Legal needs of patients attending an urban family practice in Hamilton, Ontario, Canada: an observational study of a legal health clinic

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Abstract

Background: Individuals living in poverty often visit their primary care physician for health problems resulting from unmet legal needs. Providing legal services for those in need may therefore improve health outcomes. Poverty is a social determinant of health. Impoverished areas tend to have poor health outcomes, with higher rates of mental illness, chronic disease, and comorbidity. This study reports on a medical-legal collaboration delivered in a healthcare setting between health professionals and lawyers as a novel way to approach the inaccessibility of legal services for those in need.

Methods: In this observational study, patients aged 18 or older were either approached or referred to complete a screening tool to identify areas of concern. Patients deemed to have a legal problem were offered an appointment at the Legal Health Clinic, where lawyers provided legal advice, referrals, and services for patients of the physicians. Fisher’s exact test was used to compare populations. Binary logistic regression was used to determine the factors predicting booking an appointment with the clinic.

Results: Eighty-four percent (n = 648) of the 770 patients screened had unmet legal needs and could benefit from the intervention, with an average of 3.44 (SD = 3.42) legal needs per patient screened. Patients with legal needs had significantly higher odds of attending the Legal Health Clinic if they were an ethnicity that was not white (OR = 2.48; 95% CI 1.14–5.39), did not have Canadian citizenship (OR = 4.40; 95% CI 1.48–13.07), had housing insecurity (OR = 3.33; 95% CI 1.53–7.24), and had difficulty performing their usual activities (OR = 2.83; 95% CI 1.08–7.43). As a result of the clinic consultations, 58.0% (n = 40) were referred to either Legal Aid Ontario or Hamilton Community Legal Clinic, 21.74% (n = 15) were referred to a private lawyer; one case was taken on by the clinic lawyer.

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Background

Patients living in poverty often consult with their family physicians for assistance with health problems that are the result of unidentified and unmet legal needs [1]. Data from the USA and Canada suggests that people of low income may have two or three unmet legal needs [2–4]. Though family physicians may know about this association between poverty, legal issues, and health, they are unable to help their patients with their legal issues due to a lack of legal knowledge, time and resources [5]. The inaccessibility of legal services to low income individuals could be considered a social determinant of health [6, 7]. In contrast, providing access to justice for those in need may improve poverty and therefore health outcomes [4, 7]. Possible legal mechanisms for reducing poverty include: appeasing debtors, accessing available benefit programs, preventing eviction from housing, addressing unsafe housing conditions, seeking court action to gain spousal support, and settling other court actions [2, 6]. Breaking the cycle of poverty requires dedicated professionals working together as a team to give the patient/client opportunities and support [7]. Therefore, the healthcare setting is an ideal situation for this type of inter-professional collaboration to occur [7].

In 2016, 13% or 4.5 million Canadians were living in poverty [8] based on the Low Income Measure (LIM) [9]. Poverty is widely recognized as a social determinant of health [10, 11]. The World Health Organization describes social determinants of health as “the conditions in which people are born, grow, live, work and age,” factors that are heavily influenced by wealth distribution, power and resources [11, 12]. Due to this direct link between poverty and health, it is not surprising that poverty is a serious problem identified in primary care, especially in low socioeconomic status (SES) communities [5]. For example, insufficient income can result in lack of access to medicines and untreated or sub-optimally treated chronic illness [13, 14]. Poor diet and stressful environments can lead to poor lifestyle choices and, as a result, mental illness, chronic disease and multiple co-morbidities that affect overall quality of life [13, 14].

Medical-legal collaborations delivered in a healthcare setting between health professionals and lawyers can present a novel way to approach these types of problems, by addressing the legal needs that influence poverty [15, 16]. These partnerships can reduce stress and improve the wellbeing of clients through increased access to resources and better awareness of social services as shown in limited evidence from the USA [1, 17]. Medical-legal partnerships of differing varieties have been adopted in more than three hundred health care delivery situations in the USA, though first developed at Boston Medical Center in 1993 [7]. In 2006 a National Centre for Medical-Legal Partnership was created; legal-aid agencies, pro-bono lawyers, and law schools partner with hospitals and health clinics, offering assistance with patients’ unmet legal needs in health care settings [7]. However, medical-legal partnerships are a new concept in Canada and while some collaborations already exist in pediatric hospitals, they have not been rigorously evaluated in a primary care setting. Thus, it is necessary to develop, implement and evaluate such partnerships to inform future medical-legal partnerships in Canada.

With 15% of residents below the LIM definition of poverty [19] and a high rate of emergency shelter use, Hamilton, Ontario is an area of low SES. Hamiltonians’ health is affected by poverty such that there is a significant disparity in life expectancy, with individuals in poor areas expected to live 21 years fewer than those living in wealthier areas [21]. Chronic disease rates are slightly higher than those in Canada as a whole, and lifestyle behaviors are slightly worse [22]. Hamilton is therefore an optimal urban location for the implementation and evaluation of a medical-legal partnership.

This paper reports the development of a novel legal assessment clinic embedded within primary care and explores the following research questions:

1) What are the types of legal needs identified when screening in a primary care setting?
2) What are the characteristics of the population with legal needs in primary care and are they significantly different from those without legal needs in the same setting?
3) What characteristics are associated with individuals choosing to access the legal health clinic?

Methods

Research design

A Legal Health Clinic (LHC) in an urban primary care setting was developed and implemented. A cross-
sectional observational design was used to evaluate the amount of legal need in primary care, the characteristics of those with legal needs and of LHC attendees. Ethical clearance was granted by the Hamilton Integrated Research Ethics Board.

Participants and setting

Patients aged 18 years or over were either approached in the family practice waiting room by a research assistant to complete a screening tool (Legal Health Check-Up survey) [1] or were referred to the LHC by their primary care doctor or other healthcare staff within the clinic, and then completed the screening tool. For patients not screened in the waiting room, referral criteria utilised by the family doctor or other healthcare staff were that the patient needed to have a potential legal need such as an upcoming eviction, that had been discussed with the healthcare provider and was concerning for their health outcomes. These patients would then need to complete the screening tool. There were no exclusion criteria, however participants needed to bring their own translators if they did not speak English.

The study was set in a primary care medical clinic within a family health team (FHT) with approximately 13,000 patients, in Hamilton, Ontario.

Development of the legal health clinic

This study involved providing legal aid services, in the form of a weekly clinic for patients of the FHT’s physicians. The legal clinic was created through a three-way partnership: between the FHT, Hamilton Community Legal Clinic (HCLC) and Legal Aid Ontario (LAO). A lawyer from each legal partner was onsite in the FHT clinical space, every week, on an alternating basis. The lawyers provided legal advice on multiple domains of law. The HCLC lawyer had expertise with housing, employment, social assistance, and human rights issues while the LAO lawyer had expertise on criminal, family, refugee, and estate law. As a result, the McMaster Family Practice LHC became available as a free service to patients of the FHT during this study, with the intention to continue afterwards if it was deemed feasible.

