



A Public Health Approach to Uncovering the Health-Related Needs of Teen Library Patrons

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Abstract

Widespread problems with health literacy significantly limit effective dissemination and understanding of health information, particularly among vulnerable populations. As libraries are re-envisioned as community centers and resource providers, librarians are well positioned to help patrons overcome health literacy challenges by helping them to search for and use health information. Librarians often have not had health reference training, and some are unsure of the appropriateness of their role in patrons' health. This study presents the results of a health needs assessment done in collaboration between the Teen Services Department of a major urban library and faculty from a state university. Using survey and focus group data, the research team sought to uncover the most common health-related needs among community teens as perceived by teen services librarians and staff, preparedness to respond to these needs, and interventions in addressing these needs. Findings confirm that some teens do turn to branch libraries for health information. Additional results revealed which types of health-related questions participants felt most equipped to answer (social health) and least equipped (substance abuse) and indicate staff have had altogether little formal training to address patrons' health questions. This needs

assessment presents replicable tools and questions for libraries aiming to improve health literacy in their local communities.

Introduction

Chicago has often been called a “City of Neighborhoods,” made up of over two hundred unique geographic areas that characteristically differ from one another,ⁱ and within each community are Chicago Public Library (CPL) sites. The beauty of these differences is that one can experience cultural and linguistic diversity just a few miles from one’s own home. A downfall of this diverse landscape is the vast differences in socioeconomic conditions. This means that the health outcomes of a teen library patron in one neighborhood may be worse compared to a peer’s elsewhere in the city. Similarly, the health-related needs to which teen services staff at library branches attend can vary. How can such disparities and differences exist between geographically neighboring communities? And how can a library system and its branch locations positively contribute toward the unique social determinants impacting the health of teen patrons? In this article, we share how the CPL Teen Services Department and state university faculty employed a public health approach to establish priorities to support equitable teen health across the city.

Social Determinants of Health

Identifying and addressing the health-related needs of teen patrons requires an understanding of the role of social determinants. Social determinants of health (SDOH) are “conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.”ⁱⁱ It is increasingly understood that the inequitable distribution of these conditions is directly associated with the health-related disparities that exist between and within communities.ⁱⁱⁱ In other words, where you live matters.

Operating on this belief that where you live matters, the Office of Disease Prevention and Health Promotion’s Healthy People 2020 (healthypeople.gov) uses an organizing framework that divides social determinants into placed-based key areas: *economic stability, education, social and community context, health and health care, and neighborhood and built environment*.^{iv} These conditions help to explain why some people are healthier than others. Given the

socioeconomic diversity of Chicago, one could expect to see differences in how these key issues are manifested from one neighborhood to the next and so, too, the health-related needs of community members near the different branch locations. In what ways can the library be a positive force in ensuring more equitable health outcomes?

Libraries and Community Health

Libraries offer community members a nonthreatening environment and a place for lifelong learning,^v helping people to navigate diverse areas of their lives.^{vi} As such, it makes sense that patrons of all ages may turn to libraries and their staff when they have health-related needs. For example, in Philadelphia, a study found that 34% of people come to the library for health information.^{vii} As libraries are re-envisioned and reborn as community centers and resource providers,^{viii} what is their role in understanding and positively contributing to a given neighborhood's SDOH? And specifically, how might teen services staff, who often play an integral mentorship role, influence the social determinant of *health and health care* so teens in different neighborhoods have equal opportunity to grow into healthy adults?

Librarians as Health Specialists?

The Healthy People 2020 social determinant of *health and health care* is made up of three key issues: *access to health care*, *access to primary care*, and *health literacy*. Of these issues, librarians are well suited to positively impact patrons' health literacy, broadly defined as one's ability to understand health information. Librarians are positioned to assist patrons in overcoming health literacy challenges, particularly among vulnerable and low literacy populations, by helping them to search for and use health information.^{ix} However, many librarians have not had health-related training, and some are unsure about the appropriateness of their role in advising patrons about health-related information. To support librarians with the decisions related to the latter, the American Library Association created the "Health and Medical Reference Guidelines" "to assist staff in responding to health or medical inquiries . . . and to be prepared and feel confident that they are providing the best possible response."^x To support librarians with the former, the National Network of Libraries of Medicine (NNLM) has offered professional development to librarians such as trainings in consumer health.

While the role of libraries and librarians in community health is not widely documented in the literature, it is becoming more frequent. For example, the Philadelphia Public Library partnered with the University of Pennsylvania to train librarians in becoming community health specialists and to offer programs related to nutrition, trauma, mental health, youth leadership, and healthy behaviors.^{xi} In New York, the library offers health literacy classes in neighborhoods with the greatest need.^{xii} In Arizona, the Pima County Library added registered nurses to their staff who offer everything from case management to blood pressure screening.^{xiii} In Dallas, the public library system runs programs for the homeless including assistance with job applications, housing, and other needs.^{xiv} In New Jersey, the East Brunswick Public Library helps their linguistically diverse patrons locate health care services from professionals who speak their language.^{xv} Services like these confirm the Brookings Institution’s observation that next to home and work, libraries are a “third place,” offering more to their community than just books. Further, it suggests that libraries are capable of offering such services, and they are addressing needs among subsets of its patrons such as teens.

