THE NORTHWEST TRACHOMA CAMPAIGN: DR. L. WEBSTER FOX AND THE OFFICE OF INDIAN AFFAIRS EFFECTIVE HEALTH INTERVENTIONS ON THE BLACKFEET RESERVATION, 1923-1927

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The Northwest Trachoma Campaign: Dr. L. Webster Fox and the Office of Indian Affairs Effective Health Interventions on the Blackfeet Reservation, 1923-1927

Abstract

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During the twentieth-century trachoma, an infectious eye disease, was prevalent among Native Americans. Historians have analyzed the Southwest Trachoma Campaign of 1924-27 but have overlooked a parallel campaign conducted by the Office of Indian Affairs (OIA) and ophthalmologist Dr. L. Webster Fox. The Northwest Trachoma Campaign of 1923-27 centered on the Blackfeet reservation in Montana and eventually expanded to other reservations in the state. Both campaigns used surgical treatments that have been criticized by modern scholars. This thesis argues that these surgeries aligned with contemporary medical practices. The Northwest campaign built upon the Blackfeet Agency's prior trachoma efforts and benefited from the relationship between the Agency and Dr. Fox. Though it did not eradicate trachoma, the campaign restored eyesight and prevented widespread blindness. The Northwest campaign is a rare example of the federal government providing Native American patients with beneficial and effective healthcare in the early twentieth century.

Introduction

During the twentieth-century trachoma, an infectious eye disease now known to be caused by the *chlamydia trachomatis* bacteria, was prevalent among Native Americans.[1] Histories of trachoma among Native Americans usually center on the Southwest Trachoma Campaign of 1924-27. Scholars have overlooked a parallel campaign conducted by the Office of Indian Affairs (OIA) and prominent Philadelphian ophthalmologist Dr. L. Webster Fox. The Northwest Trachoma Campaign of 1923-27 centered on the Blackfeet Reservation in Montana but eventually expanded to neighboring reservations including the Crow, Fort Belknap, Fort Peck, and Rocky Boy's reservations. Both campaigns used two surgical treatments, radical grattage and tarsectomy, that have been criticized by modern scholars as ineffective and harmful. Radical grattage involved scraping the eyelid with a chemical scrub while tarsectomy involved the removal of the tarsal plate from the upper eyelids. Full explanations of these procedures and their theorized benefits for advanced cases of trachoma will be discussed below.

Using Dr. Fox's published scholarship, newspaper coverage, and official OIA documents, this thesis argues that these two surgical treatments aligned with existing scientific knowledge of and treatment for trachoma and were the next logical step for the Blackfeet Agency given its prior trachoma efforts.[2] Surgical treatments for trachoma

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[1] A Note of Terminology: Scholars have used the terms Indian, Native American, and indigenous interchangeably to refer to the native tribes, nations, groups, and people of North America. For consistency, this thesis uses the term Native American most often. Indian may be used when quoting or if used in a historical name or title. (ex. Office of Indian Affairs). When possible, the exact tribe or nation name will be used.

[2] A Note on Primary Sources: The Blackfeet Archives, housed at the Medicine Spring Library at the Blackfeet Community College, did not contain any documents referencing to the Northwest Trachoma

were first introduced during the Blackfeet Agency's school-based eradication efforts (1915-1923) and sanitary campaign (1916). Knowledge gained during these prior efforts helped the Agency to effectively execute the Northwest campaign. Moreover, the Northwest campaign overcame the flaws of its Southwestern counterpart, partly because of the beneficial relationship between the Blackfeet Agency and Dr. Fox. Though it did not eradicate trachoma, the Northwest campaign restored many patients' eyesight and prevented widespread blindness. The OIA and Dr. Fox were mistaken in believing that surgical treatment could eradicate trachoma. Still, the Northwest campaign provided significant benefits to patients before the invention of an effective antibiotic treatment (sulfanilamide) in 1938, making it a rare case of effective federal health intervention for Native Americans in the early twentieth century. During this period, medical fatalism dominated discussions of Native American healthcare.[3] The Northwest campaign shows that such rhetoric did not have to dictate the treatment of Native American patients. When public health goals were placed above racial bias and medical fatalism was absent, Native American patients could be treated with and benefit from leading medical care like their white counterparts.

Historiography of Trachoma Among Native Americans

Most histories on Native American health in the twentieth century focus on two places: the boarding schools and the reservations. Trachoma was present at both

Campaign in 2023. It is hoped that in the future tribal sources might be discovered which can capture the Blackfeet perspective and memory of this event.

[3] Examples of scholarship that analyzes the influence of medical fatalism in histories of Native American health include Christian W. McMillen, "'The Red Man and the White Plague': Rethinking Race, Tuberculosis, and American Indians, ca. 1890-1950," *Bulletin of the History of Medicine* 82, no. 3 (Fall 2008): 608-645; David S. Jones, "Virgin Soils Revisited," *The William and Mary Quarterly* 60, no. 4 (Oct. 2003): 703-742; Arleen Marcia Tuchman, "Native Peoples and the Thrifty Gene Hypothesis," in *Diabetes: A History of Race and Disease* (New Haven: Yale University Press 2020): 102-144.

locations.[4] Many boarding school histories dedicate a chapter to student health, with trachoma and tuberculosis being emphasized as the most common diseases seen among students.[5] Additionally, many historians have analyzed the factors that led to the spread of tuberculosis and trachoma on Native American reservations.[6] The most prominent trachoma event in the early twentieth century that scholars have analyzed is the Southwest Trachoma Campaign of 1924-27.[7] The Southwest Trachoma Campaign was conducted by the OIA to treat trachoma patients with surgical operations, radical grattage and tarsectomy, in hopes of eradicating the disease among the Navajo, Hopi, Walapai,

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[4] The history of trachoma in America has also been studied in within Eastern European Jewish and Asian immigrant communities in the late 1800s/early 1900s as well as among white Appalachian communities in the 1912. For insight into this larger history of trachoma in America see Howard Markel, "The Rabbi with Trachoma: The View from Ellis Island," in *When Germs Travel: Six Major Epidemics That Have Invaded America since 1900 and the Fears They Have Unleashed* (New York: Pantheon Books, 2004): 79-110; Ji-Hye Shin, "The 'Oriental' Problem: Trachoma and Asian Immigrants in the United States, 1897-1910," *Korean J Medical History* vol 23 (Dec. 2014): 573-606; Anne-Emanuelle Birn, "Six Seconds Per Eyelid: The Medical Inspection of Immigrants at Ellis Island, 1892-1914," *Dynamis* vol 17 (1997): 281-316; Shannen K. Allen and Richard D. Semba, "The Trachoma 'Menace' in the United States, 1897-1960," *History of Ophthalmology* vol. 47 (Sept.- Oct. 2002): 500-509; Juliet Larkin-Gilmore, "Eyes of the Beholder: The Public Health Service Reports on Trachoma in White Appalachia and Indian Country," *Nursing Clio,* (2017).

[5] Examples of such scholarship include Brenda Child, *Boarding School Seasons: American Indian Families, 1900-1940* (Lincoln: University of Nebraska Press, 1998) ; Jean A. Keller, "Sore Eyes," in *Empty Beds: Indian Student Health at Sherman Institute, 1902-1922* (East Lansing: Michigan State University Press, 2002): 185-213; David H. DeJong, "'Unless They Are Kept Alive': Federal Indian Schools and Health, 1878-1918," *American Indian Quarterly,* vol. 31 (Spring 2007): 265-273.

[6] Examples of such scholarship include Clifford E. Trafzer, *Death Stalks the Yakama: Epidemiological Transitions and Mortality on the Yakama Indian Reservation, 1888-1964* (East Lansing: Michigan State University Press, 1997) and Robert A. Trennert, *White Man's Medicine: Government Doctors and the Navajo, 1863-1955* (Albuquerque: University of New Mexico Press, 1998).
Works that examine the health connections between the schools and the reservations include David H. DeJong, *'If You Knew the Conditions': A Chronicle of the Indian Medical Service and American Indian Health Care, 1908-1955* (Lanham: Lexington Books, 2008) and Bryan Rindfleisch, "'A Very Considerable Mortality': Federal Indian Health Policy and Disease at the Hayward Indian School and Lac Courte Oreilles Reservation," *The Wisconsin Magazine of History,* vol. 94 (Summer 2011): 2-13.

[7]Work that focuses on the Southwest Trachoma campaign includes Diane Therese Putney, "The Southwest Trachoma Campaign," in "Fighting the Scourge: American Indian Morbidity and Federal Policy, 1897-1928" (PhD diss., Marquette University, 1980): 219-254; Robert A. Trennert, "Indian Sore Eyes: The Federal Campaign to Control Trachoma in the Southwest, 1910-1940," *Journal of the Southwest,* vol. 32 (1990): 121-149; Todd Benson, "Race, health, and power: The federal government and American Indian health, 1909-1955" (PhD diss., Stanford University, 1994); Todd Benson, "Blinded with Science: American Indians, the Office of Indian Affairs, and the Federal Campaign against Trachoma, 1924-1927," *American Indian Culture and Research Journal* 23 (1999): 119-42; David H. DeJong, "Trachoma and Tuberculosis," in *'If You Knew the Conditions': A Chronicle of the Indian Medical Service and American Indian Health Care, 1908-1955* (Lanham: Lexington Books, 2008): 91-107; Larkin-Gilmore, "Eyes of the Beholder."

Pueblo and Apache.[8] The Southwest campaign was judged by both its contemporaries and modern scholars as poorly executed, ineffective, and harmful to the Native American patients it treated.[9] Modern scholars have criticized both the campaign's execution and its driving motivations. Robert Trennert argued that the failure of the Southwest campaign was due to both operational issues and cultural barriers between the white physicians and their Native patients.[10] For Trennert, the Southwest campaign was part of a broader history of failed trachoma interventions in the Southwest.[11] David DeJong was critical of the use of surgery. DeJong argued tarsectomy was an untested treatment that caused great harm to patients.[12] Both Trennert and DeJong emphasized the lack of training the Southwest physicians received.[13] Diane Putney stressed that physicians in the Southwest objected to the campaign policies set by the OIA, specifically the two week post-operative care time limit.[14] DeJong and Putney agreed that many complications likely arose due to this post-operative care limit, leading to avoidable cases of permanent blindness among Native American patients.[15] Historians have shown that a variety of factors hindered the execution of the Southwest campaign and can be used to explain its failure to eradicate trachoma and relieve patients' suffering.

Beyond design and execution flaws, scholars have criticized the OIA's motives. Both Todd Benson and Juliet Larkin-Gilmore claimed that the OIA could have chosen a

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[8] Putney, "Fighting the Scourge," 227; Trennert, "Indian Sore Eyes," 129-130.
[9] Lewis Meriam et al., *The Problem of Indian Administration* (Baltimore: The Johns Hopkins Press, 1928): 212-216; Putney, "Fighting the Scourge," 253-254; Trennert, "Indian Sore Eyes," 134; Benson, "Race, health, and power," 44; Larkin-Gilmore, "Eyes of the Beholder."
[10] Trennert, "Indian Sore Eyes," 130-132.
[11] Ibid., 121.
[12] DeJong, *'If You Knew the Conditions',*93-95.
[13] DeJong, *'If You Knew the Conditions',* 94; Trennert, "Indian Sore Eyes," 131.
[14] Putney, "Fighting the Scourge," 232.
[15] DeJong, *'If You Knew the Conditions',* 94; Putney, "Fighting the Scourge," 237-238.

different campaign structure.[16] Benson argued that the OIA could have conducted a sanitation, educational, or medication-based treatment campaign but deliberately chose a surgical campaign.[17] Benson proposed that the motives to choose surgery were a mix of a genuine but wrong belief in the benefits of tarsectomy along with negative racial and cultural beliefs about Native Americans held by the campaign designers.[18] Benson argued these racial attitudes also helped protect OIA officials from criticism because these beliefs allowed the OIA to blame Native American patients for the campaign's failure.[19] Larkin-Gilmore agreed with Benson that the OIA could have pursued a more traditional educational and sanitation campaign but did not because of a racial bias against Native Americans.[20] Larkin-Gilmore and Benson cited the 1912 Public Health Service (PHS) trachoma campaign among white Appalachians as evidence of the federal government's ability to effectively conduct an education and sanitation campaign.[21] The 1912 PHS campaign effectively treated white Appalachian trachoma patients and stopped endemic trachoma in the region. The government's inability to conduct an effective trachoma campaign among Native Americans when they had succeeded ten years prior when treating white patients was viewed by Benson and Larkin-Gilmore as further evidence of racial bias in federal health policies. Both historians suggested that an educational and sanitation campaign would have been less invasive, less harmful, and more effective than the surgical-based campaign that was conducted.

[16] Benson, "Blinded with Science," 4; Larkin-Gilmore, "Eyes of the Beholder."
[17] Benson, "Blinded with Science," 4.
[18] Ibid., 9-11.
[19] Ibid., 11.
[20] Larkin-Gilmore, "Eyes of the Beholder."
[21] Benson, "Blinded with Science," 9; Larkin-Gilmore, "Eyes of the Beholder."

