HEALTH CENTER EXCELLENCE: ESSENTIAL STEPS IN EYE HEALTH AND VISION CARE
Eye and vision health are essential to individuals’ overall health and independence. More than three million people in the United States aged 40 years or older suffer from blindness or impaired vision, which inflict a massive toll in human suffering and economic losses in the U.S. As essential providers of primary care to underserved communities, health centers can and should offer eye health and vision care services to help address these public health issues as part of their commitment to serve as truly patient-centered medical homes. However, resource shortages and other factors have left many health centers unable to offer these key services: less than 3% of health center patients received vision care services in 2019, representing 0.89% of clinic visits.

To address this gap in services, health centers should utilize an integrated, transdisciplinary approach to onsite eye health and vision services that properly leverages existing resources while adhering to comprehensive eye care principles. The following brief provides an introduction to the importance of eye health and vision care, the role that health centers can play in offering it, key steps that health centers can take to achieve excellence in offering eye health and vision services, and two applied case studies from health centers who began offering these services to their communities.

The Importance of Eye Health and Vision Care

Vision and eye health are intricately linked with overall health and quality of life, and blindness and vision impairment are significant public health concerns. Reduced vision can lead to social isolation, increased risk of falling, family stress, and a greater rate of disability and premature death. Vision loss is also one of the most feared conditions in adults and ranks among the top ten causes of disability in the U.S. As previously noted, more than 3.4 million Americans 40 years or older are legally blind or visually impaired, and millions more are at risk of developing these conditions. 48 million other individuals in the U.S. experience refractive errors requiring prescription glasses or contact lenses, but nearly a third are undiagnosed or uncorrected. Children, too, are impacted by vision loss: one in

If you can’t see or have some sort of debilitating impact on your vision, as you lose it, you lose the ability to interact or to even manage some of your other health conditions. It’s critically important to so many other aspects of a patients’ life.

- J. Brandon Thornock, Chief Operations Officer, Shasta Community Health Center

References:

four children experience refractive error or accidental eye injury. Furthermore, age-related eye diseases are expected to double by 2030 and triple by 2050, increasing the vital need for expanded eye health and vision care services.

Significant disparities exist in eye health and vision care, and socioeconomic status is a powerful determinant of visual impairment. Black and Latinx individuals are more likely to be visually impaired than White patients in the U.S., and these populations are also more likely than White individuals to go blind from diabetic and glaucoma-related vision disorders. Black Americans over the age of 40 have the highest prevalence of blindness and uncorrectable vision impairment of all groups in the U.S. Income, location, and housing status are also important factors: rural populations are less likely than urban residents to have insurance for eye care services, and individuals with less education and lower income are consistently less likely to have had an eye care visit in the past 12 months when compared to others. In underserved communities, these disparities and barriers to care in general are made all the more damaging because chronic vision disorders often have no symptoms in their most treatable stages.

**Why Eye Health and Vision Care at FQHCs Matters**

Because of their emphasis on providing integrated, patient-centered care to underserved populations, federally qualified health centers have unique opportunities to improve access to eye health and vision care. Indeed, for many populations, health centers may often be the only local provider of eye health and vision care services. However, while the need for greater eye health and vision care services in these settings is clear, access to this care at FQHCs is limited. In 2019, health centers employed only 444 full-time equivalent optometric doctors and ophthalmologists, the physicians qualified to provide comprehensive eye care, across all health centers. In the case of optometrists, this workforce represented less than 1% of the 41,000 practicing optometrists in the U.S.
Positive movement has occurred in recent years: while only 18% of health centers offered eye health and vision care onsite as of 2017, this figure increased to 25% in 2018. This progress belies the disparity in other services offered by comparison, however: for example, 82% of health centers offered dental services onsite in that same year. Resource shortages play a significant role in this lack of services. In one study of Missouri FQHCs, nearly all health centers wished to offer optometric services but most could not owing to a lack of space and funding. The absence of local Medicaid funding also plays a role: health centers in Medicaid expansion states provided more eye and vision care than the health centers located in states that did not expand Medicaid (27% vs. 18%).

Despite these barriers, health centers can play vital roles in incorporating onsite eye and vision health care into their patient-centered models of care. Simply put, “the provision of onsite vision care at health centers will improve health outcomes for millions of at-risk individuals.” Furthermore, eye health and vision care can also serve as a useful entry to other services. Eye care providers can play important roles in supporting comprehensive health care needs, particularly in cases of patients with diabetes. Because 73% of individuals with diabetic retinopathy are unaware of their condition, integrating eye care into primary care services can support quality improvement initiatives related to diabetes outcomes.

