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# Evaluating the Efficacy of Medical-Legal Partnerships that Address Social Determinants of Health

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## Abstract

**Background:** Medical-legal partnerships (MLPs) are health system–community partnerships composed of multi-disciplinary teams designed to improve patient and community health. MLPs provide legal services to address health-harming legal needs that contribute to health inequities.

**Methods:** A grant provided by the Association of American Medical Colleges (AAMC) and the Centers for Disease Control and Prevention established the Accelerating Health Equity, Advancing through Discovery (AHEAD) Initiative to identify, evaluate, and disseminate community-based interventions that improve health equity. Three geographically and demographically diverse institutions were chosen to strengthen the evidence-base surrounding MLP by developing standardized evaluation tools in the areas of community health, health system savings, and learner outcomes.

**Results:** The generalizable process leading to evaluation tool development is described herein, and includes the formation of multi-institutional teams, logic model development, and stakeholder interviews.

**Conclusions:** Although MLP is presented, this process can be used by various types of community health partnerships to develop evaluation tools surrounding social determinants of health (SDOH).

### Keywords

Medicine; Community health partnerships; Health disparities; United States; Delivery of health care; Program evaluation; Community health services; Vulnerable populations

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Medical training and practice are increasingly integrating community-based interventions to address SDOH and improve health outcomes for vulnerable populations. A medical-legal partnership (MLP) is a prime example of a health system–community partnership that incorporates legal assistance as an integral component of medical care.[1] In the MLP model, health care providers identify health-harming legal needs and refer patients to legal service providers. These providers act as members of the health care team to secure legal solutions for individuals' and families' social needs[2] such as housing instability, health care access, food insecurity, public benefits, employment, legal status, family instability, interpersonal violence, and education.[3] MLP also plays a role in recognizing patterns of social system failure at the level of the community and remediating those patterns through policy and legislative advocacy.[4] Despite its promise, there are limited data supporting the positive outcomes of MLP.

As part of the AHEAD Initiative, the AAMC engaged established MLPs at three AAMC-member institutions in an "evaluation cohort" focused on three domains: learner outcomes, patient and community health outcomes, and health system savings. For the reasons described below, the AAMC established these as domains of interest. This article describes the generalizable process by which the cohort collaboratively developed evaluation tools suited to measure stakeholder-focused outcomes of interest in each domain.

## IDENTIFYING A NEED

Partnerships between health systems and community-based organizations (CBOs) are becoming widely used to address health disparities,[5–7] yet limited tools for evaluation and comparison of outcomes of these partnerships have posed barriers to widespread adoption and health system funding.[8] Similar to other community health partnerships, MLPs have varying degrees of outcome evaluation,[9] largely owing to multiple barriers to standardization. Based on the experience of the authors at established MLPs, these issues are highlighted in Table 1.

With heightened focus on funding for disease prevention established through the Affordable Care Act, MLP represents a potential upstream intervention for improving the value of health care on a population level.[10–12] The MLP approach has been shown to improve patient and community outcomes for vulnerable populations by screening for and addressing legal needs as they relate to SDOH.[13–18] Studies have shown that addressing SDOH can improve health endpoints,[19,20] and small-scale studies have shown that MLPs are successful in addressing SDOH.[2,21,22] Additionally, MLP helps meet many goals of care delivery that have been prioritized by the National Academy of Medicine, including providing personalized, patient-centered, and equitable care.[23,24]

Previous studies have demonstrated the cost-effectiveness of community-based interventions such as the role of community health workers in improving individual and community health outcomes.[25–27] MLP was a component of post-discharge care coordination services for adults with complex social and medical needs evaluated in one randomized controlled trial, but the authors found no significant difference in 180-day readmission rates.[28] Most

studies examining cost endpoints for MLP specifically are framed in terms of cost pre- and post-intervention,[29] or in terms of "health care recovery dollars."[29–31]

With the recognition that elements outside of health care affect health outcomes and cost, undergraduate and graduate medical education curricula are increasingly integrating SDOH training and population-based competencies and milestones.[32–34] There are a few studies substantiating the claim that SDOH training affects future physician practice through the recognition and amelioration of health inequities.[35,36] Much of MLP's value comes from what it can teach learners about addressing SDOH in clinical practice to ensure optimal health outcomes for patients and populations.