Lastly, Putney examined the OIA's political motives behind the Southwest campaign. Prior to the Southwest campaign, the OIA dealt with criticism from Progressive reformers.[22] Progressive reformers like John Collier called upon the OIA to fix the poor health on the reservations. Putney viewed the OIA's decision to conduct the Southwest campaign as politically motivated. The Southwest campaign was an opportunity for the OIA to show its critics that it was working to improve Native American health. In contrast to Trennert and DeJong, Putney placed more blame on OIA Commissioner Charles H. Burke (1921-29) for failing to heed the early warnings of Southwest physicians about the dangers of tarsectomy.[23] Like Benson and Larkin-Gilmore, Putney argued other alternatives were open to the OIA and was critical of the OIA's failure to invest in trachoma schools.[24] Modern scholars agree that the Southwest campaign was ineffective, harmful to Native Americans, and driven by motivations other than wanting to improve Native American health.

In contrast to the Southwest campaign, the Northwest Trachoma Campaign has received little scholarly attention. Most histories of the Southwest campaign mention that the OIA was introduced to tarsectomy and radical grattage by Dr. Fox during a trachoma clinic he conducted on the Blackfeet Reservation in 1924.[25] Historians agree that the techniques Dr. Fox advocated for were untested and radical for the time.[26] Moreover, many historians argue that Dr. Fox advocated for surgery because of his personal racial

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[22] Putney, "Fighting the Scourge," 219-225.
[23] Ibid., 241.
[24] Ibid., 248-249.
[25] DeJong, *'If You Knew the Conditions',* 93-94; Benson, "Blinded with Science," 4-6; Trennert, "Indian Sore Eyes," 130-131; Putney, "Fighting the Scourge," 233.
[26] DeJong, *'If You Knew the Conditions',* 94; Benson, "Blinded with Science," 4-6; Trennert, "Indian Eye Sores," 130; Putney, "Fighting the Scourge," 233-238; Larkin-Gilmore, "Eyes of the Beholder."

biases against Native Americans.[27] While it is true that Dr. Fox's published work contained racial stereotypes of Native Americans, racial bias alone does not explain why Dr. Fox favored surgical intervention for trachoma since he discussed using these same operations for white trachoma patients.[28] This thesis proposes that Dr. Fox's recommendations were more aligned with his contemporaries in the American medical community than scholars have suggested.

Lastly, few scholars have recognized that Dr. Fox's trachoma clinics on the Blackfeet Reservation were not occasional events, but part of a coordinated campaign run by the OIA, which this thesis titles the Northwest Trachoma Campaign. DeJong mentioned that the OIA intended all physicians to become "trachoma specialists" by learning and performing Fox's techniques but did not say whether this became a reality.[29] Benson briefly mentioned that the OIA expanded their trachoma efforts in the 1920s to include reservations across the west including in Montana and Oklahoma but focused on the Southwest.[30] Likewise, Putney stated that there was an "Oklahoma phase of the Southwest campaign" but centered her analysis on the Southwest.[31] Further research is needed to determine how extensive the OIA's use of surgical intervention for trachoma was during the 1920s and what impact it had in each of the regions targeted.

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[27] Putney, "Fighting the Scourge," 238; Trennert, "Indian Eye Sores," 130; Larkin-Gilmore, "Eyes of the Beholder."
[28] L. Webster Fox, "Trachoma Among the Blackfeet Indians," *Archives of Ophthalmology* vol. 53 (March 1924): 166-171; L. Webster Fox, "Trachoma Among the North American Indians," *Hygeia* (Feb. 1926): 84-86; L. Webster Fox, "The Indian and the Trachoma Problem," *American Journal of Ophthalmology* vol. 12 (June 1929): 457-468.
[29] DeJong, *'If You Knew the Conditions'*, 94.
[30] Benson, "Blinded by Science," 6.
[31] Putney, "Fighting the Scourge," 247.

By examining the work of Dr. Fox and the Blackfeet Agency, this thesis will show how the Northwest Trachoma Campaign was conducted and the impact it had. Dr. Fox and the Blackfeet Agency collaborated to execute the Northwest Trachoma Campaign, eventually even collaborating with the local Montana medical community. Dr. Fox trained the OIA physicians in the Northwest to perform radical grattage and tarsectomy and personally performed many surgeries during his yearly visits to the Blackfeet reservation. When Dr. Fox was not present, Dr. Charles E. Yates, a Blackfeet Agency physician and head of the Cut Bank Hospital on the Blackfeet reservation, ran the campaign. Dr. Yates not only tracked and treated trachoma cases but tried to structure the campaign to meet the needs of the patients. This included petitioning for the Cut Bank Hospital to be built in an accessible location, creating hospital policies that allowed patients' families to stay with them while they received care, and extending post-operative care to avoid surgical complications. As patients were treated at the Blackfeet reservation, the OIA expanded the campaign to treat trachoma on neighboring reservations in Montana. Moreover, the Northwest Campaign was not limited to Native Americans. White trachoma patients in the region were treated with these surgical methods and local Montana physicians sought out training by Dr. Fox during his trachoma clinics. The local Montana medical community would go on to develop their own relationship with Dr. Fox as they tried to eradicate trachoma in the state.

The Northwest Trachoma Campaign successfully treated patients and lowered the number of trachoma cases in Montana. Modern scientific knowledge allows us to realize that the Northwest campaign could never have completely eradicated trachoma since trachoma is a bacterial disease. Surgeries alone cannot eradicate bacterial diseases.

Though it failed to fully eradicate the disease, the Northwest campaign improved the quality of life for patients by restoring their eyesight and relieving painful symptoms. Unlike the Southwest campaign, the Northwest campaign did not cause widespread harm to Native Americans in the region. The Northwest Trachoma Campaign is a rare case of effective federal intervention that improved Native American health. This thesis will explain the factors that enabled the Northwest Trachoma Campaign to be largely successful at a time when few federal health interventions for Native Americans were.

What Is Trachoma?: An Explanation of Historical and Modern Views on Trachoma

Before discussing the Northwest campaign, an understanding of trachoma is necessary. Trachoma is an infectious eye disease caused by the *chlamydia trachomatis* bacteria.[32] The disease is spread through personal contact with discharge from the eyes, nose, or throat of an infected individual.[33] It can also be transmitted via flies or infected objects that transfer infected discharge from one individual to another. For example, the communal use of face towels is one way trachoma can spread throughout a household. While the infectious nature of trachoma was known since the 1890s, scientists had yet to discover the biological mechanism of the disease.[34]

Scientists Ludwig Halberstaedter and Stanislaus von Prowazek first visualized the disease under a microscope in 1907 and theorized that trachoma was caused by a protozoa, a single celled organism. [35] While important, it is unclear how widely known Halberstaedter and von Prowazek's discovery was. In the early twentieth century American physicians and scientists continued to propose various biological, racial, and environmental factors as the primary cause of the disease.[36] The next scientific advance came in 1927 when Dr. Hideyo Noguchi, renowned scientist of the Rockefeller Institute, isolated the causal agent of the disease.[37] Dr. Noguchi declared trachoma to be a viral

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[32] David Taylor-Robinson, "The discovery of *Chlamydia trachomatis*," *Sexually Transmitted Infection* 93 (2017): 10. http://dx.doi.org/10.1136/sextrans-2016-053011
[33] "Trachoma," The World Health Organization, Oct. 5, 2022. https://www.who.int/news-room/fact-sheets/detail/trachoma ; "Trachoma," Centers for Disease Control and Prevention, June 15, 2022. https://www.cdc.gov/hygiene/disease/trachoma.html
[34] Fox, "The Indian and the Trachoma Problem," 457.
[35] Taylor-Robinson, "The discovery of *Chlamydia trachomatis*," 10.
[36] Fox, "Trachoma Among the North American Indians," 84-86; Meriam, *The Problem of Indian Administration,* 212-216.
[37] Francis I. Proctor, "Noguchi's discovery of the trachoma bacillus," *The American Journal of Surgery* 5 (1928): 184-186. doi.org/10.1016/S0002-9610(28)90297-4

disease, though we now this claim to be incorrect as it is a bacterial disease. At the time though, Dr. Noguchi's discovery reframed scientists' understanding of trachoma and spurred new research and treatment efforts. The World Wars disrupted momentum for trachoma research. It was not until 1965 that the next breakthrough came when a standard laboratory form of detection was invented, and *chlamydia trachomatis* was firmly established as the causal agent of the disease.[38] The understanding of trachoma as a bacterial disease has framed treatment and prevention efforts ever since.

In the early twentieth century the infectious nature of the disease was understood to some extent. The OIA debated on methods to contain the disease on the reservations. The communal use of infected objects like towels was understood to spread the disease.[39] Additionally, OIA officials voiced concerns about sanitation and hygiene on the reservations, understanding that these factors worsened the spread of trachoma and other infectious diseases.[40] Still, much was not understood about trachoma. Some scientists theorized whether there was any racial susceptibility or immunity to the disease and emphasized that African Americans seemed "immune".[41] Others suggested that nutritional deficiency could cause the disease and proposed dietary treatments.[42] Not

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[38] Taylor-Robinson, "The discovery of *Chlamydia trachomatis,*" 10.
[39]Charles L. Ellis to Commissioner of Indian Affairs (hereafter CIA) Cato Sells, "Report Blackfeet Indian Agency," March 18, 1915: 18-19. United States. Department of the Interior. Office of Indian Affairs. *Blackfeet Agency* (hereafter US, DI, OIA, *BA), DCI 150, Year 1914, File 32216*. Documents. University of Montana Mansfield Library (hereafter UM Mansfield Library), 1914–1915. From JSTOR.org; Meriam, *The Problem of Indian Administration,* 209-210.
[40] Inspector E.B. Linnen, "Report of E.B. Linnen, Chief Inspector, Dated February 3, 1916. On The Blackfeet Indian Reservation, Montana," Feb. 3, 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 35332*. Documents. UM Mansfield Library, 1916. From JSTOR.org.
[41] Fox, "Trachoma Among the North American Indians," 84-86.
[42] Meriam, *The Problem of Indian Administration,* 210-212.

enough was understood about trachoma in the early twentieth century to create a standardized treatment method and eradication plan.

Clinical Symptoms, Diagnosis, and Treatments

Today trachoma is diagnosed through both a physical eye exam and, when available, a laboratory test to confirm the presence of *chlamydia trachomatis.*[43] In the early stages of the disease, granular bumps form on the inside of the upper eyelids which can be seen by inverting a patient's eyelid.[44] The presence of these granular bumps is the most common physical feature used to distinguish trachoma from other eye diseases. Common symptoms of trachoma include mild itching and irritation of the eyes and eyelids.[45] Clinicians also list eye swelling, pus drainage of the eyes, light sensitivity, eye pain, eye redness, and vision loss as potential symptoms. While young children are the most susceptible to infection, and reinfection, clinicians often see more severe and painful symptoms in adult patients.[46]

The World Health Organization (WHO) has identified five clinical stages of trachoma.[47] The first, inflammation-follicular, begins when granular bumps form on the inside of the eyelids. In the second stage, inflammation – intense, swelling of the eyelid occurs and the patient becomes highly infectious. Eyelid scarring caused by the granular bumps occurs in the third stage and is usually a sign of persistent trachoma infections. In mild cases, the body's immune system can clear the infection in these early stages, but

[43] Mayo Clinic Staff, "Trachoma: Diagnosis & treatment," Mayo Clinic, Oct. 21, 2020. https://www.mayoclinic.org/diseases-conditions/trachoma/diagnosis-treatment/drc-20378509
[44] "Trachoma," Centers for Disease Control and Prevention (hereafter CDC).
[45] Mayo Clinic Staff, "Trachoma: Symptoms & causes," Mayo Clinic, Oct. 21, 2020. https://www.mayoclinic.org/diseases-conditions/trachoma/symptoms-causes/syc-20378505
[46] Mayo Clinic Staff, "Trachoma: Symptoms & causes."
[47] "Trachoma," The World Health Organization (hereafter WHO).

since trachoma is a bacterial disease infection does not provide individuals with any form of immunity. Repeat infections often lead to more severe cases. In the third stage, some patients may begin to exhibit more advance symptoms. The eyelid of some patients may turn inward, a condition known as entropion. As the disease progresses to the fourth stage the eyelid continues to deform. The deformation of the eyelid causes the eyelashes to turn inward, a condition known as trichiasis, and scratch the cornea of the eye. Corneal clouding or opacity occurs in the final stage because of continuous scratching of the eyelashes against the cornea. If left untreated, trachoma eventually causes complete and irreversible blindness.[48]

While no longer prevalent in the United States, the WHO considers trachoma a public health problem in 42 countries.[49] Estimates from 2022 suggest that trachoma caused blindness or visual impairment in about 1.9 million people worldwide. Today trachoma is treated through antibiotics or, in severe cases, surgery.[50] Zithromax (azithromycin) is the most common oral antibiotic used to treat trachoma. The WHO estimated that 64.6 million people received antibiotic treatment for trachoma in 2021.[51] In advanced cases surgery may be recommended to restore vision and prevent permanent blindness. There are several modern forms of surgery used to treat severe cases. Eyelid rotation surgery, also known as bilamellar tarsal rotation, is used to rotate eyelashes away from the cornea.[52] Eyelid rotation surgery stops the eyelashes from further scarring the cornea, preventing further loss of vision. In some cases, epilation surgery, the removal of

[48] Mayo Clinic Staff, “Trachoma: Symptoms & causes.”
[49] “Trachoma,” The WHO.
[50] Mayo Clinic Staff, “Trachoma: Diagnosis & treatment.”
[51] “Trachoma,” The WHO.
[52] Mayo Clinic Staff, “Trachoma: Diagnosis & treatment.”

the eyelashes, is also done to prevent further scarring of the cornea. Corneal transplantation surgery is used in some cases to repair damaged corneas and restore vision. Beyond these treatment options, the WHO suggests preventative efforts to combat the global issue of endemic trachoma.[53] The WHO recommends improving access to clean water, implementing, or upgrading sanitation systems, and personal hygiene education to reduce the spread of trachoma.

