jobs	Clear criminal/credit histories, professional license revocations/denials
Personal & Family Stability: Safe Homes & Social Support	Secure restraining orders for domestic violence, custody and guardianship, powers of attorney, wills divorces, separations, paternity, child support and emancipation actions

Results

There was a total of 78 patients/clients who received legal assistance from Legal Aid through the MLP project between September 2019 through April 3, 2020. Seven clients had two cases, totaling 85 legal cases. Of these 78 patients, there were 35 (44.9%) patients who had legal needs related to income, one for housing, one for employment, and 41 (52.6%) for personal and family stability. Table 3 shows the IHELP cases of these patients. In the income category, there were six (17.1%) cases related to supplemental security income and 19 (54.3%) related to social security disability insurance. In the personal and family stability category, there were 13 (31.7%) cases related to divorce/separation/annulment and 11 (26.8%) related to wills and estates.

Table 3. IHELP Cases

IHELP need categories	**Legal Problem Code**	**Total cases**
Income and benefits (n=35 cases)	Supplemental Security Income (SSI)	6
	Finance	1
	Social Security Disability Insurance (SSDI)	19
	Other	2
	Medicaid	2
	Bankruptcy	1
	Income Maintenance	1
	Collections	3
Housing	Other	1
Employment	Other	1
Personal and family stability (n=41cases)	Divorce/Separation/Annulment	13
	Wills & Estates	11
	Adult Guardianship	4
	Advance Directives/POA	3
	Custody/Visitation	4
	Name Change	3
	Domestic Abuse	1
	Minor Guardianship	1
	Other	1

Table 4. Shows the characteristics of patients referred to Legal Aid for services from Bluestem. Approximately 70% of patients were female. Age distributions were similar, at 32.5%, 63.6%, and 3.9% for age ranges <19-39, 40-64, and 65+, respectively. The majority of the population was white (60.6%), spoke English (81.6%), were employed or retired (66.1%), and were below 100% FPL (58.7%). There was only one patient that had a diagnosed substance abuse issue, who also had a mental health issue, so substance abuse was not counted separately, as initially planned. 43.8% of patients had a mental health issue. The average age was 46.19 years (Median 44, Standard Deviation 14.77). The average income was $19,876.29 (Median $16,560, Standard Deviation $18,474.50). The average poverty level was 89.77% FPL (Standard Deviation 88.85).

Table 4. Descriptive Statistics (Frequencies)

Variable	N	Percent	Variable	N	Percent
Gender			**Mental Health**		
Male	23	29.9%	Yes	28	43.8%
Female	54	70.1%	No	36	56.3%
Missing	1		Missing	14	
Age group			**Employment/Income**		
<19-39	25	32.5%	Employed/Retirement	39	66.1%
40-64	49	63.6%	No Income/Benefits Only	20	33.9%
65+	3	3.9%	Missing	19	
Missing	1				
			IHELP category		
Race			I	35	44.9%
White	43	60.6%	H	1	1.3%
Other	28	39.4%	E	1	1.3%
Missing	7		L	0	
			P	41	52.6%
Language					
English	62	81.6%	**Poverty**		
Other	14	18.4%	<100% FPL	37	58.7%
Missing	2		100-199% FPL	21	33.3%
			200+% FPL	5	7.9%
			Missing	15	

Tables 5 and 6 show the chi-square tests results examining the association between patient characteristics and their legal needs related to Income and Benefits and Personal and Family Stability. For poverty, we combined the 100-199% FPL and 200+% FPL groups into one group (>100% FPL) and compared it with the <100% FPL group. In both income and personal and family stability related legal needs, poverty levels were distributed closely: income legal needs, 16 (43.2%) were <100% FPL and 12 (46.2%) were >100% FPL; personal and family stability 21 (56.8%) <100% FPL and 13 (50%) >100% FPL. There were no statistically significant findings related to poverty. Based on chi-square tests (tables 5 and 6), there was statistically significant results for gender and type of legal need (income versus personal

stability). Men were more likely to have a legal need related to income than women, 65.2% of men versus 37% of women (*P*=.023), whereas women were more likely to have needs related to personal stability, 30.4% of men versus 61.1% of women (*P*=.014). There were no associations between type of legal need and other variables such as age, race, mental health, or language.