Data collection

The Legal Health Check-Up survey [23] was used as a screening tool to identify areas of possible concern and to initiate a conversation with participants about legal problem areas. It contained questions about stability of income and housing, benefit status, existence of a will, pending legal worries and discrimination or human rights issues, to name a few. Legal needs were those housing, financial, employment, social assistance, immigration, benefit needs, and other concerns that involved legal processes that either the patient did not have access to or did not understand. In collaboration with LAO, HCLC, and the FHT’s system navigator, an algorithm was developed to determine if the concern identified was a legal issue or if it was a non-legal issue that could be better addressed by the system navigator. Participants identified to have a legal issue were offered an appointment with the LHC, but could also elect to handle the problem on their own, with or without the help of the system navigator. Participants wanting to pursue legal help were matched to a lawyer in the LHC with experience in the appropriate legal domain (e.g. housing).

In conjunction with the Legal Health Check-Up survey, participants also completed a study survey asking their demographics (age, gender, marital status, educational status, income level, citizenship status and ethnicity), quality of life (EQ-5D-3L) [24], self-reported health status, [25] benefit status and poverty indicators not already captured in the Legal Health Check-Up survey. The three added poverty indicator questions have been validated for use in healthcare settings [26, 27] and measured income security (“Do you have difficulty making ends meet at the end of the month?”) [26], housing security (“Do you ever worry about losing your place to live?”) [26], and food security (“In the past month, was there any day when you or anyone in your family went hungry because you did not have enough money for food?”) [26, 27].

The LIM 50 is a common poverty threshold used internationally [9]. The indicator determines if the individual’s household income is below the median household income in their country, adjusted for their household size [9]. Since household size was not included in the baseline surveying, LIM 50 could not be calculated for the full sample. However, individuals who opted to complete the follow-up survey (open to all baseline participants) provided household size, which allowed LIM 50 to be calculated for those individuals. Aside from household size, data collected through follow-up surveying is not presented in this paper.

Intervention: legal health clinic

At the LHC appointment, participants were scheduled for a 30-min consultation with one of the two lawyers. There were several possible outcomes. Some participants would be provided with resources or educated about an area of law and that would be sufficient to either solve or help with their legal problem. Participants who needed more assistance would be referred to one of four options: 1) LAO, if their income was low enough to qualify for Legal Aid services [28]; 2) HCLC, if their income was low enough to qualify for HCLC services; 3) the LHC lawyer, if they opted to take on the case; or, 4) a private lawyer, for those financially ineligible for LAO or HCLC services due to higher income. It was then up
to the participant to pursue the help recommended to them by the LHC. Participants were able to return to the LHC if they wanted more advice or had a new legal problem.

Information on the Legal Health Check-up survey was uploaded to the participants’ medical charts automatically. If the participant provided written consent, information from their legal appointment was added to their electronic medical record, visible to their family physician. The study research assistant scanned the paper documentation and uploaded it to the participant’s electronic medical record. Lawyers were not given access to the participant’s medical record. Lawyers were not given access to the participant’s medical record. If the participant agreed, the legal team communicated with the medical team to arrange necessary items such as physical examinations for the Workers Insurance Safety Board. The lawyers would also recommend that the participant visit other services within the FHT, such as the system navigator, where appropriate.

Data analysis
Measures were assessed using descriptive analysis, including the number of screening surveys completed, number of LHC appointments and subsequent referrals, and types of legal issues identified. Rates and frequencies of demographic characteristics of those who completed the LHC screening survey, of those with unmet legal needs, of those who made an appointment for the LHC and of those who kept their appointment with the LHC were calculated. Where appropriate chi-squared or Fisher’s Exact tests were used to compare populations. Binary logistic regression was completed to determine the factors predicting booking an appointment with the LHC. All statistical tests were performed on SPSS versions 20 and 24.

Results
In the first 6 months of the program, between April 25, 2016 and October 24, 2016, 770 patients from the FHT consented to participate in the study and completed the Legal Health Check-Up survey. Almost all participants were recruited while waiting as patients in the clinic waiting room (98.4%, n = 758) and the remaining participants were patients referred directly to the LHC by another source (1.6%, n = 12). Of the 12 participants referred directly to the LHC, five were referred by their physician within the FHT, five by the FHT system navigator, and two by other patients.

Survey participant demographics
The demographic characteristics of all participants who completed the study survey (N = 770), of those who had at least one legal need (n = 648, 84.2%), and of those who had no legal need (n = 122, 15.8%) are summarized in Table 1. The majority of survey respondents were female (65.6%), had post-secondary education (59.4%), owned their residence (51.0%), were Canadian citizens (92.8%), were white (82.1%), and did not report receiving financial benefits (e.g. ODSP; 55.5%). Respondents were most commonly employed full-time (39.4%) and had a monthly income above $3000 (44.3%). The 18–24 year old age category had the lowest representation (8.4%) and the 35–44 year old age category had the highest representation (22.5%).

When comparing those who had a legal need to those who did not, using Fisher’s Exact tests, all demographic variables showed a significant difference (p < 0.05), except for gender (p = 0.188) (see Table 1). Those who had a legal need were predominantly younger, had attained lower education, had lower monthly income, did not own their residence, were not married, did not have Canadian citizenship, and were not white. Of note, the rate of full-time employment was similar between those with and without a legal need (38.9% versus 42.2%), however those without a legal need had a higher rate of retirees (41.4% versus 11.6%) while those with a legal need had a higher rate of part-time employment, unemployment, and inability to work (49.5% versus 16.3%). Similarly, those who did not have a legal need had a higher rate of receiving Canada Pension Plan (CPP) retirement benefits (23.8% versus 7.1%), while those with a legal need had higher rates of receiving disability, employment, and other benefits (38.6% versus 14.8%).

Poverty indicators, self-reported health status, and quality of life
The 770 participants who completed the study survey predominantly screened negative for each poverty indicator; 38.1% (n = 293) had income insecurity, 21.9% (n = 169) could not afford their medication, 12.2% (n = 89) could not afford food, and 11% (n = 80) had housing insecurity (see Table 2). In the subset of 283 participants who had household size available from a follow-up survey, 52.7% (n = 149) had a household income below LIM-50, indicating that their household income fell into the poverty bracket. Self-reported Health Status for the full survey sample was Very Good or Excellent in 40.4% (n = 298) of respondents. The EQ-5D-3L tool measuring five domains of quality of life showed that 28.5% (n = 208) had mobility issues, 8.0% (n = 58) had difficulties with self-care, 34.7% (n = 253) had issues performing usual activities, 60.6% (n = 443) had issues with pain or discomfort, and 51.9% (n = 376) had some or severe anxiety or depression.

