

South Carolina Public Libraries & Health: Needs and Opportunities

By: [Noah Lenstra](#) and Joanna Roberts

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Abstract:

In August 2021, the South Carolina Center for Rural and Primary Healthcare partnered with the University of North Carolina at Greensboro to produce *South Carolina Public Libraries & Health: Needs and Opportunities*.

The study documented a range of ways that South Carolina public libraries support health. It also assessed what needs public libraries have as they seek to support health in their communities. Based on that analysis, a model for continuing education to support the alignment of public libraries and health was developed.

As an exploratory study, *South Carolina Public Libraries & Health: Needs and Opportunities* highlights implications for a variety of stakeholder groups including those working in the health sector at both local and state levels, as well as library workers and administrators, funders and policy makers, and researchers. Using snowball sampling techniques, 123 library workers from across the state completed a survey in September 2021 about their health partnerships and health-related continuing education needs; an additional 19 completed a portion of the survey.

Key findings include: Library capacity is limited, but the desire to support health is strong; there is a need for health partnerships to increase library capacity to support health; across the state there exist responsive health services in South Carolina public libraries; and there also exists regional and rural/urban disparities. Based on these findings the report provides a series of recommendations for continuing education and other support needs, including a Theory of Change model to build more robust partnerships between the health and the public library sectors.

Keywords: public health | public libraries | South Carolina

Paper:

*****Note: Full text of white paper below**

South Carolina Public Libraries & Health: Needs and Opportunities

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UNC GREENSBORO
Department of Library
& Information Science



CENTER FOR RURAL AND
PRIMARY HEALTHCARE



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STATE LIBRARY



Captions of photographs on title page (from top to bottom):

(1) NBC's *The Today Show* featured the Richland Library in Columbia, South Carolina, and its coverage on the open enrollment period during the first year of the Affordable Care Act, colloquially known as Obamacare, and of the roles of public libraries in helping individuals navigate the enrollment process. Photograph courtesy Lee Patterson, LMSW, Social Work Director at the Richland Library.

(2) A South Carolina librarian utilized one of The Charlie Carts – a mobile kitchen – acquired by the State Library of South Carolina, with funding from the Network of the National Library of Medicine and the U.S. Institute of Museum & Library Services, as part of its SC Read Eat Grow state-wide initiative to increase information regarding and access to healthy food. Photo courtesy State Library of South Carolina.

(3) QuinTasha “Quin” Knox, Principal Consultant at Health Impact Partners, speaks at the 2022 South Carolina Public Health Association Conference on her participation in the SC CRPH's Rural Libraries and Health Cooperative Agreement. Knox spoke about her leadership of the Lee County Public Library Community Health Hub. Photo by Noah Lenstra.

Authors and suggested citation information.

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Dr. Noah Lenstra is an Associate Professor of Library and Information Science in the School of Education, and an Affiliated Faculty Member in the Gerontology Program, at the University of North Carolina at Greensboro. He brings a community engagement approach to the study and teaching of public librarianship. Notably, Noah founded the *Let's Move in Libraries* Initiative, inspired by Former United States First Lady Michelle Obama's Let's Move! initiative. Let's Move in Libraries continues Obama's legacy by working to increase library-community health partnerships in the U.S., Canada, and other places in the world. He is the Primary Investigator of HEAL (Healthy Eating and Active Living) at the Library via Co-Developed Programming, funded by the U.S. Institute of Museum & Library Services (IMLS # RE-246336-OLS-20).

Joanna Roberts is currently an MLIS candidate at the University of North Carolina at Greensboro. She is focusing her studies on public libraries, outreach, and digital media, with particular interest in integrating in-person programs with digital resource development. She has created resource training videos for public librarians and patrons for NC LIVE, the cooperative digital library service for North Carolina public, college, and university libraries.

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Contents

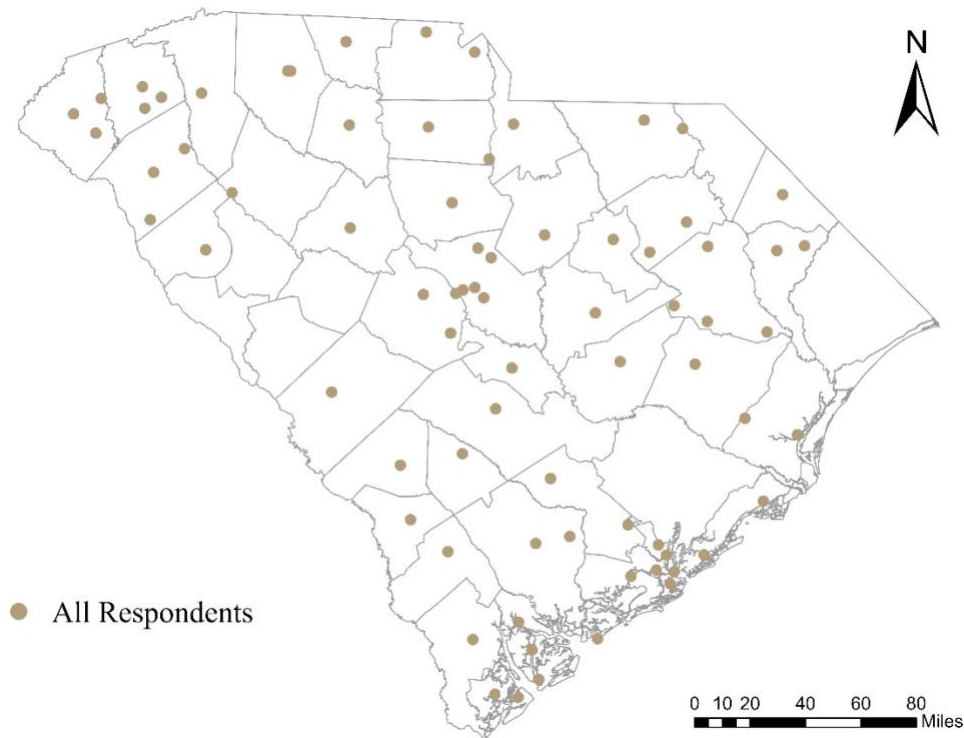
Executive Summary	1
Introduction	7
Literature Review	7
Public libraries, public librarians, and health: A brief history	7
Recent trends: The library as community space for access to health	8
How do health partners perceive public libraries?	9
More recent ideas: Social workers, health liaisons, telehealth, and more	10
Rural libraries and librarians: A missing piece of the puzzle	13
Methods	14
Analysis	15
Limitations	16
Results	18
Sample	18
Public Libraries and Community Health	21
Health services offered by library partners	21
Partnerships and relationships related to health	22
Health groups meeting at the library	24
Library participation in regional and state health systems	24
Health-related incidences on library property	26
Perception of library as part of community health	27
Staffing and infrastructure for health in libraries	30
Roles and needs for health liaisons	30
What types of health liaisons are needed in public libraries?	31
Health champion librarians and library systems	32
Access to health information at the library	33
How are health outcomes evaluated?	34
Medical equipment at the library	36
Health priorities and continuing education needs	36
Interest in supporting mental and behavioral health	40
Focusing on telehealth	41
Focusing on food, nutrition, and food access	42

Barriers to health services at public libraries	42
Continuing education priorities.....	45
Discussion and Implications	47
Theory of change models.....	51
Methodological limitations and needs for further research	55
Conclusions.....	56
References.....	57
Appendices.....	i
A1. Survey instrument	i
A2. RUCA compared to NCES for rural designations	vi
A3. Sampling Procedures.....	vi
A4. Representative Job Titles	vii
A5. Additional figures on health priorities and needs	viii
A6. Libraries that have participated in state-wide SC health initiatives.....	xii

Executive Summary

In August 2021, the South Carolina Center for Rural and Primary Healthcare partnered with the University of North Carolina at Greensboro to produce *South Carolina Public Libraries & Health: Needs and Opportunities*, as part of its broader *Libraries & Health* initiative.¹ The study documented a range of ways that South Carolina public libraries support health. It also assessed what needs public libraries have as they seek to support health in their communities. Based on that analysis, a model for continuing education to support the alignment of public libraries and health was developed.

As an exploratory study, *South Carolina Public Libraries & Health: Needs and Opportunities* highlights implications for a variety of stakeholder groups including those working in the health sector at both local and state levels, as well as library workers and administrators, funders and policy makers, and researchers. Using snowball sampling techniques, 123 library workers from across the state completed a survey in September 2021 about their health partnerships and health-related continuing education needs; an additional 19 completed a portion of the survey.



Key findings include the following:

Library capacity is limited, but the desire to support health is strong

Nearly every single respondent reported a need for a health worker or a health liaison to help them serve the public in their library: over 90% said, if outside help were available, they could see a need for a health or social worker at their libraries.

¹ Learn more about the initiative at the SC CRPH Libraries & Health Webpage: <https://www.scruralhealth.org/libraries>.

However, when respondents were asked if they would like to have specific types of health workers or health liaison's available at their libraries, interest rates diminished. Only 74% of respondents were interested in, or currently had available, social workers at their libraries. Social workers were the most desired type of health liaison.

One reason for the difference between perceived need for outside help in general, and perceived need for specific forms of outside help, relates to limited library capacity to develop new initiatives. As one respondent wrote in an open-ended comment: "We do not have enough staff and really cannot handle any more programs. Even when partnering with others, it takes staff time, and we just cannot do it anymore due to not enough staff."

Nevertheless, most respondents think that individuals in their communities look to the library as a safe and trusted space, both to access health literacy and to access health services, and most librarians see health equity as a priority for their libraries.

The most common way in which public librarians themselves directly support health centers around information access, with 75% of respondents saying their libraries support access to health information in general, 63% supporting health literacy, and 57% reporting they provide help identifying and using local health resources. Less commonly reported were informational referrals to appropriate health and/or social service agencies (43%).

A need for health partnerships to increase library capacity to support health

Respondents do not always have the partnerships that would enable them to bring other types of health services to their libraries, or to refer library patrons to appropriate health or social service agencies. Public libraries typically have close connections with agencies that support the social determinants of health (SDoH), including educational institutions, parks & recreation units, and non-profits. These reported close relationships could position public libraries to be effective facilitators of community conversations on health needs, in ways that would bring more voices into local health planning and policy making.

Librarians also report offering a range of services that support addressing the SDoH, including access to technology, literacy, education, food, legal aid and employment. Across the state, many public libraries have hosted a wide array of services that support public health and the SDoH, with more than 40% reporting they have hosted everything from food drives to fitness classes, farmers' markets, summer meals, health fairs and blood drives.

Less robust are the relationships between public libraries and agencies specifically in the health sector, and less common are library services that directly support access to healthcare. Less than 50% reported close relationships with any organization in the health sector.

Despite being less common currently, there exists a sizable number of 'early adopters' and 'health champions' within the South Carolina public library sector. Around one quarter of respondents said they have had available health liaisons and telehealth services at their libraries. Around one-third of respondents reported the presence of a 'health champion' employed within

their libraries, someone who champions health services and partnerships and could be utilized as an entry point for programs and partnerships.

There is a large opportunity for the health sector to work more closely with public librarians – particularly at the regional and state levels. Less than 15% of respondents report working with healthcare systems, health foundations, the Network of the National Libraries of Medicine, or the South Carolina Center for Rural and Primary Healthcare. This finding suggests that the health partnerships public librarians do have are local or even hyperlocal, not necessarily explicitly connected to broader regional or state health initiatives.

Responsive health services in South Carolina public libraries

During the COVID-19 pandemic, more than 60% of respondents said their libraries supported access to related services, including 42% who offered immunization clinics for COVID-19, and 29% who offered COVID-19 testing services.

In the context of other public health emergencies, over 20% of urban librarians, and over 10% of rural librarians, report having naloxone available at their libraries. Looking at rural/urban differences, 91% of urban and 59% of rural librarians report people experiencing homelessness using the library as a day shelter. More than one third of respondents report having offered mental health first aid trainings at their libraries.

Regional and rural/urban disparities

In general terms, rural librarians² are broadly interested in doing more to support health, and compared to their more urban peers, have had less opportunities, and less capacity, to do so. For instance, most rural librarians are interested in offering mental health first aid trainings, and most urban librarians have already offered these trainings.

Rural librarians were also those **least likely** to have had formalized health partnerships, with 50% reporting no partners in programmatic or funded health initiatives, meaning they are less likely to have the partnerships to support health. Given this situation, rural respondents are broadly interested in whatever resources they may be able to bring to their communities. Thinking about what kind of health liaison would be the best fit for a public library, respondents across the state articulated a preference for fully credentialed health liaisons, rather than for students, volunteers, or other health workers in training. Rural librarians, however, were broadly interested in whatever health liaisons they could bring to their libraries, regardless of credentials. The Pee Dee region stands out as having the least health-related services of any of the regions in the State of South Carolina.

Continuing education and support needs

Only 10% of respondents reported **no barriers** to supporting health at their libraries, suggesting a need for more robust continuing education and sustained support. Top priorities for continuing education as reported by survey respondents include how to get started supporting health at public libraries, how to sustain these efforts, and how to build partnerships around this topic.

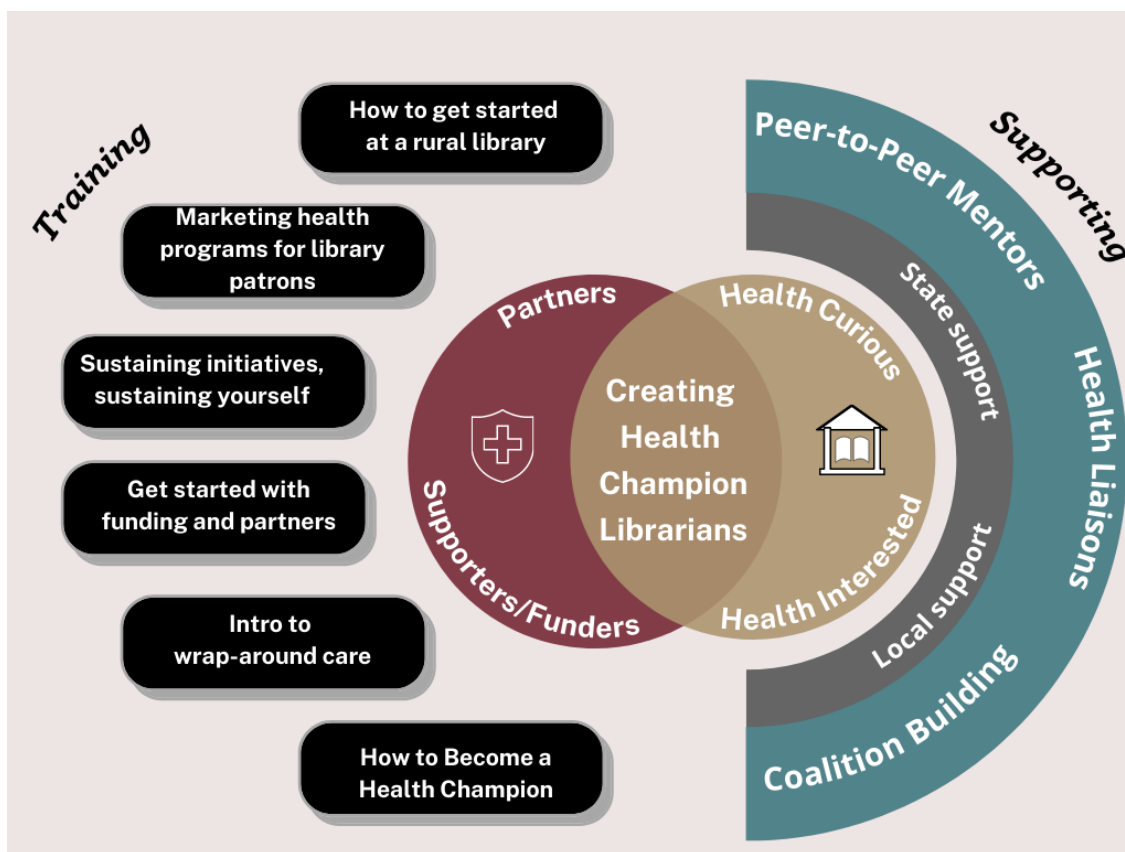
² Following federal practices established by the U.S. Institute of Museum & Library Services, rural/urban differences were established using the procedures set by the National Center for Education Statistics, a unit of the U.S. Department of Education.

Major barriers to supporting health include a perceived lack of expertise and funding. Librarians report wanting to learn more about this topic from other librarians who have directly dealt with these issues at their libraries.

Implications and a Theory of Change model

Survey results revealed some differences between library directors – those who run libraries – and library staff – those who staff libraries on a day-to-day basis, recognizing that in some rural environments those two roles overlap.

In any case, this study found that promising theory of change models focused on better connecting South Carolina’s public libraries and South Carolina’s health sector would work at two levels: library staff and library directors.



As it relates to library staff, a promising practice is to cultivate networks of health champions within South Carolina’s public libraries. This project suggests that a **minority** of South Carolina’s public libraries currently have health champions on staff. To extend this trend, these library health champions could share best practices, advocate for promising partnerships, and share common successes and challenges through the peer-to-peer infrastructure that exists for professional development and continuing education among public librarians in the state.

This model focuses on cultivating more health champion librarians by developing both training and support systems to transform health curious librarians and health interested librarians, which our survey suggests are nearly ubiquitous, into health champion librarians. Supporting these

librarians requires connecting librarians to health liaisons for interprofessional learning and exchange (e.g. social workers learning with librarians), as well as connecting librarians to librarians in peer-to-peer mentorship opportunities. Finally, it requires shifting from these interpersonal networks to coalitions, creating a community of health champions within the South Carolina public library workforce. Those in the health sector can help this community of health champion librarians emerge by:

- partnering with librarians
- funding library initiatives, and
- working with entities like the State Library of South Carolina to develop training opportunities.

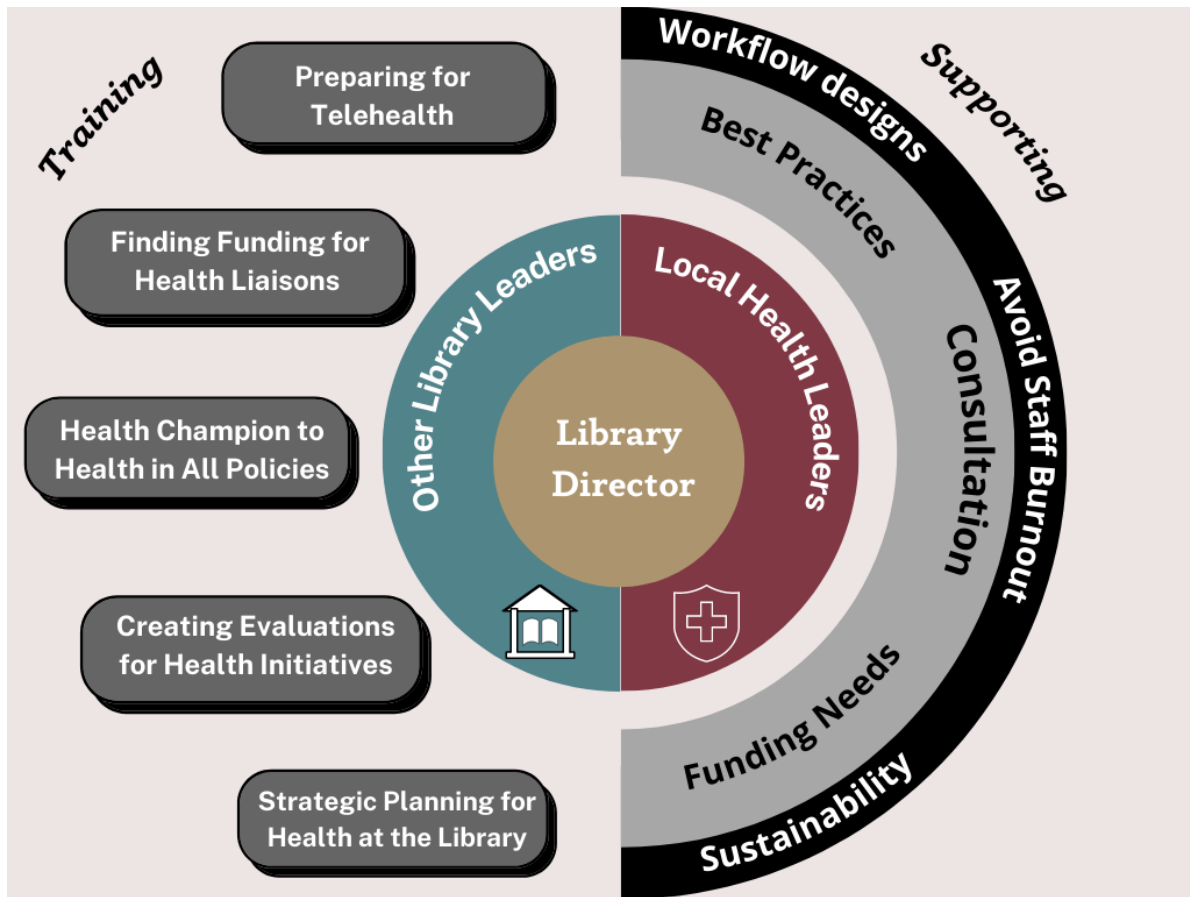
Suggested topics for this training include: how to get started supporting health in rural libraries, how to market health related library services, how to sustain initiatives in a context of limited capacity, how to get started working with funders and partners, and how to adopt ideas from allied sectors, such as the concept of ‘wrap-around care,’ into public library practices.

A second promising practice would be to find ways to better connect library directors to local health leaders and to other library leaders. These connections could be made not only at the library executive director level, but also at the deputy director and branch/division manager levels. Survey results suggest these library middle managers are less connected to local health partners than library directors. In any case, at the leadership level, the focus is less on cultivating library health champions, and more on how we make these partnerships work, administratively.

Finding opportunities like those made available by the SC CRPH require library leaders to have connections and relationships with those in the health sector, and the data suggest that these relationships are not always in place or very strong. Library directors and leaders need help understanding how to integrate health into library services in ways that avoid the burnout of their staff, and that are sustainable over time. They also need help integrating timely topics into their libraries, such as telehealth. Evaluation is a perennial issue in public libraries, and thinking strategically about health in public librarianship is another need.

There are a handful of library systems that have embraced health services and partnerships at their libraries—including in their strategic plans³—and these include libraries funded by or connected with the staff of the SC CRPH. Finding ways to meaningfully enable these stand-out systems and their leadership teams to share their successes and challenges with other leaders, both within the library and within the health sectors, could drive innovation forward.

³ The Charleston County Public Library is one example: <https://www.ccpl.org/strategicvision> - Their strategic plan explicitly calls for the library to “Empower Learners of All Ages to Manage Their Lifelong Physical and Mental Health,” and to “Empower Individuals with the Knowledge to Make Healthy Food Choices,” and “Empower Individuals to Obtain and Understand Basic Health Information.”



The ultimate goal of these theory of change models is to create stronger working relationships between the health sector and the public library sector in the state of South Carolina. This work is already underway parts of the state, but available evidence suggests that work has not yet fully scaled up to the state-wide level. The SC CRPH is poised to be a change agent, possibly creating a model that could inform state-wide efforts across the nation, and beyond.

Introduction

Nationally and in South Carolina, libraries have increasingly been serving their communities by working with partners to connect patrons to essential preventative services, and to healthcare. In rural areas, people often must travel for access to many essential services. Launched in October 2020, the South Carolina Center for Rural and Primary Healthcare's (CRPH) Rural Libraries & Health initiative supports projects that build on the role of libraries in rural areas of the state. The initiative works to support public libraries as community hubs to address health inequities and to connect people to healthcare and other supportive services. Beginning in October 2020, five projects were supported: Expanding Access to Healthcare in Union County, Lee County Public Library Community Health Hub, Library Social Worker - Kershaw County Library, Orangeburg County Library Resource Associate, and The Women in Southeast (WISE) Telehealth Network - Charleston County Public Library System. Active projects expanded to include four more in Spring 2022: Marion Wright Edelman Community Health Hub (Marlboro County), Expanding Access to Healthcare in Oconee County, Better Health – Abbeville, SC, and Collaborating to Address Critical Needs in Calhoun County.

These awarded projects represent library systems from all regions of South Carolina and include support for social workers, community health workers, and telehealth access at library locations, as well as more generally supporting learning collaboratives among library workers and health partners engaged in these unique partnerships. The programs aim to increase access to a variety of services, including behavioral health, health screenings, and reproductive health, with the goal of connecting community members to the appropriate services for consistent and sustained preventive care and treatment.

As part of that effort, in Summer 2021, staff from the SC CRPH partnered with Dr. Noah Lenstra at the University of North Carolina at Greensboro Department of Library & Information Science to develop and implement a one-year project focused on better understanding needs and opportunities for health-related library partnerships across the state of South Carolina.

Literature Review

Public libraries, public librarians, and health: A brief history

Discussions of health promotion through public libraries are as old as the profession of public librarianship itself (Rubenstein, 2012; Mon, 2021). Most of these discussions and initiatives were localized; that is, they involved librarians working with local health partners to develop innovative solutions to local problems, such as the example of a bookmobile in rural Georgia transporting a county nurse in the 1940s (Rubenstein, 2012).