There were moderate percentage differences between other variables and legal needs, though no statistical significance was found. In example, 60% of those who were <19-39 years of age had personal and family stability legal needs and 40% had income needs. Of those who were white, 51.2% had needs related to income; whereas 64.3% of those who were not white had needs related to personal and family stability. For patients who had a mental health diagnosis, 50% had income needs and 46.4% had personal and family stability needs. A larger percentage of those who were <100% FPL had needs related to personal and family stability (56.8%) versus income needs (43.2%).

Table 5: Chi Square Tests: Legal Needs Income

	Legal needs: Income				**Legal needs: Income**		
Variable	**N**	**Percent**	**p-value**	**Variable**	**N**	**Percent**	**p-value**
Gender			.023	**Mental Health**			**.**374
Male (23)	15	65.2%		**Yes (28)**	14	50%	
Female (54)	20	37%		**No (36)**	14	38.9%	
Age group			.182	**Language**			.743
<19-39 (25)	10	40%		**English (62)**	28	45.2%	
40-64 (49)	25	51%		**Other (14)**	7	50%	
65+ (3)	0	0%					
Race/Ethnicity			.114	**Poverty**			.819
White (43)	22	51.2%		**<100% FPL (37)**	16	43.2%	
Other (28)	9	32.1%		**>100% FPL (26)**	12	46.2%	

Table 6: Chi Square Tests: Legal Needs Personal & Family Stability

	Legal needs: Personal & Family Stability				Legal needs: Personal & Family Stability		
Variable	**N**	**Percent**	**p-value**	**Variable**	**N**	**Percent**	**p-value**
Gender			.014	**Mental Health**			.344
Male (23)	7	30.4%		**Yes (28)**	13	46.4%	
Female (54)	33	61.1%		**No (36)**	21	58.3%	
Age group			.111	**Language**			.827
<19-39 (25)	15	60%		**English (62)**	33	53.2%	
40-64 (49)	22	44.9%		**Other (14)**	7	50%	
65+ (3)	3	100%					
Race/Ethnicity			.142	**Poverty**			.596
White (43)	20	46.5%		**<100% FPL (37)**	21	56.8%	
Other (28)	18	64.3%		**>100% FPL (26)**	13	50%	

Discussion

This study finds that the majority of the patients refereed to MLP for services are females, in the age range of 40-64 years, reported their race was white, did not have a mental health diagnosis, spoke English as their primary language, and were <100% FPL. Findings that most of those served were below 100% FPL and in the age range of 40-64 years of age is consistent with the literature; however, most other literature found disproportionate rates of minorities served in MLPs compared to our results. MLPs support community efforts that focus on improving social determinants of health. Thus, further assessment of outcomes could aid in development of policy that fosters a more coordinated approach to health, such as programs that promote personal and family stability, legislation addressing poverty issues, and policies within healthcare settings to screen for and address mental health/substance abuse issues. There was no 2018 data related to substance abuse for Bluestem Health Center and only several hundred report mental health patients (665). Creating solid internal policies and procedures to expand tracking

and reporting processes can provide a better landscape of the patient population and their needs as the MLP continues.

Of these patients referred to MLP for services from Bluestem, female patients were more likely to have legal needs related to personal and family stability, men were more likely to have legal needs related to income and benefits. Correlation between gender and type of legal need may be attributed to traditional gender roles, whereby males are primarily responsible for the household's income and financial supports and females provide emotional support. Various factors may explain why mental health was not found to be related to type of legal need, as originally hypothesized. Despite being common, mental illness is often underdiagnosed by providers and underreported by patients. Less than 50% of those who meet diagnostic criteria for psychological disorders are identified by doctors (WHO, 2020).

The small sample size of patients assessed creates difficulty in drawing any definitive conclusions regarding associations beyond legal need and gender. There was no statistical significance found for any demographic variables examined beyond gender and legal need category. However, assessing results of these types of projects can lead to more directed efforts at addressing social determinants of health, specifically for vulnerable groups, like those who experience poverty and/or have conditions such as mental health issues. It is well-documented that health disparities exist in low-income and minority groups and research suggests correlations between low levels of household income and mental disorders and suicide attempts (Sareeen, Afifi, McMillan & Asmundson, 2011).