Teen Services Librarians Building Bridges to Better Health

Given YALSA’s mission to alleviate challenges that teens face and put them on paths toward successful and fulfilling lives, addressing the SDOH that impact teen patrons is well matched to a library’s community role. While teen services staff might not directly provide access to health care, they *can* build bridges. This function aligns with YALSA’s priority research area of *community engagement*, which encourages teen librarians to understand the needs of and build relationships in the community.^{xvi} In doing so, they can bridge emerging literacies between teens’ homes and communities, which also is a focus of the YALSA priority research area of *cultural competence, social justice and equity*.^{xvii}

According to Braun and Peterson, youth are often unaware of the services in their community.^{xviii} They argue that as leaders in youth development, libraries should serve as connectors between youth and community agencies. When it comes to health literacy, Hughes-Hassell, Hanson-Baldauf, and Burke contend, “it seems natural that public libraries take the lead in providing assistance to teenagers who need help finding health information.”^{xix} Similarly, Lukenbill and Immroth, after researching the role of librarians as health information gatekeepers, conclude, “Not only do people need information to make good decisions, they also must know

how to understand it and apply it in their lives.”^{xx} They further suggest that libraries can improve social equity among youth by way of policies, missions, goals, programming, and services that promote health.

Diverse Populations, Diverse Health Needs

Part of ensuring that health information is understandable and usable is knowing the target audience. Given the diversity of our nation’s youth and the place-based nature of the SDOH, a “one size fits all” approach will not work. A 2015 YALSA infographic highlights this diversity:

- 39% of the homeless population are under the age of eighteen.
- LGBTQI teens are two times more likely to be physically assaulted.
- 22% of youth live below the federal poverty threshold.
- African American teens are five times more likely to be incarcerated.
- 22% of Hispanic youth are unauthorized immigrants.
- 14.2% of public school enrollees are English-language learners.^{xxi}

These numbers are likely to be different in different cities. For example, in Chicago there is great diversity among its residents and their health-related needs. A Chicago Department of Public Health needs assessment revealed the following:

- Economic hardship is higher in the South and West Side neighborhoods; non-Hispanic blacks and Hispanics are overrepresented.
- Child opportunities are lowest in the South and West Side neighborhoods; low opportunities are correlated with shootings, elevated blood lead levels, child obesity, lower life expectancies, diabetes-related and diet-related mortality, and teen births.
- Sexually transmitted infections and violence embody the most extreme inequities; they are fifty times higher in economic hardship areas.
- Suicide rates are three times higher among non-Hispanic whites and two times higher in low-economic hardship areas.
- LGBTQI youth exhibit higher rates of risky behaviors, bullying, depression, suicide attempts, and eating disorders.
- Violent crime is a thousand times greater in the South and West Side neighborhoods.

- Homicide rates are twenty-five times higher among non-Hispanic blacks and ten times higher in economic hardship areas; 47% of victims are less than twenty-five years old.
- Overweight or obesity rates are highest in the Northwest and Southwest neighborhoods and among Hispanics.^{xxii}

Given this diversity, how can libraries strategically address the health-related needs of its teen patrons? And how can a library system ensure its teen services staff are prepared to address those needs? A public health approach coupled with a social justice lens might hold a solution.

Identifying and Prioritizing Health-Related Needs

Identifying and prioritizing the health-related needs of community teens and the social determinants at the source of those needs is the first step in developing and delivering appropriate library resources, programming, and services. It is also a step aligned with YALSA’s priority research area of *cultural competence, social justice and equity*, which promotes research into the factors shaping the need for and use of library services and resources and the evaluation of the extent to which current resources meet the needs of diverse teens.^{xxiii} In this section, we describe how a community health needs assessment, guided by transformative research practices, can support and honor this process.

Utilizing a Public Health Approach to Identify Needs

In public health, identifying and prioritizing health-related needs through a systematic, data-collection analysis is referred to as a community health assessment or a community health needs assessment.^{xxiv} Such assessments give information that can help organizations justify which, how, and where resources should be allocated to best meet community needs. There are a variety of frameworks and models to guide public health professionals through this process. For our study, we used the process that was outlined by the United Kingdom’s Health Development Agency (HDA).

The HDA process provides guidelines to organizations seeking to review the health issues facing a specific population, to establish priorities, and to make decisions about allocating resources.^{xxv} The process consists of five unique but interdependent steps:

Step 1: Getting Started includes assembling a health needs assessment team, defining the population to address, establishing a rationale for the assessment, engaging others who should be involved, and securing resources.

Step 2: Identifying Health Priorities includes creating a profile of the target population and assessing the factors that impact their health.

Step 3: Assessing Health Priorities for Action is when the assessment team chooses the most significant health conditions and social determinants and determines effective, acceptable interventions.

Step 4: Action Planning for Change is how the team establishes aims, objectives, indicators, and targets for intervention(s); plans the actions to achieve them; and establishes a system of evaluation.

Step 5: Moving On/Project Review concludes with the team reflecting on lessons learned and makes decisions about further actions.

While these steps might appear linear, the process requires cross-checking and revisions such that one will regularly “loop” back to earlier steps before moving forward. Together, these steps provide a structure to make data-driven, health-related changes in a community.

Embracing Transformative Research to Prioritize Needs

As a matter of health-related equity and social justice, our project team was deeply committed to identifying ways to level the playing field among community teens from one neighborhood to the next. The HDA health needs assessment process, which utilizes a mixed-methods research approach, was well-suited for this effort. Mixed-methods research is the collection, analysis, and integration of quantitative and qualitative data. This blended approach offsets the limitations associated with one methodology by utilizing the strengths of the other approach to provide a more complete picture.^{xxvi} For example, qualitatively rich narratives can humanize otherwise impersonal quantitative data.^{xxvii} When used in efforts related to equity and social justice, this approach is sometimes called *transformative research*.

According to Mertens, transformative research engages culturally diverse groups to construct knowledge in ways that aid them and improve society.^{xxviii} It typically employs

community-based, advocacy-focused research practices rooted in grounded theory. In grounded theory, researchers inductively build theories throughout the stages of the data collection and analysis.^{xxix} Charmaz sees compatibility between grounded theory and social justice because of the emphasis on being close to one's data, being critically self-reflective, and seeking to provide reciprocal benefits. To do this, Charmaz proposes that researchers ask the following questions when collecting and analyzing their data: "What is happening?" "What are people doing?" "What do these stories indicate?" and "What might they suggest about social justice?"^{xxx} Throughout our project, we asked these questions to ensure that we were open-minded about the data, that we frequently asked clarifying questions about acceptable and realistic next steps, and that we prioritized needs in a way that best supported our target population.