When comparing those who had a legal need to those who did not, using Fisher’s Exact tests, all poverty, health status, and quality of life variables showed a significant difference (p < 0.05), except for pain and discomfort (p =
Table 1 Socio-demographic characteristics of participants with and without legal needs and comparisons between these two groups

|                      | All survey respondents | At least one legal need | No legal needs | Has legal need versus No legal needs |
|----------------------|------------------------|-------------------------|----------------|---------------------------------------|
|                      | N = 770                | n = 648                 | n = 122        |                                       |
| **Age**              |                        |                         |                |                                       |
| 18–24                | 64 (8.4)               | 63 (9.8)                | 1 (0.8)        | p < 0.001                             |
| 25–34                | 143 (18.7)             | 132 (20.5)              | 11 (9.2)       |                                       |
| 35–44                | 172 (22.5)             | 156 (24.2)              | 16 (13.3)      |                                       |
| 45–54                | 156 (20.4)             | 138 (21.4)              | 18 (15.0)      |                                       |
| 55–64                | 116 (15.2)             | 86 (13.4)               | 30 (25.0)      |                                       |
| 65 and older         | 113 (14.8)             | 69 (10.7)               | 44 (36.7)      |                                       |
| Total                | 764                    | 644                     | 120            |                                       |
| **Gender**           |                        |                         |                |                                       |
| Female               | 505 (65.6)             | 433 (66.8)              | 72 (59.0)      | p = 0.188                             |
| Male                 | 255 (33.1)             | 207 (31.9)              | 48 (39.3)      |                                       |
| Transgender          | 10 (1.3)               | 8 (1.2)                 | 2 (1.6)        |                                       |
| Total                | 770                    | 648                     | 122            |                                       |
| **Education**        |                        |                         |                |                                       |
| University or college graduate | 442 (59.4) | 353 (56.4)              | 89 (75.4)      | p = 0.001                             |
| Some college or university | 149 (20.0) | 132 (21.1)              | 17 (14.4)      |                                       |
| High School          | 117 (15.7)             | 107 (17.1)              | 10 (8.5)       |                                       |
| Less than high school | 36 (4.8)               | 34 (5.4)                | 2 (1.7)        |                                       |
| Total                | 744                    | 626                     | 118            |                                       |
| **Employment**       |                        |                         |                |                                       |
| Employed, full time  | 293 (39.4)             | 244 (38.9)              | 49 (42.2)      | p < 0.001                             |
| Employed, part time  | 131 (17.6)             | 119 (19.0)              | 12 (10.3)      |                                       |
| Unemployed           | 93 (12.5)              | 89 (14.2)               | 4 (3.4)        |                                       |
| Retired              | 121 (16.3)             | 73 (11.6)               | 48 (41.4)      |                                       |
| Unable to work       | 105 (14.1)             | 102 (16.3)              | 3 (2.6)        |                                       |
| Total                | 743                    | 627                     | 116            |                                       |
| **Monthly Household Income** |               |                         |                |                                       |
| Less than $650.00    | 29 (4.0)               | 28 (4.6)                | 1 (0.9)        | p < 0.001                             |
| $700.00 to $1800.00  | 217 (29.9)             | 210 (34.4)              | 7 (6.1)        |                                       |
| $1850.00 to $3000.00 | 158 (21.8)             | 141 (23.1)              | 17 (14.9)      |                                       |
| Above $3000.00       | 321 (44.3)             | 232 (38.0)              | 89 (78.1)      |                                       |
| Total                | 725                    | 611                     | 114            |                                       |
| **Benefits**         |                        |                         |                |                                       |
| CPP-R                | 75 (9.7)               | 46 (7.1)                | 29 (23.8)      | p < 0.001                             |
| CPP-D / ODSP         | 101 (13.1)             | 99 (15.3)               | 2 (1.6)        |                                       |
| EI / EI Sick Benefits| 47 (6.1)               | 44 (6.8)                | 3 (2.5)        |                                       |
| Other (e.g. Ontario Works) | 120 (15.6) | 107 (16.5)              | 13 (10.7)      |                                       |
| No response          | 427 (55.5)             | 352 (54.3)              | 75 (61.5)      |                                       |
| Total                | 770                    | 648                     | 122            |                                       |
| **Housing**          |                        |                         |                |                                       |
| Owns residence       | 392 (51.0)             | 288 (44.5)              | 104 (85.2)     | p < 0.001                             |
| Rents residence      | 289 (37.6)             | 277 (42.8)              | 12 (9.8)       |                                       |
Those who had a legal need had a higher rate of inability to afford medication (25.5% versus 3.3%), inability to afford food (14.3% versus 0.9%), and housing insecurity (12.6% versus 2.7%). In the subset of 283 participants who had household size available from a follow-up survey, 61.9% (n = 140) of those with a legal need had a household income below LIM-50, compared to 15.8% (n = 9) of those without a legal need. In those with a legal need, 9.7% (n = 60) had a self-reported health status of 'poor' compared to 0% of those without a legal need. Also, the most frequent response for self-reported health status was 'fair or good' among those with a legal need (53.9%, n = 335), while the most frequent response was 'very good or excellent' among those without a legal need (62.1%, n = 72). Finally, the EQ-5D-3L tool measuring five domains of quality of life showed those with a legal need more frequently had difficulty with mobility (30.6% versus 17.2%), self-care (9.1% versus 1.7%), performing usual activities (38.3% versus 15.5%), and anxiety/depression (55.6% versus 31.6%).

Legal needs in primary care
Using the Legal Health Check-Up tool, 2648 legal needs were identified through screening and 648 (84.2%) participants had at least one legal need. There was an average of 3.44 (SD = 3.42) legal needs per participant screened and an average of 4.09 (SD = 3.35) legal needs per participant who had at least one legal issue; see Fig. 1 for the distribution of legal needs across participants screened. The types of legal needs identified were family/community (82.9% of respondents, n = 537), income (56%, n = 363), employment (46.9%, n = 304), housing (40.3%, n = 261), and health (34.9%, n = 226). Details on the subcategories for each of these five types of legal needs and their frequencies can be seen in Table 3.