Historical Treatment Methods

While physicians in the early twentieth century did not have modern scientific information of the disease, they used their knowledge of trachoma to create various treatments. Physicians developed methods to both treat individual cases and combat endemic trachoma. With the germ theory revolution, the American medical community became confident in their ability to eradicate infectious diseases.[54] The goal of eradication framed all trachoma treatment and prevention efforts. An effective antibiotic treatment for trachoma was not developed until 1938, when sulfanilamide was discovered by Dr. Fred Loe. [55] Prior to Dr. Loe's discovery, both chemical and surgical treatments were used to combat trachoma.

Chemical treatments were escharotics, corrosive chemicals designed to sterilize the eyelids and stop the infection. Blue stone, or copper sulfate, was the most common

[53] "Trachoma," The WHO.
[54] For an analysis of the impact of the Germ Theory on American cultural and scientific understanding see Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge: Harvard University Press, 1998).
[55] Robert M. Feibel, MD, "Fred Loe, MD, and the History of Trachoma," *Archives Ophthalmology* 129 (2011): 503-508; DeJong, *'If You Knew the Conditions',* 96-98.

corrosive chemical used to treat trachoma.[56] The blue stone treatment acted "by its irritating qualities" and removed "water from the tissues" of the eyes.[57] By removing water from the infected tissue, the eye secretions caused by trachoma were stopped and, it was hoped, the infection drawn out. No standard method of blue stone treatment existed, so each physician had their own methods for how much copper sulfate to use and how often to treat the eyelids. Other chemicals like hyrargyi bichloride, argyrol, zin sulphate, and copper citrate were used in a similar manner.[58] Despite their popularity, the effectiveness of chemical treatments was debated by physicians.[59] Some physicians also voiced concerns about the painfulness of the bluestone treatment.[60] Additional treatment methods were needed.

Uncertainty about chemical treatments led physicians to research other medicines. For example, scientists Sydney Stephenson and David Walsh proposed a form of radiotherapy for trachoma in 1903.[61] These scientists sought out new methods because of their concern over chemical treatments being too painful for patients. In their paper, Stephenson and Walsh proposed two forms of radiotherapy, x-ray focus tube and a form of brush discharge. They argued that these treatments were better than escharotics

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[56] B.M. Howley, "The Treatment of Trachoma and Chronic Conjunctivitis with Negative Pressure," *American Journal of Ophthalmology* 2 (1919): 180. https://doi.org/10.1016/S0002-9394(19)90226-1; Gen. Hugh Scott, "Report on the Blackfeet Agency," Browning, MT, Sept. 25, 1928. US. DI. OIA. *BA, DCI 150, Year 1928, File 57302*. Documents. UM Mansfield Library, 1928–1929. From JSTOR.org.
[57] Howley, "The Treatment of Trachoma with Negative Pressure," 180.
[58] "George Weazle Head: Trachoma Treatment Card," Card. Oct. 24, 1923. US. DI. OIA. *BA, DCI 806, Year 1923, File 37499*. Documents. UM Mansfield Library, 1923. From JSTOR.org; William Campbell Posy, "Trachoma Among the Indians of the Southwest," *Journal of American Medical Association* 88 (1927): 1618-1619; Howley, "The Treatment of Trachoma with Negative Pressure," 182; Fox, "Trachoma Among the North American Indians," 84-86.
[59] Howley, "The Treatment of Trachoma with Negative Pressure," 180.
[60] Ibid., 180.
[61] Sydney Stephenson and David Walsh, "Short Note on the Cure of Trachoma by X-Ray Tube Exposure and By High-Frequency Brush Discharges," *The Lancet* (1903): 237.

because they were painless, simple to administer, and rapidly showed results. Other articles from the period do not follow up on the idea of radiotherapy for trachoma, suggesting this treatment method was abandoned. Still, Stephenson and Walsh's paper shows that physicians were still searching for the most effective, most accessible, and least painful treatments for trachoma.

Another common treatment was called squeezing. Squeezing was designed to drain the infected eyes of discharge like mucus and pus. By removing the infected discharge, the painful symptoms of trachoma could be relieved and, it was hoped, the infection cleared. Dr. B. M. Howley, in 1919, claimed that for early-stage trachoma cases "squeezing [was] the favorite method of treatment."[62] Dr. Howley's statement shows that by the 1920s physicians were distinguishing between treatment for mild and advanced cases, offering treatment based on the progression of an individual case.

Dr. Howley proposed a modification of squeezing which he called negative pressure treatment. In the negative pressure treatment, the eyelids were first washed with boric acid and wiped with bichloride of mercury. Cocaine was applied as an anesthetic then pressure was applied to the lid with a tool designed to suction out fluids from the eyelid. Like squeezing, Dr. Howley's negative pressure treatment centered on the idea of removing the infection by draining secretions from the eyes. The use of an anesthetic shows that physicians like Dr. Howley were seeking ways to make treatments less painful for patients. It is not clear if physicians adopted Dr. Howley's negative pressure

[62] Howley, "The Treatment of Trachoma with Negative Pressure," 180.

treatment. Still, the development of such a treatment shows that physicians had yet to come to a consensus on the most effective trachoma remedy.

In the early twentieth century surgical operations were also proposed for trachoma. There were three common types of surgical operations used. The first was scarification which involved using a scalpel to make little cuts on the inside of the upper eyelid.[63] It is unclear who developed scarification or first proposed its use for trachoma. Like squeezing, scarification was designed to extract the infection through draining fluid from the eyes. The blue stone treatment, squeezing, and scarification were all methods designed to remove the infection through draining eye secretions. It was understood that these treatments did not present a permanent cure but rather temporary relief from the painful symptoms of trachoma.

Other surgery methods sought to reverse the physical changes made to the eyelids and halt the infection by cutting out the infected tissue. Grattage, or scraping, was used to remove the granular bumps that formed on the eyelids. The most common form was simple grattage which was done by taking a scalpel across the inside of the eyelid to remove the bumps.[64] It was thought that removing the granular bumps could provide relief to the patient, prevent scraping of the cornea, and stop the infection. It is unclear when grattage was introduced as a treatment for trachoma. Dr. Fox claimed that a rudimentary form of grattage existed among Native American tribes prior to its introduction by American physicians.[65] Dr. Fox did not name any specific tribes that had practiced forms of grattage. Most scholars agree that trachoma was introduced to Native

[63] Ibid., 182.
[64]Feibel, "Fred Loe, MD, and the History of Trachoma," 504.
[65] Fox, "The Indian and the Trachoma Problem," 458.

American tribes after contact with Europeans. References to trachoma surgeries date back to the classical and early Byzantine periods.[66] While Native Americans might have developed their own forms of grattage, it is also possible that trachoma surgeries were introduced to Native Americans by Europeans already familiar with these techniques.

Among American physicians grattage seemed to be a very common treatment for trachoma in the twentieth century. Initially grattage was done without anesthesia, making the procedure very painful for patients.[67] As anesthesia became more accessible it became standard to numb the eyelid, usually with cocaine, prior to scraping. Physicians experimented with variations on grattage, attempting to find the most effective method. Dr. Fox advocated for a form of grattage he developed called "radical grattage".[68] Radical grattage first treated the eyelid with a chemical disinfectant and then used a brush to scrub away the granular bumps. Dr. Fox viewed this method as more effective since the chemical scrub gave a better chance at clearing the infection. Dr. Fox's technique appears to have been an attempt to combine the benefits of chemical treatments with simple grattage. While modern scholars have suggested this technique was "untested" and "radical", it appeared to be a modification of existing techniques.[69] In combining two existing treatments, Dr. Fox hoped to create a more effective and long-lasting treatment.

Lastly, the most invasive surgical technique used to treat trachoma was tarsectomy. First introduced in 1882 by German physician Heisrath, tarsectomy sought to

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[66] Constantinos Tromoukis, "Trachoma in late Greek antiquity and the early Byzantine periods," *Canadian Journal of Ophthalmology* vol 42 (Dec. 2007): 870-874.
[67] Feibel, "Fred Loe, MD, and the History of Trachoma," 504.
[68] Fox, "Trachoma Among the North American Indians," 86; Fox, "Trachoma among the Blackfeet Indians," 169; Fox, "The Indian and the Trachoma Problem," 468.
[69] Putney, "Fighting the Scourge," 235.

correct the eyelid deformation that occurred in advanced cases.[70] Tarsectomy was done by cutting the upper eyelid and surgically removing the tarsal plate. Once the tarsal plate was removed, the eyelid was stitched back together. Trachoma often caused the tarsal plate to stiffen and this stiffening was thought to be one of the reasons for the inversion of the eyelid and eyelashes that occurred in advanced cases. By removing the tarsal plate, the eyelid could be returned to a normal position and patients' eyesight could be restored. Correcting the position of the eyelid and eyelashes could also prevent blindness by preventing further scarring of the cornea. Physicians also theorized that tarsectomy could relieve other painful symptoms.[71] In some cases, severe trachoma caused painful eye pressure, muscle twitches, and muscle spasms. Physicians like Dr. M. Beigelman theorized that tarsectomy, by cutting the eyelid muscles, could relieve eye pressure and stop muscle spasms. Moreover, physicians hoped that by removing the tarsal plate the infection would be cleared and future infection prevented.[72] Thus, physicians saw many potential benefits of tarsectomy for advanced trachoma patients. German physician Kuhnt advocated for its widespread use in the late 1890s.[73] By the 1920s, tarsectomy was being used in the United States.

Like with grattage, there were various forms of tarsectomy. Simple tarsectomy involved solely cutting out the tarsal plate from the upper eyelid and stitching the eyelid back together.[74] By the late 1920s and early 1930s some physicians advocated for a more

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[70] M. Beigelman, "Simple Tarsectomy: Its Indications and Technique," *American Journal of Ophthalmology* 13 (August 1930): 677-680. https://doi.org/10.1016/S0002-9394(30)90138-9
[71] Beigelman, "Simple Tarsectomy," 678.
[72] Beigelman explained how this theory was originally adopted but abandoned by 1931 as it was realized that tarsectomy was not a complete and total cure for trachoma. Ibid., 768.
[73] Beigelman, "Simple Tarsectomy," 677.
[74] Theodore J. Dimitry, M.D., "The Tarsus Made Pliable as a cure for Trachoma," *American Journal of Ophthalmology* 4 (Feb. 1921): 107; Beigelman, "Simple Tarsectomy," 677-780; Fox, "The Indian and the Trachoma Problem," 468.

complex method of tarsectomy that involved a mucous membrane transplant.[75] Simple tarsectomy reformed the eyelid by sewing it together. In contrast, the complex form of tarsectomy transplanted a small part of the mucous membrane of the patient's inner lip to replace the lost eyelid tissue. The mucous membrane transplant was advocated for because it was theorized that it was immune to reinfection by trachoma.[76] Even into the 1930s tarsectomy was still viewed as a useful surgical procedure by ophthalmologists.

Many historians emphasize that after the failure of the Southwest Trachoma Campaign, the OIA abandoned the use of surgical treatments for trachoma.[77] While the OIA turned away from surgery, the medical community continued to advocate for its use. Still, the scientific community's attitude towards tarsectomy did change throughout the twentieth century. In the late 1890s, tarsectomy had been advocated for most trachoma cases but by the 1930s it was advised only for advanced cases.[78] For example, Dr. Victor Rambo, in 1938, advocated for surgical treatment in cases where long term treatment, likely referring to routine chemical treatments, was not accessible.[79] Additionally, Dr. Rambo emphasized that surgeries were intended to relieve the pain of the patient. Thus, surgery was not to be used if it would inflict harm and fail to relieve existing symptoms. Dr. Beigelman took an even stronger stance by stating, in 1930, that the "general justification of tarsectomy is hardly necessary."[80] For Dr. Beigelman, the question was not whether to conduct tarsectomy but the proper method to use. Like Dr. Rambo, Dr.

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[75] Victor C. Rambo, "The Surgical Treatment of Trachoma," American Journal of Ophthalmology 21 (1938): 277-285. https://doi.org/10.1016/S0002-9394(38)92780-1
[76] Rambo, "The Surgical Treatment of Trachoma," 277-285.
[77] Trennert, "Indian Sore Eyes," 134; Putney, "Fighting the Scourge," 251; Benson, "Blinded with Science," 7-8.
[78] Beigelman, "Simple Tarsectomy," 678.
[79] Rambo, "The Surgical Treatment of Trachoma," 277.
[80] Beigelman, "Simple Tarsectomy," 677.

Beigelman viewed tarsectomy as a useful surgical procedure for certain types of trachoma cases. Most often physicians advocated for tarsectomy in advanced cases where the painful symptoms of the patient could be relieved, vision restored, and further vision loss could be prevented. By 1930 it was recognized that tarsectomy could not hope to cure trachoma, a theory that had been part of the initial justification for its use.[81] Rather tarsectomy was used to treat symptoms and restore vision when possible. Even today, physicians recognize that surgical intervention can be useful in restoring vision and relieving symptoms for severe trachoma cases. Modern surgeries like the bilamellar tarsal surgery are in some sense a modern-day equivalent to historical tarsectomy surgeries.