Project Aims

Step 1: Getting Started

The initial planning phase of the HDA health needs assessment process is Step 1: Getting Started. It entails defining the target population, having a clear rationale for the needs assessment, identifying who should be involved, and securing the resources needed. To undertake this first step, a faculty researcher from Northeastern Illinois University (NEIU), met with the director of the CPL Teen Services Department to discuss interest in studying the health-related needs of teen patrons and the role that CPL could play in addressing those needs. The director obtained administrative approval to pursue the research and to utilize human resources to do so. The faculty researcher prepared a rationale for the needs assessment that guided the development of these project aims:

1. To uncover the most common health-related needs among community teens as perceived by teen services staff.
2. To document the ways that teen services staff are already addressing the health-related needs of teens and any challenges associated with doing so.
3. To identify resources, programming, and services that teen services staff would like to provide to teens and how the library can support their staff in doing so.
4. To establish partnerships that support the CPL Teen Services Department in providing resources, programming, and services to existing and potential teen patrons.

Findings from these aims would be used to form relevant research and community partnerships, to acquire necessary resources and offer training for staff, and to design and provide appropriate resources, programming, and services that help to “level the playing field” from one neighborhood to the next when it comes to teens’ health outcomes.

Methodology

To accomplish our aims, we committed to conducting a needs assessment that embodied transformative research practices. In this section, we describe how we did so in relation to Steps 2 and 3 of the HDA needs assessment process.

Step 2: Identifying Health Priorities

Step 2 of the needs assessment process, Identifying Health Priorities, assumes you have a working definition of the target population and have clarified the purpose of the assessment. To profile our target population (community teens in library branch neighborhoods), we used both primary and secondary data sources to understand the primary health issues, both locally and nationally, and the SDOH influencing them. Secondary sources included the CDC’s Youth Risk Behavior Surveillance System (YRBSS) and the Healthy Chicago 2.0 Community Health Assessment. The YRBSS monitors health behaviors that contribute to the leading causes of death, disability, and social problems among young people in the United States.^{xxxix} The 2017 YRBSS report revealed that significant health disparities exist among youth subpopulations defined by sex, race/ethnicity, and grade in school and between sexual minority and nonsexual minority youth.^{xxxix} The Healthy Chicago 2.0 Community Health Assessment guides the city’s work toward populations at most risk. Their 2016 report revealed that the neighborhoods served by the library’s branch locations do indeed vary in terms of economic hardship, child opportunities, and associated health outcomes.^{xxxix} Findings from these reports, coupled with the literature review, guided the development of a data collection tool, a survey whose purpose was to gain insight into teens’ health-related needs as perceived by CPL Teen Services staff (see appendix 1). Specifically, we sought to gather the following information:

- **RQ1:** How often are Teen Services staff approached with health information questions and broached with health-related needs?

- **RQ2:** What are the most common health information questions asked, health-related needs broached, and health-related needs observed of/by teen services staff members?
- **RQ3:** On which resources and partnerships do teen services staff members rely to respond to health information questions and health-related needs?
- **RQ4:** Do teen services staff feel equipped to respond to health information questions and health-related needs?
- **RQ5:** What kinds of training have teen services staff had to respond to the health information and health-related needs of youth?
- **RQ6:** To which resources do teen services staff wish they had access to respond to the health information and health-related needs of youth?

Answers to these questions were gathered via twenty-one open- and closed-ended questions in an online survey (see appendix 1). The CPL director sent a link to this survey to all teen services staff.

Because the types of data collected were mixed, analysis required different approaches. The quantitative data included responses to Likert-scale, multiple-choice, and checkbox questions. We analyzed this data using descriptive statistics via IBM SPSS version 22. For the qualitative data, consisting of responses to open-ended questions, we used a multi-phased approach. First, we independently reviewed the data, looking for emerging concepts, and compared them to the quantitative analysis. Next, using grounded theory, we conducted a second review of the responses using Charmaz’s questions: “What is happening?” “What are people doing?” “What do these stories indicate?” and “What might they suggest about social justice?”^{xxxiv} After this open-coding period, we analyzed and sorted emerging concepts to identify overarching themes, which we combined and revised to determine final themes. The faculty researcher then re-reviewed the results using these themes, summarized the results, and shared them with the director for confirmation. This triangulation of analysis contributes to the validity of this study.^{xxxv}

Step 3: Assessing Health Priorities for Action

In Step 3: Assessing Health Priorities for Action, the assessment team prioritizes the health conditions and social determinants in terms of size and severity in relation to the target population. Then those priorities are weighed against their changeability at the local level.

Finally, the team determines effective and acceptable interventions and actions.^{xxxvi} For this step, we recognized our assessment would benefit from additional expertise and insight, and so we recruited three additional CPL Teen Services administrators and one NEIU academic librarian.

To help prioritize key issues, the team hosted a focus group of key informants consisting of teen services staff from the branch locations with the most widely used teen services departments. For this focus group, we constructed a set of questions whose responses would help us to evaluate the key issues uncovered in Step 2 in terms of their size and severity, and also changeability in terms of feasibility and accessibility (see appendix 2).

Having the focus group helped us to determine the most acceptable interventions and required us having a list ready to present. To do this, the faculty researcher and academic librarian re-reviewed the literature to identify possible interventions in which libraries engaged. These interventions were presented to the rest of the assessment team to “weed” out activities that were not a good fit. Next, the team organized the remaining interventions into three categories: *professional development*, *teen-facing*, and *miscellaneous*. Within each category, we divided activities into feasibility subcategories: *easy and inexpensive*; and *involves more time but inexpensive*.