An Integrated Approach to Offer Comprehensive Eye and Vision Services at Federally Qualified Health Centers

To help reduce health disparities and improve whole health outcomes, health centers can and should meaningfully implement eye health and vision care services for underserved communities by establishing comprehensive, integrated, and in-person care adhering to the American Optometric Association’s recommended guidelines. The following is a condensed list of essential elements based on the Association of Clinicians for the Underserved’s recommendations from Integrating Eye Health and Vision Care for Underserved Populations into Primary Care Settings and interviews with FQHC experts that health centers can use to guide their existing or emerging eye health and vision care services.

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23 Ibid.


26 Ibid. p. 9.


Best Practices & Recommendations in FQHC Vision Services

Ideal, comprehensive care encompasses onsite vision care programs with dedicated optometrists for primary vision care and ophthalmologists to provide secondary and tertiary eye care. However, health centers must provide what care they can with available resources, and no two FQHCs are alike in their ability to offer eye health and vision care services. The following are practical recommendations taken from interviews with health center leaders to help FQHCs achieve this model of care or as close to it as possible.

Assessing Readiness

The best way to start is by assessing your organization and its readiness to start or expand an eye health and vision care program. ACU has developed a Vision Services Readiness Assessment featuring a vision equipment cost calculator to help health centers begin this process by identifying program strengths and gaps prior to integrating vision services within your primary care setting. Some key questions to ask are:

- Do key providers and administrators at my FQHC support the offering of such services?
- Does my organization possess at least 900 square feet of space to establish an eye clinic with two eye exam lanes?29
- Does my health center have a center billing office, and if so, is it familiar with optometric/ophthalmological codes?
- Is my health center ready to integrate appropriate ICD-10 and procedure codes in our EHR system to ensure vision care information is available to all providers and care teams?

Another key consideration is conducting a proper needs assessment with your existing population to assess what services and equipment are necessary. To lay the groundwork for this study, it may be useful to go beyond the Uniform Data System to consider other sources, such as the Center for Disease Control and Preventions Vision and Eye Health Surveillance System (VEHSS), a national data portal. Once ready, resources are available to help your health center begin or expand eye health and vision care services, including small start-up grants from ACU. Consider also connecting with national and local partners, including the American Optometric Association, Rotary Club, InfantSEE, Vision USA, and others.

Essential Clinical Guidelines for Quality and Metrics in Care

The American Optometric Association offers practical recommendations for eye health and vision care, the Comprehensive Adult Eye and Vision Examination Evidence-Based Clinical Practice Guidelines, that health centers can use to guide their existing or emerging eye health and vision care services for their populations. Consider also using the Healthy People 2020 framework’s objectives to help develop starting metrics for your vision services. The following is a brief list of recommendations from FQHCs who have helped establish eye health and vision care services at their health center.

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29 The configuration should include two exam rooms and a testing area that can also be used for intake. A dispensing area and workspace, a frame selection area, and a provider space that is private or semi-private.
**Recommendations from the Field: First Steps to Offering Vision Services and Achieving Financial Sustainability**

**Consider seeking aid from other FQHCs.** Fish River Rural Health (FRRH), a federally qualified health center in Eagle Lake, ME, was able to start its vision services by entering into a mutual assistance agreement with another local health center which had existing optometric services. “We were considered a Center of Excellence in dental care, and [another FQHC] was looking to offer dental services... I offered to share my lessons learned in dental if she shared hers on vision, and it was tremendously helpful,” said Heather Pelletier, FRRH’s Executive Director.

**Consider starting your practice with used equipment.** Start-up costs for vision services can be significant, as eye health and vision care equipment are expensive. Fish River Rural Health was able to overcome this hurdle by buying used equipment from a local optometrist who was leaving the area. “His equipment wasn’t pretty, but it was functional,” said Pelletier. “If there’s a willingness to start with used equipment, it is far less expensive.”

**Consider available grants.** A variety of local and national organizations, including the Association of Clinicians for the Underserved, offer funding opportunities for health centers seeking to begin or expand eye health and vision care services. Consider seeking grant funding to help overcome initial startup costs. “If local optometric groups aren’t interested in joining the conversation, that’s where grant opportunities can come in,” said J. Brandon Thornock, FACHE, Chief Operations Officer at Shasta Community Health Center (Shasta CHC). “Once you get over the initial outlay, assuming your Prospective Payment System rate is sufficient, you can cover your cost once the initial investment is made.”