Contextualizing Dr. Fox's Trachoma Methods

Dr. Fox (1853-1931) was a prominent ophthalmologist of the late nineteenth and early twentieth century based in Philadelphia. Dr. Fox obtained his M.D. from Jefferson Medical College in 1878.[82] Throughout his career, Dr. Fox established himself as a prominent medical figure. After obtaining his M.D., he studied ophthalmology in Germany, Austria, and England, gaining a global perspective on the field. He served as an ophthalmic surgeon at the Germantown Hospital in Philadelphia. His obituary listed him as a member of the "State Council for the Blind and president of the Pennsylvania Home Teaching Aid Society and Free Circulating Library for the Blind."[83] Dr. Fox was also a member of the Army Reserve Corps and American Medical Association as well as

[81] Ibid., 678-679.
[82] "L. Webster Fox papers," *Historical Medical Library of The College of Physicians of Philadelphia,* 2019.
[83] *New York Times,* "Dr. L. Webster Fox, Eye Specialist, Dies," June 5, 1931. From ProQuest Historical Newspapers.

on the board of the Pennsylvania Military College.[84] Dr. Fox had held a teaching position at the University of Pennsylvania and run his own private practice in Philadelphia. By the time he became involved with the OIA's trachoma efforts, Dr. Fox was a well-established ophthalmologist within the American medical community. His work with Native Americans on trachoma became one of the most prominent aspects of his legacy.[85]

Dr. Fox's recommendations to treat trachoma among Native Americans came when trachoma treatments were at a transition point. In the 1920s, questions were raised about the effectiveness of popular chemical treatments. In addition, physicians were more vocally advocating for the use of surgical interventions. Some physicians advocated for the widespread use of surgery to treat all trachoma cases while others had already begun to view surgery as effective only for advanced cases. Historians have generally portrayed Dr. Fox as an advocate for widespread surgical intervention among Native Americans.[86] While Dr. Fox advocated for surgical intervention, historians have mischaracterized his recommendations. In 1924, Dr. Fox recognized that there was "some difference of opinion" about the correct treatment for trachoma but advocated that whatever method used be "employed vigorously" to effectively eradicate the disease.[87] At this time, Dr. Fox praised grattage which he had personally "used so frequently with good results," among his trachoma patients. Dr. Fox stated that the purpose of his 1924 paper was to

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[84] "Lieutenant L. Webster Fox Army Reserve Corps (1853-)," Archives & Personal Papers Collections. *Association of Military Surgeons of the United States.* 1901-1941. From National Library of Medicine Digital Collections.
[85] *New York Times,* "Dr. L. Webster Fox, Eye Specialist, Dies."
[86] Putney, "Fighting the Scourge," 238; Benson, "Blinded with Science," 4-5; Larkin-Gilmore, "Eyes of the Beholder."
[87] Fox, "Trachoma Among the Blackfeet Indians," 169.

"call attention to the frank negligence of the government" for their failure to provide healthcare, and especially trachoma treatment, to Native Americans.[88]

Two years later, Dr. Fox explained more thoroughly his surgical recommendations. Dr. Fox observed that "grattage had given the best results in the early cases," suggesting grattage was an intervention used for milder cases of trachoma.[89] Dr. Fox went on to recommend that "the best means of combating the resistant cases [was] the removal of the cartilage in the offending eyelid," through a tarsectomy operation but qualified his tarsectomy recommendations for "resistant cases". Thus, Dr. Fox did not recommend tarsectomy be used for all types of trachoma cases. Dr. Fox went on to claim that he "recommended the radical treatment[tarsectomy] for most of my own patients and advised the same for the Indians." Thus, Dr. Fox knew both that the tarsectomy operation was considered "radical" by some of his contemporaries but still advocated for its use in advanced cases that resisted treatment by other means. Furthermore, Dr. Fox addressed the assumption that he had a racial bias against Native Americans when he stated that he used these same methods on "his own[white] patients". Dr. Fox recognized and responded to complaints made against his recommendations by both his contemporaries and modern scholars.

Dr. Fox does not appear to have changed his recommendations after the end of the OIA's trachoma campaigns because in 1929 he continued to advocate for surgical intervention for advanced cases.[90] In his abstract, Dr. Fox stated that for later stage cases "the author prefers grattage, including scarification with a three-bladed knife and

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[88] Ibid.,170.
[89] Fox, "Trachoma Among the North American Indians," 86.
[90] Fox, "The Indian and the Trachoma Problem," 468.

vigorous scrubbing with bichloride of mercury solution on a tooth brush." This method became known as "radical grattage". While such a procedure sounds highly invasive it was in keeping with techniques practiced by other physicians of the time. All components of the "radical grattage" operation had been used separately in other treatments. Bichloride of mercury would have been used in chemical treatments. Scarification used a blade to scar the eyelid while scrubbing the eyelid would have been part of simple grattage operations. Therefore, Dr. Fox's "radical grattage" was a new operation that combined existing methods into a single, hopefully more effective, treatment. By the 1920s anesthesia was already being used for grattage, making the procedure less painful for patients. While the procedure sounds traumatic to a modern audience, these techniques were intended to relieve the painful symptoms of trachoma. This is not to discount the pain patients experienced because of these procedures but to emphasize that for some patients the benefits of "radical grattage" would have outweighed the risks of surgery.

Most historians have chosen to emphasize Dr. Fox and the OIA's use of the more invasive tarsectomy. Some historians have characterized this surgery as too invasive to have ever justified its use.[91] Still, physicians of the time viewed tarsectomy as a legitimate treatment for certain trachoma cases. Dr. Fox's recommendations aligned with the larger medical community's views on tarsectomy. Dr. Fox advocated for the use of tarsectomy in "extreme cases" and cautioned that "care must be exercised in the choice and combination of procedures in the individual case, in order not to discredit the surgery

[91] DeJong, *'If Only You Knew the Conditions',* 93-95. Larkin-Gilmore, "Eyes of the Beholder."

of the condition as a whole."[92] Dr. Fox modeled his tarsectomy technique after "the method known as Kuhnt-Heisrath", the creators of the tarsectomy procedure. The only modification Dr. Fox suggested was to advise that in some cases it be supplemented "with a canthotomy" to prevent inversion of the eyelashes. The canthotomy method Dr. Fox used was "the Ziegler method", created by another established physician of the era. Even though tarsectomy came to be known as "the Fox method", both by the OIA and modern scholars, Dr. Fox did not invent tarsectomy or drastically alter his technique from those of other ophthalmologic surgeons.[93]

Beyond criticizing Dr. Fox's methods, historians have criticized the OIA for its widespread use of surgical intervention. If Dr. Fox consistently recommended surgical intervention for "advanced" or "extreme" cases, why where these treatments so widely used by the OIA? Scholars like Benson and Larkin-Gilmore have argued that a racial bias against Native Americans as "unclean" and "uneducated" led the OIA to adopt a surgical campaign instead of a traditional education and sanitation campaign.[94] In addition to racial bias, Putney noted the political motivations behind the Southwest Campaign.[95] With mounting criticism of the OIA's treatment of Native Americans by Progressive era reformers, the OIA needed to show its ability to improve Native American health. A short-term surgical campaign, if successful, would have been politically beneficial for the OIA. Lastly, Benson noted that a short-term surgical campaign would have been better

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[92] Fox, "The Indian and the Trachoma Problem," 468.
[93] DeJong, *'If Only You Knew the Conditions',* 93-95; Benson, "Race, health, and power," 53; Trennert, "Indian Eye Sores," 130-131; *Great Falls Tribune,* "Doctors Study Fox Method of Curing Trachoma Among Indians at Browning Clinic," Sept. 4, 1924. From Newspapers.com; Gen. Scott, "Report on the Blackfeet Agency," Sept. 25, 1928. *DCI 150, File 57302.*
[94] Benson, "Blinded with Science," 4; Larkin-Gilmore, "Eyes of the Beholder."
[95] Putney, "Fighting the Scourge," 219-225.

financially for the OIA than a costly long-term education and sanitation program.[96] While all these factors likely contributed to the OIA's decision to adopt surgery-based treatment, Dr. Fox's articles provide another explanation. It is possible that most Native American trachoma cases were advanced and resistant to non-surgical treatment methods. Surgical intervention might have been the only viable treatment available for these cases. This is not to say that widespread use of surgeries might not have led to mild cases being treated with more invasive methods. Still, the evidence of endemic trachoma on the Blackfeet reservation suggests that, at least for this reservation, there were enough advanced trachoma cases to warrant the use of surgical intervention.

[96] Benson, "Blinded with Science," 2-4.

Endemic Trachoma among the Blackfeet

Like many other tribes, the Blackfeet Nation's most prominent health issues in early twentieth century were tuberculosis and trachoma. The two diseases had spread rapidly among the Blackfeet since the late nineteenth century. Increased white settlement introduced many diseases into the region.[97] For western tribes that had been relatively isolated from white communities, the introduction of new diseases had a devastating impact.[98] Warfare against western tribes by the American government and confinement to the reservations further exacerbated poor health conditions.[99] Conditions on the Blackfeet reservation, including overcrowding, lack of sanitation infrastructure, and widespread poverty, contributed to disease spread. At the turn of the century, the OIA became more aware of the health issues on the reservations and began to actively collect health data. Gathering prevalence data for diseases like tuberculosis and trachoma was seen as the first step in addressing the health situation.[100]

The Blackfeet Agency began its first health reports in 1913. Dr. W. H. Harrison, an eye specialist and OIA physician, was sent to the Blackfeet reservation to report on the health situation.[101] Dr. Harrison noted that there was a "large amount of Trachoma"

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[97] See Shelia M. Rothman, *Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in American History* (Baltimore: Johns Hopkins University Press, 1995) for an examination of the impact western migration and "health seekers" had on disease climate in the American west.

[98] Examples of scholarship that examines the introduction of new disease western tribes include Ramon Power and James N. Leiker, "Cholera among the Plains Indians: Perceptions, Causes, Consequences," *Western Historical Quarterly,* vol. 29 (Autumn 1998): 317-340; McMillen, "'The Red Man and the White Plague'," 608-645.

[99] Examples of scholarship that examines the impact of warfare and confinement to the reservations on Native American health include Elizabeth James, "'Hardly a Family Free From the Disease': Tuberculosis, Health Care, and Assimilation Policy on the Nez Perce Reservation, 1908-1942," *Oregon Historical Quarterly* 112, no. 2 (Summer 2011): 142-169; DeJong, *'If Only You Knew the Conditions',* 1-18; Trennert, *White Man's Medicine*.

[100] Putney, "Fighting the Scourge," 23-53.

[101] Oscar H. Lipps and Dr. W. H. Harrison to CIA Cato Sells, Browning, MT, Sept. 15, 1913. US. DI. OIA. *BA, DCI 150, Year 1913, File 3479*. Documents. M Mansfield Library, 1913. From JSTOR.org.

during his month-long visit though he did not gather prevalence data. Two years later, physicians at the Blackfeet reservation still failed to collect health data. In January 1915, Chief Inspector E.B. Linnen wrote to OIA Commissioner Cato Sells (1913-1921) criticizing the newly appointed physicians at the Blackfeet reservation for not knowing the health status of the reservation.[102] All that was known by the physicians was that "a large percent of the Indian [were] afflicted with trachoma and quite a number with pulmonary trouble." Linnen saw this as unacceptable and urged the OIA to demand that physicians collect health data.

Linnen's criticism worked because a few months later the Blackfeet Agency had gathered its first detailed health statistics. An August 1915 special report listed 650 cases of trachoma, 400 among men and 250 among women.[103] It is unclear whether there was any significance to the gender distribution because it was not commented on at the time. The following year estimates for trachoma increased. A January 1916 report from Dr. Clifton M. Rosin, physician at the reservation, estimated that "ninety per cent of the full bloods [were] suffering from trachoma."[104] Dr. Rosin asked "how long can this wholescale infection last? How long will it be before all of the full bloods are entirely blind or hopelessly tubercular?", suggesting the Agency physicians felt overwhelmed by these diseases. Dr. Rosin viewed the OIA as dangerously close to losing the battle against trachoma, a fate that would resign the Blackfeet to widespread blindness. The following

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[102] E.B. Linnen, "Report of Investigation of Affairs on the Blackfeet Indian Reservation," Montana, Jan. 9, 1915. US. DI. OIA. *BA, DCI 150, Year 1915, File 30650*. Documents. UM Mansfield Library, 1915. From JSTOR.org.
[103] Special Supervisor Dr. R. E. L. Newberne, "Special Report on the Blackfeet Agency," Fort Duchesne, UT, Aug. 14, 1915. US. DI. OIA. *BA, DCI 150, Year 1915, File 91473*. Documents. UM Mansfield Library, 1916. From JSTOR.org.
[104] Dr. Rosin to CIA Cato Sells, Browning, MT, Jan. 21, 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 35332*. Documents. UM Mansfield Library, 1916. From JSTOR.org.

month, Dr. Rosin reported 75% of the full blood population afflicted with trachoma, only slightly lower than his January estimate.[105] Physician reports from 1916 clearly demonstrate that trachoma was endemic among the full-blooded on the reservation.

A 1916 special report by Linnen provided the OIA with its first detailed account of trachoma cases among the Blackfeet.[106] For his report, Linnen traveled to each house on the reservation, making note of who lived in each house, the health conditions of each resident, and any pressing needs of the household. Despite these methods, some Blackfeet were excluded from the report. Those who were not present when Linnen made the house inspections or chose not to cooperate with house inspections were not included in his report. Still, Linnen provided the first detailed look at households, families, and individuals afflicted with trachoma, vision loss, or blindness.