The focus group was held at a central library branch location, and participants were given leave from their duties to attend. The sixty-minute agenda was divided into four parts:

1. *Profiling the target population*. The assessment team presented a summary of local and national teen health issues, trends, and the results of the survey. Participants were invited to ask questions and offer insight.
2. *Prioritizing key issues based on impact and changeability*. Given a list of the topics ranked based on the survey results and local data, participants rated issues as *high*, *medium*, or *low* in terms of their severity and size.
3. *Selecting interventions based on acceptability*. Participants rated the interventions in terms of acceptability as *yes*, *no*, or *maybe* from the library’s perspective.
4. *Questions and comments*.

After the focus group, we analyzed the new data to prioritize the health conditions and SDOH in terms of size and severity and to determine effective and acceptable interventions. The majority of the responses were quantitative and could be analyzed using descriptive statistics.

The data was rank-ordered to delineate those conditions deemed most severe and most changeable, and to identify where they overlapped (i.e., severe *and* changeable). The intervention acceptability ratings were then organized into three levels: *high*, *medium-high*, and *medium* (none were rated low). This summary was shared with the assessment team and adjustments were made accordingly. Finally, the team re-reviewed the intervention list one last time to assure that the activities would indeed address health-related equity among teens within their service region.

Results

Participants

Of 40 possible teens services staff, 27 (67.5%) responded to the online survey and 10 (25%) participated in the focus group. Survey participants represented twenty different branch locations and included a mixture of librarians, associates, and mentors. Of these participants, 21 (77.8%) held a library science degree. For the focus group, 10 teen services staff participated, of which five were members of the administrative staff.

Step 2: Identifying Health Priorities Results

RQ1: How often are teen services staff approached with health information questions and broached with health-related needs?

To understand the frequency of requests for health information or needs observed, two questions were asked. Data collected from the first question reveals that few staff are asked daily (3.7%, $n = 1$) or weekly (11.1%, $n = 1$); however, 33.3% ($n = 9$) indicated they are asked monthly. The remaining indicated rarely or never. Responses to the second question revealed of those teens who ask health-related questions, 40.7% ($n = 11$) of staff indicated there are one to five patrons who asked regularly; 59.2% ($n = 16$) indicated that they are not approached regularly. Variability may stem from local needs, staff approachability, staff proximity to teens, or other factors.

RQ2: What are the most common health information questions asked, health-related needs broached, and health-related needs observed of/by teen services staff?

Data for this research question was collected via two questions in which participants indicated their response via a checklist (see appendix 1). The first question presented participants with thirty-five common health topics divided into larger topical groups. We present these results in table 1, organizing responses into these tiers: 33%, 49%, 66%, and 74%. We based tiers on a visual scan of the data which showed that frequencies fell in four “clumps.” The top tier skewed toward social and emotional health topics including bullying, violence, harassment, relationships, anxiety, depression, self-esteem, and conflict resolution. Within the top 49% appeared another social and emotional-related topic: sexuality and gender.

Table 1: Health Questions Asked by Teen Patrons

| Tier of frequency | Topic |
|--------------------------|---|
| Top 33% | Relationships: romantic, sexual Relationships: friends, making friends Anxiety, depression Self-esteem, happiness (building, fostering) |
| Top 49% | Relationships: romantic, sexual Relationships: parents Sexuality and gender Conflict resolution |
| Top 66% | Specialty diets (e.g., vegan, paleo) General nutrition Substance use: alcohol Death, dying, grief Domestic violence |
| Top 74% | Substance abuse: marijuana Family planning, pregnancy prevention Eating disorders Pregnancy and parenting Puberty (i.e., growth/development) Sexually transmitted infections |

The second question presented factors related to the SDOH. As represented in table 2, economic: employment was the leading factor, with 85% ($n = 23$) of participants noting this need. The next most apparent needs were health care: mental/emotional health counseling (44%, $n = 12$), economic: access to food (41%, $n = 11$), and social: discrimination (37%, $n = 10$). The

frequency of these SDOH factors indicates potential gaps in community resources.

Table 2: Types of Health-related Service Questions Asked Related to Social Determinants of Health

| Topic | % of participants (<i>n</i> = 27) reporting topic as asked |
|--|---|
| Economic: access to food | 41 |
| Economic: access to housing | 22 |
| Economic: employment | 85 |
| Neighborhood: access to foods that support healthy eating | 15 |
| Neighborhood: environmental conditions | 19 |
| Neighborhood: quality housing | 7 |
| Health care: primary (e.g., disease/illness/injury prevention, diagnosis, treatment) | 15 |
| Health care: mental/emotional (e.g., counseling) | 44 |
| Health care: reproductive, contraception | 26 |
| Health care: reproductive, pregnancy (testing, pre-/post-natal) | 19 |
| Health literacy (e.g., how to locate, evaluate, and interpret health information) | 11 |
| Social: civic participation (e.g., clubs, community groups) | 30 |
| Social: discrimination | 37 |

RQ3: On which resources and partnerships do teen services staff rely to respond to health information questions and health-related needs?

Two open-ended questions revealed which resources and partnerships that staff relied on for health-related information and needs. The first question asked participants which in-house resources (e.g., databases, books, websites, etc.) they relied on for health information and service questions. Medical websites like MedlinePlus, the Mayo Clinic, and WebMD made up 26% (*n* =

7) of the responses, followed by nonfiction books (18.5%, $n = 5$). The remaining responses included in-house lists of free housing and community organizations, health department brochures, and general search engines. The next question asked about the resources in their professional community (i.e., fellow staff or managers, librarians in other systems, associations, other) on which they most relied. Of the 27 participants, 22% indicated fellow staff and 7% indicated their manager. The remaining responses included health professionals they personally knew, local health organizations, and librarians at other branches or systems. Collectively, these responses indicate there is not a ubiquitous “go to” resource or protocol when it comes to addressing teens’ health needs.