Table 1  Socio-demographic characteristics of participants with and without legal needs and comparisons between these two groups (Continued)

|                          | All survey respondents | At least one legal need | No legal needs | Has legal need versus No legal needs |
|--------------------------|------------------------|-------------------------|----------------|-------------------------------------|
|                          | n (%)                  | n (%)                  | n (%)          | p value2                             |
| Lives with friends or family | 67 (8.7)              | 62 (9.6)                | 5 (4.1)        |                                     |
| Other                    | 21 (2.7)               | 20 (3.1)                | 1 (0.8)        |                                     |
| Total                    | 769                    | 647                    | 122            |                                     |
| Relationship Status      |                        |                        |                |                                     |
| Married                  | 321 (42.7)             | 240 (37.9)              | 81 (68.1)      | p < 0.001                           |
| Common law or cohabiting | 94 (12.5)              | 87 (13.7)               | 7 (5.9)        |                                     |
| Single (never married)   | 178 (23.7)             | 168 (26.5)              | 10 (8.4)       |                                     |
| Widowed                  | 33 (4.4)               | 24 (3.8)                | 9 (7.6)        |                                     |
| Divorced                 | 73 (9.7)               | 64 (10.1)               | 9 (7.6)        |                                     |
| Separated                | 53 (7.0)               | 50 (7.9)                | 3 (2.5)        |                                     |
| Total                    | 752                    | 633                    | 119            |                                     |
| Citizenship Status       |                        |                        |                |                                     |
| Canadian Citizen         | 691 (92.8)             | 576 (91.9)              | 115 (97.5)     | p = 0.032                           |
| Other                    | 54 (7.2)               | 51 (8.1)                | 3 (2.5)        |                                     |
| Total                    | 745                    | 627                    | 118            |                                     |
| Race                     |                        |                        |                |                                     |
| White/Caucasian          | 612 (82.1)             | 498 (79.3)              | 114 (97.4)     | p < 0.001                           |
| Other                    | 133 (17.9)             | 130 (20.7)              | 3 (2.6)        |                                     |
| Total                    | 745                    | 628                    | 117            |                                     |

Notes: 1 Participants with legal needs indicated by the Legal Health Check-Up survey; 2 p-value from Fisher’s Exact Test; CPP-R Canadian Pension Plan, retired, CPP-D Canadian Pension Plan, disability, ODSP Ontario Disability Support Plan, EI Employment Insurance

0.214) (see Table 2). Those who had a legal need had a higher rate of inability to afford medication (25.5% versus 3.3%), inability to afford food (14.3% versus 0.9%), and housing insecurity (12.6% versus 2.7%). In the subset of 283 participants who had household size available from a follow-up survey, 61.9% (n = 140) of those with a legal need had a household income below LIM-50, compared to 15.8% (n = 9) of those without a legal need. In those with a legal need, 9.7% (n = 60) had a self-reported health status of ‘poor’ compared to 0% of those without a legal need. Also, the most frequent response for self-reported health status was ‘fair or good’ among those with a legal need (53.9%, n = 335), while the most frequent response was ‘very good or excellent’ among those without a legal need (62.1%, n = 72). Finally, the EQ-5D-3L tool measuring five domains of quality of life showed those with a legal need more frequently had difficulty with mobility (30.6% versus 17.2%), self-care (9.1% versus 1.7%), performing usual activities (38.3% versus 15.5%), and anxiety/depression (55.6% versus 31.6%).
Table 2  Poverty indicators, self-reported health status, and quality of life in participants with and without legal needs and comparisons between these two groups

|                                | All survey respondents | At least one legal need¹ | No legal needs | Has legal need versus No legal needs |
|--------------------------------|------------------------|--------------------------|---------------|--------------------------------------|
|                                | N = 770                | n = 648                  | n = 122       | p-value²                             |
| **Household Income: Low-Income Measure 50³** |                        |                          |               |                                      |
| Above LIM 50³                   | 134 (47.3)             | 86 (38.1)                | 48 (84.2)     | p < 0.001                            |
| Below LIM 50³                   | 149 (52.7)             | 140 (61.9)               | 9 (15.8)      |                                       |
| Total                          | 283                    | 226                      | 57            |                                       |
| **Income Insecurity**           |                        |                          |               |                                      |
| Yes                            | 293 (38.1)             | 293 (45.2)               | 0 (0.0)       | Not applicable⁴                       |
| No                             | 477 (61.9)             | 355 (54.8)               | 122 (100)     |                                       |
| Total                          | 770                    | 648                      | 122           |                                       |
| **Cannot afford medication**    |                        |                          |               |                                      |
| Yes                            | 169 (21.9)             | 165 (25.5)               | 4 (3.3)       | p < 0.001                            |
| No                             | 601 (78.1)             | 483 (74.5)               | 118 (96.7)    |                                       |
| Total                          | 770                    | 648                      | 122           |                                       |
| **Food Insecurity**             |                        |                          |               |                                      |
| Yes                            | 89 (12.2)              | 88 (14.3)                | 1 (0.9)       | p < 0.001                            |
| No                             | 641 (87.8)             | 529 (85.7)               | 112 (99.1)    |                                       |
| Total                          | 730                    | 617                      | 113           |                                       |
| **Housing Insecurity**          |                        |                          |               |                                      |
| Yes                            | 80 (11.0)              | 77 (12.6)                | 3 (2.7)       | p = 0.001                            |
| No                             | 645 (89.0)             | 536 (87.4)               | 109 (97.3)    |                                       |
| Total                          | 725                    | 613                      | 112           |                                       |
| **Self-reported Health Status** |                        |                          |               |                                      |
| Excellent/Very good            | 298 (40.4)             | 226 (36.4)               | 72 (62.1)     | p < 0.001                            |
| Good/Fair                      | 379 (51.4)             | 335 (53.9)               | 44 (37.9)     |                                       |
| Poor                           | 60 (8.1)               | 60 (9.7)                 | 0 (0.0)       |                                       |
| Total                          | 737                    | 621                      | 116           |                                       |
| **Quality of Life**             |                        |                          |               |                                      |
| **Mobility**                   |                        |                          |               |                                      |
| No problem                     | 522 (71.5)             | 426 (69.4)               | 96 (82.8)     | p = 0.003                            |
| Some/Severe problems           | 208 (28.5)             | 188 (30.6)               | 20 (17.2)     |                                       |
| Total                          | 730                    | 614                      | 116           |                                       |
| **Self-care**                  |                        |                          |               |                                      |
| No problem                     | 670 (92.0)             | 557 (90.9)               | 113 (98.3)    | p = 0.004                            |
| Some/Severe problems           | 58 (8.0)               | 56 (9.1)                 | 2 (1.7)       |                                       |
| Total                          | 728                    | 613                      | 115           |                                       |
| **Performing usual activities**|                        |                          |               |                                      |
| No difficulty                  | 477 (65.3)             | 379 (61.7)               | 98 (84.5)     | p < 0.001                            |
| Some/Severe difficulty         | 253 (34.7)             | 235 (38.3)               | 18 (15.5)     |                                       |
| Total                          | 730                    | 614                      | 106           |                                       |
| **Pain and discomfort**        |                        |                          |               |                                      |
| None                           | 288 (39.4)             | 236 (38.4)               | 52 (44.8)     | p = 0.214                            |
| Some/Severe                    | 443 (60.6)             | 379 (61.6)               | 64 (55.2)     |                                       |
| Total                          | 731                    | 615                      | 116           |                                       |
Legal clinic attendees

Of the 648 participants identified through screening to have a legal need, 94 (14.5%) booked an appointment with the LHC; of the 94 who booked, 69 (73.4%) attended the LHC once and five (5.3%) attended twice. In Table 4, the socio-demographic characteristics of those who booked and those who attended the LHC are provided. Since the objective of this study was not to compare these groups, there were no statistical comparisons made, however the frequencies for each group have been reported for transparency and completeness. Similarly, the poverty indicators, self-reported health status, and types of legal needs have been reported for both of these groups in Tables 5 and 6.