**Consider partnerships with private practice.** Creating partnerships with the local optometric community can be extremely effective, as Shasta CHC discovered.

> I’d start by connecting by the ophthalmological and optometric community,” said Thornock. “Find out if there are retired ophthalmologists who may be interested in providing access to the underserved community and purchase some used equipment to set up an eye lane. Some providers have their own equipment that they had in their basement. There are a million different scenarios—but just start small and set up one exam room or eye lane. Once you get a system developed, learn the medical documentation piece, and see that, yes, you can make this work, grow from there.

Private practices may also be willing to provide advice to fledgling health center services—something which aided Fish River Rural Health, which even hired one vision staffer after the practice’s office later closed.

**Consider private-public partnerships to build a sustainable business model.** Health centers can also consider entering partnerships with local optometric groups based on mutually beneficial agreements, as in the case of Shasta CHC. The Redding, CA-based FQHC was able to engage the locally based Access Eye group to provide vision services for their patients through a contract that
took advantage of the health center’s Prospective Payment System (PPS) billing rate, allowing greater sustainability.\(^{30}\)

Also consider how your health center can integrate vision services into existing patient assistance programs and funding streams. Fish River Rural Health, for example, was able to better fund its start-up vision services by utilizing grant funds to help cover other unrelated services—leaving more unrestricted funds for vision care until the program became more sustainable. A sample business plan for health centers starting vision care services is available from Prevent Blindness.

**Best Practices in Comprehensive, Onsite Eye Health and Vision Care**

Whenever possible, health centers should strive to offer permanent, comprehensive, and coordinated eye health and vision care services that adhere to AOA guidelines. Within these guidelines, organizations should take care to tailor their systems of care to their populations and service sites. Regardless of location, your services should:

- Conduct eye exams to monitor or detect chronic eye diseases, with special emphasis on certain populations such as people with diabetes, hypertension, or who are HIV+.
- Assess risk for injury to eyes from environmental factors.
- If possible, offer specialized testing such as visual fields, optical coherence tomography, or specialty contact lenses to reduce the need for outside referrals.\(^{31}\)

**The Importance of Onsite Care and the Question of Mobile Clinics**

Onsite and, if possible, collocated services are crucial for offering effective eye health and vision care. Collocated services also allow for warm handoffs and increase the chances that patients will attend follow-up appointments. “Patients are best served by an integrated, collocated model,” Pelletier said. “Hypertension was a significant issue for shared patients [at Fish River Rural Health] between family medicine and vision, so we created an integrated policy that patients have significantly benefited from.”

Though they can play a vital role in helping to meet patient needs in settings in which no other services exist, research shows that mobile clinics are at best a temporary solution that do not meet the needs of patients as ably as onsite care.\(^{32}\) If your health center must begin with mobile clinics, your health center should offer comprehensive care at points of patient contact to limit the need for additional referrals and better use support systems to ensure patients receive follow-up care to maximize effectiveness. Additionally, these services should only be utilized if local referral sources are willing to assume care of complex patients.\(^{33}\) A greater discussion of this issue is available in ACU’s [*Integrating Eye Health and Vision Care for Underserved Populations into Primary Care Settings*](https://www.clinicians.org).

Though in-person screening is always preferable, teleretinal screening programs can help, particularly in remote settings,\(^{34}\) to supplement comprehensive eye health and vision care services.

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\(^{31}\) American Optometric Association and Association of Clinicians for the Underserved. (2020).


\(^{33}\) American Optometric Association and Association of Clinicians for the Underserved. (2020).

\(^{34}\) Health Resources and Services Administration. (2020).
Health centers conducted 2,178 vision visits virtually in 2019, and in one study produced a 20% increase in compliance in the first year at one health center.\textsuperscript{35}

**Integrating Eye Care and Ensuring Care Coordination in Care Models**

It is also essential for health centers to fully integrate eye care providers into care teams and incorporate eye health information in their electronic health record (EHR) systems to ensure that information is shared throughout care teams.\textsuperscript{36} This best practice allows proper care coordination, particularly in cases in which case managers or community health workers can help address barriers to attending appointments or help education patients on the importance of eye health. Furthermore, these referrals should be bidirectional so that eye care providers receive notice when high-risk patients require a comprehensive eye exam.\textsuperscript{37} Additionally, workflows should be developed for outreach, tracking, and measuring outcomes.