At the national level, the roles of public libraries in health systems began to be formalized in the 1960s, when urban libraries developed community information and referral (I&R) systems to refer patrons in need to the services of other agencies, including health agencies. Most early I&R services focused on information resources for the urban poor and the elderly, and the scope of these services ranged from specific topics, including Social Security, to specific social problems, such as drug abuse (Arnott Smith, 2011). The National Library of Medicine, and health sciences

librarians more generally, started working with public librarians in some urban communities to support these information and referral services.

Some librarians advocated for their profession to go beyond information access, urging them to become community organizers and community advocates around pressing community concerns. As Monroe (1976) found in her study of this topic: “The public librarian may play any of several roles in a community-wide action system: information specialist, catalyst change agent, interpreter of community need, channel to community resource, expert in planning and group process the versatile librarian may exercise leadership and bring library resources and services to bear in a variety of ways” (p. 498). These innovative health partnerships tended to occur at local levels. For example, in 1992 a public librarian in Stratford, CT, developed a partnership with a local teen counseling group and an aerobics instructor to develop a physical and mental health support group for teenagers at the library (Lenstra, 2018).

Recent trends: The library as community space for access to health

More recently, the idea of the public library as a community space (e.g. Klinenberg, 2018; Mattern, 2007) has become more prominent in national conversations. As this idea has emerged, so too has the idea of the public library as a safe space to health-related services, including access to social workers, summer meals, bathrooms, a respite from the elements for individuals experiencing homelessness, nutrition classes, computer and WiFi access, early education services, telehealth, and a range of other health and social services (Whiteman et al., 2018).

Furthermore, recent trends, including the passage of the Affordable Care Act (Goldsmith, 2014) and a push by the U.S. Department of Agriculture to expand access to summer meals via public libraries (IMLS, 2014), has prompted even more national attention to the library as a community space to access health. This tendency of connecting public libraries to whatever is happening in health policy continued during the COVID-19 Pandemic, when libraries were framed as convenient spaces to distribute test, host immunization clinics, and support access to telehealth (e.g. Virginia Department of Health, 2021; State of Wisconsin, 2022).

What is often missing in the literature, however, is discussion of what Monroe in 1976 called “the versatile librarian.” The focus has become more on how the space of the public library itself can support health, resulting in a loss of understanding of the central role of library workers in creating and sustaining that space and its services. The absence of the library workers from these discussions can sometimes lead to staff burnout and staff feeling overwhelmed, as they feel they are being asked to take on more and more in their daily work (Freeman & Blomley, 2019).

More positively, the focus on the public library as a community space has led to increased interest in public librarians as facilitators of community conversations. For instance, the Harwood Foundation (n.d.) has trained over 4,000 librarians to help them become local leaders able to foster and facilitate conversations around community concerns, including health. More recently, the American Library Association’s (2021) Libraries Transforming Communities: Focus on Rural and Small Libraries has specifically set out to better support rural librarians as facilitators of community conversations on pressing community concerns.

An additional facet of the literature on library as space has been research on libraries as crucial nodes in disaster response, including USC Professor Feili Tu-Keefner's work on libraries and disaster response in South Carolina (Liu et al., 2017; Tu-Keefner et al., 2017; Tu-Keefner, 2016). Others have studied libraries in the context of hurricanes in the Gulf Coast and along the Eastern Seaboard (Jaeger et al., 2007; Hamilton, 2011; Veil & Bishop, 2014; Mardis et al., 2020). This research has found that, with training and support, public libraries can be vital nodes in disaster resiliency. This literature has continued during the COVID-19 pandemic, with research on the roles of public libraries and librarians during this emergency (Smith, 2020).

Another notable trend is that of the public library as a support for child and family health. Studies have been done on libraries as hosts of summer meal programs (de la Cruz, Phan & Bruce, 2020; Sandha & Holben, 2021), nutritional education classes (Freedman & Nickell, 2010), physical activity classes (Bedard, Bremer & Cairney, 2020), oral health programs (Woodson, Timm, & Jones, 2011), and more generally as institutions that support health, including mental health, among vulnerable teenagers and youth (Banas et al, 2020; Grossman et al., 2021; Campana et al., 2021; Winkelstein, 2019).

How do health partners perceive public libraries?

Given the growth of interest in public libraries as health access points, there is also increasing interest in understanding to what extent health workers and institutions see public libraries and public librarians as partners. The evidence here is scattered.

Beginning in 2016, the National Association of County and City Health Officials (NACCHO) started asking local health departments about which community-based partners they work with. Both in 2016 and in 2019, the Profile of Local Departments found that libraries were the **least** common partner of local health department, behind every other sector asked about, including cooperative extension agencies and faith communities. Nevertheless, the American Public Health Association (APHA) has been working to change this reality: in 2018, the fourth most read story in *The Nation's Health*, the official newsletter of the APHA was "Libraries, public health work together on community health" (APHA, 2018).

More positively, the research team of the National Recreation and Park Association (NRPA) conducted a survey in February 2021 on how parks and recreation agencies advance community health. Intriguingly, the NRPA report found that libraries were the third **most** common partner of parks and recreation agencies, in terms of their efforts to support health programs and services (p. 11), behind only schools and community-based organizations, and ahead of health departments and social service agencies.

In any case, in a recent study Lenstra and McGehee (2012) found, based on 60 interviews with library health partners in 18 communities, that health partners typically go through a learning process as their relationships with public librarians form, develop, and evolve. Typically, before working with public librarians, health partners see them as either merely a space for books or as a passive space that can be used to deliver health and other essential services. When relationships with public librarians develop, their thinking shifts, and they begin seeing public librarians as active community partners, with contacts, reach, and expertise that can inform and add value to the initiatives of others working to advance community health.

More recent ideas: Social workers, health liaisons, telehealth, and more

To further understand recent trends involving health and public librarianship, the researchers set out to analyze research literature related to this topic published recently, primarily in 2021. This review of recent trends shows interest in the following topics: social workers in libraries, health liaisons and health partnerships, telehealth access through libraries, supporting health literacy in libraries, and grappling with substance misuse issues that occur at libraries. This section summarizes that literature and then includes implications from it.

Social Workers in the Library

There has been more interest in placing social workers in public libraries since the San Francisco Public Library began the practice in 2009 (Esguerra, 2019). Recent research has been on:

- the evaluation of the impacts of social workers, both on library patrons and on other library staff,
- the challenges associated with creating a social worker program in public libraries, and
- the practical steps for creating a social worker internship program in public libraries.

Giesler (2021) studied perceptions of social workers in the public libraries, finding differences in how the position was utilized across library systems. Social workers might be primarily focused on training other library staff to recognize and empathize with specific patron populations, such as homeless populations. They could also interact directly with library patrons to offer services. Brus et. al. (2019) surveyed public library staff in Australia and found a lack of confidence in dealing with patrons with complicated social issues such as mental health and homelessness. For librarians working with patrons every day, training was seen as the most important need to increase confidence, and 84% indicated that social workers would be welcomed as staff trainers (n=171). Gross and Latham (2021) also found this benefit in staff training by the six library administrators who already employed social workers in the Southeast US (n=52).

While social workers could provide better partnership opportunities for public libraries, there were concerns about funding, licensure, and liability that could occur (Gross and Latham, 2021). When considering social worker students from local universities, which might address funding concerns, there were other issues to consider. Johnson (2021) and Wahler et. al. (2022) describes the components of “readiness” required for both a public library and the participating university when considering a student internship or practicum as a way to incorporate social workers at a library. Libraries need to understand the requirements for student workers as it relates to program standards and expectations, and universities need to understand the needs and limitations of a library setting and its staff.

Summary: The growing literature on social workers in public libraries suggests that this integration is neither easy, nor inevitable, but instead requires different actors and stakeholders getting to know each other and find common ground. Library workers recognize the need, but addressing the need requires partnerships focused on both staffing and evaluation.

Health Liaisons and Health partnerships

As with social workers, health liaisons can be helpful for library staff assisting patrons with complex needs. Homeless patrons often use the library for various reasons, as described by

Adams and Krtalić (2021). Their study found that the presence of a health liaison that focused on the needs of the homeless population helped the library and its staff to better understand and provide for those needs by reducing barriers to services.

As this report was being finalized in Spring 2022, St. David's Foundation announced a new \$1.5 million initiative to support what they are calling Libraries for Health. The foundation is collaborating to broaden access to mental health services for rural residents by placing non-clinical mental health workers at the public libraries in Central Texas. The non-clinical mental health worker initiative is modeled on peer navigator programs found in some urban libraries across the country. Crucially, the program includes a strong evaluation component, led by The Rand Corporation (Carey, 2022).

Other studies consider alternative models of placing health liaisons in libraries. Both interprofessional student internship models, and the training of library staff in health information have been the focus of research. Pandolfelli et. al. (2021) considered the lessons from different experiential learning opportunities for students (n=21) from a variety of professions: general health courses at the undergraduate level, and masters' level social worker, library science, and public health students. This study of a joint training experience for the students allowed for both support and building common ground between professions and the students involved when working in a library setting. The study evaluated the advantages of this format for the students, but also provides ideas for training future library health liaisons. This sort of inter-professional training model has been deployed at the University of Missouri, where Library & Information Science students took courses on public health as part of an experimental, federally funded project (Bossaller & Adkins, 2022).

When considering health liaisons, there are also options to directly train the current library staff to better address health issues. Malone and Clifton (2021) explored this idea in a five-year study of the Oklahoma public library system (n=106 staff, n=67 libraries) to certify existing public library staff in specialized training from the Medical Library Association. Findings from this study indicate that focused training can lead to a) increased credibility of library staff with patrons, peers, and library and government administrations, b) improved skills in health information retrieval and evaluation of sources, and c) increased health outreach by participants due to materials provided through the certification process, which were created and designed with this intended outcome.

In addition to academic training, there are other agencies that provide assistance and toolkits for designing health initiatives within libraries. The Dept. of Agriculture's SNAP-Ed is one such program that can work with public libraries. Draper (2021) conducted a feasibility study for that partnership with South Carolina public libraries. This study found that while there were extensive overlapping goals between SNAP-Ed and public libraries, library staff had little knowledge of the federal program, with only one of the 14 participants having any understanding of SNAP-Ed and how it could support libraries. As with other health initiatives, rural libraries felt that space and staffing were barriers to offering the nutrition and healthy living programs that SNAP-Ed provided. However, Draper (2021) also found that many librarians were open to partnering once they had information about the program.

Summary: Numerous experimental models to weave health expertise into public libraries have recently been developed and deployed. Especially promising is the model of health science students working collaboratively with library science students to develop common ground and a shared vocabulary during professional training.

Telehealth

Providing direct medical help through a program such as telehealth is one of the newer options being explored by public libraries. Santos (2021) provides a case study of this effort in a small rural library in Pottsboro, Texas. Because this is such a new endeavor, studies are focused on helping libraries with evaluating the benefits, providing guidelines, and performing assessments of library facilities for implementation. When it comes to possible benefits, DeGuzman, Jain, and Loureiro (2021) found great potential for libraries to become hubs for providing health access to rural populations with little or no broadband access. This study also identified the difficulties and concerns of librarians in implementing telemedicine access onsite, and stressed the need to continuously evaluate the outcomes.

When interviewing rural libraries in nine states (n=15), DeGuzman et. al. (2021) described specific barriers to telemedicine were based on limited resources at libraries, such as providing private space in a small library, or increasing funding for such a program. When considering the infrastructure needs for telemedicine, DeGuzman et. al. (2020) surveyed Virginia rural libraries' access to appropriate broadband speeds that would be needed for video conferencing in telemedicine. Other needs, such as laptops or tablets that can be moved to private spaces, were also considered. The study concludes that infrastructure feasibility studies for implementing telemedicine could be a start to partnering between public libraries and health organizations.

Summary: Up to now, the idea of telehealth in public libraries remains more of a promising practice than a practical reality. The groundwork being established suggests the need for a much greater amount of research on this topic, including rigorous evaluation of existing programs, as well as feasibility studies that examine what it takes to develop this initiative sustainably.

Health Literacy at the Library

As discussed above, consumer health literacy has long been supported as a public library training priority, including in the present. Studying Australian public libraries, Naccarella and Horwood (2021) provide some guidelines for how to initiate and implement a health literacy focus using the Ophelia diagnostic approach (Optimizing Health Literacy and Access). Derosa et. al. (2021) describes a partnership between Weill Cornell Medicine library and Brooklyn, New York, focused using a train-the-trainer model for library workers by providing training in how to better serve patrons requesting information about health issues. Like the certification training by the Medical Library Association, library staff were taught how to conduct health reference interviews and better advocate for health literacy initiatives, in addition to other skills.

Summary: Basic training and support around health information can help public librarians become health champions by helping them develop the vocabulary to build partnerships and advocate for health services.

Substance misuse issues

Individuals experiencing substance misuse issues often utilize libraries. Feuerstein et. al. (2022) surveyed five states (n=356) for information on instances of substance abuse on library property, and how libraries planned and prepared for this occurrence. The survey found that alcohol and drug use was common on library property, but most libraries did not have on-site medical help, such as Naloxone. The same study found that librarians would like more training on how to handle these situations.

Wong et. al. (2021) reported on the ability of Pennsylvania public librarians (n=100) to provide health information on substance abuse issues over the phone, and found that there was a wide variation between libraries. The suggestion from this study was to create closer partnerships with local health organizations, so that librarians could be better informed of the local resources for substance abuse.

Summary: When public health issues, like the opioid crisis, impact public library practice, public library workers do not respond to it uniformly, but instead respond in locally idiosyncratic ways, suggesting the need for a space for public library workers and their partners to understand and come up with shared responses to public health crises.

Rural libraries and librarians: A missing piece of the puzzle

Throughout the literature on health and libraries, rural libraries and librarians have been under-acknowledged, despite scattered evidence that they have worked with local partners to support health outcomes since the beginning of the public library profession (Rubenstein, 2012). Much of the I&R and consumer health information in public library movements focused on urban libraries, as has much of the more recent discussions on social work, homelessness, the opioid epidemic, and the COVID-19 pandemic, among other topics.

Nevertheless, a few notable studies stand out. Mary Grace Flaherty (Flaherty & Miller, 2016) describe how a rural health champion who works for the public library in Farmville, North Carolina was able to increase access to health screenings and health programming at his library. An Appalachian Rural Commission (2019) study of bright spots in Appalachian health focused on the role of the public library director in McCreary County, Kentucky, identifying her as a health champion who works alongside others in her community to support positive health outcomes.

A handful of studies have also considered how consumer health information provision can be supported via rural libraries (Carter & Wallace, 2007; Flaherty & Luther, 2011). Retired Library & Information Science professor Mary Grace Flaherty was especially supportive of the idea of rural libraries as community health hubs, she and focused her how-to handbook *Promoting Individual and Community Health at the Library* (Flaherty, 2018) around the needs of rural librarians. Currently, several projects focus on rural libraries as telehealth access hubs and what is needed to support this trend, as well as on extending access to mental health services in rural libraries. Others have focused on the roles of rural libraries in disaster preparedness, especially in relation to climate change (Ghorbanzadeh et al., 2021).

Summary: Despite some interest in rural libraries as anchor institutions in community health, the literature on this topic is underdeveloped in relation to that on urban libraries. Much more needs to be done to understand the needs and opportunities associated with the intersection and alignment of rural librarianship and health.

Methods

To understand needs and opportunities associated with South Carolina public library participation in health initiatives, a survey was designed through a collaborative process that included the following steps:

1. A review of survey instruments used in previous surveys of the topic of public libraries and community health, including those in Bertot et al. (2015), Whiteman et al. (2018), Voter Perception Study (ALA/OCLC, 2020), and Feuerstein-Simon (2020)
2. An alignment of the research instrument with the priorities of the SC CRPH
3. Coordination with the State Library of South Carolina around framing this topic

After being developed and tested, the research methods were approved by the Institutional Review Board of the University of North Carolina at Greensboro.

There is no comprehensive directory of public library employees, either at the state or local levels. According to the U.S. Institute of Museum & Library Services (2020), in FY2019 – the most recent year in which data is available – the total staff of all public libraries in South Carolina is 2,112. This number includes 514 credentialed librarians, and 1,598 other employees, including paraprofessionals, grounds-keepers, and security staff, among others. There are 42 numbers of public library systems in the state. Although we were most interested in hearing from librarians, the survey was designed such that as was open to any employee of a public library in South Carolina.

To reach these employees, the researchers used a form of snowball sampling in which individuals and institutions that are pillars of the public library community in South Carolina were asked to distribute the survey to their networks on behalf of the researchers. These institutions included the State Library of South Carolina, the Network of the National Library of Medicine, the South Carolina Library Association, and the SC CRPH itself.

The survey was distributed during four weeks in September 2021. For logistical reasons, the survey had to be distributed during this moment in time. September 2021 was in the middle of the global pandemic. On September 8, 2021, the U.S. passed 40 million cases of COVID-19, and by September 15 one in every 500 Americans had died from COVID-19 (Holcombe, 2021). Although cases were dropping during the month of September, it was still an extremely difficult moment in South Carolina and in the world. This information is essential context for the distribution of this survey, and the moment in time revealed by the data.

During the four weeks the survey was open, the researchers monitored the response rate, generating a weekly map of where respondents were coming from, at the county level. This response rate informed subsequent snowball sampling techniques, which focused on attempting

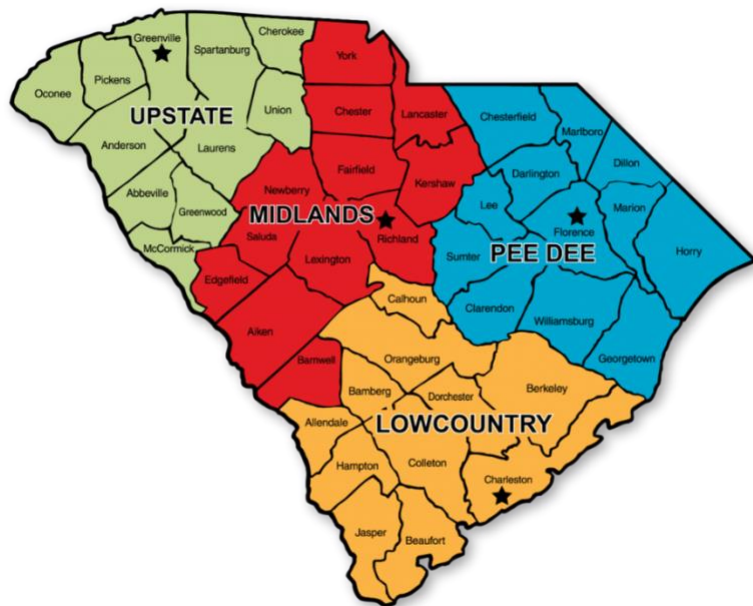
to secure complete saturation across all counties in the state of South Carolina. More information on recruitment and sampling can be found in the Appendices.

Analysis

Descriptive statistics were calculated for all closed-ended survey responses, while thematic coding was conducted to analyze open-ended responses. To further analyze the data and to generate regional and other trends, the researchers used the demographic information respondents provided about their job titles and their library locations to generate comparisons.

The data were also sorted into the four South Carolina Department of Health and Environmental Control (SCDHEC) Public Health Regions: Low Country, Midlands, Pee Dee, Upstate⁴.

To generate rural-urban comparisons, the researchers first compared two ways of sorting the data: 1) the Rural Urban Commuting Area (RUCA) codes, as described by the U.S. Office of Management and Budget Federal Register; and 2) the National Center for Education Statistics (NCES), as described by the Institute of Education Sciences, which is part of the U.S. Department of Education. Although RUCA codes are more commonly used in the health sciences, NCES codes are more commonly used in the library & information sciences, including by the U.S. Institute of Museum & Library Services (2020) Public Library Survey.⁵



A comparison of how the data would be sorted using the two coding frameworks revealed the NCES to be the preferred sorting mechanism because there are considerable differences in how libraries are designated by zip codes between these two systems of classification. Fully 39% of the respondents would be classified differently depending on whether RUCA or NCES would be used. The reason for this fact relates to the fact that RUCA focuses more on the connection between areas due to population movement (percentage commuting daily), whereas NCES is based on the service areas of libraries, their population densities, and their location viz-a-viz

⁴ Learn more about the DHEC regions of South Carolina at this link

<https://scdhec.gov/sites/default/files/media/document/DIS%20FOM%20Health%20Regions%20Map.pdf>

⁵ Detailed information on these procedures can be found in the documentation file associated with the FY2019 IMLS Public Library Survey, the most recent available as of April 2022.

https://www.imls.gov/sites/default/files/2021-05/2019_pls_data_file_documentation.pdf Data files for FY2020 are slated to be released in late Spring 2022, and were not available at the time of this project.

urbanized areas. Since South Carolina has several rural bedroom communities, particularly outside of the PeeDee region, we found RUCA to be less significant than NCES in our analysis.

The NCES (2020) uses a four-part division, city, suburb, town, and rural.⁶ Throughout this document the terms “city” and “urban” are used interchangeably. Towns are urbanized clusters, areas with between 2,500 and 49,999 people where no more than 1,500 people live in an institution. Many town libraries serve both the towns in which they are located as well as surrounding rural communities.

The data were also sorted based on the job titles of the respondents. The researchers sorted the respondents’ job titles into five categories:

- Director – Library directors
- Other Admin – Branch managers, division heads, and other administrators
- OPY (Outreach, Programming, Youth) – Librarians who typically organize and deliver educational programs and/or outreach programs
- (Library) Health liaison – including community health workers and social workers
- Other Librarians – All other library workers

In this report, the words “library worker” and “library staff” are used interchangeably to refer to non-administrative library staff. “Library administration” refers to those in managerial positions, and “library director” refers to the top-level director of a library system. In the world of public libraries, programming has a specific meaning. The American Library Association defines library programming as “an intentional service or event in a social setting, developed proactively to meet the needs or interests of an anticipated target audience, at least some of whom attend by choice” (Levay, 2018). More traditional forms of library programming are storytimes and book clubs. As programming becomes more central to public library services, librarians are also developing health programming, including everything from fitness classes to opportunities to meet and engage with primary healthcare providers in social settings, such as Walk with a Doc®. The creation of the OPY category derives from the understanding that Youth Services Librarians are among those most engaged in programming and outreach (Campana et al., 2022. See appendices for representative job titles within these five categories.

A final note on presentation: Throughout this document bold-faced text is used to emphasize points. Italicized text is used to indicate that text is quotations provided by respondents using open-ended prompts on the survey questionnaire.

Limitations

As with any nonprobability sampling technique, there are limitations of this approach, but it was chosen as the best way to secure a broad sample of the South Carolina public library community within the timeframe of this project.

Additional limitations derive from the survey format itself. It is possible that different respondents may have interpreted some of the survey’s prompts in different ways. For instance,

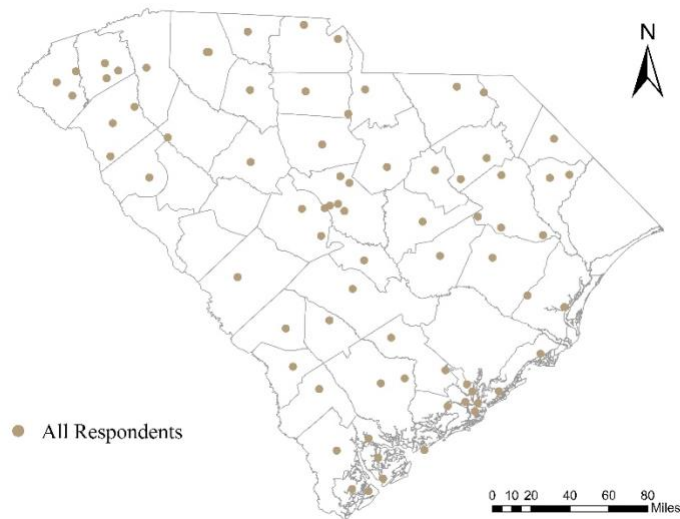
⁶ Learn more at <https://nces.ed.gov/programs/edge/Geographic/LocaleBoundaries>

the survey did not specify what was meant by “access to health literacy,” and thus this prompt and others like it may have been interpreted in different ways. Nonetheless, despite these limitations, this survey and its results provide an unprecedented window into perceptions, needs, and opportunities associated with public library and health partnerships.

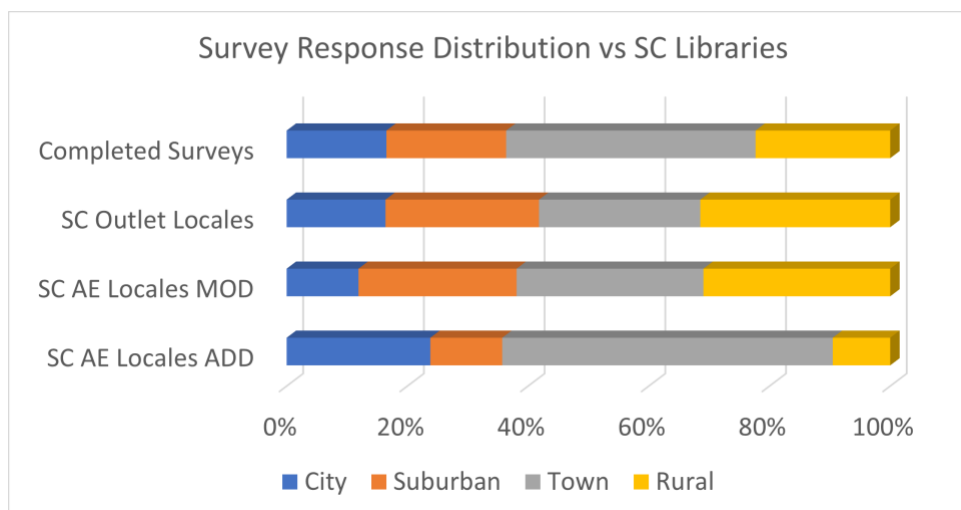
Results

Sample

In general terms, the sample of respondents roughly aligns with the distribution of public libraries across South Carolina. The figure below shows that the distribution of the 123 respondents who fully completed the survey⁷ roughly aligns with both the distribution of South Carolina library branches and bookmobiles (outlets, in the nomenclature of the IMLS), and with the distribution of library systems (library administrative entities, or AEs, in the nomenclature of the IMLS).