In the 69 participants who did attend the LHC, the majority were female (59.4%, n = 41), did not complete post-secondary education (59%, n = 36), were not employed full-time (89.1%, n = 57), were receiving benefits (69.6%, n = 48), did not own their residence (79.3%, n = 55), were not married or common-law (72.3%, n = 47), were Canadian citizens (85.5%, n = 53), and were white (69.2%, n = 45). The 18–24 year old age category had the lowest representation (7.4%, n = 5) and both the 35–44 and 45–54 year old categories had the highest representation (25.0% and n = 17 for both age categories). Please see Table 4 for the full demographic profile.

The poverty indicators were common among LHC attendees (see Table 5), with 78.3% (n = 54) reporting income insecurity, 58.0% (n = 40) unable to afford their medication, 56.9% (n = 37) having food insecurity, and 39.1% (n = 25) having housing insecurity. In the subset of 27 respondents who provided household size, 88.9% (n = 24) had a household income below the LIM-50 threshold. Self-Reported Health Status in LHC attendees was quite low, with only 7.7% (n = 5) reporting ‘excellent’ or ‘very good’ health, 67.7% (n = 44) reporting ‘good’ or ‘fair’ health, and 24.6% (n = 16) reporting ‘poor’ health. Quality of life was similarly low among attendees with

![Fig. 1](image_url)  
**Fig. 1** Distribution of legal needs (n = 2648) across participants (n = 770) as identified through Legal Health Check-up survey screening
85.9% (n = 64) reporting pain or discomfort, 78.1% (n = 50) difficulty performing their usual activities, 74.6% (n = 47) anxiety or depression, 65.6% (n = 42) mobility problems, and 25.0% (n = 16) problems with self-care (e.g. dressing unassisted).

Looking at the types of legal needs in attendees (see Table 6), 95.7% (n = 66) had a legal need related to family/community, 89.9% (n = 62) income, 75.4% (n = 52) employment, 69.6% (n = 48) housing, and 59.4% (n = 41) health. The frequencies for each subcategory of legal need can be seen in Table 6. Notably, 85.5% (n = 59) of attendees did not have a will, 78.3% (n = 54) had trouble making ends meet, 56.5% (n = 39) needed help getting or keeping their benefits, 53.6% (n = 37) did not have

**Table 3** Types of legal needs identified using the Legal Health Check-up Survey

| Type of Legal Need                                    | n (%): |
|------------------------------------------------------|--------|
| **Income**                                           |        |
| ’Trouble making ends meet’                           | 363 (56.0)* |
| Needing help getting or keeping benefits              | 293 (45.2) |
| Someone taking their money or possessions without permission | 161 (24.8) |
| Medical review date for ODSP                         | 42 (6.5) |
| Other/unspecified income issue                       | 18 (2.8) |
| **Housing**                                          |        |
| Problems with home repairs, heat not working, bed bugs, etc. | 25 (3.9) |
| Late with rent this year                             | 24 (3.7) |
| Problems with neighbours                             | 21 (3.2) |
| Denied a rental unit due to discrimination            | 16 (2.5) |
| Being harassed or discriminated by their landlord     | 45 (6.9) |
| Worried rent subsidy will be cancelled                | 304 (46.9)* |
| Behind with rent                                      | 195 (30.1) |
| Served eviction papers                               | 107 (16.5) |
| Court order affecting where or with whom they can live| 112 (17.3) |
| Being threatened with eviction                        | 92 (14.2) |
| Other/unspecified housing issue                      | 75 (11.6) |
| **Employment**                                       |        |
| Has been hurt at work                                | 112 (17.3) |
| Having trouble finding work due to discrimination     | 75 (11.6) |
| Has been harassed by your employer or colleagues      | 75 (11.6) |
| Current or past employer owes them money              | 24 (3.7) |
| Other/unspecified employment issue                   | 45 (6.9) |
| **Health**                                           |        |
| Does not have someone to make health decisions if they are unable to do so | 21 (3.2) |
| Other/unspecified health issue                       | 45 (6.9) |
| **Family/Community**                                 |        |
| Does not have a will                                 | 486 (75.0) |
| Relationship where someone tries to control them      | 156 (24.1) |
| Going through a divorce or separation                 | 63 (9.7) |
| Problems with child support or access                 | 54 (8.3) |
| Trouble bringing family members to Canada            | 24 (3.7) |
| Trouble attaining citizenship                         | 15 (2.3) |
| Other/unspecified family or community issue          | 35 (5.4) |

*Note:* Respondent indicated at least one item from the respective list
Table 4 Socio-demographic characteristics of participants who booked and attended Legal Health Clinic appointments

|                        | Booked appointment | Attended appointment |
|------------------------|--------------------|----------------------|
|                        | n = 94             | n = 69               |
|                        | n (%)              | n (%)                |
| **Age**                |                    |                      |
| 18–24                  | 9 (9.8)            | 5 (7.4)              |
| 25–34                  | 19 (20.7)          | 12 (17.6)            |
| 35–44                  | 24 (26.1)          | 17 (25.0)            |
| 45–54                  | 21 (22.8)          | 17 (25.0)            |
| 55–64                  | 12 (13.0)          | 10 (14.7)            |
| 65 and older           | 7 (7.6)            | 7 (10.3)             |
| **Total**              | 92                 | 68                   |
| **Gender**             |                    |                      |
| Female                 | 57 (60.6)          | 41 (59.4)            |
| Male                   | 34 (36.2)          | 25 (36.2)            |
| Transgender            | 3 (3.2)            | 3 (4.3)              |
| **Total**              | 94                 | 69                   |
| **Education**          |                    |                      |
| University or college graduate | 35 (40.7) | 25 (41.0) |
| Some college or university | 24 (27.9) | 16 (26.2) |
| High School            | 17 (19.8)          | 14 (23.0)            |
| Less than high school  | 10 (11.6)          | 6 (9.8)              |
| **Total**              | 86                 | 61                   |
| **Employment**         |                    |                      |
| Employed, full time    | 13 (14.6)          | 7 (10.9)             |
| Employed, part time    | 16 (18.0)          | 14 (21.9)            |
| Unemployed             | 21 (23.6)          | 16 (25.0)            |
| Retired                | 8 (9.0)            | 8 (12.5)             |
| Unable to work         | 31 (34.8)          | 19 (29.7)            |
| **Total**              | 89                 | 64                   |
| **Monthly Household Income** |                |                      |
| Less than $650.00      | 10 (11.1)          | 6 (9.2)              |
| $700.00 to $1800.00    | 51 (56.7)          | 40 (61.5)            |
| $1850.00 to $3000.00   | 20 (22.2)          | 13 (20.0)            |
| Above $3000.00         | 9 (10.0)           | 6 (9.2)              |
| **Total**              | 90                 | 65                   |
| **Benefits**           |                    |                      |
| CPP-R                  | 5 (5.3)            | 4 (5.8)              |
| CPP-D / ODSP           | 29 (30.9)          | 22 (31.9)            |
| EI / EI Sick Benefits  | 6 (6.4)            | 5 (7.2)              |
| Other (e.g. Ontario Works) | 24 (25.5) | 17 (24.6) |
| No response            | 30 (31.9)          | 21 (30.4)            |
| **Total**              | 94                 | 69                   |
| **Housing**            |                    |                      |
| Owns residence         | 20 (21.3)          | 14 (20.3)            |
| Rents residence        | 58 (61.7)          | 45 (65.2)            |
someone to make health decisions if they become unable, 43.5% (n = 30) had been hurt at work, 43.5% (n = 30) were in a relationship where someone was trying to control them, 36.2% (n = 25) had problems with their home (e.g. heat not working), and 36.2% (n = 25) were having trouble finding work due to discrimination.