RQ4: Do teen services staff feel equipped to respond to health information questions and health-related needs?

Two questions uncovered how equipped staff felt about responding to health-related questions and needs. The first asked about the types of questions they felt most prepared to answer; the second asked for which they felt least prepared to answer. Those areas in which the 27 participants felt most prepared included social health and issues (48.1%); food, nutrition, fitness, and weight management (40.7%); and mental/emotional health (27.0%). Areas in which they felt least prepared included substance use (59.3%), injury/disease and growth/development (33.3%), and mental/emotional health (33.3%). Worth noting, some librarians felt most equipped in topics that others felt least equipped. For example, mental/emotional health was cited as an area of both strength and weakness. Altogether, these responses show that staff might benefit from health-related training, but perhaps participants should be able to choose the type of training they would like to receive.

RQ5: What kinds of training have teen services staff had to respond to the health information and health-related needs of youth?

Regarding training, two questions asked about health-related training participants had received and the type of training they would like. Again, participants were given a checklist of responses from which to choose. Responses to the first question indicated that 55.6% had been trained informally (e.g., books, articles, blogs, recorded webinars and lectures, conversations with professional connections, etc.); 40.7% participated in formal trainings such as those

sponsored by the NNLM or other agencies; and 25.9% received training as part of their formal coursework for their degree. Of those health-related topic areas for which they would like training, the leading topic was mental/emotional health (25.9%). This finding is not surprising given the results shared in the previous section. Mental/emotional health appears to be a topic area in which staff have mixed levels of confidence. Altogether, the results indicate that the staff had not had much formal training to address the health-related information questions and needs of local teens.

RQ6: To which resources do teen services staff members wish they had access to respond to the health information and health-related needs of youth?

An open-ended question prompted participants to identify resources and partnerships they had access to in order to address the health information and service questions asked and/or health-related needs observed. The predominant response was partnerships with neighborhood health centers and community organizations. These centers and organizations would include places to which staff could refer teens for help with sexual or mental/emotional health. These organizations might also come to the library to offer mental health first-aid training to staff or to answer topical questions. Finally, staff indicated they would like support from and recognition among the larger library administration that community health is a priority for all patrons, not just teens. Overall, these responses reveal a willingness among the staff to respond to teens' health-related needs, but they require additional resources to do so.

Step 3: Assessing Health Priorities for Action

The focus group responses were intended to help us complete Step 3: Assessing Health Priorities for Action. Specifically, we wanted to identify the most significant health conditions and SDOH factors, as perceived by teen services staff, and to determine the best interventions. The focus group was split into four parts. In the first part, we shared the local and national teen health trends and the results of the survey. In the second part, we asked participants to rate the severity of the most common health-related topics in the survey as *high*, *medium*, or *low*. The topics that staff perceived as most severe included anxiety and depression; death, dying, and grief; and sexually transmitted infections. These topics were followed by bullying, violence, and harassment; self-esteem and happiness; and domestic violence. In the second part, we also asked

participants to rate the same topics in terms of changeability (i.e., ability to be effectively improved by the CPL). The areas rated as most changeable included bullying, violence, and harassment; relationships; self-esteem and happiness; conflict resolution; general nutrition; and pregnancy and parenting. The HDA needs assessment process recommends that the areas an organization should address first are those where severity and changeability overlap. For our focus group, these areas were bullying, violence, and harassment; and self-esteem and happiness. It should be noted that in this second part of the focus group, we did not discuss the most severe and changeable SDOH, because the most obvious factor, made clear by the survey results, was employment, followed by access to food and mental/emotional health counseling.

In the third part of the focus group, participants evaluated potential interventions in terms of acceptability for CPL to perform by way of indicating *yes*, *no*, or *maybe*. The tabulated results appear in table 3. Below appears a summary of the results for each of the three intervention categories: *professional development*, *teen-facing*, and *miscellaneous*.

Approval was medium-high for these professional development activities:

- Creating a professional development resource library for staff.
- Working with the CPL's Library Staff and Organizational Development Department to create webinars in collaboration with the NNLM.
- Providing onsite professional development opportunities.

Approval was high for these teen-facing activities:

- Publicizing existing SDOH and health-related resources.
- Inviting community service providers to provide teen programming.
- Constructing a teen-focused health resource list for staff and eventually a teen-friendly version to be made available at branch locations.

Approval was medium-high for these teen-facing activities:

- Constructing a teen-focused health reading list consisting of both fiction and nonfiction books about health-related topics or with a health-related theme.

Approval was medium-high for these miscellaneous activities:

- Partnering with school librarians or health teachers to ensure that teens develop health literacy and information literacy skills.

- Forming a Teen Health Advisory task force made up of three to four teen services staff, a teen services administration team member, and the library social worker. This team would meet regularly to discuss and plan health-related initiatives.

Approval was medium for these miscellaneous activities:

- Updating library policies, the Strategic Plan, or teen services’ goals to include attention to and activities directed toward teen health.

Table 3. Focus Group Participants Select Interventions Based on Acceptability to Various Constituencies

| Intervention Idea | Acceptability? (n = 8) |
|--|-----------------------------------|
| PROFESSIONAL DEVELOPMENT | |
| Create a professional development resource library for staff. | Yes: 6 No: 0 Maybe: 2 |
| Work with the CPL’s Library Staff and Organizational Development Department to create webinars in collaboration with the National Library Network of Medicine. | Yes: 6 No: 1 Maybe: 1 |
| Provide onsite professional development opportunities. | Yes: 7 No: 0 Maybe: 1 |
| TEEN-FACING POSSIBILITIES | |
| Publicize existing/new SDOH and health-related resources. | Yes: 6 No: 1 Maybe: 1 |
| Invite community service providers to provide teen programming. | Yes: 7 No: 0 Maybe: 2 |
| Construct a teen-focused health <u>reading</u> list. | Yes: 6 No: 0 Maybe: 1 |
| Construct a teen-focused health <u>resource</u> list. | Yes: 8 No: 0 Maybe: 0 |
| MISCELLANEOUS | |
| School Partnerships: Partner with school librarians or health teachers to ensure that teens develop health and information literacy skills | Yes: 5 No: 0 Maybe: 3 |

| | |
|---|-----------------------------|
| Form a Teen Health Advisory Task Force: Consists of 3–4 teen services staff, a teen services administration team member, and the library social worker. Meets regularly to discuss and plan health-related initiatives. | Yes: 7 No: 0 Maybe: 1 |
| Library Policy/Strategic Plan: Modify or add to the library’s mission and goals. | Yes: 2 No: 0 Maybe: 6 |

Note: These results include a total of eight respondents and one respondent who did not answer every question.