One key strength of this type of model is the holistic, interdisciplinary approach to health. It attempts to address health disparities through increasing access to justice and addressing civil legal needs that may otherwise not be addressed, thereby reducing stress, and providing potential

to improve health outcomes. In the evaluation, the data and information were gathered from Legal Aid of Nebraska. As such, a primary limitation is lack of patient follow-up or tracking to measure changes in health, in any, as a result of legal services provided by Legal Aid of Nebraska. Demographic data included race, but not ethnicity, thus we were not able to distinguish Hispanic/Latino individuals. Legal Aid noted that healthcare staff may make referrals with providing patients an intake form. Consistency in screening and referral process must be established to confirm accuracy and ensure those who are eligible for services are referred appropriately (Sandel et al., 2010). To establish consistency in the screening process, it is recommended that screening be implemented into the clinical operations and staff workflow. A longer evaluation period would allow for larger population size. Incorporating an evaluation piece to track health outcomes of patients referred would provide better insight as to the impact to health. Collection of ethnicity information would be helpful for future assessment of priority groups and/or disparities amongst varying demographic characteristics.

In general, funding for MLPs is also a limitation in wide-scale implementation. Some evidence suggests that despite awareness of health disparities, most healthcare providers do not perceive that they exist in their own practices. Thus, motivating providers to take be aware and take ownership of health disparities is essential (Regenstein, Trott, Williamson, Theiss, 2018). Partnerships should support other clinical initiatives that identify social determinants and work towards improving health equity. MLPS can address social determinants of health and bridge gaps in health disparities through legal assistance, which provides an added layer of advocacy and action for patients. This approach focuses on a multidisciplinary model and is an innovative approach to improving individual and community health (McCabe & Kinney, 2010).

Bibliography

Agency for Healthcare Research and Quality. (2010). Disparities in healthcare quality among racial and ethnic minority groups. Retrieved from https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/nhqrdr10/minority.pdf

Allen, J., Balfour, R., & Bell, R. (2014) Social determinants of mental health. International Review of Psychiatry, 26(4), 392-407.

American Addition Centers. (2020) Alcohol and Drug Abuse Statistics. Retrieved from https://americanaddictioncenters.org/rehab-guide/addiction-statistics

Baciu A, Negussie Y, & Geller A. (2017). Communities in Action: Pathways to Health Equity. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK425844/

Cohen, E., Fullerton D.F., Retkin, R., Weintraub, D., Tames, P., Brandfield, J., & Sandel, M. (May 2010). Medical-legal partnership: collaborating with lawyers to identify and address health disparities. *Journal of General Internal Medicine,* 25(2), 136-139. doi: 10.1007/s11606-009-1239-7

DeJong, N.A., Wood, C.T., Morreale, M.C., Ellis, C., Davis, D., Fernandez, J., & Steiner, M. (2015). Identifying social determinants of health and legal needs for children with special health care needs. Clinical Pediatrics, 55(3), 272-277.

Health Resources and Services Administration. (2018). Health center data. Retrieved from https://bphc.hrsa.gov/uds/datacenter.aspx

Huston, R.L., Zinn, S., & Leal-Castanon, S. (2011). Medical-Legal Partnerships. AMA Journal of Ethics, 13(8):555-558. doi: 10.1001/virtualmentor.2011.13.8.hlaw1-1108.

Legal Aid of Nebraska (2019). Health education and law. Retrieved from https://www.legalaidofnebraska.org/how-we-help/programs-and-projects/health-education-and-law-project-help/

McCabe, H., Kinney, E.D. (2010). Medical legal partnerships: a key strategy for addressing social determinants of health. *Journal of General Internal Medicine,* 25(2), 200-201.