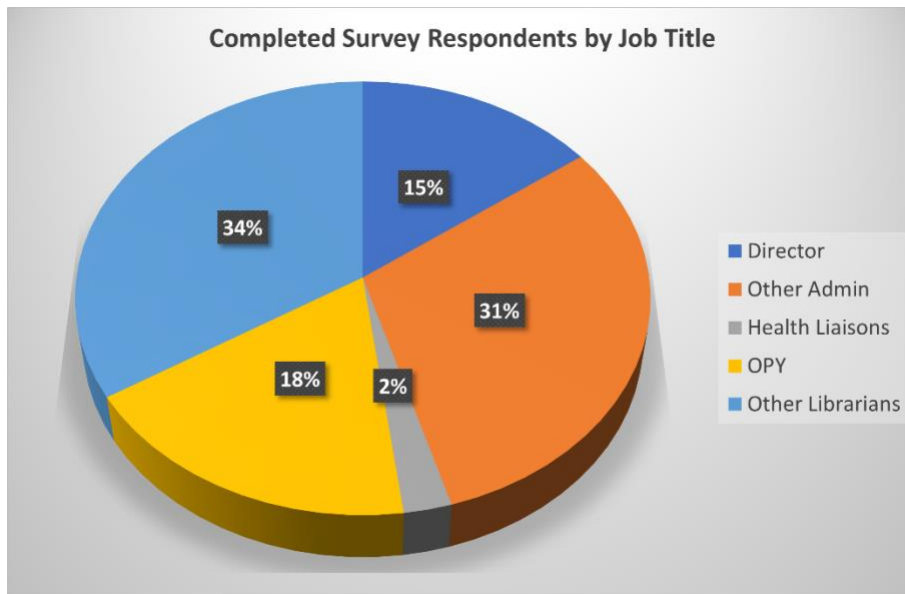
This map and accompanying figure show this sample is slightly over-representative of towns and slightly under-representative of rural areas, partially explained by the fact that the handful of counties from which we did not receive responses are in more rural parts of the state (Horry, McCormick, Marlboro, Laurens, Edgefield, Saluda & Berkeley).



Note on Figure at left: The IMLS (2020) classifies the geographic location of library systems (AE) in two different ways. SC AE Locales MOD refers to the distribution of library administrative entities (systems) based on the aggregate “urban-ness” of the total service area of the

library system. It is assigned based on the modal locale code of associated stationary outlets (i.e., central and branch libraries). SC AE Locales ADD refers to the distribution of library administrative entities (systems), based on the census tract where the systems are headquartered, via IMLS (2020).

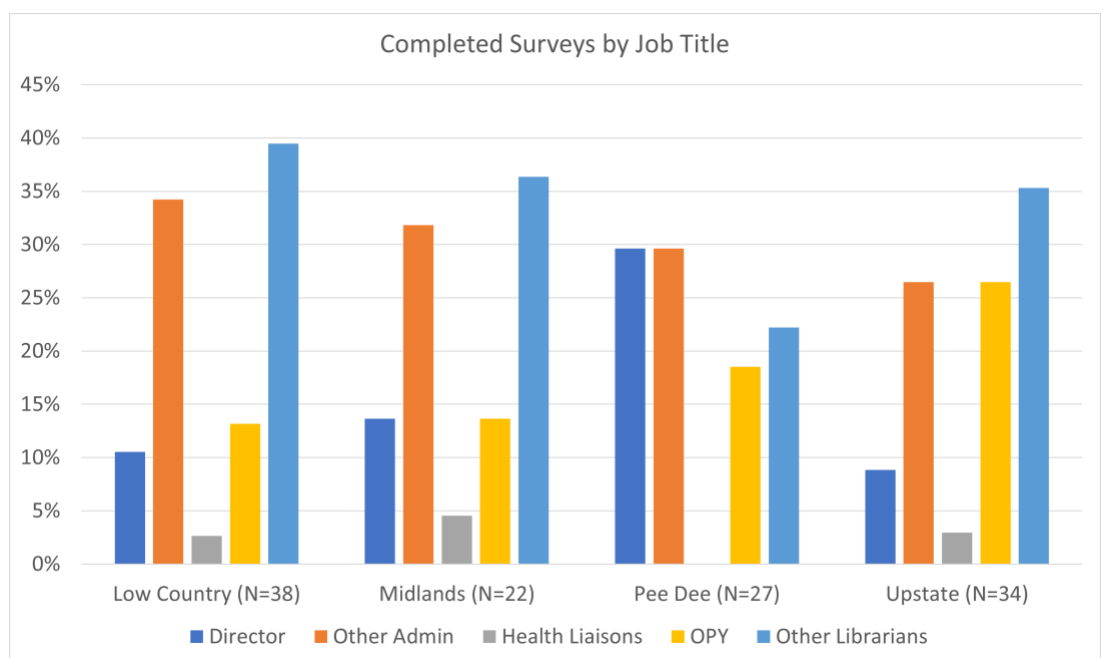
⁷ The number of completed responses refers to the number of library workers who totally completed the survey: There are 21 respondents who gradually dropped out of the survey after completing a proportion of the survey. All those who dropped out did so after completing a full question set. More information on the sample appears in the Appendix, as well as in the Methods section.



Shifting from geography to job title, roughly half of the respondents are library leaders and half are more front-line library workers.⁸ Across the state, the most common respondent was “Other librarian,” or a general librarian (34%), followed by other admin (31%), OPY (Outreach, Programming, and Youth Librarians) (18%), and Library

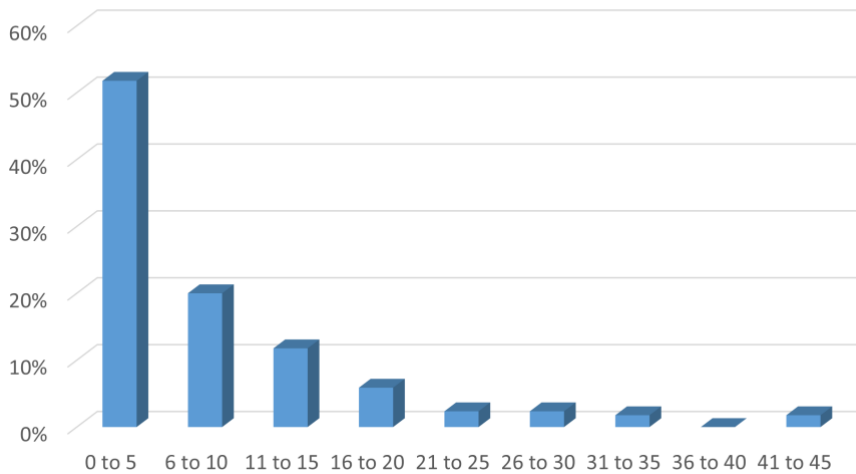
Director (15%). One library health worker responded from a city, a town, and a rural library.

Urban respondents tended to be “other librarians,” reflecting the fact that urban libraries tend to have larger staffs with more complicated staff hierarchies. Town respondents, like suburban respondents, occupied a variety of staff roles, with no type of librarian encompassing more than 40% of the sample. In rural libraries, “other leadership” represented more than 50% of respondents: These other leaders were most typically branch managers.



⁸ The boundary between these two roles can be blurred, particularly in rural communities, where library leadership is more likely to engage in direct service provision due to small staff sizes overall.

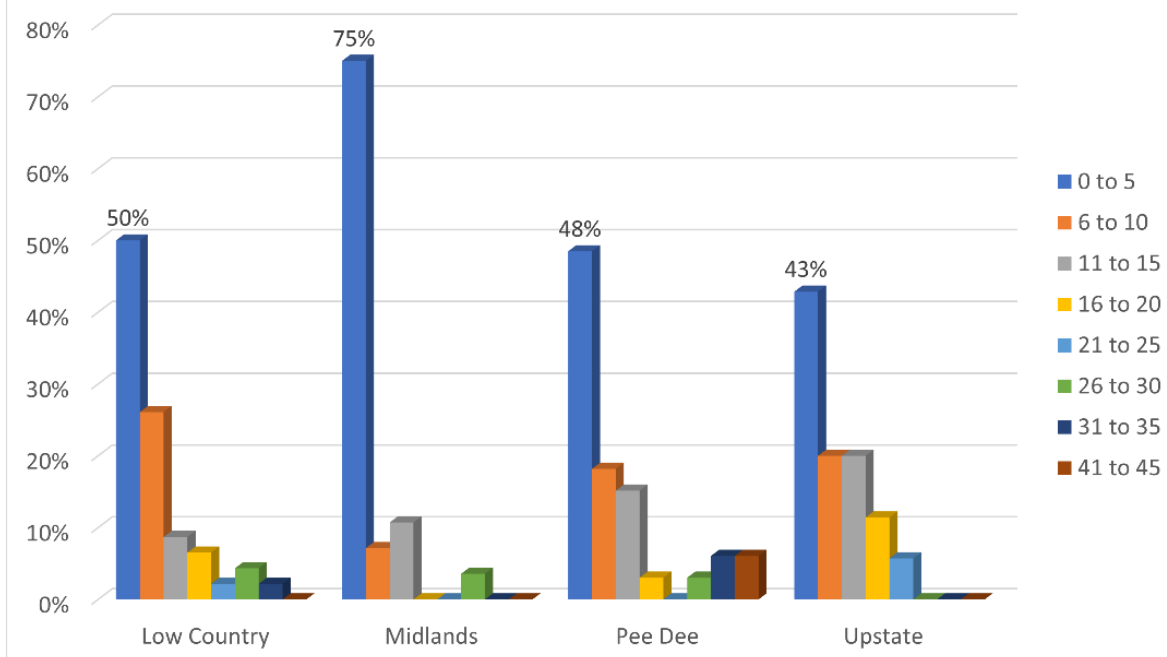
Respondents' Years of Experience at Their Current Library



A large proportion of those who responded to this survey had worked at their library for a relatively short period of time, with about 50% reporting they had worked at their library for 0 to 5 years, with roughly an additional 20% and 10% having worked for 6-10 and 11-15 years at their libraries, respectively. The remaining 20% had worked at their libraries for 16 years or more.

There was a noticeable difference across the regions of the state in terms of experience at their libraries, and thus in their communities. Respondents in the Midlands were most likely to have 5 or less years of experience (75%), while respondents in the Pee Dee and Upstate were more likely to have worked more than 10 years at their libraries.

Respondents' Years of Experience at Their Current Library



Public Libraries and Community Health

This section focuses on the roles of public libraries and public librarians in community health. It includes information on the prevalence of health services offered in libraries by library partners, the extent of library partnerships with health organizations, the extent of library participation in regional and state health systems, the prevalence of health-related incidences on library property, and perceptions of the library as a part of community health.

Health services offered by library partners

Looking at health services offered by library partners, the most notable finding is that **no single service was offered in more than 50% of respondents' libraries**. In other words, data show a great heterogeneity of health services offered by public library partners across the state.

The most offered health services center around food, with summer meals, food drives, nutrition classes, other ways of distributing food, and farmers' markets all reported by more than 30% of respondents. Other common health services provided by libraries include blood drives (45%), health fairs (37%), COVID-19 immunization clinics (36%), and blood pressure screenings (31%).

Health services	By Partners	By Library Staff
Summer meals	47%	31%
Blood drives	45%	26%
Food drives	40%	40%
Health fairs	37%	23%
Immunization clinics, specifically for COVID19	36%	16%
Offering nutrition classes	36%	34%
Immunization clinics, in general (e.g. for vaccinations)	36%	13%
Farmer's Markets	33%	26%
Other ways of distributing free food (community fridge, food boxes)	33%	29%
Health screening services: Blood pressure	31%	6%
Health screening services: Other	29%	12%
Understanding specific health topics	29%	36%
Referrals to appropriate health and/or social service agencies	28%	26%
Identifying or using local health resources	27%	40%
Mental health first aid trainings	26%	16%
Assistance w/mental health issues (social, behavioral, emotional needs)	25%	14%
COVID-19 testing	24%	9%
Offering fitness classes	23%	34%
Health screening services: Mammography	22%	6%
Locating and evaluating free health information online	21%	51%
Telehealth services	20%	12%
Identifying health insurance resources	20%	26%
Health screening services: Obesity	16%	5%
Using subscription health database(s)	12%	42%

This table shows a range of other health services offered by partners in South Carolina libraries, including referrals to other agencies (28%), mental health first aid trainings (26%), COVID-19 testing (24%), fitness classes (23%), telehealth (20%) and help identifying health insurance resources (20%).

In most cases, these health services tended to be offered by library partners, with library staff playing a more supporting role. Exceptions to this general trend center around more informational services, which are more likely to be offered by library staff themselves. These include: Locating and evaluating free health information online, Using subscription health database(s), Identifying or using local health resources, Understanding specific health topics, Identifying health insurance resources, and, somewhat surprisingly, Offering fitness classes.

Findings show that in addition to supporting access to information, public libraries across the state are supporting access to health classes, to vital health services, and to food. Nonetheless, this work seems to occur with great unevenness across the state, with nothing being universally available. Instead, the data suggest local librarians are working with local partners to make available health services.

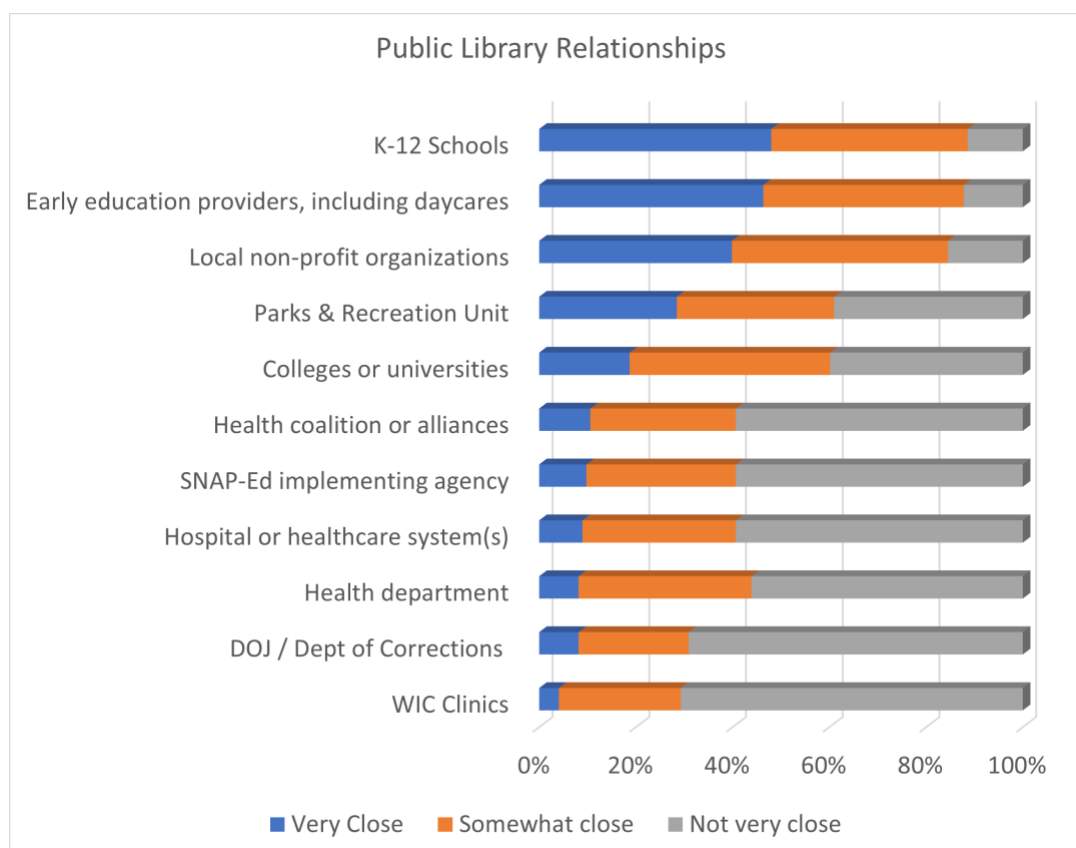
Partnerships and relationships related to health

The ability of South Carolina’s libraries to offer these services relates to the closeness of relationships between public librarians and organizations in the health sector. The table and figure below show the comparative closeness of relationships between libraries and partners, illustrating that in general **more than 50%** of public librarians have close relationships with formal and out-of-school-time educational institutions, non-profits, and parks & recreation, but **less than 50%** of public librarians have close relationships with any organization in the health sector. Within the health sector, relationships are strongest with health departments, and weakest with WIC Clinics.

Department/Institution	Very close or somewhat close	Not very close
K-12 Schools	89%	11%
Early education providers, including daycares	88%	12%
Local non-profit organizations	85%	15%
Parks & Recreation Unit	61%	39%
Colleges or universities	60%	40%
Health department	44%	56%
Hospital or healthcare system(s)	41%	59%
Health coalition or alliances	41%	59%
SNAP-Ed implementing agency	41%	59%
Department of Justice / Department of Corrections	31%	69%
WIC Clinics	29%	71%

It is notable that despite a wide variety of food services being available in South Carolina public libraries, relationships with WIC Clinics tend not to be very close. It could be that public

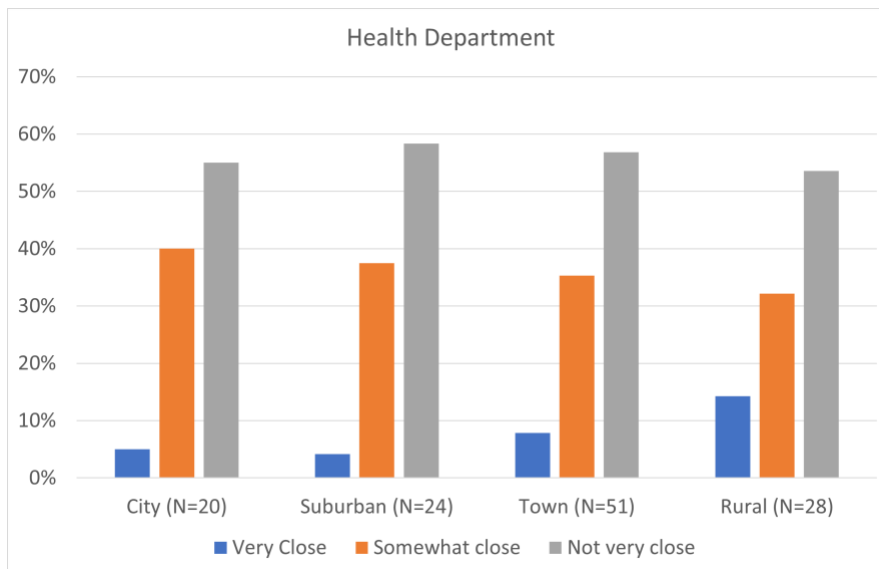
librarians are looking to other partners, such as K-12 Schools and their nutrition and food professionals as key partners for these services. More research is needed on this point.



On the other hand, these figures also show that in at least **some** South Carolina libraries, there ***are in fact*** “very close” relationships between public librarians and **all** the organizations asked about, including Hospitals, Health Departments, Health Coalitions, SNAP-Ed, and WIC Clinics. In other words, despite being in the minority, there are communities in South Carolina where public librarians have very close relationships with all the sectors asked about.

Looking at regional variations, the PeeDee Region has the least close relationships for most of these sectors, compared to the other regions. The one sector the PeeDee Region has a stronger relationship with is the Dept. of Corrections/Prisons, with 43% of respondents indicating very close or somewhat close relationships.

Looking at urban-rural differences, urban librarians were those most likely to report strong relationships with all the sectors asked. For instance, approximately 65% of urban librarians reported very or somewhat close relationships with health coalitions or alliances, while about 60% of other librarians reported not very close relationships with health coalitions or alliances. A notable exception to this overall trend centers around the Health Department –



rural librarians were **least likely** to report not very close relationships with health departments, and **most likely** to report very close relationships, but by a small margin, see figure.

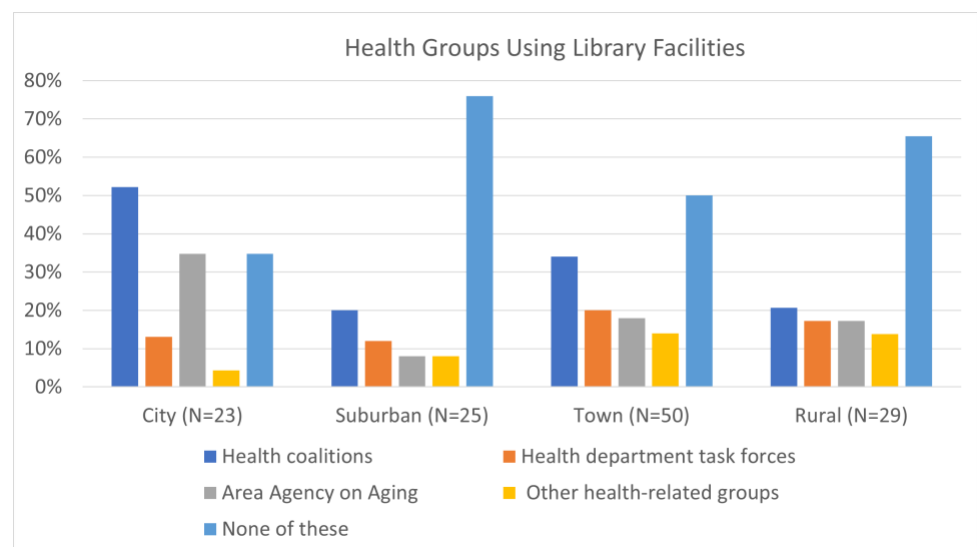
Health groups meeting at the library

Shifting to the use of library spaces by health groups, urban librarians were most likely to report

their spaces used for health groups' gatherings. Nevertheless, one-third of rural librarians, and half of town librarians, did report that health groups use library facilities.

Health coalitions are those most likely to use library spaces for meetings, followed by Health department task forces, Area agencies on aging, and Other health-related groups.

The most reported answer overall, though, is that None of these groups met on library property, particularly outside of urban South Carolina.

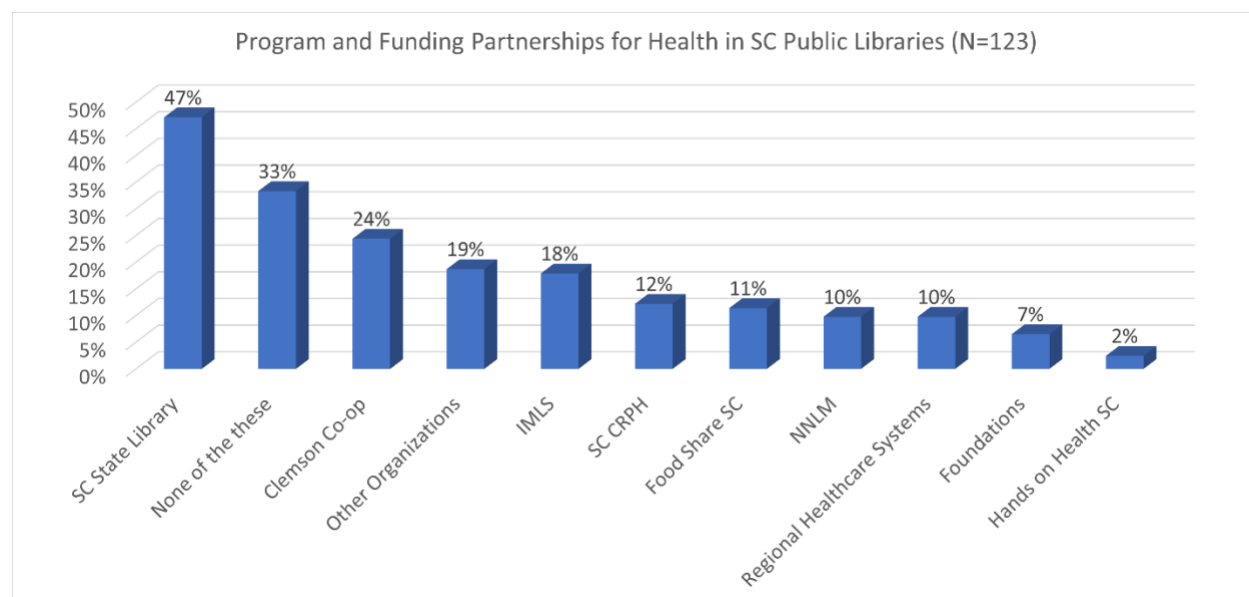


Library participation in regional and state health systems

Beyond local partnerships, the survey also asked about library participation in regional and state health initiatives. **Across the state, public librarians do not typically look to health organizations as programmatic partners.** Approximately one third of respondents said they had not worked with **any** organization as a programmatic partner to offer health related services. Among those who had, the most common partner was the South Carolina State Library, which receives an annual block grant from the Institute of Museum & Library Services to support library development across the state. The IMLS (2018) Strategic Plan includes health literacy, which is currently a priority, under library support for lifelong learning.⁹ In addition to providing

⁹ See <https://www.imls.gov/publications/transforming-communities-imls-strategic-plan-2018-2022>

block grants to all states and territories, the IMLS also provides direct financial support to public libraries, which is why it was reported as the fourth most common programmatic partner for health initiatives. For instance, in 2017 the Richland Library in Columbia, South Carolina, received a \$50,000 grant directly from the IMLS to develop Fresh Food, Fresh Thinking, which focused on developing “unconventional partnerships that support the potential development of a Farmers Market/Public Library hybrid facility to be designed by high school students with the Farmer’s Market being managed by them” (IMLS, 2017).