Through his report, Linnen showed the extent of trachoma among the Blackfeet and finally put names to the trachoma cases that were recorded. One example is the household of Cree Medicine.[107] Linnen reported that "Cree Medicine: wife, two children, Mrs. Spotted Eagle and two children – all have trachoma, Cree Medicine nearly blind" but claimed that the household was "in apparent good health, except for trachoma." The description of Cree Medicine's household is a typical example of how Linnen reported on trachoma among families. It was common for Linnen to describe a household where several residents had trachoma. Mentions of family members who were blind was also

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[105] Linnen, "Report on The Blackfeet Indian Reservation," Feb. 3, 1916. *DCI 150, File 35332*.
[106] Ibid.
[107] E.B. Linnen, "Exhibit A: List of Indian Homes on the Blackfeet Reservation, Montana, Visited by Chief Inspector E.B. Linnen, Superintendent C. L. Ellis and Doctor C. M. Rosin," The Blackfeet Indian Reservation, MT, Dec. 30, 1915 -Jan. 1916: 2. US. DI. OIA. *BA, DCI 150, Year 1916, File 35332*. Documents. UM Mansfield Library, 1916. From JSTOR.org.

frequent. Though Linnen did not state that the vision loss was caused by trachoma, given its spread throughout the reservation it can be assumed that these references are likely reports of trachoma-caused vision loss and blindness. Additionally, Linnen stated that Cree Medicine's two children attended school. Schools were a likely place where children contracted trachoma and inadvertently introduced the disease into their households.

In a few cases, Linnen made note of the mildness or severity of a trachoma case he witnessed. In describing the household of Joe Trombley, Linnen noted "suspicious signs of trachoma in both children," making clear that he was unsure of the diagnosis.[108] It seems likely that the children were in the early stages of trachoma when their symptoms might have been mistaken for other eye diseases. For the household of Frank Vielle, who had seven children, Linnen noted that "He and wife and most of the children have mild form of trachoma."[109] It is unclear why Linnen chose to specify that trachoma was "mild" among this family. This qualification suggests that when Linnen reported on other cases of trachoma they were past the mild stages. If so, then Linnen's many reports of trachoma shows that trachoma was advanced and endemic among the Blackfeet. Linnen also noted when he came across unusually severe cases. In the household of Eddie Running Crane Linnen reported "Daughter, Annie, 9 years old, has very bad case of trachoma and neck scrofula, Son, Dan, also has a bad case of trachoma."[110] Linnen's description suggests that the cases seen in Annie and Dan Running Crane were unusual. This might be because trachoma cases were usually more common but less severe in

[108] Linnen, "Exhibit A: Dec. 30, 1915 – Jan. 1916," *DCI 150, File 35322.*
[109] Ibid.
[110] Ibid.

children. With examples like these, Linnen firmly established that trachoma was endemic on the Blackfeet reservation.

Despite these reports, not all agents assigned to the Blackfeet reservation were aware that trachoma had been endemic for years. In his 1917 report to the Board of Indian Commissioners, agent Malcolm McDowell noted that 615 trachoma cases, of 1818 Native Americans examined, were found on the reservation.[111] McDowell claimed that records "prior to 1916 [did] not show that trachoma was so general." McDowell argued that the increased reports of trachoma were due to the frequency of medical inspections since 1915. This seems unlikely as even before prevalence data was gathered, agents like Dr. Harrison recognized that trachoma was widespread. Again in 1917 another report stated that of the total population (1702) there were 657 confirmed trachoma cases.[112] Special physician Dr. Dewey estimated that around 1497 cases were present on the reservation, showing that trachoma was still endemic.[113] In March of 1918, Assistant Commissioner E.B. Meritt remarked that 46% of the reservation was infected with trachoma.[114] Two years later, General Hugh Scott, member of the Board of Indian Commissioners, wrote that at the Cut Bank Boarding School 27 of 30 students had trachoma.[115] When discussing the situation at Heart Butte, Gen. Scott remarked "Here are most of the blind and helpless Indians…. These old and blind people are utterly unable to

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[111] Secretary Malcolm McDowell to Hon. George Vauz Jr. Chairman of Board of Indian Commissioners, Washington, D.C. Nov. 31, 1917: 32. US. DI. OIA. *BA, DCI 150, Year 1918, File 12419*. Documents. UM Mansfield Library, 1917–1920. From JSTOR.org.
[112] Dr. R. E. L. Newberne. "Special Report on the Blackfeet Agency, Montana," Browning, MT, May 24-31, 1917. US. DI. OIA. *BA, DCI 150, Year 1917, File 54536*. Documents. UM Mansfield Library, 1917. From JSTOR.org.
[113] Ibid.
[114] Assistant Commissioner E.B. Meritt to Superintendent Fred C. Campbell. March 28, 1918. US. DI. OIA. *BA, DCI 150, Year 1918, File 12419*. Documents. UM Mansfield Library, 1917–1920. From JSTOR.org.
[115] Gen. Scott to Hon. George Vaux, Jr. Sept. 27, 1920. US. DI. OIA. *BA, DCI 150, Year 1920, File 104722*. Documents. UM Mansfield Library, 1920–1921. From JSTOR.org.

make a living and those like them in every civilized community are taken care of." Gen. Scott viewed widespread blindness as a barrier to the assimilation of Native Americans.

The following year reports on the Blackfeet reservation schools noted the presence of trachoma and the importance of nurses for trachoma care in the schools.[116] In late 1922, Dr. Ralph R. Ross, special physician, completed a health survey of the reservation.[117] Dr. Ross examined 1607 Blackfeet and discovered around 17% infected with trachoma. Dr. Ross also stated that he "performed 106 operations on the eyes, throat, and nose of these Indians." Despite these operations, Dr. Ross argued that "unless something is done for improvement of housing condition with better sanitation I do not see how either tuberculosis or trachoma can be fought and successfully conquered." Clearly, Dr. Ross was worried about the ability of the OIA to successful eradicate infectious diseases. In Dec. 1922 Blackfeet students were examined at each school on the reservation.[118] Trachoma was reported at all these schools, with the lowest rates being 10% of students at Camp Nine Public School and the highest being 58% of students at the South Fork Cut Bank Public School. Trachoma had likely been endemic among the Blackfeet for years and it was only with the increased health statistics in the 1910s that the OIA became fully aware of the issue. Reports during this period continually show that trachoma was a serious health issue on the Blackfeet reservation.

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[116] Chairman of School Board J.L. Sherburne to F.C. Campbell. April 14, 1921. US. DI. OIA. *BA, DCI 803, Year 1921, File 32588*. Documents. UM Mansfield Library, 1920–1921. From JSTOR.org.
[117] Dr. Ralph H. Ross to CIA Burke. Browning, MT, Dec. 9, 1922. US. DI. OIA. *BA, DCI 806, Year 1922, File 95850*. Documents. UM Mansfield Library, 1922–1923. From JSTOR.org.
[118] Dr. Ross to CIA Burke, Browning, MT, Dec. 1, 1922. United States. DI. OIA. *BA, DCI 806, Year 1922, File 95850*. Documents. UM Mansfield Library, 1922–1923. From JSTOR.org.

The Blackfeet Nation also recognized the issue of endemic trachoma on their reservation. For example, in his testimony to the 1915 Joint Commission to Investigate Indian Affairs, Blackfeet tribal council member Robert J. Hamilton reported that there was lots of trachoma on the reservation.[119] Hamilton noted that agency physicians had treated many cases in August and September of that year. Despite this effort, Hamilton testified to the poor medical care that tribal members usually received by agency physicians. Hamilton called attention to the urgent need for better healthcare. Hamilton's testimony shows that the members of the Blackfeet Nation were concerned about the same health issues being discussed by the OIA and aware of the gaps in healthcare coverage. These gaps would need to be addressed if the OIA were to be successful in eradicating trachoma.

Contributing Factors to Endemic Trachoma

The OIA had firmly established that trachoma was endemic on the Blackfeet reservation by 1917 but continued to debate what factors contributed to the disease's spread. Early on, the Blackfeet Agency recognized the health disparities on the reservation. In 1913, Dr. Harrison called attention to the poorer health outcomes seen on the south side of the reservation.[120] The southern part of the reservation, known as the Heart Butte district, was mostly inhabited by full-blood Native Americans. The Heart Butte district was poor, lacked adequate housing, and had little sanitary or medical

[119] "Blackfeet Indian Reservation Serial One: Hearings Before the Joint Commission of the Congress of the United States Sixty-Third Congress Second Session to Investigate Indian Affairs Part Six," Feb. 21-March 25, 1914: 576. US. DI. OIA. *BA, DCI 154, Year 1915, File 16682 [2 of 2]*. Documents. UM Mansfield Library, 1914–1915. From JSTOR.org.
[120] Lipps and Dr. Harrison to CIA Sells, Sept. 15, 1913. *DCI 150, File 3479*.

infrastructure. Dr. Harrison suggested an agency physician be stationed full time at Heart Butte to provide medical care and address the pressing needs of this district.

Agency physicians corroborated Dr. Harrison's report on Heart Butte. In January of 1916, physicians Dr. Eugene Rice, Dr. Clifton Rosin and Dr. Leslie Stauffer, wrote a letter to Linnen describing the conditions in each of the districts on the reservation.[121] District 1 and 2 included the northern part of the reservation, the Cut Bank Boarding School, the town of Blackfoot, and the old Sanitorium. Better health conditions were reported in District 1 and 2, along with a mention that the area was mostly inhabited by mixed bloods and whites. The physicians reported that there were "cases of Tuberculosis and to lesser degree Trachoma that present themselves fairly well under observation and treatment," suggesting better medical care and health outcomes in these districts.

In contrast, District 3, which included Heart Butte, the Old Agency, the Mission School and two day-schools, had far worse health outcomes. Tuberculosis and trachoma were reported at "75 and 50 per cent respectively." Once again, the physicians noted that the area was inhabited by mostly full bloods. The physicians were not optimistic about the ability of the federal government to treat the situation as they wrote "Conditions are here present that no supervision by Medical staff, increased fourfold, Field Matron or Farmer can combat or rectify." The physicians viewed the complete destruction of "residences, bedding, clothing, blankets and furniture by fire" as the only option to stop the spread of disease. Once accomplished the physicians recommended the creation of a "new sanitary structure and issues of fresh supplies and equipment" and recommended

[121] Dr. Eugene H. Rice, Dr. Clifton M. Rosin, and Dr. Leslie J. Stauffer to E.B. Linnen, Browning, MT, Jan. 7, 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 35332*. Documents. UM Mansfield Library, 1916. From JSTOR.org.

the creation of an emergency hospital to treat cases. Not only did the physicians recognize the geographical health disparities but their recommendations centered on fixing the environmental causes of disease rather than solely treating individual cases.

While the OIA was clearly aware of environmental factors, the repeated mentions of "full bloods" in association with trachoma does raise questions as to whether the OIA had a race-based interpretation of the disease. Scientists and physicians of the time debated whether racial immunity and susceptibility occurred for certain diseases. The idea that Native Americans had "no natural immunity" plagued debates about diseases on the reservations.[122] Assumptions that Native Americans had no natural immunity to certain diseases was used to explain the high rates of certain diseases. For trachoma, the idea of "natural immunity" because of race was used to explain the disease's lack of prevalence among African American communities.[123] In contrast, the high rates of trachoma among Native Americans were often associated with the poor conditions on the reservation. However, racial bias did impact some interpretations of trachoma. Historians emphasize that many viewed Native Americans as too "uncivilized" to be taught about hygiene and sanitation.[124] There were debates within the OIA as to whether Native Americans could be taught to maintain a clean household, have personal hygiene, and understand how to prevent disease. It is possible that the references to trachoma being more prevalent among full-blooded Native American were remarks on racial attitudes of disease. Still, the idea of racial susceptibility does not appear to have been the main framework used by the Blackfeet Agency to plan their trachoma campaigns. The

[122] Jones, "Virgin Soils Revisited," 703-742; Fox, "The Indian and the Trachoma Problem," 467.
[123] Fox, "Trachoma Among the North American Indians," 84**;** Louis Alphonse Julianelle, *The Etiology of Trachoma,* (London: Oxford University Press, 1938): 33-34.
[124] Benson, "Race, health, power," 89-95; Larkin-Gilmore, "Eyes of the Beholder."

Blackfeet Agency made efforts to address the environmental factors and incorporated education into their early anti-trachoma efforts.

Efforts to rectify the situation at Heart Butte focused on addressing healthcare gaps and housing infrastructure. Early reports on Heart Butte, like that made by Linnen in 1916, described "poor ventilated, unclean, and unsanitary" houses.[125] Linnen argued for tearing down existing houses and building new structures because only after new housing was built would efforts to educate on sanitation and hygiene be useful. Linnen's recommendations echo that of the Blackfeet Agency physicians who saw housing infrastructure as the first step that needed to be corrected at Heart Butte. It appears the OIA followed up on these suggestions. Commissioner Sells reported in 1916 that "earnest effort [was] being made to improve home conditions and bring about a higher sanitary standard of living" at Heart Butte.[126] Sells also reported that a physician had been stationed at Heart Butte. Sells' letter suggests the OIA was taking steps to address some the specific needs of Heart Butte. By 1917 some improvements had been made. A special report in May 1917 noted that housing conditions at Heart Butte had improved. Still, Special Supervisor Dr. R. E. H. Newberne voiced skepticism that funding could be acquired to achieve all the improvements that were needed for Heart Butte.