Discussion

In this section, we discuss the implications of our findings for the CPL, as per Step 4: Action Planning for Change, preview the activities taken to date for that step, and share our intentions for Step 5: Moving On/Project Review.

Step 4: Action Planning for Change

In Step 4: Action Planning for Change of the needs assessment process, the team establishes intervention goals, the actions to accomplish them, and creates a system of evaluation.^{xxxvii} For this step, we expanded our team to include a licensed professional counselor. We also established relationships with members of the NNLM and are working to create partnerships with health science librarians at nearby universities. The expertise of these individuals will help us to set realistic goals and provide avenues for intervention implementation.

With the licensed professional counselor, we reviewed the findings. Our review indicated that health information and service needs do exist among community teens and that some of these teens turn to their local library branch for assistance. The Healthy Chicago 2.0 Community Health Assessment and our survey results make apparent that needs vary by neighborhood and are influenced by the SDOH. Literature on the role of libraries in community health, coupled with YALSA’s priority research area of *community engagement*, indicates there is an opportunity for, and perhaps even duty among, libraries to positively influence these conditions and factors as a matter of social justice and equity.

Given our new “charge,” the team established immediate, short-, and long-term goals and identified the actions to achieve them. To do this, we began with the highest-ranking interventions. Among those, we chose one activity from each intervention category.

- *Professional development:* Work with the CPL’s Library Staff and Organizational Development Department to create webinars in collaboration with the NNLM.
- *Teen-facing:* Construct a teen-focused health resource list for staff reference and eventually a teen-friendly version to be made available at branch locations.
- *Miscellaneous activities:* Update library policies, the Strategic Plan, or teen services goals to include attention to and activities directed toward teen health.

We also decided to initially focus on teen health and SDOH in general, and eventually the health topics identified both as severe and changeable (bullying, violence, and harassment; and self-esteem and happiness).

For each intervention, we agreed upon aims and objectives, and actions to achieve them. While it is beyond the scope of this article to describe these and our system of evaluation, we are pleased to have already met two of our objectives: working with the NNLM to offer a webinar and constructing a teen-focused health resource list. Due to changes in library and city leadership, updates to the Strategic Plan and policies will be more long term.

Step 5: Moving On/Project Review

In Step 5: Moving On/Project Review, the assessment team reflects on lessons learned and makes decisions about further actions.^{xxxviii} While we have not fully implemented our planned interventions, we did complete the needs assessment. We evaluate our success by revisiting here our original aims and accomplishments. We also identify our limitations and make suggestions for improvement.

Our first aim was to uncover the most common health-related needs among teens as perceived by teen services staff. Via survey, we obtained perceptions from 67.5% percent of the teen services staff. Coupled with secondary data sources, we ascertained the greatest needs and the SDOH influencing them. Future research might include surveying and interviewing teens and local health professionals to improve the accuracy of our findings.

Our second aim was to document the ways that teen services staff already address health-related needs and the challenges with doing so. While our survey captured the frequency at which staff responds to health-related needs, we could have done a better job in identifying the ways they successfully do this. Future research should capture this information as interventions could be built upon those activities. Site visits, additional surveys or interviews with staff, and an

evaluative document review of programming and services on a branch-by-branch location basis could be ways to collect this data.

Our third aim was to identify resources, programming, and services that staff would like to or could provide to teens, but do not. Our survey participants identified community partnerships and administrative support as factors in being able to deliver programming and services. Though not interventions in and of themselves, the project team will set specific goals and identify actions to ensure these factors are addressed.

Our final aim was to establish both research and community partnerships. Regarding research partnerships, our team expanded to include three additional teen services administrative staff, an academic librarian, and a licensed professional counselor, each of whom afforded new insight and expertise. Regarding community partnerships, this is an area of focus for the year, though we have already established relationships at the national level with the NNLM and joined a citywide initiative to address bullying and suicide.

Conclusion

In large cities like Chicago, residents in one neighborhood may experience poorer health outcomes than in others. In large part, these are due to conditions and factors known as the SDOH.^{xxxix} As libraries increasingly become a third place (after home and work) for community members, there lies an opportunity for them to positively impact these conditions and factors. For young people, we know that “when children have the opportunity and resources to be healthy, they are more likely to grow into healthy adults.”^{xi} Young adult and teen services librarians can help to ensure those opportunities and resources. This idea is supported by YALSA’s mission “to support library staff in alleviating the challenges teens face, and in putting all teens—especially those with the greatest needs—on the path to successful and fulfilling lives.”^{xi}

To identify the greatest health-related needs of teens served by the CPL, we conducted a community health needs assessment. Our data collection and analysis were guided by transformative research practices to construct knowledge for the purpose of improving the health-related outcomes of community teens. Interventions will include staff training, community resource lists, and updating goals or the library’s Strategic Plan to include a focus on community health. Because teens’ health-related needs and the factors influencing them will change over

time, ongoing assessment and evaluation is essential to assuring that resources, programming, and services serve teen patrons in the best way possible.

Appendix 1. Survey Questions

DEMOGRAPHIC QUESTIONS

1. What neighborhood/community does your library serve?
2. What is your title?
3. Do you possess a library science degree?
4. If you possess a library science degree, at what level is it?