What is most notable about the above figure is the comparative absence of organizations that have health as a primary focus. South Carolina libraries tend to look to state and national library agencies as funders and programmatic partners, as well as the Clemson University Cooperative Extension and other organizations.

Less than 15% of any of the health organizations asked about were reported as programmatic partners, with the SC CRPH being the most reported (12%), followed by Food Share SC (11%), Regional Healthcare systems (10%), Health Foundations (7%), and Hands on Health SC (2%).

Many of the text responses articulated by respondents who indicated other organizations centered around food, including the USDA, food banks, and Wholespire (formerly known as Eat Smart, Move More South Carolina, and identified as such by survey respondents in their open-ended responses). Schools were another common text response, illustrating how librarians see schools both as education and health partners, at least in some locations.

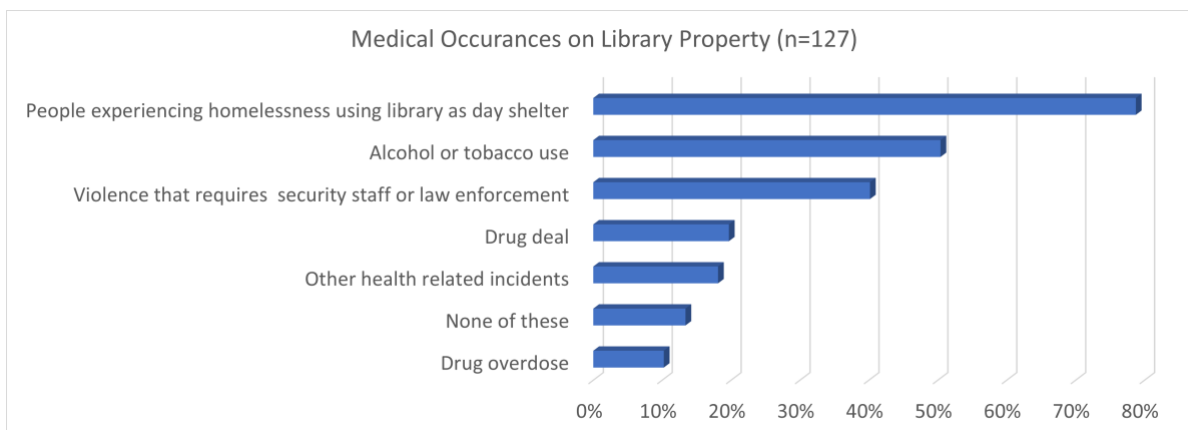
Data show that although local libraries are collaborating with local partners to offer a range of health-related services, these local partnerships have not yet translated into programmatic state or regional partnerships.

Looking at the urban-rural continuum, urban librarians were slightly more likely to report having programmatic health partners. For instance, 20% of urban librarians reported working with regional healthcare systems, while less than 10% of other librarians reported the same.

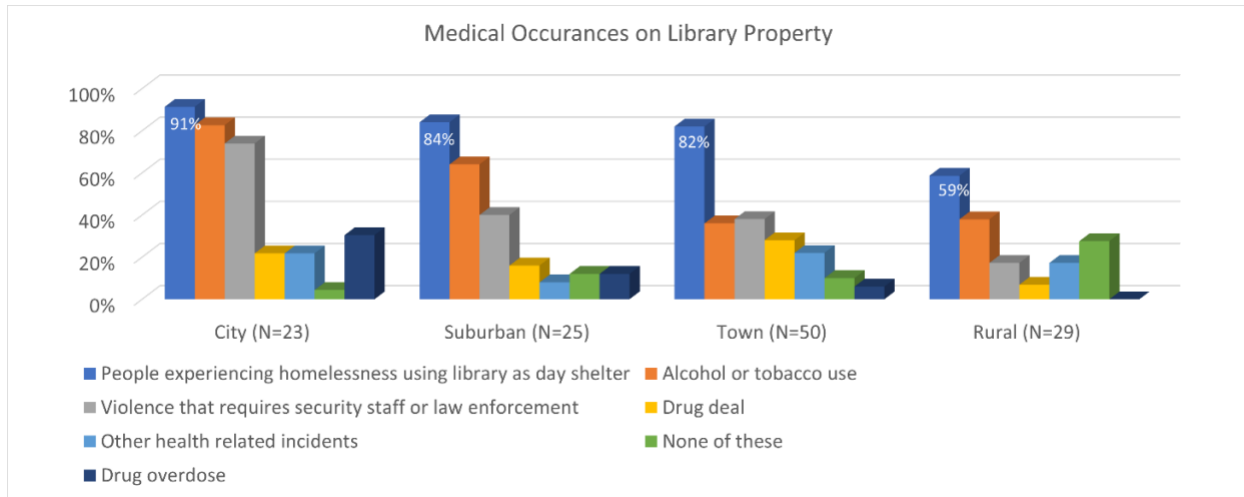
On the other hand, 7% of rural librarians reported Hands on Health SC as a programmatic partner, while 0% of urban and suburban librarians reported this as a partner. Similarly, 31% of town librarians reported the Clemson Cooperative Extension as a programmatic partner. Both town and rural librarians were more likely to report Food Share SC as a partner, compared to their urban and suburban peers. Food Share SC's rural outreach is funded by the SC CRPH.

Health-related incidences on library property

Another sign of the multi-faceted roles of libraries in community health appears in the prevalence of health-related incidents on library property. Nearly 80% of respondents report that people experiencing homelessness use public libraries as day shelters, and between 10-50% report a range of other incidents on library properties, including drug deals, physical violence, and overdoses. Librarians also wrote in open-ended comments other health-related incidents they had witnessed at their libraries, including seizures and heart problems.



City librarians most likely to report all the incident types asked about, except for drug deals (reported most frequently by Town librarians). Data suggest, however, that these sorts of incidents occur in public libraries across the state. Less than 30% of rural respondents said no health-related incidents had occurred at their properties. As open public spaces, health issues occurring in communities tend to also occur in public libraries.



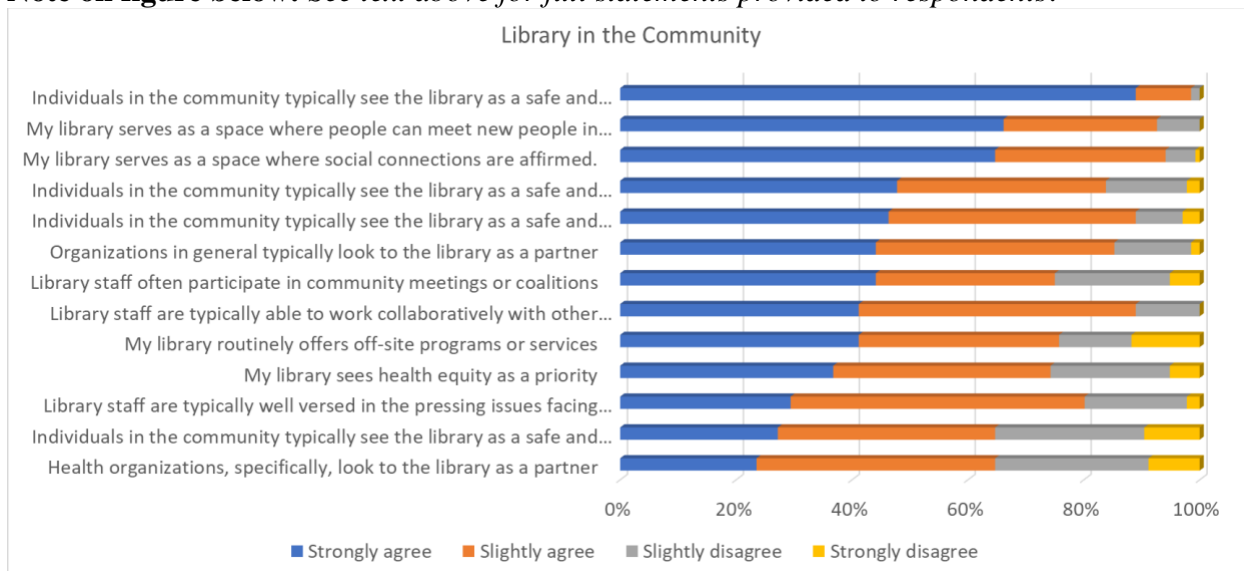
Perception of library as part of community health

The survey also sought to assess librarians' perception of how their libraries fit into community health. A series of questions were asked regarding perceptions of how respondents see the library as part of the community, and how they see it as part of community health. Respondents tend to think that individuals and organizations in their communities look to the library as a safe and trusted space, including to access health literacy and to potentially access health services, and most librarians see health equity as a priority for their libraries. Nevertheless, there is overall less agreement among respondents about the roles of libraries in community health, compared to the broad agreement associated with the roles of libraries in the larger community. For instance, while around 40% of respondents strongly agree that "Organizations in general typically look to the library as a partner," only about 20% strongly agree that "Health organizations, specifically, look to the library as a partner."

Library in the Community	Strongly or slightly Agree	Slightly or strongly Disagree
Individuals in the community typically see the library as a safe and trusted space for all ages	99%	1%
My library serves as a space where social connections are affirmed.	94%	6%
My library serves as a space where people can meet new people in the community	93%	7%
Individuals in the community typically see the library as a safe and trusted space to access health information	89%	11%
Library staff are typically able to work collaboratively with other individuals and organizations to address pressing community issues	89%	11%
Organizations in general typically look to the library as a partner	85%	15%
Individuals in the community typically see the library as a safe and trusted space to access health literacy	84%	16%
Library staff are typically well versed in the pressing issues facing the community	80%	20%

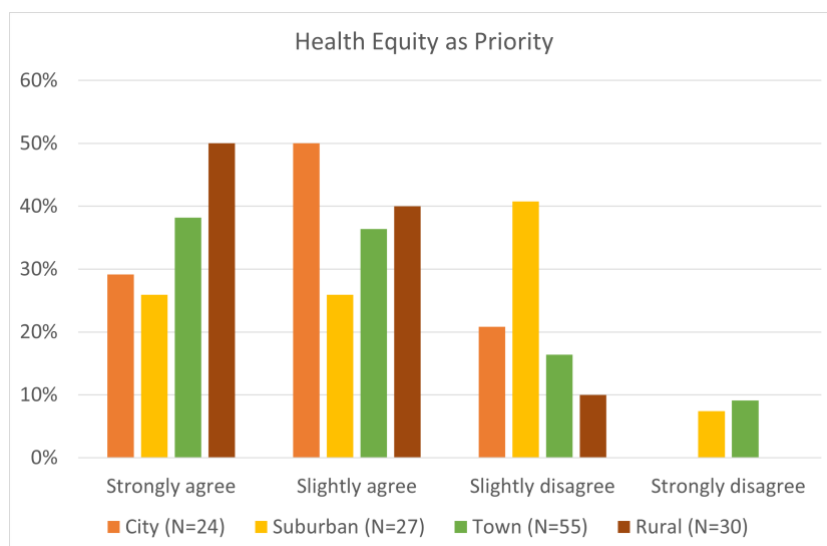
My library routinely offers off-site programs or services	76%	24%
Library staff often participate in community meetings or coalitions	75%	25%
My library sees health equity as a priority	74%	26%
Health organizations, specifically, look to the library as a partner	65%	35%
Individuals in the community typically see the library as a safe and trusted space to access health services	65%	35%

Note on figure below: See text above for full statements provided to respondents.



Looking at urban-rural differences, the vast majority (nearly 90%) of urban library respondents tend to agree that the library is part of community health, while only about 70% of respondents from outside cities tend to agree with this idea. This fact in turn suggests that the idea of libraries as part of community health has become more established in urban South Carolina, compared to other parts of the state.

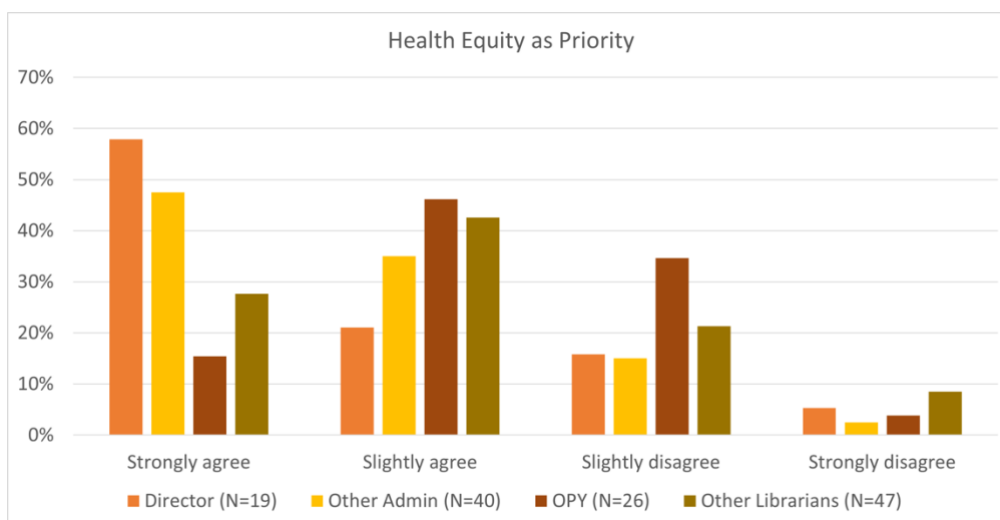
Similarly, agreement with the premise that “My library sees health equity as a priority” is not evenly distributed across the state. Suburban librarians were most likely to “disagree” with this premise: Nearly 50% of suburban librarians disagreed, and about 20% of town and urban librarians disagreed. **Only 10% of rural librarians slightly disagreed**, and 0% strongly disagreed. This shows



that health equity tends to be a priority in rural librarianship in ways similar to urban librarianship. Rural librarians were also the respondents *most* likely (50%) to say they “Strongly agree” that “My library sees health equity as a priority.” The PeeDee region sticks out with the highest number of respondents who Strongly Agree that Health Equity is a priority for their library, at 50%.

The survey also found that perceptions of the library as part of community health varied by job title, with some library employees more enthusiastic about this idea than others. Those most likely to agree that the library is part of community health were library health workers, followed by library directors, other leadership, OPY staff, and, finally, other librarians.

This finding suggests that there may be an opportunity for those in the health sector to reach out to and to help public librarians who occupy more public facing staff roles to understand how health equity fits into the work of public librarianship.



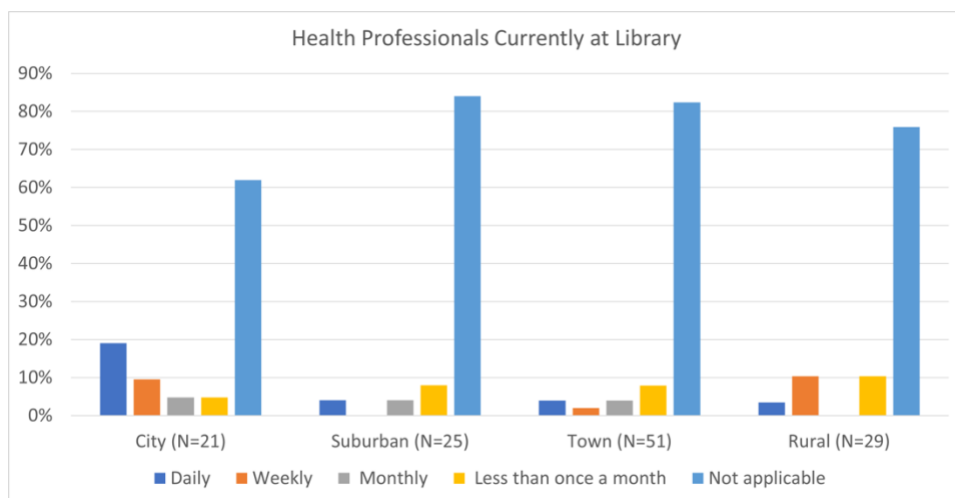
It is also probable that at least some of these front-line library workers feel they already have so much to do, and as such have difficulty seeing how promoting health equity could fit into their already busy days. With support, public library workers may feel more comfortable and capable seeing health equity as something that they could help to support, working alongside those in the health sector. One promising tactic to build support for health equity within the public library profession is to highlight connections between community health and workplace wellness. During the COVID-19 Pandemic many public library workers struggled with burnout and compassion fatigue, leading some library continuing education providers to strongly emphasize the critical importance of self-care and workplace wellness as foundational to library workers’ ability to serve and care for their communities (e.g. Esguerra et al., 2022; Hough & Gutsche, 2021). Many in the health sector suffered similarly during the pandemic, and one opportunity to build stronger relationships between the health and public library sectors centers around creating opportunities for each to understand the stresses they are under, and the strategies each sector uses to manage and work through workplace stress, particularly during the COVID-19 Pandemic.

Staffing and infrastructure for health in libraries

This section of the white paper reports on staffing for community health at South Carolina's public libraries, including the roles of and needs for health liaisons, as well as the health services that library staff themselves provide within public libraries.

Roles and needs for health liaisons

A growing trend within public librarianship is to have health liaisons available at libraries to serve the public. These liaisons include social workers, social work students, nurses, community health workers, health educators, and medical student interns among others (see literature review). This trend has made some small headway in South Carolina, particularly urban South Carolina.

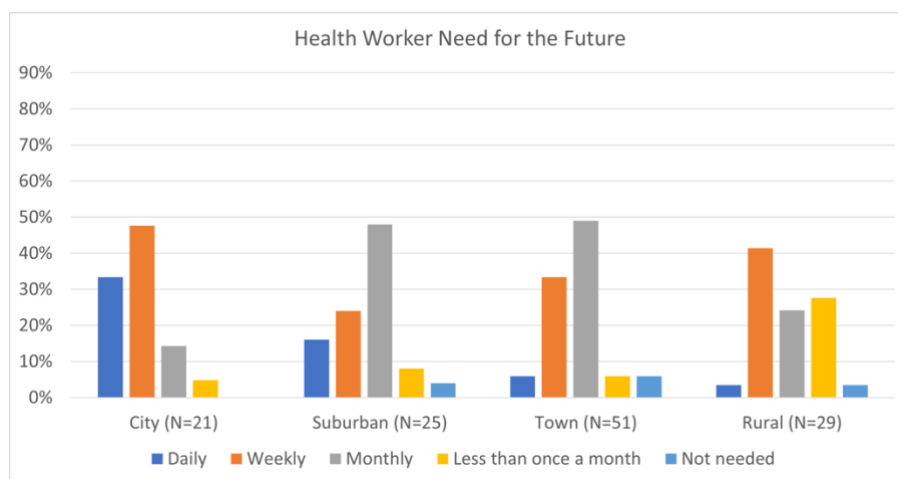


Nearly 40% of urban respondents reported having had health liaisons available at their libraries in some capacity, but less than a quarter of other librarians did so. Following urban respondents, health liaisons were most reported among rural, town, and lastly suburban libraries. Among all respondents, **rural**

librarians are those who have the most interest in having health liaisons available in the future. The PeeDee DHEC region is the only region to not have any health workers available at respondents' libraries at the time of the survey, but with funding from the SC CRPH they will have a library program in Marlboro County beginning during 2022. PeeDee respondents did report having had some health liaisons at their libraries in the past, and those rates of past availability are not substantively different from those of other regions.

Shifting from current availability to future needs, urban librarians expressed the greatest need for health workers at their libraries, with **0% saying this is not needed.** Rural librarians were the second most likely to say health workers are needed at the library.

Looking toward future needs, rural librarians were only slightly less interested than their urban counterparts in having a



health liaison at least weekly. Overall, rural librarians saw the most need for health liaisons to become part of library services moving forward, as in urban libraries those liaisons are already starting to be in place. The perceived need for health liaisons varies by intensity of need, with urban librarians tending to report daily or weekly need, and others reporting weekly, monthly, or less than monthly being ideal.

What types of health liaisons are needed in public libraries?

This section now goes into greater detail into the types of health liaisons South Carolina public librarians would like to see at their libraries.

In general, public librarians evince a preference for credentialed health professionals, rather than for students, volunteers, or other health workers. For instance, 80% of rural librarians are interested in having credentialed health professionals at their libraries, while only 55% are interested in having students or other non-credential health professionals at their libraries. That said, rural librarians were those most interested in bringing in whomever would be available to them: They were those **most interested** in having students or volunteer health workers available at their libraries.

There is also an intriguing discrepancy between the perceived need for outside help in general, and the perceived need for specific types of help. Over 90% of respondents said there was a need for a health liaison at their libraries, but when respondents were asked if they would like to have a *specific* type of health worker available at their libraries, on average over 30% were not interested (see table, below).

This disconnect could derive from the perception among some respondents that having a specific health worker available at their library would add to their workload. There was a noticeable disconnect between library administrators and library workers as it relates to interest in having health liaisons at the library. For instance, 55% of library leaders reported wanting to have social work students at their libraries, while only 30% of front-line library workers reported wanting such students. Explaining this reticence, in an open-ended response, one respondent wrote “*We do not have enough staff and really cannot handle any more programs. Even when partnering with others, it takes staff time, and we just cannot do it anymore due to not enough staff.*”

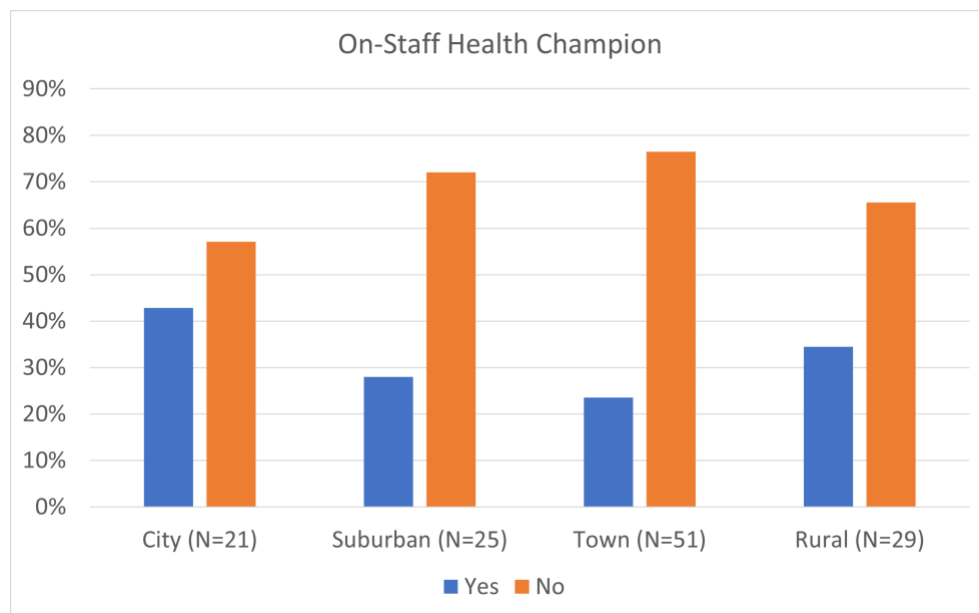
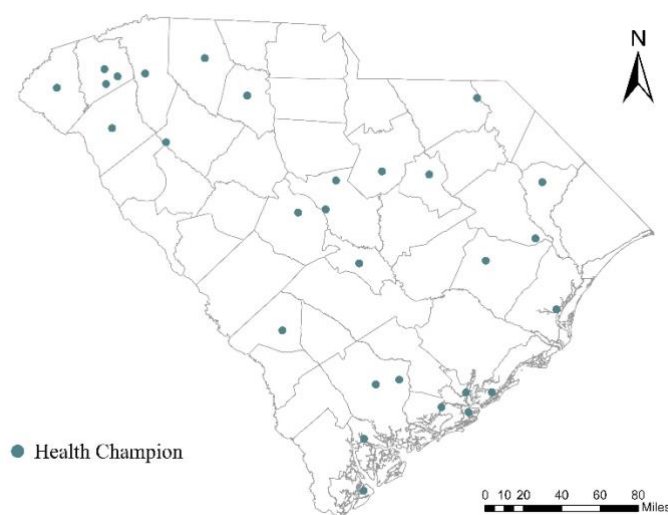
Health Service or Program (n=126)	Not interested	Offered	Interested – Not Offered
Social workers	26%	23%	51%
Nurses	37%	12%	51%
Health educator	25%	27%	48%
Medical students	48%	4%	48%
Community health workers	29%	24%	47%
Social work students	44%	13%	43%
AmeriCorps or other volunteers	40%	21%	39%
Other health-related professional	69%	8%	23%

In open-ended comments, librarians specified other forms of health professionals who had been available to the public at their libraries, including:

- Nutritionists and dieticians (5x)
- Mental health workers, psychiatric professionals, and counselors (5x)
- Telehealth worker
- Physician assistant
- Physical therapist/Exercise specialists
- A virologist from DHEC
- Certified lactation counselor

Health champion librarians and library systems

More common than the current presence of health liaisons in public libraries is the presence of health champions employed by libraries. For instance, while only about a quarter of rural librarians reported having health liaisons available in any capacity, 35% reported having health champions employed by the library. Health champions were most reported among urban respondents, followed by rural, suburban, and town respondents.