Along with lacking funds to improve housing, the Blackfeet Agency had struggled to obtain and retain the necessary medical staff. While in 1916 there were three

[125] Linnen, "Report on The Blackfeet Indian Reservation," Feb. 3, 1916. *DCI 150, File 35332*.
[126] CIA Cato Sells to Mrs. Mary Roberts Rinehart. Dec. 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 128114*. Documents. UM Mansfield Library, 1916. From JSTOR.org.

physicians by 1918 there was one physician who "had been there but a short time."[127] While adequate staffing had been an issue for the OIA throughout the early twentieth century, World War I exacerbated these issues. During World War I (WWI) many OIA physicians were conscripted or chose to leave the OIA for more lucrative private practices.[128] Few that left during WWI chose to return to the OIA following the conclusion of the war. Despite staffing and funding issues, the Blackfeet Agency did mount two concerted efforts to control trachoma prior to the Northwest campaign. One effort focused on trachoma in the schools and the other tried to address the needs of the Heart Butte district through treatment and sanitation.

[127] Supervisor Walter G. West "Inspection Report of Supervisor Walter G. West Blackfeet Reservation, Montana. August 3, 1918. Section III. Health," Aug. 3, 1918. US. DI. OIA. *BA, DCI 150, Year 1918, File 67644*. Documents. UM Mansfield Library, 1918–1919. From JSTOR.org.
[128] Trennert, *White Man's Medicine,* 119-154; Trennert, "Indian Eye Sores," 128.

The Blackfeet Agency's Early Intervention Efforts

School Interventions

Initially the Blackfeet Agency created an anti-trachoma plan centered around the schools. By focusing on the schools, the Agency hoped to both treat children and educate them on sanitation and personal hygiene. The first decision that needed to be made was whether trachomatous students would be allowed to stay enrolled at the existing schools on the reservation. In his 1913 report, Dr. Harrison suggested that trachomatous students stay enrolled in the schools so they could receive proper treatment.[129] Some, like Dr. Harrison, saw the schools as the best place to treat and track trachoma cases. Others viewed trachomatous children as a health risk to the student body and thought they should be either unenrolled or enrolled in a separate trachoma school. Mrs. McFatridge, wife of Blackfeet Agency Superintendent Mr. McFatridge and Blackfeet Agency staff member, was one of the people that disagreed with Dr. Harrison on the enrollment of trachomatous children.[130] Mrs. McFatridge stated that she would not allow trachomatous children to attend school. While the OIA loosely recommended that trachomatous children be separated from healthy students, they provided no formal directions or funding to ensure that these suggestions were followed.[131] The decision on trachomatous students was left largely up to the individual agencies. Despite objections from staff members like Mrs. McFatridge, the Blackfeet Agency decided to keep trachomatous children enrolled at the schools.

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[129]Lipps and Dr. Harrison to CIA Sells, Sept. 15, 1913. *DCI 150, File 3479*.
[130] O. H. Lipps, "Report of Investigation of Administration, Blackfeet Agency, Montana," Sept. 20, 1913. US. DI. OIA. *BA, DCI 150, Year 1913, File 3479*. Documents. UM Mansfield Library, 1913. From JSTOR.org.
[131] Trennert, "Indian Eye Sores," 124-125; Putney, "Fighting the Scourge," 146.

Early efforts to treat trachoma in the schools were hindered by a lack of standardized care, lack of medical records, and a failure to segregate trachomatous students. In a 1914 inspection of the Browning School, a day school on the reservation, Dr. Rice critiqued the school for its lack of consistent care given to trachomatous students.[132] In the report, 19 cases of trachoma were recorded along with 15 cases of incipient trachoma. Dr. Rice estimated that about 47% of students suffered from some type of eye irritation, with trachoma, conjunctivitis and other eye issues present at the school. The lack of medical records was also criticized. Without medical records there was no way to track cases and assess how often students were being reinfected. With almost half of the student body suffering from eye diseases, the ability to track and treat trachoma was a prominent concern. Dr. Rice reported that trachomatous students at Browning were not separated from the rest of the student body. Failure to segregate trachoma cases risked spreading trachoma throughout the student body. Reports such as this one pressured the Blackfeet Agency to develop a standardized method of dealing with trachoma in the schools.

Early on it was debated whether trachomatous students could be feasibly segregated from the rest of the student body. With no funding for a trachoma school, other methods of segregating students had to be used. Dr. Newberne argued that the "segregation of tubercular and trachomatous pupils would not be practicable" and "open air sleeping and open air classes are not feasible" because of the climate in northern

[132] Dr. E. H. Rice to E.B. Linnen, "Inspection of Schools," Browning, MT, Dec. 18, 1914. US. DI. OIA. *BA, DCI 154, Year 1915, File 16682 [2 of 2]*. Documents. UM Mansfield Library, 1915–1928. From JSTOR.org.

Montana.[133] Furthermore, no funding was provided for building a separate trachoma school. Unenrollment was not an option as the school setting was the primary location where children were treated. Still, the Blackfeet reservation school staff came up with ways to segregate trachomatous students within the existing school buildings.

By 1915 efforts were being made to segregate trachomatous students and containment efforts centered on classrooms. Special seats were assigned for trachomatous students to avoid contamination of seats and desks.[134] Trachomatous students were given separate pencils. Once used, these pencils were fumigated before being allowed for general use. Hand towel usage was also updated in 1915. For the day schools, separate hand towels were provided for each student. At the Cut Bank Boarding School "the Pullman system" was used. This appears to be a reference to hand towels purchased from the Pullman Company, a national railroad company that manufactured hand towels and other textiles for their trains.[135] The "Pullman system" remained a popular used method in reservations schools throughout the period.[136] It is unclear how effective these segregation methods were and what impact they had on the students.

Trachomatous students were also treated at the schools. A March 1915 report from Charles L. Ellis reported that agency physician Dr. Eugene W. Hill was "giving each pupil individual attention and daily treatment for trachoma where necessary."[137]

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[133] Dr. R. E. L. Newberne, "Special Report on the Blackfeet Agency, Montana," May 24-31, 1917. *DCI 150, File 54536*.
[134] C. L. Ellis to CIA Cato Sells. March 18, 1915, *DCI 150, File 32216*.
[135] Pullman Company hand towels were likely purchased by the federal government for use in the Indian boarding schools. It is unclear what the "Pullman system" referred to in terms of hand towel usage but might have been a system of washing and cleaning the hand towels. For an example image of the hand towels see Encyclopedia of Pullman, "Pullman Hand Towel Image No. 16873", *Pullman History Site,* April 2020.
[136] Meriam, *The Problem of Indian Administration,* 210.
[137] Charles L. Ellis to CIA Cato Sells. March 18, 1915. *DCI 150, File 32216*.

While no mention is made of the specific type of "daily treatment" the students received, the language of these early reports suggests that this treatment involved common chemical treatments like the blue stone treatment. Later reports emphasized when cases were "operated on" versus "treated" with non-surgical means. An August 1915 special report commended Dr. Hill, physician at the Cut Bank Boarding School, for segregating dormitories, school rooms, and dining halls.[138] Despite 49 cases of trachoma being reported the prior year, Dr. Hill's efforts were viewed as proof that "every precaution [was being] taken against the disease" at Cut Bank Boarding School and other schools.

Beyond treating and segregating students, the Blackfeet physicians and school staff incorporated an educational aspect to their campaign. Ellis's report mentioned that the school staff conducted hygiene lectures and educational lectures on the dangers of trachoma and other diseases.[139] Some scholars have argued that the OIA failed to conduct an educational campaign for trachoma because of racialized views of Native Americans.[140] While some members of the OIA likely did hold these views of Native Americans, it appears that the staff at the Blackfeet Agency viewed education as an essential part of their early trachoma efforts. Reports mention that education was needed so that children could be taught to break the cycle of transmission by practicing personal hygiene and educating their parents.[141] Thus, the early anti-trachoma efforts at the

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[138] Dr. R. E. L. Newberne, "Special Report on the Blackfeet Agency," Aug. 14, 1915. *DCI 150, File 91473*.
[139] C. L. Ellis to CIA Cato Sells. March 18, 1915. *DCI 150, File 32216*.
[140] Benson, "Blinded with Science," 9-11; Larkin-Gilmore, "Eyes of the Beholder."
[141] C. L. Ellis to CIA Cato Sells. May 1, 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 35332*. Documents. UM Mansfield Library, 1916. From JSTOR.org; Chairman of School Board J.L. Sherburne to F.C. Campbell, April 14, 1921. US. DI. OIA. *BA, DCI 803, Year 1921, File 32588*. Documents. UM Mansfield Library, 1920–1921. From JSTOR.org; C. L. Ellis to CIA Cato Sells. March 18, 1915. *DCI 150, File 32216*.

Blackfeet Agency used a blended method of education and treatment to address trachoma.

While these early school-based efforts did not eradicate trachoma among Blackfeet children, they provided a foundation that would guide future campaigns. Assistant Commissioner E.B. Meritt provided an update on the trachoma situation at the Blackfeet school in March 1918.[142] Unfortunately, 46% of students were reported to be affected by trachoma, suggesting little improvement had been made in stopping the spread of trachoma in the schools. Still, Meritt made a point to mention that steps were being taken by a special physician to clear up the situation, showing that the OIA was not giving up on the possibility of eradicating trachoma.

Meritt stressed that the Blackfeet physicians recognized that "the after-treatment in trachoma [was] very necessary if the treatment [was] to be a success." After care was provided to students by field matrons and nurses after a special physician "performed the necessary operations and instituted the requisite medicinal treatment." Two things are important to note about this description. The first is Meritt's use of the word "operation". Since Meritt also mentioned "medicinal treatment", the use of "operation" likely referred to surgical intervention for trachoma. While the exact operation is not listed, likely Blackfeet Agency physicians used a form of simple grattage, the most common surgical intervention for trachoma at this time. Thus, surgical intervention for trachoma was introduced prior to Dr. Fox's initial visit to the reservation in 1923. Second, Meritt emphasized the importance of after-care for successful trachoma operations. The lack of after-care is one of the main criticisms that historians have raised about the Southwest

[142] E.B. Meritt to F. C. Campbell. March 28, 1918. *DCI 150, File 12419*.

Trachoma Campaign.[143] While physicians in the Southwest learned about after-care during the Southwest campaign, the Blackfeet physicians already recognized this fundamental aspect of surgical operations. Their prior knowledge of these surgeries for trachoma is likely one of the main reasons the Blackfeet Agency adopted Dr. Fox's recommendations and were able to perform so many operations without the same complications that were seen in the Southwest. These references to "operations" prior to the Northwest campaign raise questions about when surgeries for trachoma were first introduced to the Blackfeet reservation and by whom.

The 1916 Sanitary Campaign

Along with treating trachoma in the schools, the Blackfeet Agency conducted a short four-month sanitary campaign in 1916. After Linnen's 1916 report about the widespread nature of trachoma, the Blackfeet Agency decided to conduct an anti-trachoma campaign. A 1916 memorandum stated that the sanitary campaign was "inaugurated with the purpose of placing all trachoma cases under treatment and improving housing conditions in the Heart Butte District."[144] The Agency was responding to Linnen's report that called attention to the unsanitary environment and poor health outcomes at Heart Butte. Historians that focus on the Southwest have criticized the OIA for failing to attempt sanitation campaigns prior to the surgical campaign.[145] In contrast to the Southwest, the Blackfeet Agency recognized the need to address environmental factors, provide treatment, and provide education. Moreover, surgical treatment for

[143] Putney, "Fighting the Scourge," 249-251.
[144] "Memorandum 39789-16, 16300-17, 128114-16," 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 128114*. Documents. UM Mansfield Library, 1916. From JSTOR.org.
[145] Benson, "Blinded with Science," 4; Larkin-Gilmore, "Eyes of the Beholder."

trachoma was introduced during the 1916 campaign. Thus, the sanitary campaign enabled the Blackfeet Agency to learn about surgical intervention prior to the Northwest campaign. The knowledge gained during the 1916 sanitary campaign influenced how the Blackfeet Agency conducted the later Northwest campaign.

In response to Linnen's January 1916 report, the OIA sent Dr. Dewey, an eye specialist, and Supervisor Newton to the reservation.[146] Dr. Dewey was assigned to the Blackfeet reservation in May to head up the sanitary campaign. Both Commissioner Sells and Assistant Commissioner Meritt expressed optimism for the campaign's ability to right the situation at Heart Butte.[147] The campaign was structured on treatment, education, and infrastructure. In terms of treatment, Dr. Dewey was assigned to seek out and treat trachoma within the Heart Butte district. McDowell reported that "Dr. Dewey examined over 1800 Indians for trachoma during the campaign" and the results were "noticeable" during his inspection.[148] In May, Sells praised Dr. Dewey for treating "about 60 eye cases a day here at Heart Butte."[149] In June 1916 an inspection report by Supervisor L.F. Michael noted that "186 [of 510 patients examined] had to be operated [on] and the balance are receiving proper local treatment."[150] Furthermore, an unnamed physician at the reservation reported that he "examined over one thousand Indians and

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[146] Linnen, "Report on The Blackfeet Indian Reservation," Feb. 3, 1916. *DCI 150, File 35332*.
[147] E.B. Meritt to Mountain Chief. May 26, 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 17031*. Documents. UM Mansfield Library, 1916. From JSTOR.org; CIA Cato Sells to Mountain Chief, May 10, 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 17031*. Documents. UM Mansfield Library, 1916. From JSTOR.org.
[148] Secretary Malcolm McDowell to Hon. George Vauz Jr., Nov. 31, 1917. *DCI 150, Year 1918, File 12419*.
[149] CIA Cato Sells to Mountain Chief, May 10, 1916. *DCI 150, File 17031*.
[150] L.F. Michael "Inspection Report" June 30, 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 00*. Documents. UM Mansfield Library, 1916. From JSTOR.org.

performed two hundred thirteen operations." Thus, by 1916 surgical intervention for trachoma was being used on the Blackfeet reservation.