Circle all that apply:

Bachelor's Master's Doctorate Certificate: School Library or other

FREQUENCY OF HEALTH-RELATED QUESTIONS

5. How often do youth ask health information or health-related services questions?

Daily A couple times per week Once a week

A couple times per month Rarely Never

6. Of those youth who ask health information or health-related questions, approximately how many ask regularly?

1–5 6–10 11–15 I do not have patrons who ask regularly

HEALTH INFORMATION QUESTIONS

7. What kinds of health information (i.e., topics) questions are asked? Check all that apply.

Food, Nutrition, Fitness, and Weight Management

- Eating disorders
- Exercise/physical activity
- General nutrition
- Food allergies
- Food safety
- Specialty diets (e.g., vegetarian, paleo, etc.)
- Sport (as a participant)
- Weight management

Injury/Disease, Growth/Development

- Acne, warts, and other skin issues
- Disease diagnosis, prevention, management (exclusive of sexual health)
- Injury diagnosis, prevention, management
- Puberty (i.e., changes associated with growth and development)
- Sexuality and gender identification
- Sexually transmitted diseases and infections

Sexual Health

- Reproduction (i.e., “where do babies come from?”)
- Family planning and pregnancy prevention (i.e., contraception)
- Pregnancy and parenting (i.e., teen pregnancy/parenting)

Social Health and Issues

- Bullies, violence, harassment
- Conflict resolution
- Domestic violence
- Relationships: romantic/sexual
- Relationships: friends, making friends
- Relationships: parents

Mental and Emotional Health

- Addiction (any kind)
- Anxiety, depression
- Death, dying, grief
- Self-esteem, happiness (building, fostering)
- Separation and loss (from or of loved ones)
- Sleep problems
- Suicide thoughts

Substance Use

- Marijuana
- Opiates or other prescription drugs
- Tobacco
- Alcohol
- Other drugs

8. Of those health-related questions asked, which are most frequently asked?

HEALTH-RELATED SERVICES RELATED QUESTIONS

9. What kinds of health-related service questions are asked? Check all that apply.

- Economic: access to food
- Economic: access to housing
- Economic: employment
- Neighborhood: access to foods that support healthy eating
- Neighborhood: environmental conditions
- Neighborhood: quality housing
- Health care: primary (i.e., disease/illness/injury prevention, diagnosis, treatment)
- Health care: mental/emotional (e.g., counseling)
- Health care: reproductive, contraception
- Health care: reproductive, pregnancy (testing, pre-/post-natal)
- Health literacy (i.e., how to locate, evaluate, and interpret health information)
- Social: civic participation (e.g., clubs, community groups)
- Social: discrimination
- Other

10. Of those health-related service questions asked, which are most frequently asked?

HEALTH-RELATED NEEDS OBSERVED

11. Thinking about the health topics/issues listed in the previous questions, what kinds of health-related needs do you OBSERVE, by way of seeing or overhearing, among youth patrons in your setting?

12. Of those health-related needs, which do you most commonly observe?

RESOURCES FOR HEALTH-RELATED QUESTIONS AND OBSERVED NEEDS

For health information and health-related service questions ASKED, on which . . .

13. in-house resources (e.g., “go to” databases, books, websites, etc.) do you rely?
14. community resources (i.e., social services, medical institutions, businesses, associations, other) do you rely?
15. resources in your professional community (i.e., fellow staff or managers, librarians in other systems, associations, other) do you rely?
16. For health-related needs OBSERVED, on which resources (in-house, community, or professional community) do you rely?

HEALTH TRAINING, PART 1

Librarians are not necessarily trained in health.

17. To which health information/service questions and health-related needs do you feel most equipped to respond? Check all that apply.

- Food, nutrition, fitness, and weight management
- Injury/disease, growth/development
- Sexual health
- Social health and issues
- Mental and emotional health
- Substance use
- Other _____

18. To which health information/service questions and health-related needs do you feel least equipped? Check all that apply.

- Food, nutrition, fitness, and weight management
- Injury/disease, growth/development
- Sexual health
- Social health and issues
- Mental and emotional health
- Substance use
- Other _____

HEALTH TRAINING, PART 2

19. What kinds of training have you received to prepare you to respond to health information/service questions and health-related needs of youth? Check all that apply.

- As part of formal coursework during my professional preparation (i.e., degree programs).
- As a component of formal professional development (i.e., organized continuing education sponsored by the NNLM or other agencies).
- As a component of informal professional development? (e.g., books, articles, blogs, recorded webinars and lectures, conversations with professional connections, other).
- I have not participated in health-related training.
- Other _____

20. For which health information/service questions and health-related needs would you like training? Check all that apply.

- Food, nutrition, fitness, and weight management
- Injury/disease, growth/development
- Sexual health

- Social health and issues
- Mental and emotional health
- Substance use
- Other _____
- I do not want training.

21. To which resources and partnerships do you wish you had access in order to address health information and service questions asked and/or health-related needs observed?

Appendix 2. Focus Group Prompts

CHOOSING PRIORITIES ACCORDING TO IMPACT (SEVERITY) AND CHANGEABILITY

1. Which of the priority (in terms of size) health condition/determinant factors have a significant impact, in terms of *severity*, on teen health functioning (i.e., overall mental, social, physical health)? Indicate as high, medium, or low.
2. Which of the priority health conditions /determinant factors can be effectively improved by the CPL? Indicate as high, medium, or low.

Key

High impact on health functioning: keep on list.

Medium impact on health functioning: possibly keep?