Logistic regression was used to determine the demographic characteristics, poverty indicators, health status, and quality of life domains associated with a participant choosing to attend the LHC or not. Due to a high correlation between employment status and receiving benefits, only employment status was retained in the model. All participants who had a legal need and complete data for the modelled variables were included in the analysis (n = 561; see Table 7). Participants with legal needs indicated by the Legal Health Check-Up survey; p-value from Fisher’s Exact Test; CPP-R Canadian Pension Plan, retired, CPP-D Canadian Pension Plan, disability, ODSP Ontario Disability Support Plan, EI Employment Insurance

Table 4 Socio-demographic characteristics of participants who booked and attended Legal Health Clinic appointments (Continued)

|                           | Booked appointment  | Attended appointment |
|---------------------------|---------------------|----------------------|
|                           | n (%) | n (%) | |
| Lives with friends or family | 8 (8.5) | 5 (7.2) |
| Other                     | 8 (8.5) | 5 (7.2) |
| Total                     | 94    | 69    |

**Relationship Status**

| Relationship Status                  | Booked appointment | Attended appointment |
|--------------------------------------|--------------------|----------------------|
| Married                              | 16 (17.8)          | 14 (21.5)            |
| Common law or cohabiting             | 10 (11.1)          | 4 (6.2)              |
| Single (never married)               | 31 (34.4)          | 20 (30.8)            |
| Widowed                              | 2 (2.2)            | 2 (3.1)              |
| Divorced                             | 17 (18.9)          | 15 (23.1)            |
| Separated                            | 14 (7.1)           | 10 (15.4)            |
| Total                                | 90                | 65                   |

**Citizenship Status**

| Citizenship Status          | Booked appointment | Attended appointment |
|-----------------------------|--------------------|----------------------|
| Canadian Citizen            | 77 (88.5)          | 53 (85.5)            |
| Other                       | 10 (11.5)          | 9 (14.5)             |
| Total                       | 87                | 62                   |

**Race**

| Race           | Booked appointment | Attended appointment |
|----------------|--------------------|----------------------|
| White/Caucasian| 63 (71.6)          | 45 (69.2)            |
| Other          | 25 (28.4)          | 20 (30.8)            |
| Total          | 88                | 65                   |

Notes: ¹ Participants with legal needs indicated by the Legal Health Check-Up survey; ² p-value from Fisher’s Exact Test; CPP-R Canadian Pension Plan, retired, CPP-D Canadian Pension Plan, disability, ODSP Ontario Disability Support Plan, EI Employment Insurance

As a result of the LHC consultations, 58.0% (n = 40) were referred to either LAO or HCLC, depending on their income level and area of law needed, 21.74% (n = 15) were referred to a private lawyer, and one case was taken on by the LHC lawyer. This does not include cases that were taken on by lawyers at LAO or HCLC post-referral. Also, 47.8% (n = 33) of participants were provided education and 29.0% (n = 20) of participants were provided resources.

**Discussion**

The FHT-based legal clinic appears to be fulfilling a need by providing more equitable access to legal services for vulnerable populations. To date, the USA has been the primary source of research literature on medical-legal partnerships; although there have also been medical-legal partnerships focused on geriatrics, obstetrics and gynecology, oncology and family medicine in the USA, most have been in the area of pediatrics [1]. The current study describes a novel medico-legal partnership in a Canadian family medicine clinic. Lawyers from LAO and HCLC staffed the program successfully for the 6-month study, provided consultations to 69 patients, and have continued to deliver their services to additional FHT patients through the LHC beyond the study time frame. This study found that four out of every five patients in this primary care setting had at least one legal need that could affect their health, therefore the LHC is playing an important role in addressing
Table 5 Poverty indicators, self-reported health status, and quality of life in participants who booked and attended a Legal Health Clinic appointment

|                                      | Booked appointment | Attended appointment |
|--------------------------------------|--------------------|----------------------|
|                                      | n (%)              | n (%)                |
| **Household Income: Low-Income Measure 50** |                    |                      |
| Above LIM 50                         | 4 (12.5)           | 3 (11.1)             |
| Below LIM 50                         | 28 (87.5)          | 24 (88.9)            |
| Total                                | 32                 | 27                   |
| **Income Insecurity**                |                    |                      |
| Yes                                  | 74 (78.7)          | 54 (78.3)            |
| No                                   | 20 (21.3)          | 15 (21.7)            |
| Total                                | 94                 | 69                   |
| **Afford to Buy Medication**         |                    |                      |
| Yes                                  | 38 (40.4)          | 29 (42.0)            |
| No                                   | 56 (59.6)          | 40 (58.0)            |
| Total                                | 94                 | 69                   |
| **Food Insecurity**                  |                    |                      |
| Yes                                  | 51 (58.0)          | 37 (56.9)            |
| No                                   | 37 (42.0)          | 28 (43.1)            |
| Total                                | 88                 | 65                   |
| **Housing Insecurity**               |                    |                      |
| Yes                                  | 32 (36.8)          | 25 (39.1)            |
| No                                   | 55 (63.2)          | 39 (60.9)            |
| Total                                | 88                 | 64                   |
| **Self-Reported Health Status**      |                    |                      |
| Excellent/Very good                  | 11 (12.4)          | 5 (7.7)              |
| Good/Fair                            | 51 (57.3)          | 44 (67.7)            |
| Poor                                 | 27 (30.3)          | 16 (24.6)            |
| Total                                | 89                 | 65                   |
| **Quality of Life**                  |                    |                      |
| **Mobility**                         |                    |                      |
| No problem                           | 35 (41.2)          | 22 (34.4)            |
| Some/Severe problems                 | 50 (58.8)          | 42 (65.6)            |
| Total                                | 85                 | 64                   |
| **Self-care**                        |                    |                      |
| No problem                           | 65 (75.6)          | 48 (75.0)            |
| Some/Severe problems                 | 21 (24.4)          | 16 (25.0)            |
| Total                                | 86                 | 64                   |
| **Performing usual activities**      |                    |                      |
| No difficulty                        | 23 (26.7)          | 14 (21.9)            |
| Some/Severe difficulty               | 63 (73.3)          | 50 (78.1)            |
| Total                                | 86                 | 64                   |
| **Pain and discomfort**              |                    |                      |
| None                                 | 13 (15.1)          | 9 (14.1)             |
| Some/Severe                          | 73 (84.9)          | 55 (85.9)            |
| Total                                | 86                 | 64                   |
this gap in access to legal services and may improve health outcomes in the long term.