The reports on the 1916 sanitary campaign are the first time that Blackfeet Agency physicians distinguished between trachoma cases that were "operated on" versus "treated". Since Dr. Fox had yet to introduce "radical grattage" and tarsectomy to the Blackfeet Agency physicians, what "operation" were these reports referring to? Given the timing of the reports it is most likely that the operations were a form of simple grattage, which was a common surgical intervention for trachoma at that time. The transition from "treatment", which likely referred to chemical corrosive treatments, to "operation", likely referring to simple grattage, shows how the Blackfeet Agency physicians were adapting their treatment methods. The physicians' decision to introduce surgical intervention during the sanitation campaign is intriguing. It is possible that the physicians had too many patients with advanced trachoma to be treated through non-surgical means. Dr. Dewey, an eye specialist, might have introduced surgical intervention to the Blackfeet because of personal knowledge or experience with grattage and its potential benefits.

The decision to introduce surgical treatments gave the Blackfeet Agency physicians an opportunity to learn how to conduct surgical treatments successfully. The sanitation campaign also introduced surgical treatment to the Blackfeet, making them familiar with the idea of surgery for trachoma. Thus, by the time of the Northwest Campaign both physicians and patients were familiar with the idea of surgical treatment for trachoma. This familiarity might help explain why physicians and patients at the Blackfeet reservation accepted Dr. Fox's recommendations. Radical grattage might have been viewed as a "newer" form of a method already being utilized. Prior experience with

surgical intervention may have made tarsectomy seem like a logical extension of surgical treatments. Both physicians and patients entered the Northwest Campaign already familiar with surgical treatments, giving them an advantage in learning the specific techniques Dr. Fox recommended.

Though the campaign used surgical treatment, it also sought to improve the hygiene and sanitation at Heart Butte. McDowell wrote that "face towels were distributed, two for each member of the family, for the common towel [was] the most effective agency for spreading trachoma."[151] By providing personal towels, the campaign staff tried to eliminate environmental factors that spread trachoma. Towel distribution also provided staff an opportunity to educate the Blackfeet on new personal hygiene habits. In a 1916 letter it was noted that field nurses "spent several months in the Heart Butte district the past summer, making a house to house canvas, cleaning up insanitary conditions, treating disease, etc., in an earnest effort not only to improve present conditions, but also to establish a higher standard of living among the Indians."[152] Environment was clearly seen as crucial to controlling the spread of disease. Thus, the sanitary campaign blended treatment and prevention to address the needs at Heart Butte.

The sanitary campaign also showed physicians how important personal relationships with the Blackfeet were to a campaign. Early in the campaign the OIA expressed optimism for the campaign's success. Inspector Michael reported that the Blackfeet responded, "splendidly to the demands of the doctor, and if the work [was] carefully followed up after he completes the same, much good can be hoped for."[153] The

[151] M. McDowell to Hon. George Vauz Jr., Nov. 31, 1917. *DCI 150, File 12419*.
[152] CIA Cato Sells to Mrs. Mary Roberts Rinehart. Dec. 1916. *DCI 150, Year 1916, File 128114*.
[153] L.F. Michael "Inspection Report," June 30, 1916. *DCI 150, File 00*.

OIA anticipated that the campaign would need at least a year of maintenance, with a field nurse being recommended to keep "in constant and close touch with the trachoma and tuberculosis situation." Michael went on to note the general attitude of the Blackfeet towards each physician, suggesting that patient relationships with the physicians were seen as an important part of the campaign. Dr. Stauffer was noted as being popular among teens because he responded "cheerfully to the calls made for his services." Dr. Stauffer's willingness to respond to the needs of his patients likely helped foster a positive doctor-patient relationship. If the Blackfeet were more willing to seek out Dr. Stauffer's services and take his advice, his contribution to the campaign's success would be greater.

In contrast, Dr. Rosin was reported as having "a rather strong willed disposition" and was "not as tactful and patient as Dr. Stauffer," therefore likely not as well liked by his patients. The report also noted that Dr. Rosin was "mixed up in a liquor scandal" that eventually saw his removal from his position at the reservation. A passing mention was made of Dr. C.J. McCallister who was stationed at Heart Butte in November 1916, after the campaign ended. Dr. McCallister seems to have been placed in this district to meet the physicians request for a physician at Heart Butte. Michael noted that "The Indians [seemed] to be especially well pleased with the services of Dr. C.J. McCallister."[154] These reports are mediated through the OIA agents so caution should be taken before assuming they reflect the unbiased opinions of Blackfeet patients. Still, given the criticism of Dr. Rosin, it is likely that Michael captured some of the attitudes he

[154] L.F. Michael "Inspection Report" Nov. 15, 1916. US. DI. OIA. *BA, DCI 150, Year 1916, File 00*. Documents. UM Mansfield Library, 1916. From JSTOR.org.

observed. Given the lack of records from the patient viewpoints, we can only theorize what Blackfeet patients thought of the doctors and their 1916 sanitary campaign against trachoma. Still, it is possible that the potentially positive reputations of Dr. Stauffer and Dr. McCallister might have helped ensure the sanitation campaign's short success.

Despite its initial success, the campaign failed to have a lasting impact. Several factors contributed to the campaign's failure to eradicate trachoma. McDowell reported that "The campaign lasted about four months and just as it was achieving good results the lack of funds brought it to a close."[155] Such a result was typical of OIA health programs during this time, especially given the funding cuts and staffing issues resulting from WWI. Additionally, geography and weather prevented the sanitary campaign from being expanded. A memorandum at the end of the year noted that "the field matrons and physician at Blackfeet [were] supposed to keep up the trachoma treatment, although it [was] somewhat doubtful if they have been able to accomplish this" because of winter weather and long distance travel required.[156] While the campaign had centered on Heart Butte traveling to patients had been easier, but expanding the campaign to the whole reservation required more staff than the Blackfeet Agency had. During the spring and summer the campaign had been able to operate successfully but winter weather prevented both patients and physicians from traveling. Thus, a variety of factors led to the Blackfeet Agency's failure to build on the initial success of the sanitary campaign. Still, the sanitary campaign provided the Agency an opportunity to learn what was needed for the next trachoma eradication effort.

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[155]M. McDowell to Hon. George Vauz Jr., Nov. 31, 1917. *DCI 150, File 12419*.
[156] "Memorandum 39789-16, 16300-17, 128114-16," 1916, *DCI 150, File 128114*.

The Northwest Trachoma Campaign

The Northwest Trachoma Campaign of 1923-27, was the Blackfeet Agency's third concerted efforted to eradicate trachoma among the Blackfeet. Though it did not eradicate trachoma in the region, the campaign was largely successful. Reports on the Blackfeet prior to the campaign claimed there were hundreds of trachoma cases yearly.[157] In contrast, after the campaign there were reports of less than 100 cases per year.[158] The widespread use of surgery successfully restored the vision of many trachoma patients and prevented permanent blindness for these patients. Surgical intervention improved these patients' quality of life. Though the surgeries were not always completely successful, the benefits of the Northwest Trachoma Campaign were significant and unmatched by any other trachoma effort the OIA attempted prior to the invention of an effective antibiotic treatment in 1938.

The Northwest campaign began in the summer of 1923 when Dr. Fox, who had been visiting Glacier National Park, was asked by the Blackfeet Agency to visit the reservation and help them conduct a health assessment.[159] During this tour it was discovered that about 30%, 351 cases of 1168 patients examined, of the reservation were infected with trachoma.[160] At some point during that initial tour Dr. Fox demonstrated his

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[157] O.H. Lipps and Dr. W. H. Harrison to CIA Cato Sells, Sept. 15, 1913. *DCI 150, File 3479*; Dr. Rosin to CIA Cato Sells, Jan. 21, 1916. *DCI 150, File 35332*; M. McDowell to Hon. George Vauz Jr., Nov. 31, 1917. *DCI 150, File 12419*; Dr. R. H. Ross to CIA Burke, Dec. 1, 1922. *DCI 806, File 95850*.
[158] "Conference of Chapter Officers-Five Year Program," Cut Bank Boarding School, June 28-29, 1927. US. DI. OIA. *BA, DCI 054, Year 1927, File 44097*. Documents. UM Mansfield Library, 1927. From JSTOR.org; Dr. D.C. Turnipseed, "Inspection Report Blackfeet Indian Agency," Browning, MT, Nov. 9, 1928. US. DI. OIA. *BA, DCI 150, Year 1928, File 54419*. Documents. UM Mansfield Library, 1928. From JSTOR.org.
[159] Fox, "Trachoma Among the Blackfeet Indians," 166.
[160]Ibid., 168.

trachoma techniques, radical grattage and tarsectomy, at the Blackfoot hospital.[161] The Blackfoot hospital was an old sanatorium that had been converted into a general hospital and was located near the town of Blackfoot. Blackfeet Agency physicians were familiar with grattage from the prior 1916 sanitary campaign, but Dr. Fox introduced them to tarsectomy. The *Great Falls Tribune*, a local Montana newspaper, reported in 1924 that Dr. Fox had "perfected" the techniques and "came to Montana last May to teach his new treatment to Dr. Fahey [a Blackfeet Agency physician]."[162] Reports do not mention how many patients were treated during this initial demonstration. While these techniques became known among the OIA, and modern scholars, as "the Fox method," they were not Dr. Fox's own inventions. Still, Dr. Fox became recognized as in America as a leading expert in these surgical operations.

Dr. Fox's visit left a positive impression on the Blackfeet Agency who decided to send Dr. Yates, physician at the Blackfeet reservation, to Philadelphia to train under Dr. Fox in February 1924.[163] Dr. Yates spent two months in Philadelphia learning radical grattage and tarsectomy until Dr. Fox deemed him competent to practice these techniques on his own. When Dr. Yates came back to the Blackfeet reservation he attempted to introduce these surgeries at the reservation but the Blackfeet were reluctant to undergo surgery, perhaps because of the unfamiliarity with tarsectomy.[164] It took until May for Dr. Yates to find a willing patient to agree to surgery.[165] Reports do not mention how Dr.

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[161] *Great Falls Tribune,* "Doctors Study Fox Method of Curing Trachoma Among Indians at Browning Clinic."
[162] *Great Falls Tribune*, "Trachoma Operations Performed at Havre," Sept. 20, 1924. From Newspapers.com.
[163] *Great Falls Tribune,* "Doctors Study Fox Method of Curing Trachoma Among Indians at Browning Clinic."; Fox, "Trachoma Among the Blackfeet Indians," 171.
[164] *Great Falls Tribune,* "Doctors Study Fox Method of Curing Trachoma Among Indians at Browning Clinic."
[165] Ibid.

Yates persuaded the Blackfeet to agree to surgical intervention but it appears that once one patient agreed others quickly followed because by September of that year Dr. Yates had operated on 110 patients.[166] Similarly, since being trained by Dr. Fox in May 1923, Dr. N.A. Fahey had "operated on 126 Indian patients and with a very high degree of success."[167] The Blackfeet Agency physicians clearly felt comfortable performing the surgical techniques they had been taught by Dr. Fox.

The First Trachoma Clinic

In September Dr. Fox returned to the reservation to conduct his first full-scale trachoma clinic. The clinic, held at the old Blackfoot hospital, started on Sept. 3, 1924, and lasted for several days.[168] In attendance were OIA physicians "Dr. Perkins of Arizona, Dr. Barton of Idaho and Dr. Steven, head of the medical service…[and]several local visitors," suggesting that a variety of people were interested in observing the surgeries.[169] Blackfeet Agency physicians were likely also in attendance. Newspaper reports focused on tarsectomy, with descriptions being made of the operation itself, length of the surgery, and post-operative care.[170] These descriptions align with that of the medical literature on simple tarsectomy. Some patients who were treated at this clinic included Mrs. William Croff, George Wren, and Ethel Rides-at-the-Door.[171] Dr. Fox

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[166] Ibid.
[167] *Great Falls Tribune*, "Trachoma Operations Performed at Havre."; *The Independent-Record,* "Trachoma Operations Performed at Havre," Sept. 21, 1924. From Newspapers.com; *The Augusta News,* "Reservation Physician Performs Operation for Trachoma at Havre," Oct. 9, 1924. From Newspapers.com; *The Kevin Review,* "Reservation Physicians Performs Operation for Trachoma at Havre," Oct. 2, 1924. From Newspapers.com; *The Wolf Point Herald,* "Reservation Physicians Performs Operation for Trachoma at Havre," Oct. 2, 1924. From Newspapers.com.
[168] *Great Falls Tribune,* "Doctors Study Fox Method of Curing Trachoma Among Indians at Browning Clinic."
[169] Ibid.
[170] Ibid.
[171] Ibid.

operated on many patients personally.[172] When not treating patients, Dr. Fox trained the physicians present at the clinic and observed them until he felt confident in their ability to operate. The *Great Falls Tribune* anticipated that there were "about 400 of whom the work will restore sight in a greater or less degree" at the Blackfeet reservation.[173] A significant number of patients were expected to benefit from the Northwest campaign.