Shifting from health champion on staff to library systems that champion health, library systems across South Carolina were ranked based on the average number of affirmative responses of employees in their systems to the following five survey questions:

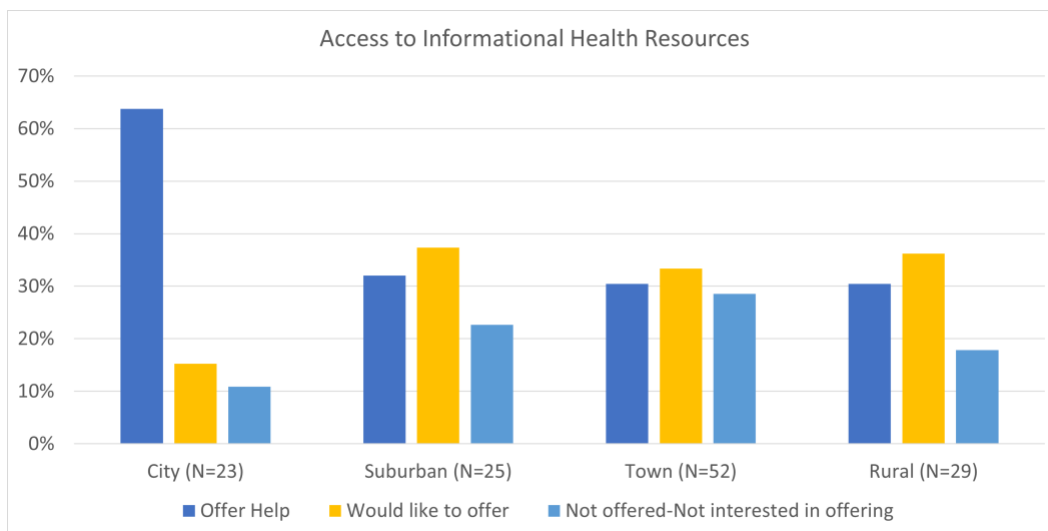
- Have a Health Champion on staff
- Have very close relationships with Health Coalitions
- Have very close relationships with Health Departments
- Have very close relationships with Hospitals or Healthcare System
- Strongly agree that Health organizations, specifically, look to the library as a partner

Based on these criteria, representatives from the following eight library systems tended to answer affirmatively to more than one of these prompts. Looking at the data in this way reveals the presence of health champion library systems spread throughout the state of South Carolina, in addition to the presence of health champion librarians. See also the Appendices for another way of identifying health champion library systems, based on past and present participation in state health networks, including that of the SC CRPH.

Library Systems	Average number of affirmative responses (out of five)
Union County	4
Kershaw County	2.5
Calhoun County	2
Greenwood County	2
Lancaster County	2
Marion County	1.6
Charleston County	1.3
Richland County	1.2

Access to health information at the library

As discussed in the literature review, a focus on preparing public librarians to support consumer health information access and informational referral to local health agencies has been a national priority for decades. This section looks at how public librarians in South Carolina support access to health information. In general, urban librarians are most likely to report supporting health



resources, and rural librarians tend to be those most interested in learning more about how to do so.

Over 60% of urban librarians reported their libraries support consumer health, and only about 30% of all other libraries

reported support for consumer health. In general, library leadership tends to be more interested in

this topic than front-line librarians, possibly based on the perception that this task would be an unfunded mandate for overloaded library workers. The PeeDee region stands out as having the least amount of health information access at the library.

Across the state, the most reported ways in which librarians support health information access were, in order, helping patrons 1) locate and evaluate free health information online, 2) use subscription health database(s), 3) identify health insurance resources, 4) help in the understanding specific health topics, 5) identifying or using local health resources, and 6) referrals to appropriate health and/or social service agencies. This finding again shows a weak spot in the state's health infrastructure centers around connections between public librarians and the health sector. **Public librarians tend to be less familiar with navigating local health resources, compared to their understanding of national resources.**

How are health outcomes evaluated?

Historically, librarians have struggled with program evaluation, and that difficulty has continued into the present (Lopez, 2018). An open-ended question asked respondents "How, if at all, has your library evaluated the health outcomes of library services or programs?" **The most common response was that health outcomes were not evaluated**, beyond monitoring numbers of individuals who engage with library services and spaces.

Some librarians were not sure how or if health outcomes were tracked:

- *I'm not sure how outcomes are evaluated - I know participation stats are tracked.*
- *I do not know. I know data and statistics are collected for every program, but I am unaware of the ways in which those numbers are used for evaluations.*
- *I don't think we've looked at programming from a "health outcome" perspective.*

One librarian acknowledged this gap in their library's knowledge, writing "Our library system has not evaluated the health outcomes of our library services, however, we do provide some." Another said they wanted to get started in this area: "I have only been the Director for 8 months but as far as I know Health Care Services and Programs have not been a focus or anything we have developed. I would like to though in the future."

Others knew participation numbers were tracked, and in some cases informal feedback was sought, but for what purposes were not specified by respondents:

- *To my knowledge, this library has not deeply evaluated the health outcomes of our services and programs. Any information gathered has typically been related to attendance. We may have made note of anything self-reported by a patron, but that has never been requested to my knowledge.*
- *Recorded the number of participants in free lunch programs, housing assistance programs, legal clinics, and other referrals.*
- *Number of attendees; number of circulations of materials in [health] areas*
- *Attendance to programs has been our major tracked statistic. We do not want to keep any information on anyone so tracking for success would not really be possible.*
- *Evaluation was from views on virtual programming and no follow-up beyond that.*
- *By the number of individuals that are interested and/or requested such services.*
- *Depending on the program or service, mostly surveys or numbers of people served.*

- *Our evaluation usually consists of counting the number of attendees and collecting individual feedback about the service and/or event.*
- *We distribute healthy lunches during summer reading with food supplied by the school district. It is a great program, our location serves the smallest number of children. We have awful parking.*
- *We have been attempting to quantify this information, but to my knowledge do not measure "health outcomes" apart from attendance/views.*
- *When offering specific programs, we count attendees. We have received verbal feedback from some patrons who we assisted with rental and housing assistance.*

A handful mentioned the use of surveys, but without any details on how surveys informed knowledge of health outcomes:

- *Surveys*
- *By having patrons complete surveys.*
- *[Use of] 10/10 rating scale*

Some mentioned that evaluation was being undertaken, but did not specify exactly how:

- *Demographics though education services*
- *Mostly qualitatively, in conversation with users*
- *We rely on the evaluation of our strategic plan, staff evaluation of programming, patron input, and working to continuously improve what we offer to the public*
- *Yes, we are constantly evaluating our services and resources.*

A handful did mention more sophisticated outcome frameworks. Most indicated the tracking of health outcomes for library services was done primarily by the library's partners and health liaisons, including social workers, suggesting that this may be a promising model for staffing the work of health evaluation in public libraries:

- *By both traditional and outcome-based evaluation methods: surveys, pretests/post-tests, observations, headcounts, etc.*
- *Many of these services are offered through our Library Social Worker, who connects clients individually to a variety of needs (medical, substance use, food, shelter, insurance, etc.) Her interactions and client journeys are tracked using case management software. Other programs hosted by staff (e.g. computer classes) or outside agencies (e.g. Goodwill Job Connection) are evaluated based on attendance.*
- *Case management with clients; surveys*
- *Actively tracking through SC CRPH grant*
- *For the WISE Telehealth Network, we ask them to take surveys that tell us how the program has impacted them.*
- *We have a partnership with the USC Bar Association to host legal programs including health insurance and End of Life issues. We use a survey at the end of the session for participants*
- *We have someone that is part of a 'health literacy' team but I don't know how much they do with the community.*
- *We have worked with outside programs to offer some of the things above.*

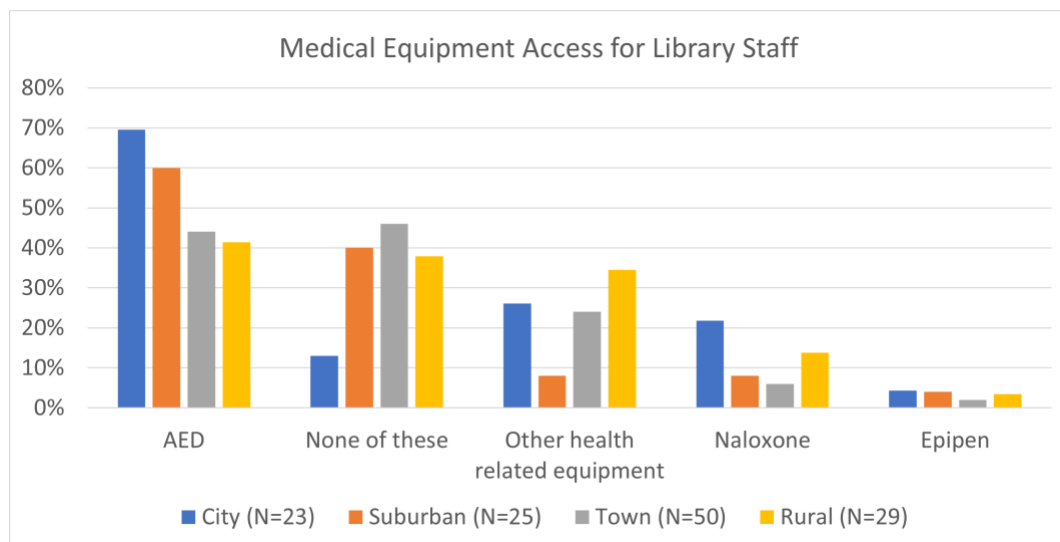
One librarian articulated the limitations of this approach – noting that partners had done program evaluation, but had not shared what they learned with library staff: *“We don’t really have a way to track this info. We did weight loss programs but the partner tracked progress and no long-term info available. We have done nutrition and health programs with our hospital targeting diabetes and heart disease, distributed food during 2020, have had exercise programs for seniors, walking programs, etc. We have sponsored CPR training courses for the public.”*

As more and more libraries host health services and liaisons, it will be crucial to ensure the sharing of knowledge, as well as the sharing of resources, regarding how libraries fit into community health. The staffing for community health in public libraries requires sustainable relationships between public libraries and the health sector, with health liaisons a promising approach to building those bridges, including around the evaluation of program outcomes.

Medical equipment at the library

Finally, the survey asked about medical equipment that may be accessible at libraries. Across the state, less than 50% of librarians reported **not** having any medical equipment on site, and less than 15% of urban librarians reported no equipment.

The most commonly available equipment was an Automated External Defibrillator (AED), followed by Other health related equipment, Naloxone, and Epipen.



Librarians were asked to specify other equipment they may have available to library staff, and common responses included first aid kits (16x) and Jacobs Kit, or other stop the bleeding kits (7x). One librarian wrote *“We have equipment installed but not training on it. That is something I am looking into at this time,”* and another wrote that they had an *“Epipen for my own use that coworkers know about.”*

Health priorities and continuing education needs

Respondents were interested in most of the things asked about by the survey. This finding aligns with the finding that public librarians generally would like to support health in their communities. For every health service asked about except one (Other health-related professional), more than 50% of respondents said they were either interested in learning more about it, or were currently offering it. Librarians are specifically interested in learning more about health liaisons in libraries. Looking at health services not currently being offered, but which respondents are interested in, health liaisons occupy 6 of the top 10 positions, including, in

order of interest, Social workers (tied), Nurses (tied), Medical students, Health educators, Community health workers, and Social work students.

Health Service or Program	Interested – Not Offered	Offered	Not interested
Social workers	51%	23%	26%
Nurses	51%	12%	37%
Access to reentry services for those previously incarcerated	50%	16%	34%
Medical students	48%	4%	48%
Health educator	48%	27%	25%
Community health workers	47%	24%	29%
Access to mental health or behavioral health	46%	37%	17%
Access to support with chronic disease(s)	45%	25%	30%
Social work students	43%	13%	44%
Access to reproductive health	43%	20%	37%
Access to services for substance abuse disorders	41%	35%	24%
Access to transportation	40%	25%	35%
Access to services related to healthy aging	40%	43%	17%
Access to primary healthcare	40%	30%	30%
Health screening services: Obesity	39%	20%	41%
Mental health first aid trainings	39%	36%	25%
AmeriCorps or other volunteers	39%	21%	40%
Access to preventative health services	38%	42%	20%
Access to health insurance	38%	37%	25%
Access to economic development opportunities	36%	41%	23%
Health screening services: Mammography	36%	26%	38%
Referrals to appropriate health and/or social service agencies	35%	43%	22%
Access to housing	35%	38%	27%
Telehealth services	35%	25%	40%
Assistance with mental health issues (e.g. social, behavioral, emotional needs)	34%	36%	30%
Health screening services: other	33%	36%	31%
Health fairs	32%	49%	19%
Health screening services: Blood pressure	32%	35%	33%
Identifying or using local health resources	31%	57%	12%
Identifying health insurance resources	29%	40%	31%
COVID-19 testing	27%	29%	44%
Access to health literacy	27%	63%	10%

Other ways of distributing free food (community fridge, food boxes)	27%	48%	25%
Access to physical activity	26%	58%	16%
Blood drives	24%	57%	19%
Access to COVID-19 related services	24%	61%	15%
Understanding specific health topics	24%	55%	21%
Farmer's Markets	24%	50%	26%
Offering fitness classes	24%	48%	28%
Access to legal aid	23%	58%	19%
Immunization clinics, specifically for COVID	23%	42%	35%
Other health-related professional	23%	8%	69%
Access to nutrition	23%	65%	12%
Access to education (Adult)	22%	60%	18%
Food drives	22%	60%	18%
Immunization clinics, in general (e.g. for vaccinations)	22%	43%	35%
Access to early childhood services	22%	64%	14%
Access to education (Pre-K)	22%	64%	14%
Locating and evaluating free health information online	22%	62%	16%
Offering nutrition classes	22%	56%	22%
Using subscription health database(s)	22%	50%	28%
Access to food	21%	65%	14%
Access to education (K-12)	19%	68%	13%
Access to health information in general	16%	75%	9%
Summer meals	16%	60%	24%
Access to employment	14%	75%	11%
Access to literacy	14%	80%	6%
Access to technology	8%	88%	4%

Notable as well is the fact that “Access to reentry services for those previously incarcerated” is a top topic among respondents, given the fact that respondents generally reported not having very close relationships with the Department of Justice or Department of Corrections.

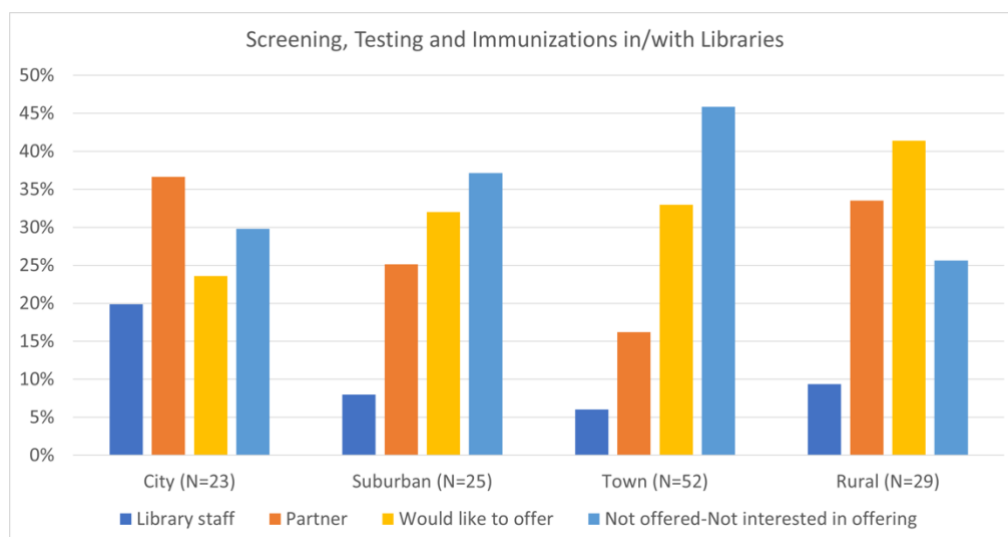
Librarians are also interested in learning more about several infrequently offered health services. These are information services supporting community access to a) mental health or behavioral health, b) chronic disease(s), and c) reproductive health.

It is important to note that “not interested” may signify that the respondent believes this need is already being addressed in the community – interviews or other forms of follow-up would be required to clarify why different library workers are more or less interested in supporting different facets of health at libraries.

Shifting to partner organized health services commonly offered at libraries, the topics of most interest to respondents included, in order:

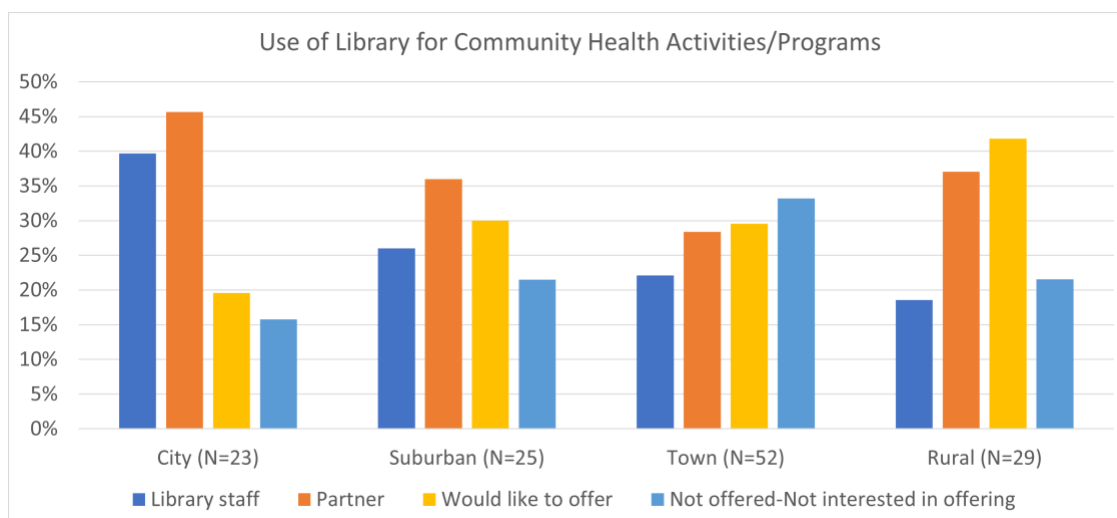
- Health screening services: Obesity
- Mental health first aid trainings
- Health screening services: Mammography
- Referrals to appropriate health and/or social service agencies
- Telehealth Services
- Assistance with mental health issues (e.g. social, behavioral, emotional needs)
- Other health screening services
- Health fairs
- Health screening services: Blood pressure
- Identifying or using local health resources

This list also shows respondents broadly interested health fairs and increasing access to health screening at libraries. These screenings and health fairs could be time-bound partnerships that would enable the formation of stronger relationships between the health and public library sectors. Increasing access to Local Health Resources is **one of the more popular topics** across the board, with very few resistant to the idea of libraries doing more to provide access to information related to local health resources.



Shifting to regional differences, **in almost all cases we see rural librarians as the most interested in almost every topic asked about.** Illustrations of this trend can be found in these two figures. The first averages responses to all questions about interest in

offering health screenings, testing, and immunizations at respondents' libraries. Data shows that, on average, rural librarians and urban librarians have offered a similar level of these services in the past. **The more urban, or the more rural the respondent, the more likely they are either currently offering health services or have an interest in doing so.** Interest is less high in suburban or town libraries.



Rural respondents are similarly interested in supporting health services that involve using the public library space for community services (figure above), including: Summer meals, Other ways of distributing free food (community fridge, food boxes), Health fairs, Farmer's Markets, Blood drives, Food drives, Assistance with mental health issues (e.g. social, behavioral, emotional needs), and Telehealth services. Whereas urban respondents tend to report already offering these services, rural respondents tend to be interested in offering them. Those respondents in towns and suburbs have more mixed attitudes to these types of health services.

Interest in supporting mental and behavioral health

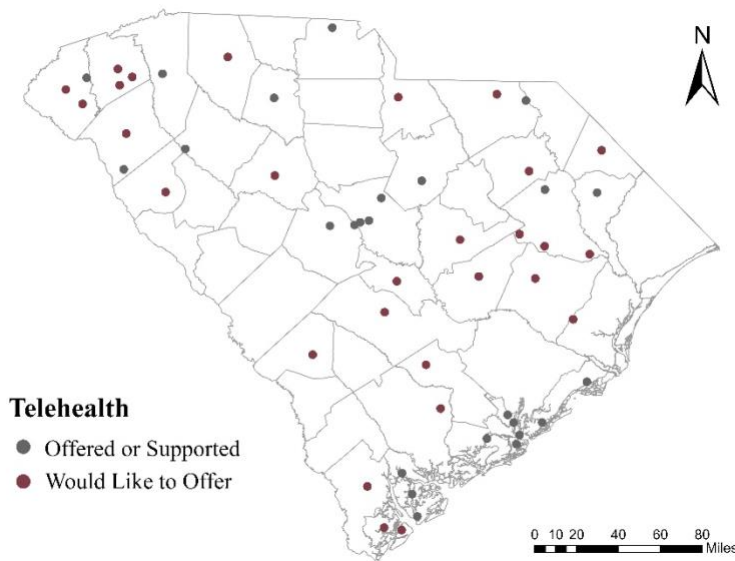
The following three sections focus specifically on respondent interest in three topics: mental and behavioral health, telehealth, and access to food and nutrition education.

As it concerns respondent interest in supporting mental and behavioral health:

- A minority (less than 20%) of librarians are **not** interested in offering services related to mental health access
- Although urban librarians, and those in the Midlands region specifically, were those most likely to have offered services related to mental health access, rural librarians were a near second, followed by town and suburban librarians.
- Rural librarians, and those in the Pee Dee Region specifically, were those **most** interested in offering these services.
- Library directors are those **most** interested in offering these services. This aligns with the general finding that those in administrative roles report being **more** interested in new health services at their libraries than those in non-administrative roles.
- Bucking these general trends, suburban librarians had the greatest interest in mental health first aid trainings, with rural librarians second greatest interest in this topic. Librarians in the Low Country and Pee Dee Regions were about equally interested in offering mental health first aid training at their libraries.

Additional information can be found in the figures in the Appendices.

Focusing on telehealth



Focusing on telehealth, a **greater proportion of librarians said they were “not interested” in this topic than those who said they were interested.** Although there is some interest in this topic, it has lower interest than many other health services asked about on the survey.

Telehealth interest also reveals an intriguing split among respondents. The Pee Dee region has the highest interest in learning more about telehealth at libraries. The Pee Dee also has

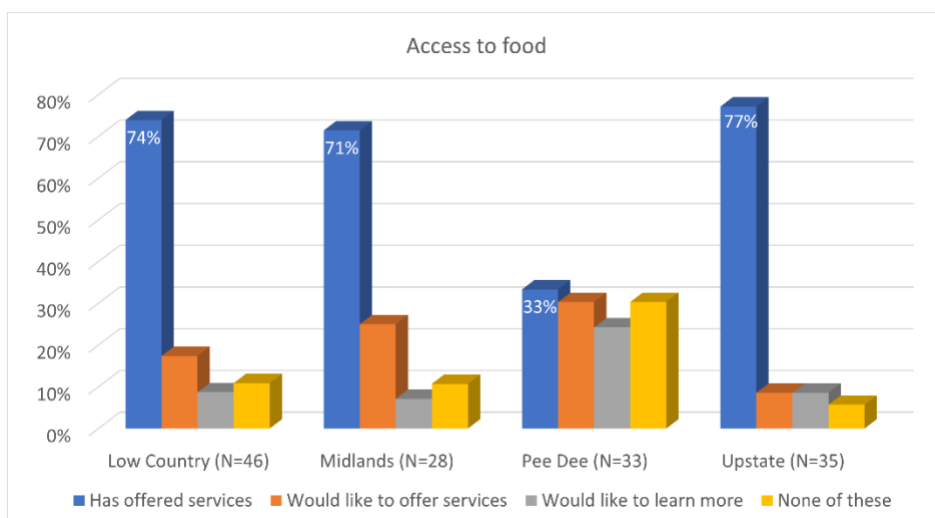
the least current offerings of this service. In the Midlands, there is **the least interest** in supporting Telehealth, even though they and the Low Country each have most of the respondents at the time of the survey supporting telehealth. Interest in supporting telehealth access is concentrated in more rural parts of the state.