“Authentically committing to the integration [of vision services] is key,” said Pelletier. “One of our optometrists serves on our Quality Improvement Committee, which serves every discipline and provider.” Through this process, Fish River Rural Health was able to strengthen handoffs between family medicine and vision and improve its diabetes care. Many of their patients with diabetes “were more likely to care about getting a new pair of glasses to improve their vision than their wellness visits with the family doctor,” and the health center was able to make diabetic retinopathy screenings in vision care an entry point to coordinated treatment for patients with diabetes. For these reasons, diabetic retinopathy screenings should also be part of diabetes care plans.

**Offering Opticals (Glasses)**

To offer complete optometric services—particularly for patients whose ability to travel offsite or attend follow-up appointments is limited—it is highly advisable for health centers to onsite optical dispensaries if possible. If your organization cannot do so, it may be possible to locate partners willing to provide inexpensive frames or seek grant opportunities. See Case Studies for two examples of strategies for offering onsite glasses.

**Educating Patients and Performing Outreach**

Health centers establishing eye health and vision care services should also take care to ensure proper patient education and outreach to promote services and inform at-risk populations of the vital need for eye health and vision care. Eye care messaging can be incorporated into patient-facing technology, and all patients should receive education about the availability of vision services in your health center. As previously discussed, diabetes treatment programs can significantly benefit from greater coordination with eye health and vision care services, and messaging should be developed to encourage warm handoffs between providers. Lastly, all members of care teams should be trained in offering basic eye health education to patients and offering referrals to eye health and vision care services.\textsuperscript{38}


\textsuperscript{37} American Optometric Association and Association of Clinicians for the Underserved. (2020).

\textsuperscript{38} Ibid.
• **National Eye Health Education Program**: This program, developed by the National Eye Institute, offers a host of resources to help teach people in your community how to protect their vision. Articles, fact sheets, infocards, webinars, and more are available in both English and Spanish.

**CASE STUDY: SECURING OPTOMETRY FOR A REMOTE COMMUNITY**

**FISH RIVER RURAL HEALTH, EAGLE LAKE, MA**

A federally qualified health center in Eagle Lake, ME, Fish River Rural Health (FRRH) provides a broad spectrum of onsite eye health and vision care services. The sole provider of eye health and vision services in its community, FRRH’s began offering eye health and vision care services in 2017 after learning that their region’s sole optometrist region would soon be closing their practice.

**A Chance Visit Leads to a New Initiative**

“Growing up in the area, we had four optometrists,” said Heather Pelletier, Executive Director of FRRH. “But in time we were down to two, and then to one.” Pelletier became aware of the impending departure of her area’s last optometrist not as an executive, but as a patient. In the fall of 2016, “I was the patient sitting in [my optometrist’s] chair when he said it’ll be the last time we see each other, as I’m moving and closing my practice. That’s when it began.”

Realizing that Eagle Lake would rapidly be left without vision care, Pelletier immediately started educating herself on optometric services and began discussions with her board. She also sought advice from another health center offering optometric services, which provided their advice in exchange for FRRH sharing its own experiences on dental services. “It was tremendously helpful in helping me visualize the services and space would look like,” she said.

Pelletier also received help from her optometrist, which helped her begin recruitment for two part-time optometrists and helped Fish River partially mitigate its start-up costs by selling the health center his used equipment. By January, Fish River Rural Health had repurposed old office space into a small but effective 872-square foot clinic offering vision screenings and preventive care with referrals for diagnostic concerns.

**Growth in Services and Quality**

Interest in services was significant, and Fish River quickly outgrew its facility. Pelletier successfully sought funding through the American Rescue Plan to partially cover the costs of opening FRRH’s second vision lane, and she also creatively budgeted to allow greater investment in Fish River’s fledgling services by utilizing grant funds to help cover other unrelated services—leaving more unrestricted funds for vision care. Four years later, Fish River employs two full-time and one floating optometrists and has expanded to offer a 3,000-square-foot vision care space with two vision lanes, diagnostic space, a two-seat reception area, and an outtake section. Over time, Pelletier was able to recruit an optometrist to offer specialty diagnostics as well—preventing patients from having to travel an hour away to receive these services.

FRRH also offers onsite opticals for its patients. The decision to explore this option caused considerable conversation among Fish River’s governing board, as the health center had never
offered retail services. Ultimately, Pelletier said, “we got into it because there was no other option.” A remote community with no public transportation, Fish River offered no other options for patients seeking prescription frames. “Our mission is to serve the underserved in a comprehensive way, and if we didn’t offer it, where would they go?” Fish River now offers frames onsite at wholesale rates, leading to a “tremendous impact” for patients.