## THE AAMC AHEAD INITIATIVE

The AAMC launched the AHEAD Initiative to "identify, evaluate, and disseminate effective and replicable AAMC-member institution practices that improve community health and reduce health disparities." Cycle 1 convened member institutions engaged in the evaluation of MLP specifically owing to MLP's rapid nationwide expansion despite a limited evidence base. The AAMC solicited applications from all AAMC-member institutions through an open competitive process, receiving thirteen proposals. A team comprised of AAMC and National Center for MLP staff assessed each application for 1) qualifications of the proposed team (requirements mandated one health care partner, one legal partner, and one evaluator per team); 2) infrastructure available to facilitate data collection and evaluation; 3) collaborative experience with community-based partners; and 4) willingness to engage in peer-to-peer learning. Three teams were chosen: Children's National Hospital, Indiana University School of Medicine, and Emory University School of Medicine. This cohort was convened for three years (2015–2018), including three in-person grantee meetings and monthly sub-group phone calls. This article describes Year 1 activities (Figure 1) to develop a cohort-wide evaluation framework, including 1) the formation of collaborative, multi-institutional teams, 2) logic model development, 3) stakeholder engagement, and 4) metric and evaluation tool development. Tool implementation, results of initial cohort-wide evaluations, and dissemination of results, conducted in Years 2 and 3, will be analyzed and presented in future publications.

## MLP SITE DESCRIPTIONS

### Children's National Hospital/Children's Law Center, Washington, DC

Healthy Together is a large, urban pediatric MLP formed in 2002 through collaboration between the Washington, DC-based nonprofit organization Children's Law Center and Children's National Hospital. Healthy Together has 11 full-time staff of attorneys, investigators and family outreachworkers and a robust pro bono program allowing for the provision of legal services to families referred from outpatient clinics, the Emergency Department, and the inpatient setting. Broadly, the legal needs addressed include health care access, education, public benefits, and housing. Children's Law Center provides trainings on MLP and SDOH for medical trainees, faculty, and patient families.

### Indiana University School of Medicine/Eskenazi Health MLP, Indianapolis, Indiana

Eskenazi Health is the safety net hospital and health system in the Indianapolis area. The Eskenazi Health MLP, established in 2008, provides civil legal aid to pediatric, adult, and geriatric patients at four community health centers, a transgender clinic, and multiple community mental health centers. The MLP collaborates with nonprofit legal clinics and pro bono private attorneys. Health care providers at the primary care and community mental health sites make MLP referrals to on-site attorneys directly through the health system's electronic health record (EHR). As an academic medical center that works closely with Indiana University School of Medicine, the MLP regularly trains both Eskenazi Health providers and Indiana University School of Medicine pediatric residents on SDOH and MLP.

### Emory University School of Medicine/Georgia Health Law Partnership, Atlanta, Georgia

The Health Law Partnership (HeLP) is an MLP that serves low income and minority children. The Atlanta Legal Aid Society, Georgia State University's College of Law, and Children's Healthcare of Atlanta created HeLP in 2004 to assist in improving the health and social well-being of vulnerable children and their families seeking care within the Children's system. HeLP has four components: 1) delivery of legal services, 2) education of professional students and health care professionals, 3) systemic public health advocacy, and 4) research, scholarship, and evaluation related to the impact of MLPs. The HeLP Legal Services Clinic, a law school-based legal clinic, educates law students through involvement in the MLP process. The partnership and clinic also collaborate with Emory University School of Medicine and Morehouse School of Medicine in training medical students, residents, and fellows.

## THE PROCESS: YEAR 1

### Formation of Collaborative Teams across Domains of Interest

As highlighted in the Introduction, AAMC project leadership identified three domains anticipated to be most relevant to member health system stakeholders. These included 1) educational outcomes related to clinical providers, medical students, and residents/fellows who train and work in an MLP setting, 2) patient and community health outcomes, and 3) cost savings/return on investment for the health care partner. Cross-grantee subgroups were created to focus on each domain, and teams were divided to ensure equal health, law, and evaluation representation.