In the Pee Dee Region, 55% of librarians said they would like to offer telehealth services at their libraries. Pee Dee and Upstate librarians are also those least likely to report currently offering telehealth support, with only about 10% in each region saying they had offered telehealth support, compared to about one-third of librarians elsewhere in the state.

Similarly, rural librarians had the greatest interest in telehealth services, with 45% wanting to offer these services, followed by 38% of town, 36% of suburban librarians, and 30% of urban librarians.

Focused efforts on reaching rural librarians and engaging them in dialogue about what telehealth services could look like at their libraries could be a promising tactic to build this infrastructure.

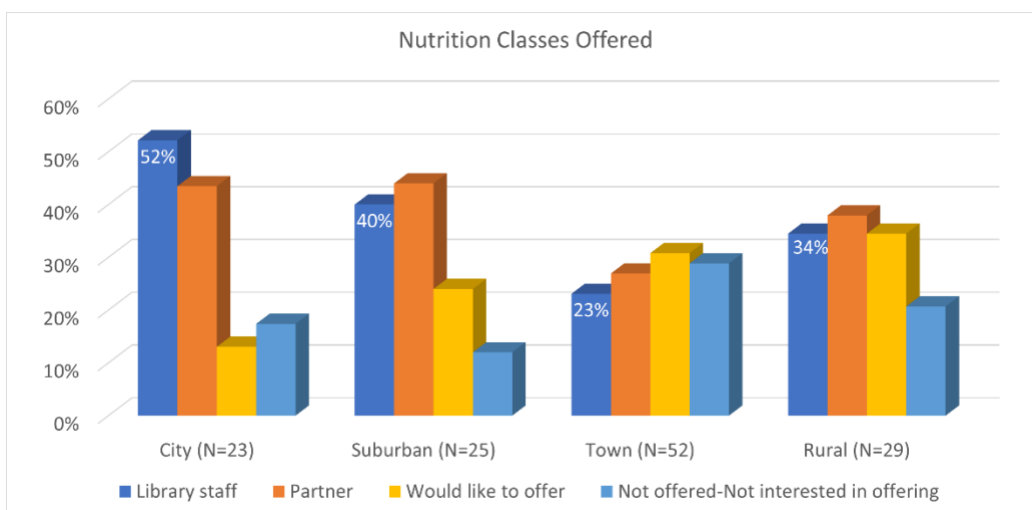
Focusing on food, nutrition, and food access



Most respondents indicate high levels of current support for food security and food literacy at their libraries, but the PeeDee region is noticeably divergent. Outside of the PeeDee region, over 70% of respondents said they had offered services related to food access. Outside of the PeeDee and

Low Country regions, over 70% of respondents said they had offered services related to access to nutrition. In the PeeDee Region, only 33% said they had offered food access services, and only 48% had offered nutrition access services.

As it concerns offering nutrition classes at libraries, the Pee Dee Region again was least likely to have offered these classes. There was also a noticeable urban/rural difference in regard to the prevalence of

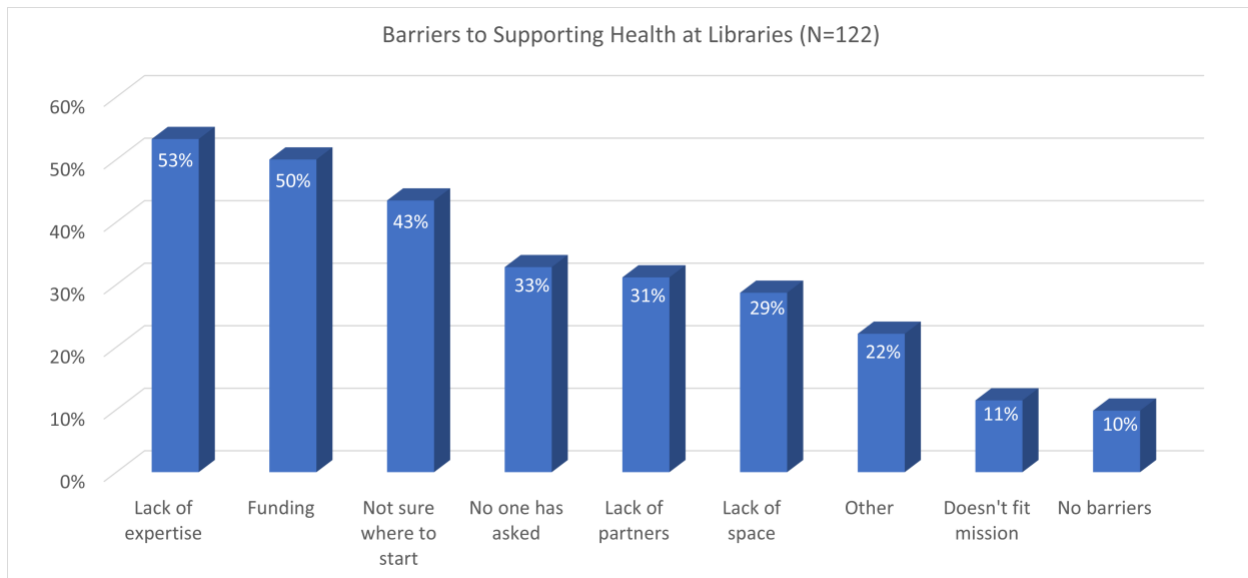


nutrition classes in libraries, with town and rural librarians noticeably less likely to have offered these classes, and town libraries the least interested in offering them in the future.

Similar trends are seen around the provision of summer meals, with Pee Dee region librarians at the bottom in terms of offering this service, but at the top in terms of their interest in it. Similar trends were found for Farmers' Markets (see appendices for more information on these trends).

Barriers to health services at public libraries

Given all this interest in so many health topics among the South Carolina public library workforce, what stands in the way of public librarians working with partners to advance community health outcomes?



There is not **one** barrier, but instead a number of different barriers that together influence what librarians are able to offer. Only one barrier – lack of expertise – was reported by more than 50% of respondents. Across the state, different barriers exist in different communities, with some struggling with funding, others with partners, others with space, etc. What is not a barrier, for most, is the perception that supporting health doesn't fit within the mission of the public library. Only 11% said that was a barrier to health at their libraries.

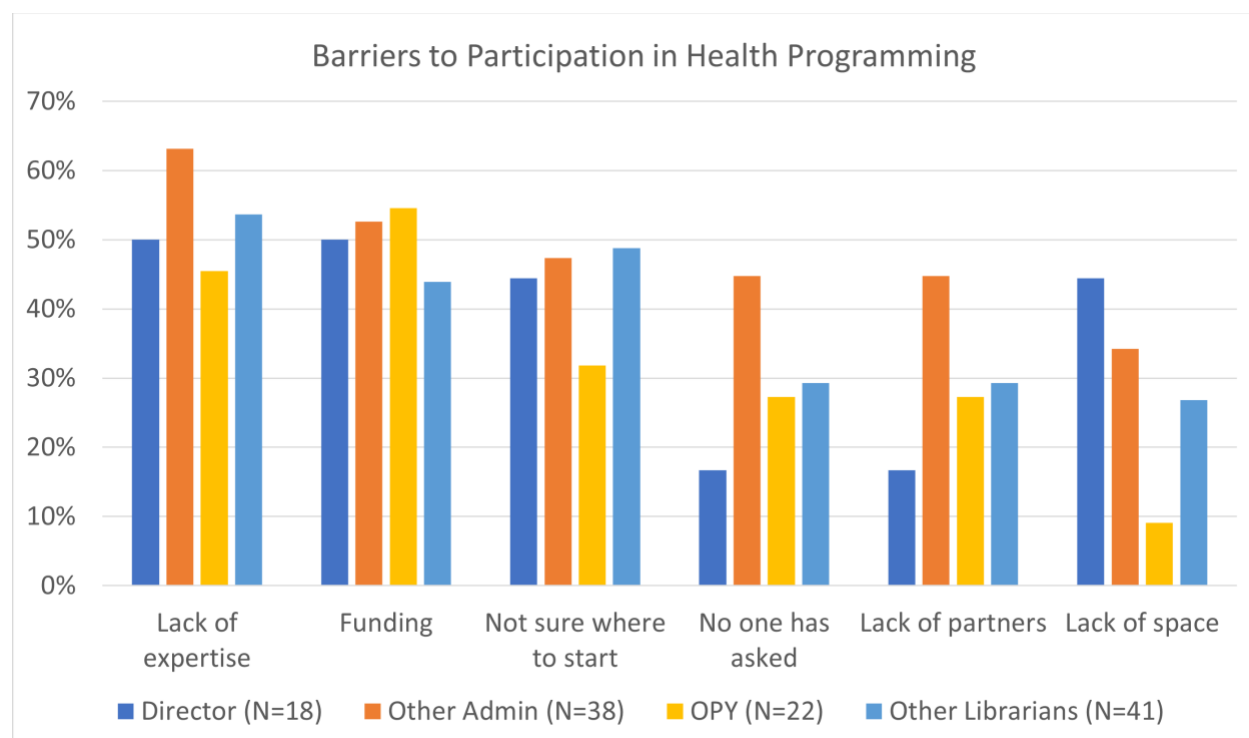
Urban (n=20)	Suburban (n=24)	Town (n=50)	Rural (n=28)
Funding (60%)	Lack of expertise (54%)	Lack of expertise (52%)	Lack of expertise (57%)
Lack of expertise (50%)	Funding (46%)	Funding (52%)	Not sure where to start (54%)
Not sure where to start (45%)	Lack of partners (38%)	Not sure where to start (42%)	Lack of partners (43%)
No one has asked (40%)	No one has asked (33%)	Lack of space (38%)	Funding (43%)
Other (25%)	Not sure where to start (33%)	No one has asked / Lack of partners (tied) (30%)	No one has asked (32%)

Top barriers, by community type

Shifting to regional variations, urban respondents tend not to see a lack of partners as a barrier, with only 10% reporting this as a barrier. In contrast, 43% of rural librarians see this as a barrier, as did 30% of town and 38% of suburban respondents. Urban respondents appear to have the partners they need, while those outside of urban South Carolina struggle finding partners.

In contrast, for urban libraries the top barrier is a lack of funding (60%). Rural librarians ranked Lack of funding as a lower barrier (43%), with more commonly reported barriers being Lack of expertise (57%) and Not sure where to start (54%).

The survey also identified one intriguing difference between library Directors versus other library administrators as it relates to community partnerships. Whereas Directors were the **least** likely to say that “No one has asked” and “Lack of partners” were barriers, Other Admin were those **most** likely to say that these are barriers.



This finding suggests that a promising strategy would be to target middle management – not library directors, but those other library workers in leadership positions (branch managers and division heads) – who survey data suggest have not yet been engaged around this topic as much as they potentially could be.

A sizable (n=29) number of respondents also indicated “other” barriers to participation. These included 4 who said COVID-19 had been a barrier, 11 who indicated staffing problems as barriers, 4 who indicated lack of interest from library administration, 3 who said liability was a concern, and 4 who had other responses. These open-ended responses add nuance to our understanding of barriers, suggesting that in many places barriers center around not understanding how to weave health services into public librarianship in a sustainable way, limiting its drain on staff resources.

As one wrote “*Even when partnering with others it takes staff time and we just cannot do it anymore due to not enough staff.*” Other open-ended responses to the barrier prompt included:

Lack of administrative support or risk management a challenge

- Administration generally a barrier (3x)
- *Lack of interest from different levels*
- *Concerns of liability from administration*

- *Liability concerns*
- *Potential liability for staff members involved*
- *Our director makes those decisions--I cannot make those.*

Staffing challenges reported

- *Lack of staff time or personnel in general (6x)*
- *Lack of staff qualified to handle the types of needs and patrons that may come in seeking health care services*
- *Lack of staff time due to currently frozen library positions*
- *Staff to coordinate and focus on health related events/programs/reference*
- *Staffing, parking, and space limitation*
- *We do not have enough staff and really cannot handle any more programs. Even when partnering with others it takes staff time and we just cannot do it anymore due to not enough staff.*

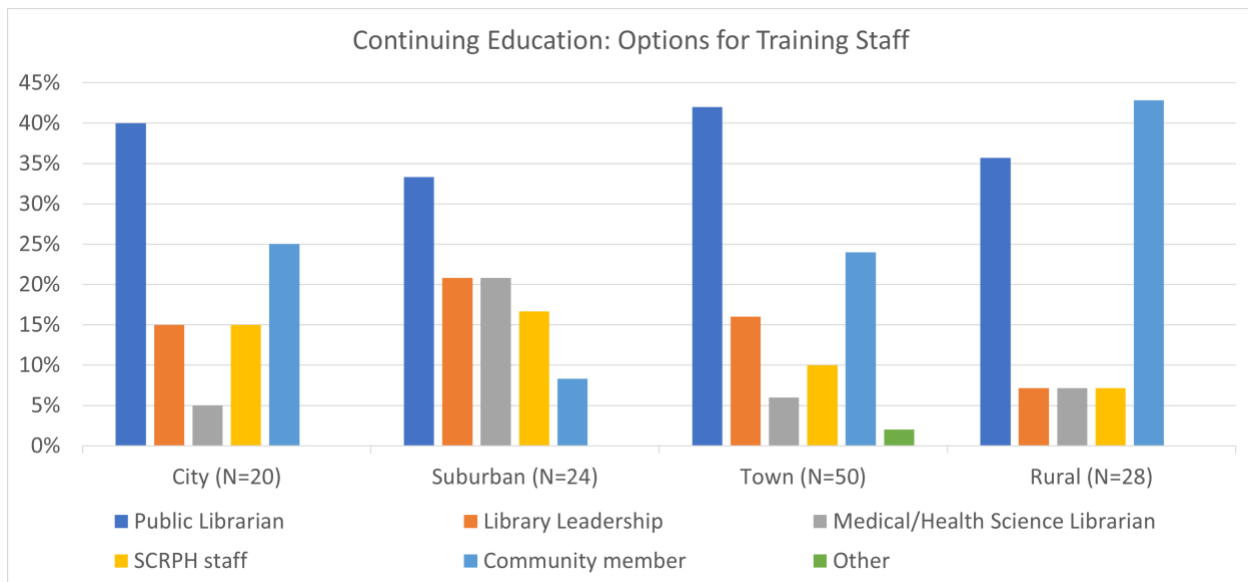
Community challenges

- *Health related programs are not very well attended. I would love to do some sexual health/education for the teens (as well as adults, to be perfectly honest), but have been told I can't for fear of community backlash.*
- *Patron access to the library - rural area with little/no public transportation*
- *While not directly against the mission of our library, the community our library services does not always see the library has a type of place that can provide such services. A majority of this community has an old-fashioned view of the library that we work to change all the time through the programs and services we do offer in addition to simple staff-patron interactions.*

Continuing education priorities

How do librarians want to learn about these topics? The survey shows that respondents generally prefer to engage in continuing education led, in whole or in part, by other public librarians. The one exception to this general trend is in rural libraries, where a community member was the preferred source of continuing education. **In general, though, public librarians want to learn about this topic from individuals like them, either individuals from their communities or individuals in their profession.** Similarly, over 20% of library directors said their top priority was to hear from other library administrators.

There was less desire to learn about these topics from individuals not part of the local or professional communities of respondents, with less than 15% of all respondents, and less than 10% of town and rural respondents, saying they would most prefer to hear from a staff member at the SC CRPH, or from a medical or health sciences librarian with expertise on this topic.



Shifting from how librarians want to learn, to what they want to learn about, there are commonalities and differences across the state. Urban librarians stick out for having markedly different continuing education priorities, with sustainability and evaluation coming out on top. In contrast, for all other parts of the state there is more interest in introductory topics, with how to get started and how to partner rated top priorities for continuing education. Those in the PeeDee region were most concerned about Funding and Where to Start, while Lack of Expertise was most of interest to those in the Low Country and Upstate.

Urban (n=20)	Suburban (n=24)	Town (n=50)	Rural (n=27)
Sustainability (70%)	How to get started (54%)	How to get started (62%)	How to get started (59%)
How to evaluate (65%)	How to partner (tied) (54%)	How to partner (56%)	How to partner (tied) (59%)
How to get started (60%)	Sustainability (tied) (54%)	Marketing (48%)	Marketing (56%)
How to partner (50%)	Marketing (38%)	Sustainability (46%)	Sustainability (48%)
Marketing (30%)	How to evaluate (21%)	How to evaluate (36%)	How to evaluate (tied) (48%)

Top priorities for continuing education, by community type

Discussion and Implications

As discussed in the literature review, consumer health literacy has been framed as within the purview of public librarianship since at least the 1960s (Arnott Smith, 2011). Around the time this study was being undertaken, those in the health sector continued efforts to support and empower public librarians to take on larger roles in terms of supporting consumer health literacy. Derosa et al. (2021) developed a train-the-trainer model for library workers by providing training in how to better serve patrons requesting information about health issues.

Rather than focus on how public librarians could, with training, support consumer health literacy, this present project instead focused on what is still a somewhat novel idea (e.g. APHA, 2018), the idea that public librarians could be critical community-based partners in the promotion of health access and equity. The focus here is on opportunities for those in the health sector and those in the public library sector to get to know each other, identify shared concerns, and work together towards increasing health outcomes and access among all South Carolinians.

Most respondents to this survey saw a role for their public libraries in health promotion, equity, and access. Nevertheless, obstacles large and small prevent the South Carolina public library workforce from doing as much as they would like to support health. In urban South Carolina, funding, sustainability, and evaluation are major challenges, while outside of cities discovering how to get started and how to build partnerships are major issues. Throughout the state, respondents see a need for help weaving health into the operations of a public library without overwhelming or over-burdening the library staff. Librarians need technical assistance, as well as support for funding and evaluation, to make their community-based health initiatives sustainable and impactful over the long-term.

This section discusses select implications of this survey, as well as some of its methodological limitations and the need for further research. It also includes the introduction of theory of change models that could enable stronger health champions within the South Carolina public library workforce. It is envisioned that any public library employee could be a health champion. The theory of change models includes a separate model for library leaders, who should be seen and supported as community leaders within local health ecosystems.

A promising tactic identified from this survey is that of increasing visibility for how many public libraries **already** support health, and then building upon those beginnings. This is critical because, as was discovered in a previous study of this topic (Lenstra & McGehee, 2022), health partners do not always see public librarians as health promoters. This study found that across the state over 51% of respondents said library staff help patrons locate and evaluate free health information online, 42% help with subscription health databases, 40% help patrons identify or use local health resources, and 36% help patrons understand specific health topics. This foundation of support for consumer health literacy in South Carolina's public libraries could be used by potential health partners to augment existing library services. Bringing to libraries individuals such as consumer health workers and health educators could help make library-based health services more impactful and more able to be evaluated.

There is a strong tradition of training programs for public librarians focused on increasing their comfort and confidence with health information. This training has been, historically, offered by

medical and academic health science librarians. For instance, in Oklahoma, Malone and Clifton (2021) trained 106 public librarians from 67 libraries, using specialized training from the Medical Library Association. The successful deployment of this type of training suggests that one promising tactic would be to provide public librarians with a different type of training program, one focused less on comfort and confidence with health information sources, and more on comfort and confidence establishing and leveraging health partnerships. Such a training would need to be mindful of the fact that, at least in some South Carolina public libraries, respondents report feeling discouraged from stepping out of the “traditional” roles of libraries, as one put it. A successful continuing education model requires providing public library workers, from directors to front-line staff, with language they can use to communicate to colleagues and co-workers what it means for librarians and libraries to be community health champions.

In March and April 2022, preliminary findings from this study were presented at the South Carolina Public Health Association Conference, as well as in an online webinar. Discussions at those venues revealed the critical importance of advocating for libraries as a pre-condition to libraries being able to support health. For instance, a public health worker from a rural community shared that at her library the county commissioners had severely under-funded the library. Furthermore, the county government also refused to allow innovative uses of this rural library, adhering to a traditional view of a library providing access to books and other reading materials only. That discussion revealed that building relationships with a public library’s workforce may not be sufficient to unlocking their potential. Attention and energy also need to focus more fundamentally on advocating for well-funded libraries, which in South Carolina and across the country are vulnerable to being under-funded, de-funded, and in other ways starved of crucial resources.

Our goal should be to find ways to enable the health and public library workforces to mutually build each other up, with the two workforces adding value to each other, and adding capacity to their abilities to support the communities they serve together.

Although it was not always identified as a top priority for continuing education, evaluation emerged as a significant obstacle to unlocking the potential of libraries as health partners. Most respondents indicated that their libraries offered either health services or services that support the social determinants of health, but most also indicated that they were not doing anything to evaluate or track the impacts of their libraries on health or the SDoH. A major need, then, is to figure out how to connect the public library and health workforces such that we would have a better understanding of how public libraries have, up to now, supported health and the SDoH, as well as to create a system to enable impact tracking going forward.

Having a strong evaluation system in place becomes even more important when one considers the ways in which library-health partnerships tend to snowball and evolve. As one respondent wrote: *“We don’t really have a way to track this info. We did weight loss programs, but the partner tracked progress and no long-term info available. We have done nutrition and health programs with our hospital targeting diabetes and heart disease, distributed food during 2020, have had exercise programs for seniors, walking programs, etc. We have sponsored CPR training courses for the public.”* This quote illustrates how evaluation systems need to consider the myriad and evolving ways in which public libraries support health. The focus should not be

exclusively on evaluating the impacts of particular health interventions offered in public libraries. Instead, evaluations should be designed within an infrastructure that allows public librarians and their partners to track the impact of multiple initiatives over time.

A starting point for developing this type of evaluation should be a discussion between health organizations and public libraries that promotes understanding for the different structures and needs of each group. The conversations convened between the SC CRPH and participating public libraries identified a gap between how those in the health sector and those in the public library sector understand evaluation, including the language used to describe how impacts are measured. We need to develop a blueprint for how to embed peer-to-peer discussion between librarians and their partners on how to troubleshoot problems, and to identify and document successes, as they emerge in real-time. In public libraries, there is often little time to document a particular library service before librarians must move on to the next service or initiative. Finding ways to embed documentation into these partnerships is crucial for their long-term viability.

A promising initiative working in this direction was under development at the time of this study. In Texas, the Libraries for Health Initiative, led by the St. David's Foundation, includes a strong evaluation component, led by The Rand Corporation (Carey, 2022). Having outside evaluators for library-based health partnerships could help provide them with the type of rigorous evaluation needed to build up an evidence base on the efficacy of these partnerships.

From a library perspective, and even more particularly from a rural library perspective, outreach and community engagement are key concerns currently (American Library Association, 2021). Health partnerships have the potential to help libraries increase their outreach and community engagement. In addition to tracking health outcomes, evaluation systems could also help library workers communicate about health partnerships and help them reach audiences and engage their communities. A promising model for health promotion in public libraries would include not only strong relationships and partnerships between the health and public library sectors, but also strong mechanisms to enable those partnerships to expand outwards, directly including library patrons and other community members as partners in community-informed health initiatives. Building upon the success of past initiatives, like the Harwood Institutes' (n.d.) training of librarians to facilitate community conversations, could be a promising mechanism to support not only health delivery via public libraries but also health planning.