The LHC was purposefully developed in collaboration with LAO and HCLC to facilitate both immediate feasibility and long-term sustainability. This ensured that organisational attitudes were positive towards the LHC and so funding was made available. At the time of writing, the service has continued for 3 years, with a slight alteration in the participant flow process. Instead of being approached in the waiting room by a research assistant, they are now identified during new patient registration, at which point patients are asked to complete the screening tool, and those identified with unmet legal needs are asked if they would like an LHC appointment. For existing patients, physicians or other health professionals from the FHT can refer patients to the LHC if a new need is identified. In order to make the LHC more sustainable, and because family physicians felt that they were accurately able to assess potential legal needs, the screening tool was dropped for these types of direct referrals, though new patients to the clinic are all screened by clinic staff using the screening tool. Also, there are posters and on-screen advertisements in the waiting areas to raise awareness among patients that the LHC is available and free for them to access.

In the study setting, a FHT in Hamilton, Ontario, 84% of patients screened had unmet legal needs that could benefit from the LHC intervention, with an average of 3.4 legal needs per patient screened. Given that approximately half of patients in the waiting area had a household income below LIM 50 (poverty threshold), the rate of observed legal needs is similar to those found in studies from the USA and Canada suggesting that each low-income household has three or more legal needs per year [3, 4, 29, 30]. The types of legal issues identified through the Legal Health Check-Up in the current study were family/community, income, housing, employment, and health. These are in line with those identified in the Canadian pediatric medical-legal model, where the most common legal issues encountered were: family concerns, immigration/refugee, education, employment, income and housing [2]. Similarly, a report on the civil legal needs of Ontarians has cited that the most common legal problems identified among low and middle income individuals include: family relationship problems, wills and powers of attorney, housing, real estate, and employment (listed from most common to least common) [29]. In contrast, in the United States, the most common legal issues encountered were social security, health insurance coverage, advance directives, food stamps, family concerns, and housing [1]. These legal needs are quite different from those found in the Canadian studies (the current study and the study in pediatrics), [2] highlighting the differences between the USA and Canadian healthcare contexts and the importance of Canadian-based research on this topic to inform future medical-legal partnerships in Canada.

We also found that those with a legal need were more vulnerable compared to those without, with higher rates of housing insecurity, food insecurity, and income insecurity. It has been suggested in Canada that the vulnerability of this population makes them less likely to seek legal assistance, [4] however trusted healthcare professionals can facilitate this introduction, as observed in the current study. When comparing our study participants who attended the legal clinic to those with legal needs who did not attend, there is a clear difference in SES between the two groups. The population that chose to attend had lower income levels, as well as unstable employment and residence. Participants who were not Canadian citizens had significantly higher odds of attending an appointment than Canadians. These results are consistent with the demographic profile of participants in other studies that have implemented medical-legal partnerships and demonstrate the LHC's success in providing more equitable access [2, 30]. This is expected as vulnerable populations that are negatively impacted by the social determinants of health are more likely to have unmet legal needs and are unable to afford a lawyer [15, 29]. It is these legal needs, that when addressed, can improve the social determinants of health and result in positive health outcomes [7, 13, 14].

One of the limitations of this paper is that the Legal Clinic was only provided in an academic FHT, located in
the inner city, urban setting of Hamilton, Ontario. It is possible that in different settings the results would have been different. It is likely though, that the results of this paper are generalizable to other inner city settings with similar populations.

The McMaster Family Practice Legal Clinic has important implications for the future health of patients, as well as for clinical practice. The Legal Clinic is taking an “upstream” approach to addressing the social determinants of health by ensuring patients receive timely access to the legal services for which they otherwise may have not received help. By helping patients overcome the barrier in accessing legal services and therefore addressing underlying social causes of adverse health outcomes, and

| Type of Legal Need                                      | Booked appointment n = 94 | Attended appointment n = 69 |
|--------------------------------------------------------|---------------------------|-----------------------------|
| **Income**                                             |                           |                             |
| ‘Trouble making ends meet’                             | 82 (87.2)*                | 62 (89.9)*                  |
| ‘Trouble making ends meet’                             | 74 (78.7)                 | 54 (78.3)                   |
| Needing help getting or keeping benefits               | 53 (56.4)                 | 39 (56.5)                   |
| Someone taking their money or possessions without permission | 21 (22.3)                 | 14 (20.3)                   |
| Medical review date for ODSP                           | 5 (5.3)                   | 4 (5.8)                     |
| Other/unspecifed income issue                          | 37 (39.4)                 | 30 (43.5)                   |
| **Housing**                                            |                           |                             |
| Problems with home repairs, heat not working, bed bugs etc. | 35 (37.2)                 | 25 (36.2)                   |
| Denied a rental unit due to discrimination              | 27 (28.7)                 | 19 (27.5)                   |
| Late with rent this year                              | 24 (25.5)                 | 14 (20.3)                   |
| Being harassed or discriminated by their landlord      | 18 (19.1)                 | 14 (20.3)                   |
| Worried rent subsidy will be cancelled                 | 13 (13.8)                 | 9 (13.0)                    |
| Being threatened with eviction                         | 11 (11.7)                 | 6 (8.7)                     |
| Served eviction papers                                | 8 (8.5)                   | 6 (8.7)                     |
| Court order affecting where or with whom they can live | 8 (8.5)                   | 5 (7.2)                     |
| Behind with rent                                       | 7 (7.4)                   | 3 (4.3)                     |
| Other/unspecifed housing issue                         | 23 (24.5)                 | 17 (24.6)                   |
| **Employment**                                         |                           |                             |
| Has been hurt at work                                  | 38 (40.4)                 | 30 (43.5)                   |
| Having trouble finding work due to discrimination      | 32 (34.0)                 | 25 (36.2)                   |
| Current or past employer owes them money               | 9 (9.6)                   | 9 (13.0)                    |
| Has been harassed by your employer or colleagues       | 9 (9.6)                   | 8 (11.6)                    |
| Other/unspecifed employment issue                      | 16 (17.0)                 | 15 (21.7)                   |
| **Health**                                             |                           |                             |
| Does not have someone to make health decisions if they are unable to do so | 49 (52.1)                 | 37 (53.6)                   |
| Other/unspecifed health issue                          | 13 (13.8)                 | 12 (17.4)                   |
| **Family/Community**                                   |                           |                             |
| Does not have a will                                   | 80 (85.1)                 | 59 (85.5)                   |
| Relationship where someone tries to control them       | 46 (48.9)                 | 30 (43.5)                   |
| Problems with child support or access                  | 24 (25.5)                 | 14 (20.3)                   |
| Going through a divorce or separation                  | 18 (19.1)                 | 14 (20.3)                   |
| Trouble bringing family members to Canada              | 13 (13.8)                 | 9 (13.0)                    |
| Trouble attaining citizenship                          | 5 (5.3)                   | 5 (7.2)                     |
| Other/unspecifed family or community issue             | 14 (14.9)                 | 11 (15.9)                   |