### Logic Model Development

Cohort participants worked within member institutions and domain subgroups to brainstorm and finalize a logic model representing potential domain-specific short, medium, and long-term outcomes resulting from MLP intervention (Figure 2).

### Stakeholder Engagement and Metric Development

Based on the logic model and team member consensus, domain-specific subgroups established lists of indicators of potential interest to stakeholders (Table 2). Subgroup members met with stakeholders representing the interests of each domain at their respective

institutions to prioritize the indicators and identify key metrics for each domain. The goals of these metrics were to be 1) specific enough to measure the full scope and quality of impact of MLP, 2) general enough to be measured across institutions, and 3) sufficiently convincing to stakeholders and AAMC-member institutions to support widespread adoption of the MLP model.

### Learner Outcomes

Stakeholders were identified who provide oversight for or who implement training for health care staff or students of medicine, nursing, social work, and public health. Stakeholders included course directors, medical student and residency program directors, and MLP attorneys providing education to medical staff about SDOH or MLP. The subgroup identified indicators (Table 2) relevant to learners across multiple disciplines and prioritized these indicators in interviews with stakeholders. For example, aligning final metrics with professional competencies emerged as a theme essential for stakeholders representing medical schools. Final indicators, including increased knowledge of, identification of, screening for, and referral for SDOH, were developed into a metric-based survey instrument to identify changes in learner knowledge, beliefs, and behaviors based on MLP training.

### Patient and Community Health Outcomes

This subgroup relied upon stakeholder interviews previously conducted by the HeLP for the purpose of developing their own program evaluation metrics. Indicators were then revised in collaboration with stakeholders for the AAMC MLP cohort. Indicators expanded beyond health outcomes to include intermediary factors such as patient/family physical safety and stress reduction, as not every legal interaction had a direct health component. Final metrics (Table 2) were agreed upon by the multi-institutional subgroup through consensus, and integrated into a survey instrument quantifying the effect of MLP on self-reported patient physical health, emotional health, perceived safety, knowledge, and self-efficacy.

### Health System Savings

Health System Savings subgroup members identified stakeholders that make financial decisions on a systemic level, including medical department chairs, outpatient and inpatient medical directors, financial officers, and executive officers. Indicators were identified (Table 2) that allowed for incorporation of variable hospital payment structures based on state Medicaid policy, insurance contracts, and payor mix, as these may affect financial incentives for investment in MLP. Group members examined institutional missions, organizational structure, and considered hospital system “pain points,” or those inefficiencies in health care systems that affect the hospital systems’ bottom lines.[12] Stakeholder interest in MLP stemmed from its ability to address issues particularly relevant to health systems entering value-based contracts. Ultimately, this subgroup elected to focus on cost savings resulting from changes in acute care utilization for site-specific high-risk patient populations receiving MLP services. While different MLPs have diverse methods of data collection and varying data management systems,[37] this standard metric can accommodate a wide range of data including insurance level data, hospital administrative data, EHR review, and legal case management data.

## METRIC IMPLEMENTATION AND MEASUREMENT

In Years 2 and 3 of the AAMC grant period, institutions proceeded with implementation and dissemination, including prospective data collection within each domain using the metrics described above. Findings of these multi-site analyses are currently being finalized and will be disseminated in subsequent publications. The survey tools applicable to the evaluation of the MLP domains chosen can be found online.[38] Modifications to the published tools can be adapted to suit the needs of individual institutions.

## DISCUSSION

### Strengths of the Evaluation Tool Development Process

The rigorous multi-site evaluation tool development process described herein can be applied to the evaluation of not only MLP, but also to the evaluation of various types of CBOs seeking to partner with health systems. Given that MLP is an inter-professional intervention, evaluation necessitates input from various stakeholders, including hospital executives, educators, patients, and training program directors. Our process was also cross-disciplinary, with subgroups composed of program evaluators, medical providers, and attorneys. This approach allowed for the development of metrics that are widely applicable across a variety of MLP designs.