As evaluation and partnership systems emerge, they need to be very sensitive to the many roles of public libraries and of public library workers in communities. This survey found that public library workers across the state are already assisting the most vulnerable, including individuals experiencing homelessness, drug addiction, mental health crises, and more. While the survey suggests that some libraries are working to prevent staff burnout, there is an opportunity for health partners to help libraries with current burdens and burnout issues, while also creating relationships that could be leveraged to increase health in both the short- and long-term. Previous research (Brus et al., 2019; Gross & Latham, 2021) has indicated that social workers and other health liaisons can provide the library workforce with the skills needed to practice self-care while also caring for the most vulnerable. In addition, this type of training could provide library staff and medical staff with a greater understanding of the benefits provided by each group to the wider community. This, in turn, could help build relationships that would make coordination

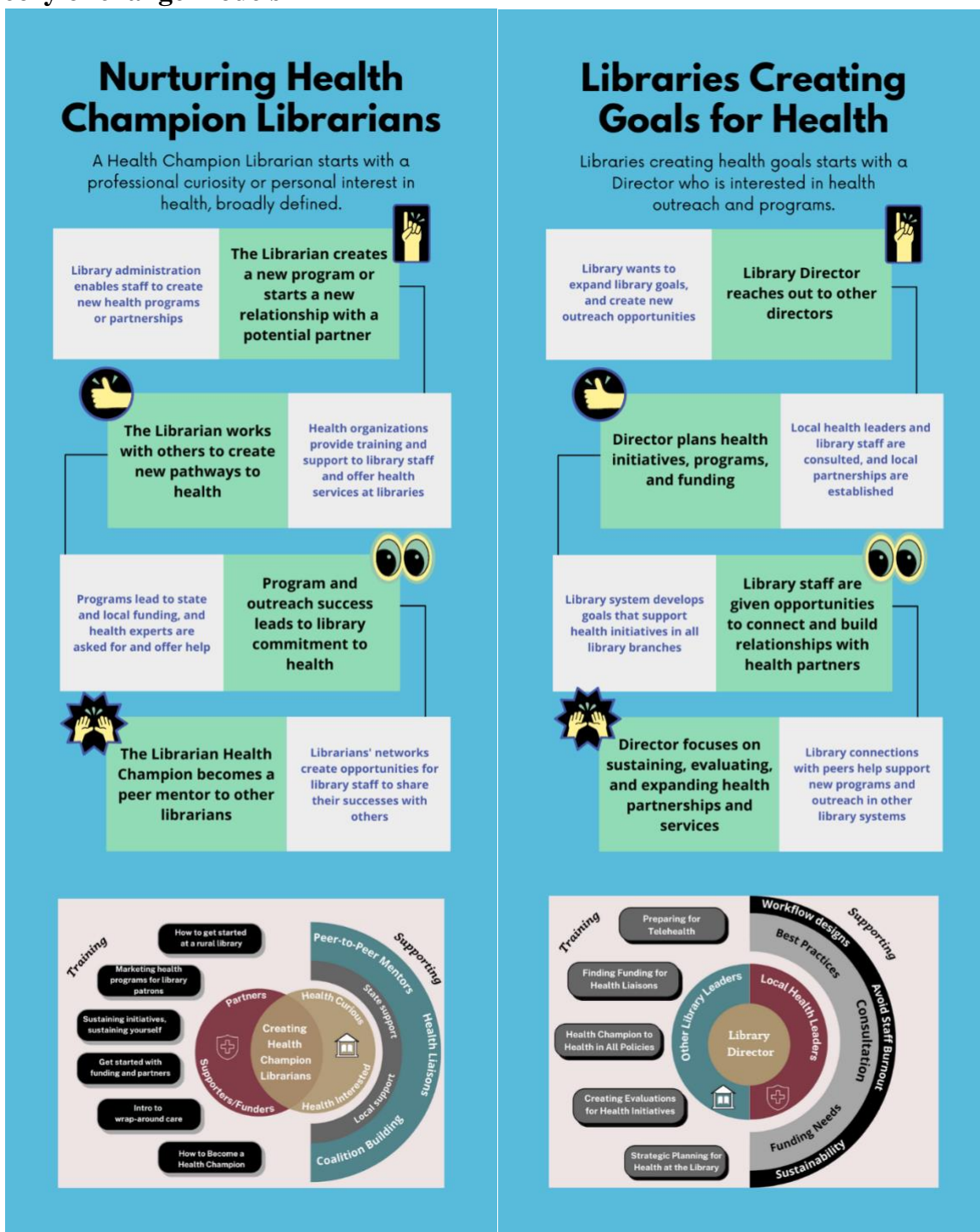
between them more strategic when focused on health. We want to be very sensitive to the fact that our goal is **not** to ask librarians to solve problems in our healthcare systems by themselves. Instead, the goal should be for librarians to be part of health partnerships, and for those partnerships to be beneficial for a) librarians, b) health partners, and c) the communities that are served by both.

As those relationships develop, conversations about sustainability are critical. It appears that in parts of urban South Carolina the conversation has reached that point, as sustainability is more of a concern in urban South Carolina than in other parts of the state. In any case, sustainability and evaluation should be seen as intrinsically interconnected. It is difficult, if not impossible, to make the case for sustained funding and support if one does not know, and cannot communicate about, the impacts of one's efforts. These policy conversations are critical, but need to build upon an infrastructure of evaluation and even more fundamentally about storytelling, telling the story about how particular public libraries in South Carolina advance community health.

Finally, it is critical to think about the roles of higher education within this infrastructure. In South Carolina, as in the broader nation, some libraries are turning to students to help them support health, including social work student interns. Elsewhere, universities are developing innovative models that place health science students more generally into public libraries (Pandolfelli et al., 2021). One implication is to think through what mechanisms are in place to ensure the cross-pollination of health and librarianship at the curricular level. There is only one Library & Information Science program in the state of South Carolina, located at the University of South Carolina. But even outside of Columbus, there are opportunities for colleges and universities to directly partner with public libraries in their regions to propose and sustain mutually beneficial partnerships.

Increasing relationships with institutions of higher education was identified as a promising opportunity, particularly in rural South Carolina, where respondents were least likely to report having very or somewhat close relationships with colleges or universities. The opportunity also appears in the comparative reticence of public librarians across the state to inviting social work and health/medical students and volunteers into their libraries, at least compared to their interest in having fully credentialed health professionals available at their libraries. It is likely that the front-line library worker sees students as a potential additional burden they'll be asked to oversee, without additional funding or technical assistance. A possible way forward may be for library administrators to work with colleges and universities to focus, initially, on providing library staff with resources on self-care, professional boundaries, and preventing burnout. That additional relationship building exercise could then lead to more public- and community-facing opportunities for institutions of higher education to collaborate with public librarians to increase community health.

Theory of change models



Data suggest that a strategy to engage rural librarians in health initiatives would be to introduce models of health promotion in libraries, introduce them to potential partners, and to provide a structure they could use to get started. In contrast, urban libraries' needs are more focused, and have to do with continued funding for initiatives that have already started.

In general, the preference among librarians in South Carolina seems to be to engage in continuing education opportunities related to health, led or co-led by South Carolina public librarians, and complemented by community members in rural areas.

The data collected suggest that across South Carolina many public librarians work with local partners to provide their communities with services that support healthy populations. At the same time, the data also suggest that these local partnerships have not yet scaled up to a state-wide integration of public libraries into the community health infrastructure.

For example, 47% of respondents report that partners have offered summer meals at their libraries, and 36% report partners have offered nutrition classes, but only 29% report having somewhat or very close relationships with WIC clinics. Interviews would be needed to further understand this reality, but it seems probable that local librarians work opportunistically with the partners they see as available and interested in working with them. As one example, this survey indicates an opportunity for WIC clinics to reach out to public libraries and their staff to find areas of mutual support and increased cooperation.

Public librarians in South Carolina have their own continuing education and professional development infrastructure. This structure is financially supported by the state and federal government through the state library and the Institute of Museum & Library Services, with additional support supplemented by membership-based organizations like the South Carolina Library Association. Building and supporting relationships between organizations such as the WIC Clinics and public libraries could be done most successfully by working with and through this existing library support infrastructure.

When asked how they want to learn more about supporting health at their libraries, respondents often indicated they would like to learn through their existing professional networks. A promising practice would be to recruit those library workers who are passionate about health – the health champions – and encourage and incentivize them to share their experiences and stories across the state. There is some evidence that sharing has already begun. For instance, Taylor Atkinson, the director of the Union County Library System and a member of the first SC CRPH Libraries & Health Cohort, led a state-wide continuing education webinar on mental health and public libraries, facilitated by the SC State Library, in September 2021.

Furthermore, as the Appendix indicates, there are a range of existing networks of public librarians already involved in past and recent state-wide health initiatives. These cohorts could be elevated and used as models for peer-to-peer learning and resource sharing, with the goal of creating a dense tapestry in which public libraries and public librarians are woven deeply into the fabric of the state of South Carolina's health infrastructure.

Survey results revealed some differences between library directors – the executive leaders – and library staff – those who interact with patrons on a day-to-day basis. While recognizing that in some library systems those two roles overlap, there were areas where the difference between these two groups was evident. Working with this difference in approach levels, this study found evidence for two promising 'theory of change' models. These models focus on better connecting

South Carolina's public libraries and South Carolina's health sector, and would work at two levels: library staff and library directors.

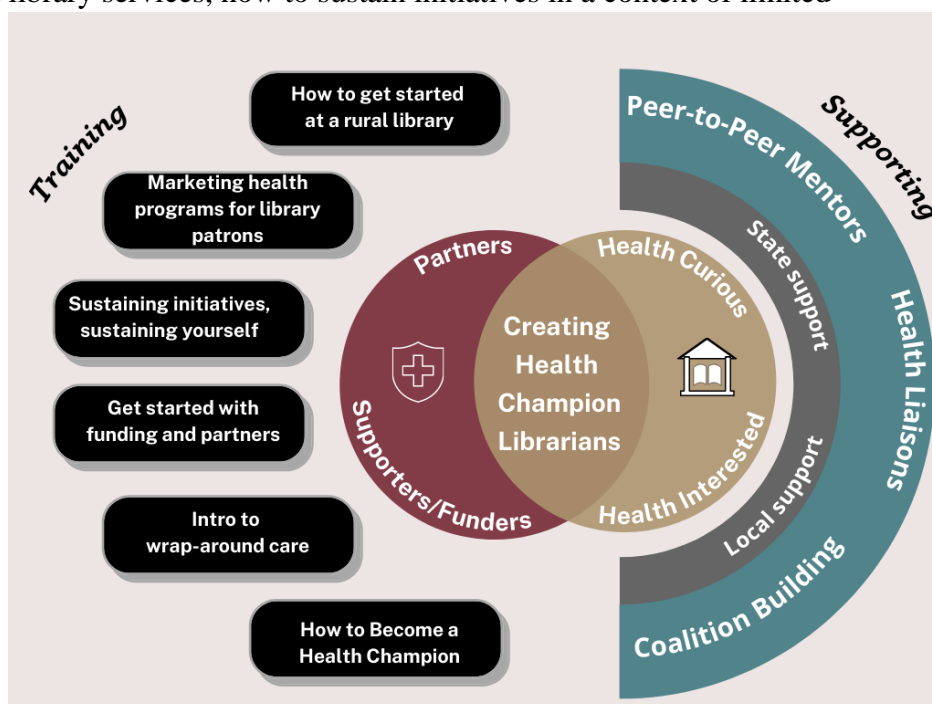
As it relates to library staff, a promising practice is to cultivate networks of health champions within South Carolina's public libraries. This project suggests that a **minority** of South Carolina's public libraries currently have health champions on staff. To extend this trend, these library health champions could share best practices, advocate for promising partnerships, and share common successes and challenges through the peer-to-peer infrastructure that exists for professional development and continuing education among public librarians in the state.

This model focuses on cultivating more health champion librarians by developing both training and support systems to transform health curious librarians and health interested librarians, which our survey suggests are nearly ubiquitous, into health champion librarians. Supporting these librarians requires connecting them to health liaisons for interprofessional learning and exchange (e.g. social workers learning with librarians), as well as connecting peer-to-peer mentorship opportunities. Finally, it requires shifting from these interpersonal networks to coalitions, creating a community of health champions within the South Carolina public library workforce. Those in the health sector can help this community of health champion librarians emerge by:

- partnering with librarians
- funding library initiatives, and
- working with entities like the State Library of South Carolina to develop training opportunities.

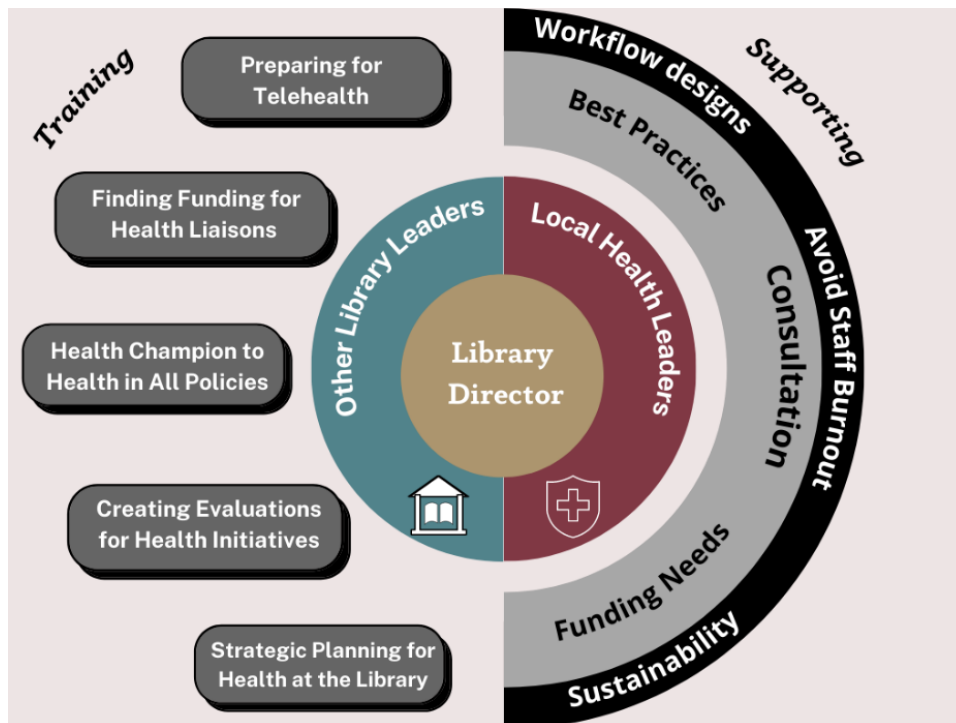
Suggested topics for this training include: how to get started supporting health in rural libraries, how to market health related library services, how to sustain initiatives in a context of limited capacity, how to get started working with funders and partners, and how to adopt ideas from allied sectors into public library practices, such as the concept of 'wrap-around care.'

A second promising practice would be to find ways to better connect library directors to local health leaders and to other library leaders. These connections could be made not only at the library executive director level, but also at the deputy director and branch/division manager levels. Survey results suggest these library middle managers are less



connected to local health partners than library directors. In any case, at the leadership level the focus is less on cultivating library health champions, and more on how to make these

partnerships work administratively.



Finding opportunities like those made available by the SC CRPH require library leaders to have connections and relationships with those in the health sector, and the data suggest that these relationships are not always in place or very strong. Library directors and leaders need help understanding how to integrate health into library services in

ways that avoid the burnout of their staff and that are sustainable over time. They also need help integrating timely topics into their libraries, such as telehealth. Evaluation is a perennial issue to be addressed in public libraries, while thinking strategically about health in relation to public librarianship is another need.

There are a handful of library systems that have embraced health services and partnerships at their libraries—including in their strategic plans¹⁰—and these include libraries funded by or connected with the staff of the SC CRPH. Finding ways to meaningfully enable these stand-out systems, and their leadership teams, to share their successes and challenges with others in the library and health sectors could drive innovation forward.

The ultimate goal of these theory of change models is to create stronger working relationships between the health sector and public libraries in the state of South Carolina. This work is already underway in some parts of the state, but available evidence suggests that work has not yet fully scaled up to the state-wide level. The SC CRPH is poised to be a change agent, possibly creating a model that could inform state-wide efforts across the nation, and beyond.

¹⁰ The Charleston County Public Library is one example: <https://www.ccpl.org/strategicvision> - Their strategic plan explicitly calls for the library to “Empower Learners of All Ages to Manage Their Lifelong Physical and Mental Health,” and to “Empower Individuals with the Knowledge to Make Healthy Food Choices,” and “Empower Individuals to Obtain and Understand Basic Health Information.”

Methodological limitations and needs for further research

As an exploratory study, *South Carolina Public Libraries & Health: Needs and Opportunities* highlights implications for a variety of stakeholder groups including those working in the health sector at both local and state levels, as well as library workers and administrators, funders and policy makers, and researchers. Using snowball sampling techniques, 123 library workers from across the state completed a survey in September 2021 about their health partnerships and health-related continuing education needs; an additional 19 completed a portion of the survey.

After comparing RUCA and NCES rural classification codes, the researchers opted for the NCES codes, as those are more generally used within the library literature. Given the limited and self-selecting sample, comparisons between rural and urban public library workers remain tentative. Additional research using a randomized sampling model that employs cluster sampling to ensure a strategically selected distribution of public library workers representing the rural-urban continuum could enable a more nuanced understanding of the unique needs of public library workers within different types of communities within South Carolina.

Further complicating discussion of rural/urban differences is that within the State of South Carolina, many rural library workers are employed by more urbanized library systems, based in cities. For example, the Charleston County, Horry County, and Richland County libraries, all of which are based in cities, have within them rural library locations. Additional research could focus in more detail on differences and similarities between:

- Rural libraries that are part of library systems based in urban communities
- Rural libraries that are not part of library systems based in urban communities

This question matters because one possible explanation for some of the regional findings of this study relates to the administrative set-up of libraries across the state, with public libraries in the PeeDee region more likely than libraries in all other parts of the state to be part of library systems **not** based in urban communities, given the predominately rural character of this region.

More generally, many of the findings of this survey deserve more nuanced explanation through interview-based research. This survey shows what is happening in South Carolina's public libraries; it cannot answer why things are the way they are. For instance, the survey found that in one-third of respondents' libraries a health champion was employed. How did these health champions within the public library workforce come to be? What policies, practices, and community forces led to health champions working at these libraries? These are topics interview-based and case study research could help to illuminate.

Conclusions

In August 2021, the South Carolina Center for Rural and Primary Healthcare partnered with the University of North Carolina at Greensboro to produce *South Carolina Public Libraries & Health: Needs and Opportunities*, as part of its broader *Libraries & Health* initiative.¹¹ The study documented a range of ways that South Carolina public libraries support health. It also assessed what needs public libraries have as they seek to support health in their communities. Based on that analysis, a model for continuing education to support the alignment of public libraries and health was developed.

Key findings include:

- Public library workers see health as part of the work of public librarianship
- Nearly all see a role for a health liaison at their library
- Nearly all report offering at least one health service at their libraries
- Nearly all struggle with evaluation, particularly as it relates to health outcomes
- Health in libraries is more developed within urban South Carolina, with more support for getting started needed in more rural parts of the state
- Building relationships between public library workers and workers in the health sector is identified as a promising step towards cultivating and supporting health champions within the public library workforce

Although tentative, the findings from this project unambiguously demonstrate interest within the South Carolina public library workforce to support health, particularly through partnerships that would bring health workers to their libraries. Although additional research is needed to build up our understanding of this topic, this survey shows a great potential for impacts associated with public library health partnerships.

¹¹ Learn more about the initiative at the SC CRPH Libraries & Health Webpage: <https://www.scruralhealth.org/libraries>.

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Appendices

A1. Survey instrument

Survey Questions	N		
Do you understand the consent information provided above and agree to participate in the study?			
Part 1. Demographics			
What is the zip code* where your library is located? *Having this information will allow us to incorporate data from other sources, including the US Census.			
What is the name of the library or library branch where you work?			
What is your job title?			
How long have you worked at your library?			
Part 2. Health Services at the Library			
We would like to know how your library supports health. Please indicate what types of health-related services or programs your library has, to your knowledge, offered, as well as what types of topics you would like to learn more about in the future. (Select all that apply)			
Access to health information in general	142		
Access to health literacy	142		
Access to primary healthcare	142		
Access to preventative health services	142		
Access to health insurance	142		
Access to mental health or behavioral health	142		
Access to reproductive health	142		
Access to services for substance use disorders	142		
Access to COVID-19 related services	142		
Access to food	142		
Access to nutrition	142		
Access to physical activity	142		
Access to support with chronic disease(s)	142		
Access to services related to healthy aging	142		
Access to reentry services for those previously incarcerated	142		
Access to housing	142		
Access to transportation	142		
Access to employment	142		
Access to early childhood services	142		
Access to education (Adult)	142		
Access to education (Pre-K)	142		
Access to education (K-12)	142		
Access to legal aid	142		
Access to economic development opportunities	142		
Access to technology	142		

Access to literacy	142		
Part 3. Library in the Community			
How would you rate the following:			
My library routinely offers off-site programs or services	136		
Library staff often participate in community meetings or coalitions	136		
Organizations in general typically look to the library as a partner	136		
Health organizations, specifically, look to the library as a partner	136		
Individuals in the community typically see the library as a safe and trusted space to access health literacy	136		
Individuals in the community typically see the library as a safe and trusted space to access health services	136		
My library sees health equity as a priority	136		
My library serves as a space where people can meet new people in the community..	136		
My library serves as a space where social connections are affirmed	136		
Individuals in the community typically see the library as a safe and trusted space for all ages	136		
Individuals in the community typically see the library as a safe and trusted space for all ages	136		
Library staff are typically well versed in the pressing issues facing the community	136		
Library staff are typically able to work collaboratively with other individuals and organizations to address pressing community issues	136		
Part 4. The Library and Community Health			
Have library staff and/or partners ever offered any of the following at your library, or off-site with library participation? (Select all that apply). "Partners" here includes all individuals or organizations that are not directly affiliated with the library			
Immunization clinics, in general (e.g. for vaccinations)	129		
Immunization clinics, specifically for COVID19	129		
COVID-19 testing	129		
Health screening services: Blood pressure	129		
Health screening services: Obesity	129		
Health screening services: Mammography	129		
Health screening services: other	129		
Assistance with mental health issues (e.g. social, behavioral, emotional needs)	129		
Referrals to appropriate health and/or social service agencies	129		
Locating and evaluating free health information online	129		
Using subscription health database(s)	129		
Identifying health insurance resources	129		
Understanding specific health topics	129		
Identifying or using local health resources	129		
Offering fitness classes	129		
Offering nutrition classes	129		
Summer meals	129		

Other ways of distributing free food (community fridge, food boxes)	129		
Health fairs	129		
Farmer's Markets	129		
Blood drives	129		
Food drives	129		
Mental health first aid trainings	129		
Telehealth services	129		
Have any of the following health-related groups ever met at your library? (Select all that apply)			
Health coalitions	127		
Health department task forces	127		
Area Agency on Aging	127		
Other health-related groups (please describe)	127		
None of the above	127		
To your knowledge, have any of the following ever occurred at your library, or on property owned by your library (e.g. parking lot)?			
Drug overdose	127		
Drug deal	127		
Alcohol or tobacco use against library policy	127		
Individuals experiencing homelessness using library as de facto day shelter	127		
Violence that requires intervention from security staff or law enforcement	127		
Other health related incidents (please describe)	127		
None of these	127		
Do any of your library staff have access to the following on-site at your library? (Select all that apply)			
Naloxone	127		
Epipen	127		
Automated external defibrillator (AED)	127		
Other health-related equipment (please describe)	127		
None of the above	127		
Part 5. Staffing for Health			
Does your library currently , or has your library ever had , any of the following types of individuals available to the public?			
Social workers	126		
Social work students	126		
Community health workers	126		
Health educator	126		
Nurses	126		
AmeriCorps or other volunteers	126		
Other health-related professional (describe)	126		
If your library has any health-related professionals currently available to the public, about how often do these individuals typically provide services at your library?			
Daily	126		

Weekly	126		
Monthly	126		
Less than once a month	126		
Not applicable	126		
If your library could have any health-related professionals available to the public, about how often do you think the services of such individual(s) would be needed at your library?			
Daily	126		
Weekly	126		
Monthly	126		
Less than once a month	126		
Not applicable	126		
To your knowledge, does your library have someone on staff who you would characterize as a “champion” for health-related programs, services, or partnerships?			
Yes	126		
No	126		
If yes, could you please briefly describe what your library’s health champion(s) do to support health-related programs, services, or partnerships?			
Part 6. Health Partnerships and Funding			
Has your library ever worked with or received funding from any of the following, specifically to offer health related services or programs?			
SC Center for Rural and Primary Healthcare	123		
Hands on Health SC	123		
National Network of Libraries of Medicine (NNLM)	123		
Institute of Museum and Library Sciences	123		
Regional healthcare systems	123		
Foundations	123		
Food Share SC	123		
South Carolina State Library	123		
Clemson Cooperative Extension	123		
Other organizations (please describe)	123		
None of the above	123		
Thinking about your local community, how would you characterize the relationship between your library and the following organizations?			
Health department	123		
Hospital or healthcare system(s)	123		
Health coalition or alliances	123		
SNAP-Ed implementing agency	123		
Local non-profit organizations	123		
Colleges or universities	123		
K-12 Schools	123		
Parks & Recreation Unit	123		
Early education providers, including daycares	123		
WIC Clinics	123		

Department of Justice / Department of Corrections	123		
Part 7. Health Priorities			
What barriers, in your opinion, stand in the way of your library being able to participate in efforts to support health? (Select all that apply)			
No barriers	122		
Not sure where to start	122		
No one has asked us to help, or to participate in community efforts	122		
Funding	122		
Lack of expertise on topic	122		
Lack of partners	122		
Lack of space	122		
Doesn't fit within the mission of our library	122		
Other (please specify)	122		
Thinking of future continuing education opportunities, what are priorities for you in terms of library support for health? (Select all that apply)			
How to get started with health-related services or programs	121		
How to market the availability of health-related services or programs	121		
How to sustain health-related services or programs	121		
How to expand health-related services or programs	121		
How to partner with community collaborators	121		
How to evaluate health-related services or programs	121		
Other (please describe)	121		
None of the above	121		
Thinking of future continuing education opportunities, how would you most like to learn more about the topics addressed in this questionnaire (select one)			
From a SC public library worker who has directly worked on these topics at their library	122		
From a SC public library administrator who has supervised work on these topics at their library	122		
From a medical or health sciences librarian with expertise on this topic	122		
From a staff member at the South Carolina Center for Rural and Primary Healthcare	122		
From a person in your community (e.g. local health department)	122		
From someone else (please specify)	122		
Thinking about the topics addressed in this questionnaire, is there anything else you would like us to know?			
If you would be potentially interested in participating in an interview or focus group about these topics, please insert your email address here			
Please include your email address to receive a \$10 Amazon Gift Card			

A2. RUCA compared to NCES for rural designations

RUCA locale codes

- Designations are based on census tracts: zip code designations are correlated to the census tracts and blended where there are overlapping areas.
- Metropolitan Area Core (UA-Urban Area) and Micropolitan Area Core (UC-Urban Cluster) definitions are population based.
- Code numbers are comprised of 10 divisions, based on the percentage of an area's population that commutes to a UA or UC area, or outside of a UA or UC (Code #10 only).
- The proportion of the local population that commutes 5 days a week or more

NCES locale codes:

- Designations are based on the GPS street address of a library building, and NCES Locale framework, which accounts for the service population of a location.
- Commuting population data is not a factor in code designation
- There are 12 code designations in the IMLS system; 3 each for City, Suburban, Town, and Rural designations (11-13, 21-23, 31-33, and 41-43).
- Residence in, or distance from, a UA or UC, as defined by the locale's GPS location, is used to designate codes within the 4 main categories.