Furthermore, Fish River has integrated vision care into its spectrum of services through collocated spaces and inclusion on their Quality Improvement Committee. Pelletier credits this integration with allowing FRRH to improve not only its vision but also diabetic care. “By committing fully to integration, we strengthened handoffs between family medicine and vision,” said Pelletier. Many of the FQHC’s patients with diabetes were likelier to attend vision appointments than wellness visits, allowing Fish River to make diabetic retinopathy screenings an entry point to coordinated treatment.

“In time, we not only secured optometry for the region, but we graduated it to the modern times of what it’s capable of. We went from standard vision screenings to diagnostics.”

**CASE STUDY: ACHIEVING SUSTAINABILITY THROUGH PARTNERSHIPS SHASTA COMMUNITY HEALTH CENTER IN REDDING, CA**

Shasta Community Health Center (Shasta CHC) offers comprehensive, onsite eye health and vision care services at its Enterprise Family Health & Vision Center. Shasta CHC’s journey to offering vision care services for its diverse patient population in Redding, CA, offers unique insights into how to expand small-scale, temporary eye health and vision care services into comprehensive, sustainable models.

“It’s been an evolution,” said J. Brandon Thornock, Shasta’s Chief Operations Officer. “The need for vision care has always been a lingering one in our community.” To help address that gap in care, Shasta began offering its first vision services in 2007 when it contracted with a local ophthalmologist to see patients once a month, later adding a retired provider in 2012 who could offer services a half day each week. With grant funding, Shasta was able to gradually offer lenses and frames for patients as well. It was a good start—but one that was unable to meet the needs of their population, Thornock said.

“We went for several years on this model, but we were barely scratching the surface for the Medicaid population and uninsured,” Thornock said, noting that the relative lack of services also forced Shasta to make many referrals for outside appointments, creating another hurdle for patients. “We needed to do something more to improve access in our area.”

**Bridging the Gap in Services**

Shasta CHC’s found a path forward by making connections with a local optometric group, Access Eye in Chico, CA, who “had a love for serving the underserved.” Through a mutually beneficial arrangement, the health center contracted with Access Eye to offer services in what would become Shasta CHC’s Enterprise Family Health & Vision Center beginning in July of 2020, providing their patients with a dedicated, collocated optometry clinic and connecting them to frames and other services.
Shasta CHC has also been able to overcome reimbursement hurdles to achieve better sustainability. Many of their patients have Medicare, which does not pay for regular vision visits without an accompanying diagnosis. However, because "the vast majority of patients in the Medicare population have vision issues related to their medical issues, as long as optometrists capture why they’re experiencing these issues, it isn’t as big a hurdle as we thought it would be initially."

**A Massive Impact**

The new vision care model has had a transformative impact on Shasta's services. “Typically, before we contracted with the ophthalmologists, we'd see between maybe 70 patients a month,” said Thornock. “Now we're seeing 40 a day.”

Incorporating vision care into its spectrum of patient-centered services has also positively impacted quality improvement and care coordination efforts at Shasta CHC, particularly in terms of diabetes treatment. “Our diabetic population has seen a huge benefit from this, because before they leave their primary care appointment, they have an optometry appointment scheduled,” Thornock said. “If they’re seen by a PCP in the Enterprise location, they can transition right over to get a retinal eye exam. In terms of access, it’s really improved things for us.”

“It's been a good thing for us, a good thing for the community, and a good thing for the clinicians,” said Thornock.

**Further Resources**

- [Integrating Eye Health and Vision Care for Underserved Populations into Primary Care Settings, 2020](#): This publication by the American Optometric Association and the Association of Clinicians for the Underserved provide information about the current need and best practices for delivering health care services as part of integrated care models.

- "Integrating Eye Health and Vision Care for Underserved Populations into Primary Care Settings": This webinar details eye health and vision care needs of underserved populations, challenges to such care delivery, and best practices for integrating eye health and vision care into comprehensive care models.

- [Vision Services Readiness Assessment, 2020](#): This questionnaire helps health centers assess their readiness to start an eye health and vision care program. Participants also [receive a cost estimate of the equipment and tools needed for integrating](#) vision services into primary care.

- [Integrating Eye Services into Primary Care](#): Developed by Prevent Blindness, this fact sheet includes simple recommendations and a sample business plan for health centers.

- [Comprehensive Adult Eye and Vision Examination](#): Developed by the American Optometric Association, this document offers evidence-based clinical practice guidelines.

- [American Optometric Association](#). AOA offers comprehensive guidelines for eye health and vision care, as well as a variety of updates on practice and policy.