### Challenges to the Evaluation Tool Development Process

The field of MLP must overcome various barriers to develop standards for evaluation (Table 1). The process of metric development presented herein aimed to account for such barriers to standardization within each domain. For example, despite variable payment contracts, health systems in both fee-for-service and value-based contracts will be interested in the outcome of acute care utilization. The learner outcomes survey developed can be used with various levels of trainees. The community health survey developed can be used to measure patient-specific outcomes across a variety of disease types and states. For this process to be successfully implemented across AAMC-member institutions and more broadly to other types of community health partnerships, teams must gain an understanding of potential challenges in partnership evaluation.

Community-based health partnerships should also understand the priorities of stakeholders at their respective institutions as this will influence metric prioritization. The approach described herein used group consensus and informal stakeholder interviews to gauge metric priority. Further studies that take a more formal approach to qualitative interviews of mixed methods design would be useful. Community health partnerships can also attempt to understand stakeholder priorities through review of the Community Health Needs Assessment (CHNA) required for nonprofit, tax exempt hospitals.[39] Community health partnerships targeting specific diseases, populations, or disparities in health outcomes prioritized in the CHNA may be of more interest to stakeholders.[40] Another strategy is to examine the value-based contracts between hospitals and payors to identify the specific populations, outcomes, and cost goals that health systems are monitoring.

As the AAMC MLP cohort advances to metric implementation, some of the biggest challenges will be varying methods of data collection and sharing. There have been significant attempts made to highlight barriers to information sharing between health care entities and legal partners.[37] Such barriers are one reason for the limited evidence-base supporting this promising intervention. For example, while some MLPs may integrate legal services and case management systems directly into the EHR, others maintain a separate legal case management system requiring additional consents and/or protections for data sharing. For MLPs with disparate data management systems, sharing of Protected Health Information for research purposes can prove difficult without the use of specific protections for patient privacy and confidentiality. Such data sharing challenges are present in other types of community health partnerships as well, and will be further addressed in future publications.

We acknowledge that our multi-disciplinary, multi-institutional process did require dedication of time from development through implementation. The AAMC, the Centers for Disease Control and Prevention, and involved institutions dedicated financial support in order to account for the time offset. We hope that sharing our experience will support and allow for more streamlined adoption by other CBOs that interact with health systems.

## FUTURE DIRECTIONS

Given the barriers to evaluation and the potential to improve outcomes for learners, patients, and health systems, it makes sense that MLP was chosen as one focus of community health partnerships to be evaluated through the AAMC AHEAD Initiative. The evaluation tool development process described herein provides a valuable roadmap for other partnerships between CBOs and health systems to evaluate program effectiveness, cost efficiency, and educational outcomes resulting from interventions that address SDOH.

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This publication describes the process undertaken by a cohort of institutions and does not meet the federal definition of human subject research; thus, IRB approval was not required. IRB approval was obtained for future studies regarding actual outcomes of program evaluation.

All statements in this report, including its findings and conclusions, are solely those of the authors.

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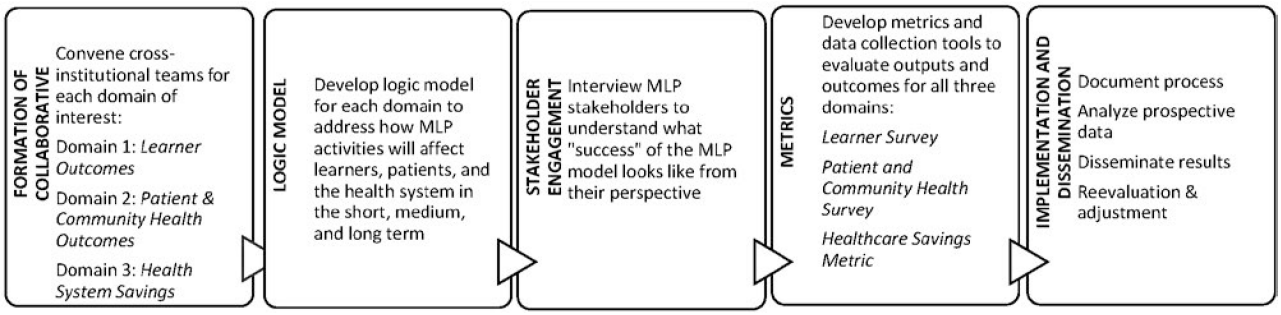