Minnesota Department of Health. (2020). Opioids: understanding social determinants of health. Retrieved from https://www.health.state.mn.us/communities/opioids/prevention/socialdeterminants.html

National Center for Medical Legal Partnership. (2020). Retrieved from https://medical-legalpartnership.org/

O'Sullivan, M.M., Brandfield, J., Hoskote, S.S., Segal, S.N., Chug, L., Modrykamien, A., & Eden, E. (October 2012). Environmental improvements brought by the legal interventions

in the homes of poorly controlled inner-city adult asthmatic patients: a proof-of-concept study. *Journal of Asthma,* 49(9), 911-917.

Paul, E., Fullerton, D.F., Cohen, E., Lawton, E., Ryan, A., & Sandel, M. (2009). Medical-legal partnerships: addressing competency needs through lawyers. *Journal of Graduate Medical Education,* 1(2), 304-309

Paul, E.G., Curran, M., Tobin, T., & Elizabeth J.D. (2017). The Medical–Legal Partnership Approach to Teaching Social Determinants of Health and Structural Competency in Residency Programs. Journal of the Association of American Medical Colleges, 92(3), 292-298. doi: 10.1097/ACM.0000000000001494

Pettignano, R., Bliss, L.R., Caley, S.B., & McLaren, S. (2013). Can access to a medical-legal partnership benefit patients with asthma who live in an urban community? Journal of Health Care for the Poor and Underserved, 24(2), 706-717.

Regenstein, M., Trott, J., Williamson, A., & Theiss, J. (2018). Addressing social determinants of health through medical legal partnerships. *Health Affairs,* 37(3), 378-385. doi: 10.1377/hlthaff.2017.1264

Robert Wood Johnson Foundation. Health care's blind side: the overlooked connection between social needs and health: summary of findings from a survey of America's physicians. http://www.rwjf.org/content/dam/farm/reports/surveys_and_polls/2011/rwjf71795. Accessed December 18, 2019.

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. doi: 10.1377/hlthaff.2010.0038

Sareen, J., Afifi, T.O., McMillan, K.A., & Asmundson, G.J. (April 2011). Relationship between household income and mental disorders: findings from a population-based longitudinal study. *Archives of General Psychiatry,* 68(4), 419-427. doi: 10.1001/archgenpsychiatry.2011.15.

Tobin Tyler E. (2017). Medical-Legal Partnership in Primary Care: Moving Upstream in the Clinic. American journal of lifestyle medicine, 13(3), 282–291. doi:10.1177/1559827617698417

Williams, D. R., Costa, M. V., Odunlami, A. O., & Mohammed, S. A. (2008). Moving upstream: how interventions that address the social determinants of health can improve health and reduce disparities. *Journal of public health management and practice*: JPHMP, 14 Suppl(Suppl), S8–S17. doi:10.1097/01.PHH.0000338382.36695.42

Wills, L. (2017). Access to justice: mitigating the justice gap. Retrieved from https://www.americanbar.org/groups/litigation/committees/minority-trialawyer/practice/2017/access-to-justice-mitigating-justice-gap/

World Health Organization. (2020) Mental health. Retrieved from https://www.who.int/mental_health/prevention/genderwomen/en/

World Health Organization. (2019). Social determinants of health. Retrieved from https://www.who.int/social_determinants/sdh_definition/en/

World Health Organization. (2014). Social determinants of mental health. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/112828/9789241506809_eng.pdf;jsessionid=D99493009B92D3929E1D314668D8BC89?sequence=1

Biography & CV

Fung Jeng Liu is a Registered Dietitian at Charles Drew Health Center. Her work focuses primarily on management of a federally funded program that serves vulnerable, high-risk maternal and child populations. She is interested in how programs and policies can influence population health and reduce health disparities.

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Leadership Education Trainee, University of Nebraska Medical Center, July 2019 – April 2020

Intern, No More Empty Pots, August 2018 – December 2018

WIC Registered Dietitian, Charles Drew Health Center, July 2015 – October 2017

Dietetic Intern, Tri-County Health Department, July 2015 – June 2015

Research Assistant, University of Northern Colorado, November 2012 – April 2013

MEMBERSHIPS / AFFILIATIONS

Academy of Nutrition and Dietetics

Commission on Dietetic Registration

Public Health Association of Nebraska