The National Center for Education Statistics (NCES) revised its definitions of school locale types in 2006 after working with the Census Bureau to create a new locale classification system. That system, which is also used by the IMLS, includes the following library locale types:

- City - Territory inside an urbanized area (of 50,000 or more people) and inside a principal city within that urbanized area
- Suburb - Territory outside a principal city and inside an urbanized area
- Town - Territory inside an urban cluster, defined by the U.S. Census as a cluster "of at least 2,500 and less than 50,000 people"
- Rural - Census-defined rural territory

A3. Sampling Procedures

The survey was distributed during 4 weeks in September 2021 to potential respondents in the SC public library community through a combination of listservs, direct emails through Qualtrics email system, Facebook direct messaging on library pages, and direct phone contacts to encourage library staff from across the state to participate.

The recruitment language included an appeal for the recipient to either complete the survey themselves, if they worked in a South Carolina public library, and/or pass on the survey to contacts who did.

Listserves were the first point of contact, including a variety of general, public library listservs (State Library of South Carolina affiliated, SC Association of Public Library Administrators, SC Library Association, and the Network of the National Library of Medicine Region 2) and networks of public librarians affiliated with health initiatives (Hands on Health SC, SC State SNAP-Ed Program, and SC CRPH).

Through the Qualtrics system, a total of 222 emails were sent to library directors, staff, and library departments, with encouragement to share the email with others. This list of email contacts was gathered from publicly available staff and department emails, such as SCLENDS, public library and government webpages. These direct emails included both a personal survey link and an anonymous survey link that could be used to access the survey, with most respondents choosing to use the anonymous link. During the first two weeks, survey responses were mapped across the state, providing information on areas of high, medium, and low response rates using the demographic information from the survey questions. From that information, a secondary list of contacts was developed for areas of low response rates during the first two weeks. This group of library systems were sent Facebook direct messages (~30 public library systems) with the survey description and an anonymous link, or a direct phone call (12 public library systems) to the main administration number providing information about the survey during the third week. The final week, data was collated for the response spread, but no further contacts were attempted. The total number of surveys started was 197, with 142 respondents completing at least 1 total question set, and 121 completing all questions. Respondents who completed a question set were included in the data for that question. A total of five public library systems did not have any participation in the survey results.

A4. Representative Job Titles

Survey respondents self-identified their job titles. Their responses were collated into 5 groups, with each group including the following job titles. Those respondents with manager or coordinator in their title, who also identified a department affiliation, were included in the matching group, instead of in the more general group of Other Admin. Examples are Youth Services Managers in the OPY group rather than the Other Admin group, and Circulation Managers in the Other Librarians group. Other Admin includes those with titles indicating less patron interaction (such as Executive Assistants), or who did not identify a more specific department within a library. Directors and Medical/Social groups included only those who specifically identified those job titles.

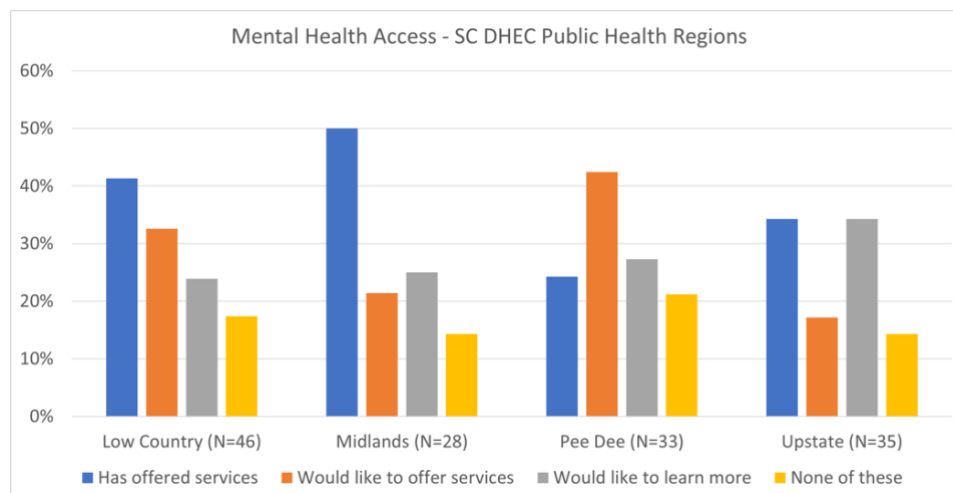
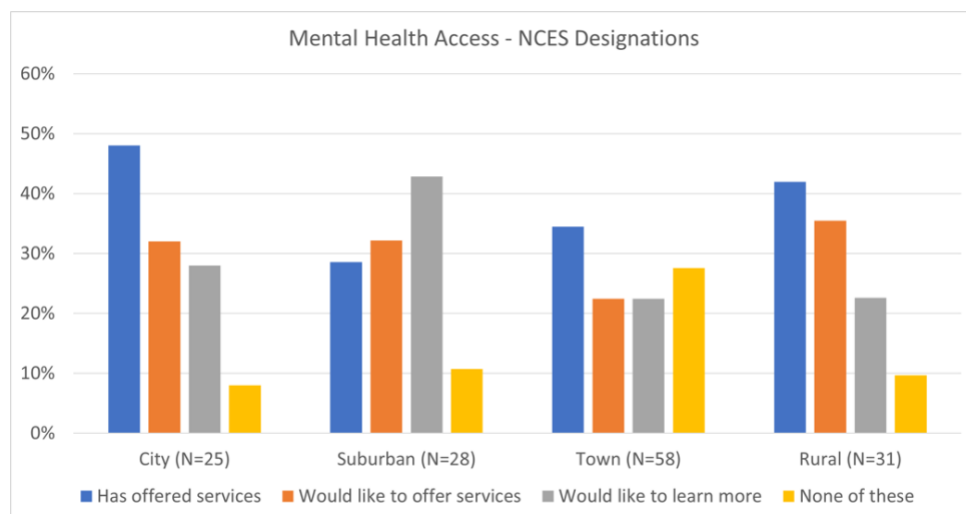
- **Director** –Library System Directors only
- **Other Admin** – Assistant Directors, Branch Managers, IT Managers, Assistant Managers, Executive Directors, Branch Assistants, Executive Assistants, and general Managers (this group included those managers that did not specify a department within the library)
- **OPY** (Outreach, Programming, Youth) – Children’s Librarians, Bookmobile/Extension Services, Teen System Coordinators, Children’s Reference Assistants, Youth Services Reference Assistants, Program Coordinators, Outreach Managers, Health Literacy

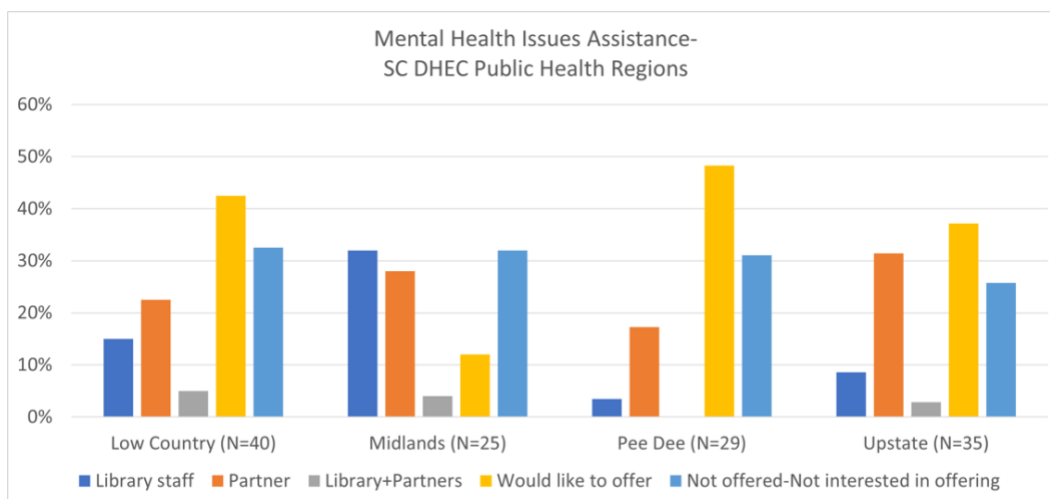
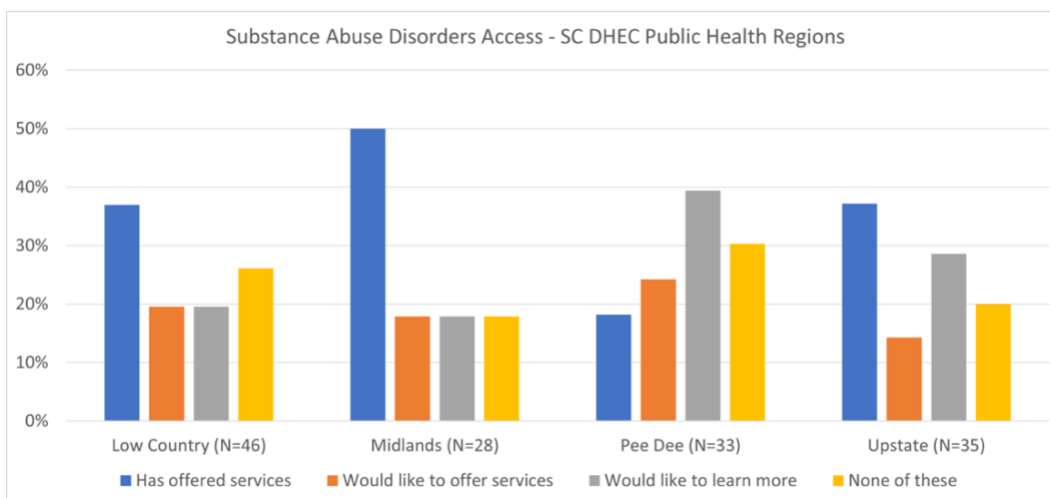
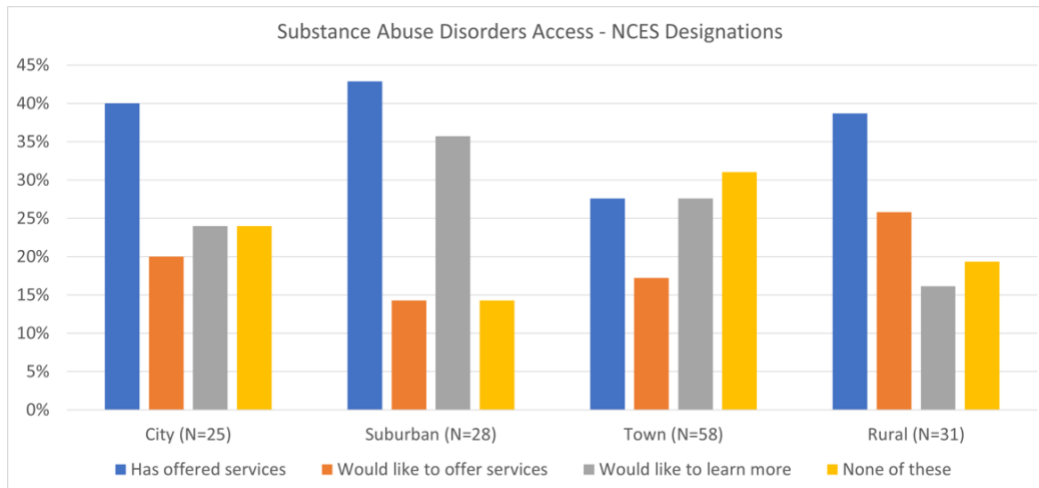
Programmers, Makerspace Coordinators, Extension Librarians, and others with similar titles

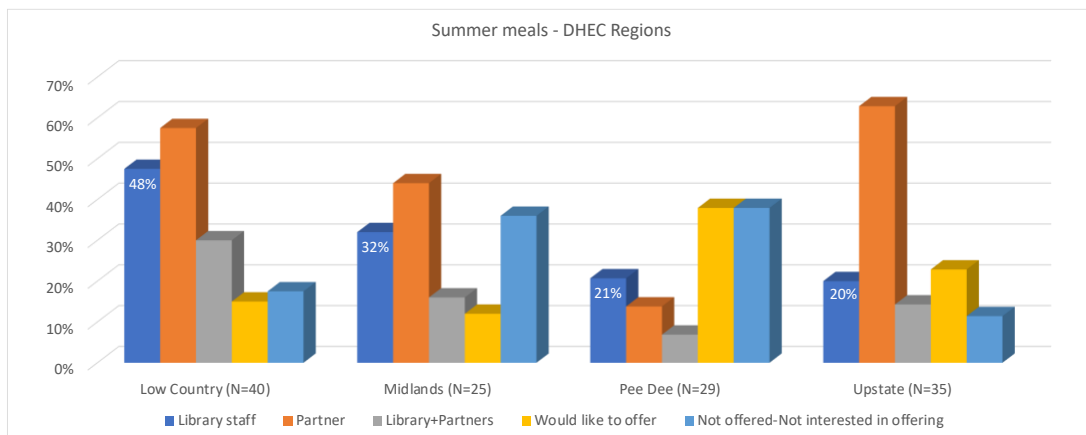
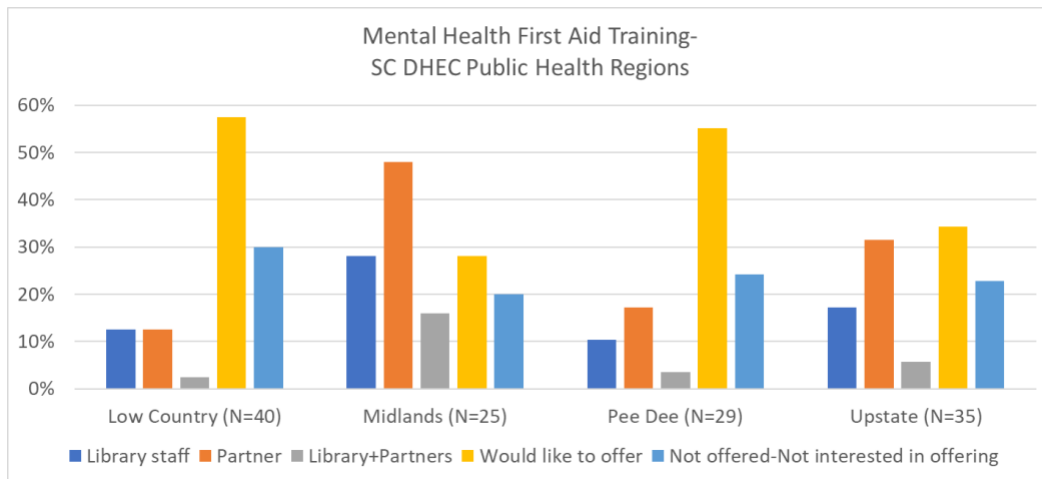
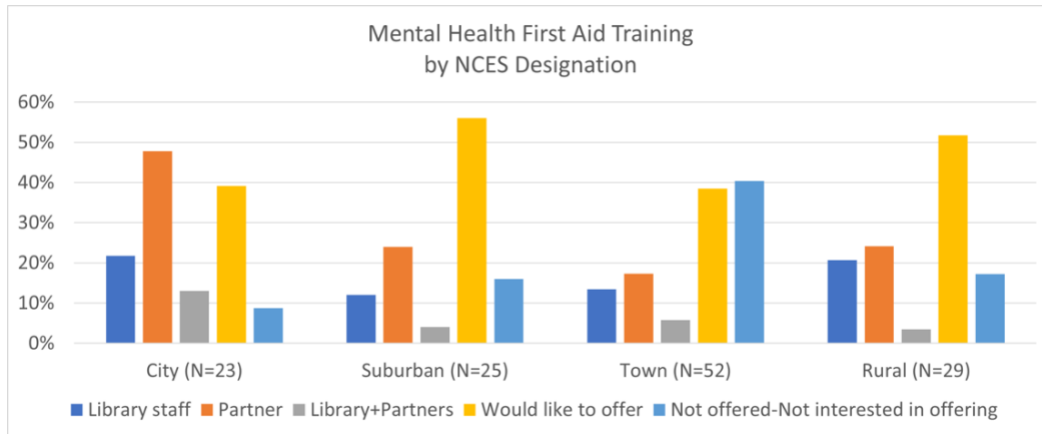
- **Medical/Social** – Community Health Workers and Social Workers
- **Other Librarians** – Circulation, Staff Development, Student clerks, Library Assistants, Readers’ Advisors, Information Services Librarians, Reference Librarians, Catalogers and Collection Development Librarians, Customer Service Librarians, and others with similar titles

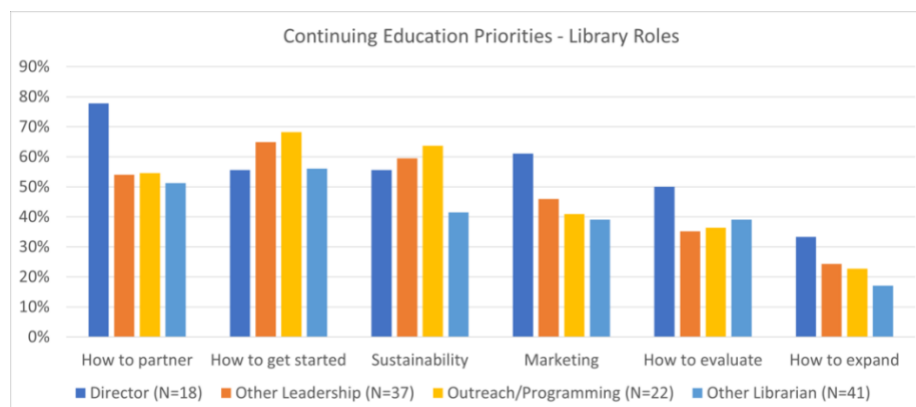
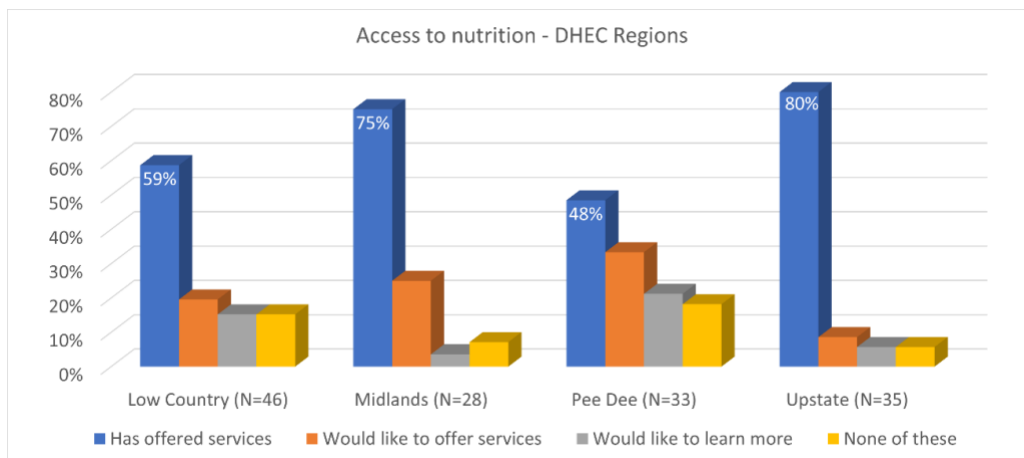
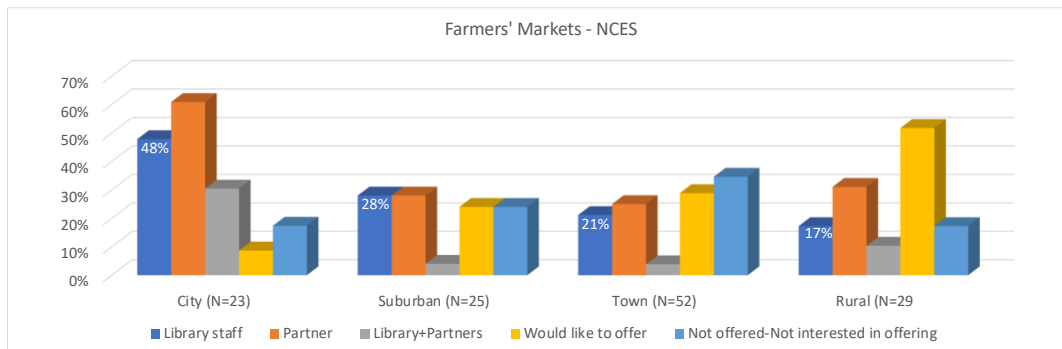
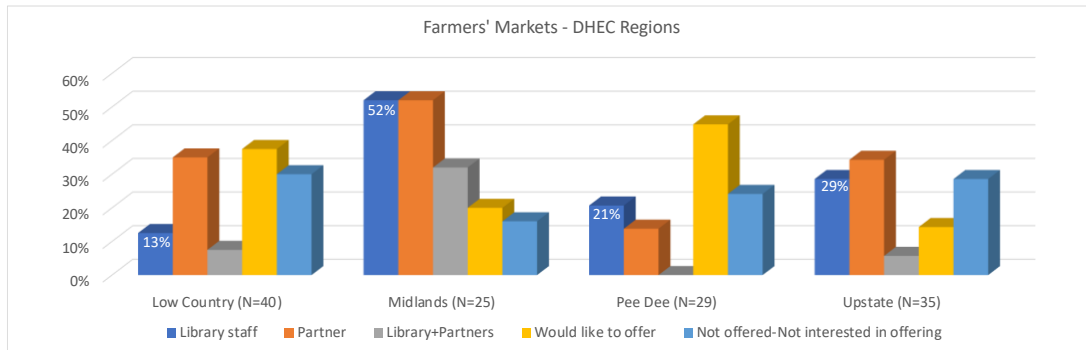
A5. Additional figures on health priorities and needs

Refer to text for information on these figures. These figures are shared for those wishing to further understand needs and opportunities related to health promotion in South Carolina public libraries.









A6. Libraries that have participated in state-wide SC health initiatives

This table contains a high-level overview of public library participation in state-wide health projects, as of April 2022.

Public Library System	SC Plants the Seed	SC CRPH	SC Hands on Health	SC SNAP-Ed USC
ABBE Regional Library System	X		X	
Abbeville County	X	X		
AHJ Regional Library System	X			
Anderson County			X	
Calhoun County		X		X
Charleston County		X	X	X
Chester County	X		X	
Chesterfield County	X			
Clarendon County	X			
Colleton County			X	
Dillon County	X			
Fairfield County			X	
Georgetown County	X			
Greenville County			X	
Horry County	X		X	
Kershaw County		X		
Laurens County			X	
Lee County		X		
Lexington County	X			X
Marion County	X		X	
Marlboro County	X	X		
Newberry County			X	
Oconee County	X	X	X	
Orangeburg County		X		X
Richland County			X	X
Saluda County	X			
Union County		X		X
Williamsburg County	X		X	
York County	X		X	

The four projects featured in this table include:

1. SC Plants the Seed, a project of the South Carolina State Library that is “a partnership between various state agencies that target low-income and rural populations by bringing local farmers to public libraries and providing nutrition education, free books, and affordable, fresh produce,” financially supported by the Network of the National Library of Medicine. Project launched in 2017 and ended in 2021, superseded by the Read Eat

Grow initiative: Learn more at Read Eat Grow state-wide continuing education initiative that emerged from SC Plants the Seed:

<https://guides.statelibrary.sc.gov/SCReadEatGrow/>. Additional information the NNLM funding application <https://nnlm.gov/funding/funded/aou-330-south-carolina-read-eat-grow>

2. SC CRPH Rural Libraries and Health Cooperative Agreement, led by the South Carolina Center for Rural and Primary Healthcare with funding from the Centers for Disease Control & Prevention via the South Carolina Department of Health and Environmental Control (SC DHEC). Project started October 2020 and is ongoing. Website <https://www.scruralhealth.org/libraries>
3. The purpose of Hands on Health-SC is to give the people of South Carolina a place to go to learn about health and wellness, according to the project website - <https://www.handsonhealth-sc.org/page.php?id=1205> – It is a Medical University of South Carolina (MUSC) Library, funded by the Duke Endowment. The project officially launched in 2002. One part of Hands on Health SC is “Go Local-South Carolina: an effort to make health resources in South Carolina more accessible,” according to the project webpage - <https://www.handsonhealth-sc.org/golocal/GLabout.php> - The libraries listed under on SC Hands on Health are Go Local-South Carolina partners, as of September 23, 2011, the last date on which this webpage was updated.
4. SC SNAP-Ed at the University of South Carolina is one of four SNAP-ED implementing agencies in the State of South Carolina. Since the mid-2010’s USC as part of its Policies, Systems, and Environmental Change Strategies has sought to more directly include public librarians in food systems planning and policies. Learn more at SNAP-Ed connection’s South Carolina Success Stories - <https://snaped.fns.usda.gov/state-snap-ed-programs/south-carolina> and in this webinar featuring Carrie Draper and Ashley Page - <https://www.webjunction.org/events/webjunction/food-access-at-your-library.html>