Low impact on overall health functioning: delete.

| Tier of frequency | Topic | Severity | Changeability |
|-------------------|--|-------------|-----------------------|
| Top 33% | Bullies, violence, harassment | High Low | High Medium Low |
| | Relationships: friends, making friends | High Low | High Medium Low |
| | Anxiety, depression | High Low | High Medium Low |
| | Self-esteem, happiness (building, fostering) | High Low | High Medium Low |
| | | High Low | High Medium Low |
| Top 49% | Relationships: romantic, sexual | High Low | High Medium Low |
| | Relationships: parents | High Low | High Medium Low |
| | Sexuality and gender | High Low | High Medium Low |
| | Conflict resolution | High Low | High Medium Low |

| | | | | | |
|---------|---------------------------------------|-------------|-------------|-------------|--------|
| | | High Low | Medium | High Low | Medium |
| Top 66% | Specialty diets (e.g., vegan, paleo) | High Low | Medium | High Low | Medium |
| | General nutrition | | | | |
| | Substance use: alcohol | High Low | Medium | High Low | Medium |
| | Death, dying, grief | High Low | Medium | High Low | Medium |
| | Domestic violence | | | | |
| | | High Low | Medium | High Low | Medium |
| Top 74% | Substance abuse: marijuana | High Low | Medium | High Low | Medium |
| | Family planning, pregnancy prevention | High Low | Medium | High Low | Medium |
| | Eating disorders | | | | |
| | Pregnancy and parenting | High Low | Medium | High Low | Medium |
| | Puberty (i.e., growth/development) | High Low | Medium | High Low | Medium |
| | Sexually transmitted infections | | | | |
| | | High Low | Medium | High Low | Medium |
| | High Low | Medium | High Low | Medium | |

SELECTING INTERVENTIONS BASED ON ACCEPTABILITY

Acceptability refers to what are the most acceptable changes needed to achieve the maximum impact. Consider whether interventions/changes would be acceptable to CPL.

| Intervention Idea | Acceptable to CPL? |
|---|--|
| <p>PROFESSIONAL DEVELOPMENT</p> <ul style="list-style-type: none"> • Create a professional development resource library for staff. • Work with the CPL’s Library Staff and Organizational Development Department to create webinars in collaboration with the National Library Network of Medicine. • Provide onsite professional development opportunities. | <p>Yes No Maybe</p> <p>Yes No Maybe</p> <p>Yes No Maybe</p> <p>Comments:</p> |
| <p>TEEN-FACING POSSIBILITIES</p> <ul style="list-style-type: none"> • Publicize existing/new SDOH and health-related resources. • Invite community service providers to provide teen programming. • Construct a teen-focused health <u>reading</u> list. • Construct a teen-focused health <u>resource</u> list. | <p>Yes No Maybe</p> <p>Yes No Maybe</p> <p>Yes No Maybe</p> <p>Yes No Maybe</p> <p>Comments:</p> |
| <p>MISCELLANEOUS</p> <ul style="list-style-type: none"> • School Partnerships: Partner with school librarians or health teachers to ensure that teens develop health and information literacy skills. • Form a Teen Health Advisory Task Force: Consists of 3–4 teen services staff, a teen services administration team member, and the library social worker. Meets regularly to discuss and plan health-related initiatives. • Library Policy/Strategic Plan: Modify or add to the library’s mission and goals. | <p>Yes No Maybe</p> <p>Yes No Maybe</p> <p>Yes No Maybe</p> <p>Comments:</p> |

Notes

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ⁱⁱ Office of Disease Prevention and Health Promotion (ODPHP), “Social Determinants of Health,” HealthyPeople.Gov, <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health> (accessed July 15, 2019).

ⁱⁱⁱ Laura K. Brennan Ramirez, Elizabeth A. Baker, and Marilyn Metzler, *Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health* (Atlanta: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2008).

^{iv} ODPHP, “Social Determinants of Health.”

^v Elizabeth Michaelson Monaghan, “The Library Is In,” *Library Journal* 141 (2016): 28–31.

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^{vii} Claire Shubik-Richards and Emily Dowdall, *The Library in the City: Changing Demands and a Challenging Future* (Philadelphia: Pew Charitable Trusts’ Philadelphia Research Initiative, 2012).

^{viii} Mary Grace Flaherty, “Health Information Resource Provision in the Public Library Setting,” in *Meeting Health Information Needs Outside of Healthcare: Opportunities and Challenges*, ed. Catherine Smith and Alla Keselman (Waltham, MA: Elsevier, 2015), 97–116.

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^{xii} National Academies of Sciences, Engineering, and Medicine, *Community-Based Health Literacy Interventions*, 15–48.

^{xiii} Monaghan, “The Library Is In,” 28.

^{xiv} Marcello Cabello and Stuart Butler, “How Public Libraries Help Build Health Communities,” Brookings Institution, March 30, 2017, <https://www.brookings.edu/blog/up-front/2017/03/30/how-public-libraries-help-build-healthy-communities/> (accessed July 15, 2019).

^{xv} Monaghan, “The Library Is In,” 30.

^{xvi} Young Adult Library Services Association (YALSA), “National Research Agenda on Libraries, Learning, and Teens, 2017–2021,” ii, http://www.ala.org/yalsa/sites/ala.org.yalsa/files/content/2017YALSA_NatlResearchAgenda_Print.pdf.

^{xvii} *Ibid.*, 7.

^{xviii} Linda W. Braun and Shannon Peterson, *Putting Teens First in Library Services: A Road Map* (Chicago: Young Adult Library Services Association, 2017).

^{xix} Sandra Hughes-Hassell, Dana Hanson-Baldauf, and Jennifer E. Burke, “Urban Teenagers, Health Information, and Public Library Web Sites,” *Young Adult Library Services* 6 (2008): 35.

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- ^{xx} Bill Lukenbill and Barbara Immroth, “School and Public Youth Librarians as Health Information Gatekeepers: Research from the Lower Rio Grande Valley of Texas,” *School Library Media Research* 12 (2009): 5.
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- ^{xli} YALSA, “National Research Agenda on Libraries,” 2.