*Note: *Respondent indicated at least one item from the respective list
| Variable               | Attended the Legal Health Clinic (n = 59) | Versus Did not attend (n = 502) | OR   | 95% CI       | p-value |
|------------------------|------------------------------------------|---------------------------------|------|--------------|---------|
| Gender                 |                                          |                                 |      |              |         |
| Male                   | 1.11                                     | 0.55, 2.26                      | 0.766|              |         |
| Transgender            | 6.74                                     | 0.69, 66.30                     | 0.102|              |         |
| Age Category           |                                          |                                 |      |              |         |
| 18–24 years            | REF                                      | –                               | –    |              |         |
| 25–34 years            | 0.75                                     | 0.19, 3.03                      | 0.686|              |         |
| 35–44 years            | 1.18                                     | 0.31, 4.53                      | 0.811|              |         |
| 45–55 years            | 0.69                                     | 0.18, 2.68                      | 0.592|              |         |
| 55–64 years            | 1.02                                     | 0.24, 4.43                      | 0.976|              |         |
| 65 and older           | 0.95                                     | 0.18, 4.93                      | 0.950|              |         |
| Ethnicity              |                                          |                                 |      |              |         |
| White                  | REF                                      | –                               | –    |              |         |
| Other ethnicity        | 2.48                                     | 1.14, 5.39                      | 0.022|              |         |
| No response            | 6.04                                     | 0.338, 96.49                    | 0.204|              |         |
| Citizenship            |                                          |                                 |      |              |         |
| Canadian               | REF                                      | –                               | –    |              |         |
| Other citizenship      | 4.40                                     | 1.48, 13.07                     | 0.008|              |         |
| No response            | 1.02                                     | 0.05, 23.27                     | 0.989|              |         |
| Relationship Status    |                                          |                                 |      |              |         |
| Married/Common Law     | REF                                      | –                               | –    |              |         |
| Other response         | 1.01                                     | 0.45, 2.24                      | 0.988|              |         |
| Education              |                                          |                                 |      |              |         |
| High School or below   | REF                                      | –                               | –    |              |         |
| Any post-secondary     | 0.99                                     | 0.45, 2.18                      | 0.976|              |         |
| No response            | 7.97                                     | 0.46, 139.21                    | 0.155|              |         |
| Employment             |                                          |                                 |      |              |         |
| Employed               | REF                                      | –                               | –    |              |         |
| Not employed           | 1.25                                     | 0.55, 2.83                      | 0.594|              |         |
| Monthly Household Income|                                        |                                 |      |              |         |
| Less than $650         | REF                                      | –                               | –    |              |         |
| $700 - $1800           | 0.62                                     | 0.17, 2.18                      | 0.446|              |         |
| $1850 - $3000          | 0.36                                     | 0.09, 1.51                      | 0.162|              |         |
| More than $3000        | 0.36                                     | 0.07, 1.89                      | 0.226|              |         |
| Housing                |                                          |                                 |      |              |         |
| Owns their home        | REF                                      | –                               | –    |              |         |
| Does not own their home| 1.48                                     | 0.60, 3.63                      | 0.397|              |         |
| Income Insecure        |                                          |                                 |      |              |         |
| No                     | REF                                      | –                               | –    |              |         |
| Yes                    | 1.95                                     | 0.78, 4.93                      | 0.156|              |         |
| Food Insecure          |                                          |                                 |      |              |         |
| No                     | REF                                      | –                               | –    |              |         |
| Yes                    | 1.57                                     | 0.70, 3.52                      | 0.276|              |         |
| Housing Insecure       |                                          |                                 |      |              |         |
| No                     | REF                                      | –                               | –    |              |         |
| Yes                    | 3.33                                     | 1.53, 7.24                      | 0.002|              |         |
| Affords Medication     |                                          |                                 |      |              |         |
| Yes                    | REF                                      | –                               | –    |              |         |
| No                     | 1.15                                     | 0.51, 2.61                      | 0.740|              |         |
| Self-reported Health Status|                                    |                                 |      |              |         |
| Excellent              | REF                                      | –                               | –    |              |         |
| Very Good              | 0.55                                     | 0.05, 5.86                      | 0.622|              |         |
| Good                   | 1.29                                     | 0.14, 12.30                     | 0.826|              |         |
| Fair                   | 1.25                                     | 0.12, 12.86                     | 0.852|              |         |
| Poor                   | 1.22                                     | 0.11, 13.48                     | 0.874|              |         |
| Mobility               |                                          |                                 |      |              |         |
| No problems            | REF                                      | –                               | –    |              |         |
though this paper does not measure health outcomes, it is likely that accessing the Legal Clinic will translate into improved health outcomes for these patients [7, 13, 14]. Future research should prospectively follow patients to fully evaluate this impact on health outcomes. Moreover, the implementation of a Legal Clinic will likely benefit clinical practice. Studies that have implemented Legal Clinics have found that clinicians feel as though they are better advocates for their patients by collaborating with a lawyer and knowing where they can refer them [29, 30]. Other family practices may be an ideal setting in which legal services can be provided to vulnerable individuals in a familiar, trusted setting.

**Table 7** Logistic regression of participant characteristics associated with attending the Legal Health Clinic (Continued)

| Variable       | Attended the Legal Health Clinic (n = 59) | Versus Did not attend (n = 502) | OR     | 95% CI   | p-value |
|----------------|-------------------------------------------|---------------------------------|--------|---------|---------|
| Self-Care      | Some/Severe problems                       |                                 | 1.56   | 0.65, 3.73 | 0.321   |
|                | No problems                                |                                 | REF    | –       | –       |
|                | Some/Severe problems                        |                                 | 0.76   | 0.30, 1.97 | 0.575   |
| Usual Activities| No problems                                |                                 | REF    | –       | –       |
|                | Some/Severe problems                        |                                 | 2.83   | 1.08, 7.43 | 0.034   |
| Anxiety/Depression | No problems                                |                                 | REF    | –       | –       |
|                | Some/Severe problems                        |                                 | 0.91   | 0.39, 2.13 | 0.826   |
| Pain/Discomfort | No problems                                |                                 | REF    | –       | –       |
|                | Some/Severe problems                        |                                 | 1.62   | 0.54, 4.87 | 0.392   |

**Note:** Bolding denotes risk factors significant at \( p < 0.05 \)

Consent for publication
Not applicable.

Competing interests
The authors declare that they have no competing interests.

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