**Figure 1.**

Timeline of Association of American Medical Colleges Accelerating Health Equity, Advancing through Discovery (AAMC AHEAD) Initiative Cycle 1 cohort process

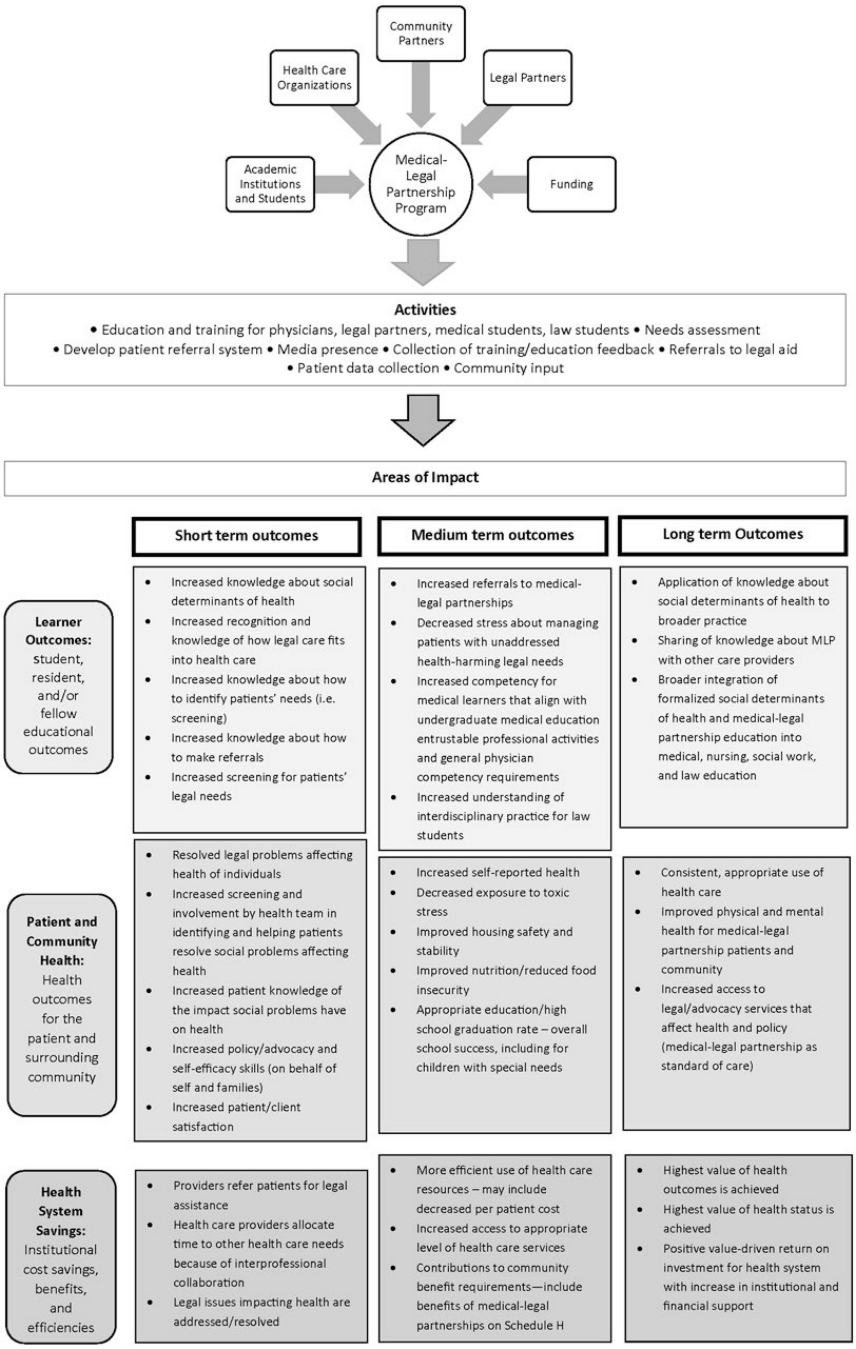


**Figure 2.**
Medical-legal partnership logic model, including key inputs and domain-specific outcomes

**Table 1.**

Barriers to Standardization of MLP Evaluation

| Barrier | Example |
|---|---|
| **Learner outcomes** | |
| Variation in level of engagement with trainees | Engagement can vary from once a month lecture to full courses and electives dedicated to MLP. |
| Variation in level of trainee | Engagement will vary with an incoming trainee compared to those in their clinical years or within residency training. |
| **Community health** | |
| Variable populations served | MLPs may have a “general population model” or a disease-specific “special population model” making it difficult to compare both process and outcome measures across sites. |
| Variation in health-harming legal needs based on population served | One MLP may focus on educational resources for children with special health care needs, while another may focus on home care resources for adults at end of life. |
| **Health system savings** | |
| Variable payor mix | Variations in health care contributions from public versus private sources can make health care costs and savings difficult to compare. |
| Variable systems of health care payment | Ratio of fee-for-service to capitated payments or contracts can affect economic interest of health care institutions. |
| State-based differences in Medicaid expansion | Types of health-harming legal needs can vary by state based on Medicaid expansion; states that did not expand Medicaid may devote more resources to health care access. |
| Different “pain points”[12] for each health care system | Some health systems may identify pain points of high resource utilizing patients, while others may target the prevention of unnecessary acute care visits for ambulatory sensitive conditions. |

MLP = medical-legal partnership.

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**Table 2.**

Potential Domain-Specific MLP Indicators Presented in Stakeholder Discussions

| Domain | Potential Indicators Presented to Stakeholders |
|---|---|
| Learner outcomes | Increased knowledge of SDOH |
| | Increased recognition that legal care should be integrated into health care to better address SDOH |
| | Increased knowledge about how to identify unmet legal needs among patients |
| | Increased knowledge about how to refer patients with unmet legal needs to MLP attorneys |
| | Increased learner referrals of patients with unmet legal needs to MLP attorneys |
| | Increased demonstration of competency for physician learners that aligns with General Physician Competency requirements |
| | Increased demonstration of competency for medical student learners that aligns with Undergraduate Medical Education Entrustable Professional Activities |
| | Increased demonstration of competency for other student learners that aligns with discipline-specific requirements |
| | Increased application of knowledge about SDOH to broader clinical practice |
| | Increased sharing of knowledge about MLP with other health care professionals |
| | Increased integration of formalized SDOH and MLP education into medical, nursing and social work education |
| Patient and community health | Improved patient/client reported individual and family physical health |
| | Improved patient/client reported individual and family emotional health |
| | Increased self-reported ability to navigate health care system |
| | Increased self-reported ability to navigate legal system |
| | Impact of MLP on physical safety |
| | Impact of MLP on financial well-being |
| | Impact of MLP on family well-being |
| | Impact of MLP on educational well-being |
| | Perceived ability to deal with stress and improved coping skills |
| | Overall improved self-efficacy in handling health-harming legal needs |
| Health system savings | Increased number/percent of patients screened for legal needs |
| | Increased number/percent of referrals from providers to MLP for legal assistance |
| | Increased number/percent of providers who report re-allocation of time to other health care obligations as a result of MLP services |
| | Decreased acute care utilization for ambulatory sensitive conditions |
| | Decreased costs for ambulatory sensitive conditions |
| | Increased access to appropriate primary and specialty care |

*Prog Community Health Partnersh*. Author manuscript; available in PMC 2022 January 05.

| Domain | Potential Indicators Presented to Stakeholders |
|---|---|
| | Increased access to health care coverage (including behavioral health) |
| | Increased access to appropriate level of insurance benefits (for those with coverage) |
| | Increased value of benefits attributed to MLP as reported on hospital Schedule H |
| | Increased quality to cost ratio by health outcome |
| | Increased quality to cost ratio by health status |
| | Increased health system cost-savings to MLP cost investment ratio (return on investment) |

MLP = medical–legal partnership; SDOH = social determinants of health.