The 1924 trachoma clinic was part of a larger five-day Indian Service conference being held in Browning, Montana.[174] The conference was an opportunity for OIA physicians to express the needs of their reservations and suggest health interventions. Some of the OIA physicians present were "Doctors Stevens, Barton, Stackpoole, Perkins, Fahey, Yates, and Craig," the last three of whom were stationed at the Blackfeet Agency.[175] During the conference Dr. Yates explain "the need for facilities to better handle the cases of trachoma and tuberculosis among Indians, not only on the Blackfeet reservations, but on other reservations in the northwest."[176] Dr. Yates's work earlier in the year had shown him that the old Blackfoot hospital was not equipped to handle the number of trachoma surgeries necessary for the campaign. Debates about the old hospital had occurred for several years, but the infrastructure needs for the Northwest campaign provided an incentive to relocate and update the hospital. Dr. Yates also recognized that better hospital facilities would be needed throughout the northwest for the campaign to successfully expand. Thus, the 1924 clinic helped demonstrate to OIA leaders the need

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[172] Fox, "The Indian and the Trachoma Problem," 466-467.
[173] *Great Falls Tribune,* "Doctors Study Fox Method of Curing Trachoma Among Indians at Browning Clinic."
[174] *Great Falls Tribune,* "District Sanitarium Urged for Indians at Browning," Sept. 5, 1924. From Newspapers.com.
[175] *Great Falls Tribune,* "District Sanitarium Urged for Indians at Browning."
[176]Ibid.

for updated medical infrastructure. The old Blackfoot hospital was eventually moved to Cut Bank, a more accessible location for patients, updated for surgery, and expanded to treat more patients.[177]

Overall, those present at the conference expressed hope for these new trachoma efforts. The only one who expressed "skepticism as to the ability of the Indian service to clean up all the cases of trachoma" was Dr. W. C. Barton, though at the time he did not voice criticism of the surgical techniques themselves.[178] Some physicians like Dr. Polk Richards would later raise concerns about the surgical methods themselves.[179] At the time though, the success of the 1924 clinic was convincing and has been attributed by modern scholars as being the primary reason for the OIA's adoption of surgical intervention for the Southwest campaign.[180]

Post-Clinic Efforts

Newspapers reported that Dr. Fox spent two months in Montana following the trachoma clinic. It is unclear whether all this time was spent assisting the Blackfeet Agency though the *Great Falls Tribune* noted that "Dr. Fox spent a considerable part of his 1924 vacation at Glacier park last summer," right near the reservation.[181] It does appear that Dr. Fox did lend his assistance to the campaign while in the area. *The Carbon County Chronicle*, a local Montana newspaper, claimed that during his stay in Montana

[177] *Great Falls Tribune,* "District Sanitarium Urged for Indians at Browning."; Gen. Hugh Scott, "Report on the Blackfeet Indian Agency," Princeton, New Jersey, Aug. 27, 1926. US. DI. OIA. *BA, DCI 150, Year 1926, File 46533*. Documents. University of Montana Mansfield Library, 1926. From JSTOR.org.
[178] Gen. Hugh Scott, "Report on the Blackfeet Indian Agency," Aug. 27, 1926. *DCI 150, File 46533*.
[179] Trennert, "Indian Sore Eyes," 131.
[180] Benson, "Blinded with Science," 4-6; Trennert, "Indian Eye Sores," 130-131; DeJong, *'If Only You Knew the Conditions',* 93-94.
[181] *Great Falls Tribune,* "Indian Clinic Aids Doctors," Jan. 6, 1925. From Newspapers.com.

"Dr. Fox voluntarily visited the Owen Heavy Breast Indian School" at the request of the school's founder Chief Owen Heavy Breast.[182] Dr. Fox's visit resulted in two trachomatous students being moved to the reservation hospital. The student body was also "given instructions that will prevent them from contracting the disease." Dr. Fox appeared to have assisted with the Northwest campaign when asked while he was in the region. *The Chronicle's* report shows that Dr. Fox utilized education alongside surgical intervention. Clearly, Dr. Fox recognized the importance of education in trachoma prevention even while advocating for the use of surgery.

Dr. Fox in the Southwest

In 1925 the OIA asked Dr. Fox to conduct a trachoma clinic in the Southwest.[183] In January of that year Dr. Fox held a trachoma clinic in Albuquerque, New Mexico. This clinic appears to be the only clinic Dr. Fox ever held in the Southwest. In contrast to his yearly visits in the Northwest, Dr. Fox was not heavily involved in the Southwest campaign. The Albuquerque clinic lasted 10 days.[184] Like the Northwest clinics, Dr. Fox demonstrated his techniques and then oversaw the operations of the physicians in attendance.[185] Despite newspaper reports that "abundant clinical material was afforded at the clinic" the 10-day limit makes it unlikely that physicians received enough education to be fully competent in the surgical techniques. [186] Whether the time limit on the Albuquerque clinic was because of decisions made by Dr. Fox or the OIA is unclear.

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[182] *The Carbon County Chronicle,* "Indians Adopt Doctor Who Cures Eyes of Blackfoot Tribesmen," Oct. 15, 1924. From Newspapers.com.
[183] Fox, "The Indian and the Trachoma Problem," 466.
[184] *Great Falls Tribune,* "Indian Clinic Aids Doctors."
[185] Putney, "Fighting the Scourge," 238; Benson, "Race, health, and power," 58.
[186] *The Philadelphia Inquirer,* "Dr. Fox Gets Results in War on Trachoma," Jan. 21, 1925. From Newspapers.com.

Additional education was provided to the Southwest physicians by the OIA physicians rather than Dr. Fox.[187] Moreover, Dr. Fox did not stay in the region after the conclusion of the clinic, meaning he did not return to assess how the physicians performed after their initial training period. Unlike in the Northwest where Dr. Fox provided long term support, the Southwest campaign was run without his involvement. It is apparent that physicians in the Northwest received more extended training periods and had more personal support from Dr. Fox throughout the campaign. Whether the limits on Dr. Fox's involvement in the Southwest were due to his personal decisions or the OIA is hard to stay. It seemed that by 1925 the Blackfeet Agency, in particular Dr. Yates, had developed a mutually beneficial relationship with Dr. Fox. Beyond this close relationship, Dr. Fox's habit of vacationing in Glacier National Park might have been an additional reason for his involvement in the Northwest campaign. The contrast between the surgical outcomes of the two campaigns suggests that Dr. Fox's involvement in the Northwest was a factor in the Northwest campaign's success.

Dr. Fox Made a Chief?

Many newspapers reported throughout the 1920s that Dr. Fox was made a chief and formally incorporated into several Native American tribes.[188] In Oct. 1924 *The Evening News,* a Pennsylvanian newspaper, reported that Dr. Fox had returned "to the East as an Indian Chief."[189] The article claimed that the Blackfeet "demonstrated their appreciation by bestowing the title of Chief Eagle upon him[Dr. Fox] and adopting him

[187] Benson, "Race, health, and power," 56-69; Putney, "Fighting the Scourge," 237.
[188] Dr. Fox was reported to be made a Chief by the Blackfeet and Navajo. *The Evening News,* "Tea Table Topics," Oct. 4, 1924. From Newspapers.com; *Harrisburg Telegraph,* "Dr. L. Webster Fox Is Now 'Pita Nice' of Navajo Tribe," Feb. 28, 1925. From Newspapers.com.
[189] *The Evening News,* "Tea Table Topics."

into their tribe" through a ceremony that was "the first of its kind to be held in sixty years." Both *The Carbon County Chronicle* and *Independent Observer,* local Montana newspapers, ran an article in October titled "Indians Adopt Doctor Who Cures Eyes of Blackfoot Tribesmen."[190] This article stated that Dr. Fox was made a member of the Blackfoot tribe and given "the name of 'Ne-ni-pe-ti,' in recognition of the benefits resulting from his work." The article claimed that this name translated to "'Chief Eagle,' and was conferred on him because of the Indians believe the eagle has the best eyes among all the species of the bird and animal kingdom," a nod to his trachoma work. These reports of Dr. Fox being made "Chief Eagle" are the first mentions hinting at the Blackfeet's views on Dr. Fox and his work.

Mentions of Dr. Fox being named "Chief Eagle" by the Blackfeet continued throughout the years of the Northwest campaign. *The Harrisburg Telegraph,* in 1925, ran an article titled "Salute Chief Eagle!", with an etching of Dr. Fox dressed in the traditional Blackfeet clothing and a feathered headdress.[191] *The Telegraph* wrote "They bestowed upon him all the honors of an Indian chief and gave him the name which he now bears in their tribe." Additional newspaper articles in 1926 repeatedly mention this event when reporting on Dr. Fox's trachoma work. *The Philadelphia Inquirer* in July 1926 added additional details of Dr. Fox being "presented with rare gifts of Indian art and craftsmanship," during his naming ceremony.[192] *The Lititz Express* and *Indiana Times* both ran a short article titled "Doctor to Aid Indian Fight on Trachoma" in Sept. 1926

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[190] *Independent-Observer,* "Indians Adopt Doctor Who Cures Eyes of Blackfoot Tribesmen," Oct. 16, 1924. From Newspapers.com; *The Carbon County Chronicle,* "Indians Adopt Doctor Who Cures Eyes of Blackfoot Tribesmen."
[191] *Harrisburg Telegraph,* "Salute Chief Eagle!" May 29, 1925. From Newspapers.com.
[192] *The Philadelphia Inquirer,* "Phila. Surgeon to Aid Indians," June 27, 1926. From Newspapers.com.

where again mention was made of Dr. Fox being name Chief, incorporated into the tribe, and given rare gifts by the Blackfeet.[193] Even Dr. Fox's obituary in the *New York Times,* in 1931, stated in its subheading that "Philadelphia Physician Was Made Chief Eagle of Blackfeet for Aid to 400 Trachoma Cases."[194] Clearly, mainstream American newspapers interpreted this event as proof that the Blackfeet Nation was grateful to Dr. Fox for his trachoma work.

The numerous mentions of this ceremony in American newspapers make it likely that it did occur, but caution should be taken to avoid overstating the significance of this event for the Blackfeet. While newspapers portrayed the ceremony as proof that Dr. Fox's work was celebrated among the Blackfeet, their articles contain several common misinterpretations.[195] First, many newspapers assumed that Dr. Fox being given the name Eagle meant he was given the status and title of Chief. This was a common misinterpretation during the period.[196] Had Dr. Fox been granted the status of Chief among the Blackfeet there would likely be an oral or written record from the Blackfeet Nation of such an event though none has been uncovered. Additionally, the Blackfeet Nation make a distinction between gifting someone a Blackfeet name and formally incorporating them. By the 1920s, blood quantum rules, based on the idea of "Indian blood", dictated who was formally recognized as a member of the Blackfeet Nation.[197]

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[193] *The Indiana Times,* "Doctor to Aid Indian Fight on Trachoma," Sept. 22, 1926. From Newspapers.com; *The Lititz Express,* "Doctor to Aid Indian Fight on Trachoma," Sept. 2, 1926. From Newspapers.com.
[194] *New York Times,* "Dr. L. Webster Fox, Eye Specialist, Dies."
[195] Aaron LaFromboise email message to Ana Hoshovsky, Feb. 28, 2023.
[196] Ibid.
[197] Ibid.

Even if Dr. Fox had been gifted a Blackfeet name, he would not have been a formally recognized member of the Blackfeet Nation.

It does seem likely that Dr. Fox was gifted a Blackfeet name in recognition of his services. An outsider of the Blackfeet Nation being given a Blackfeet name seems to have been a more common practice than the newspaper articles on Dr. Fox would suggest.[198] For example, in August 1926 the *Great Falls Tribune* wrote that "The Gorham family was honored by the Blackfeet Indians stationed on the west side of the park [Glacier National Park] by the adoption of Miss Catherine Gorham into the Blackfeet tribe and the bestowing upon her of the name 'Red Pine Women.' The ceremony was conducted by the medicine man, Bull Calf, assisted by Calf Robe, and others."[199] Benjamin Gorham, father of Catherine, was the president of the Northwestern Fuel company and his family was visiting Glacier National Park at the time. No mention is made of any action or service of the Gorham family or Miss Catherine Gorham that would have warranted being honored in such a manner. Rather, it seems that gifting a Blackfeet name was a typical service provided to visitors of Glacier National Park.[200]

Dr. Fox's naming ceremony was more typical than the newspaper reports suggest. The name Eagle was known to be a common name given to young Blackfeet who had yet to earn additional names through their actions.[201] Furthermore, it is unlikely that such a naming ceremony for Dr. Fox reflected the entire Blackfeet Nation's views on him and his work at the reservation. The practice of gifting an outsider a Blackfeet name did not

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[198] Ibid.
[199] *Great Falls Tribune*, "Expert Happy at Trachoma Clinic Result," Aug. 16, 1926. From Newspapers.com.
[200] Aaron LaFromboise email message to Ana Hoshovsky, Feb. 28, 2023.
[201] Ibid.

mean an endorsement of that person by the whole Nation. Names could be given by any member of the tribe and did not need to be given by a Chief.[202] As shown in the report of the naming ceremony of Miss Catherine Gorham, only a few Blackfeet needed to be present to conduct such a ceremony. Thus, if Dr. Fox was given a Blackfeet name it should not be interpreted as an endorsement of him by the entire tribe. It is more likely that a few Blackfeet held positive views of Dr. Fox and his trachoma work and chose to gift him a Blackfeet name. These could have been former trachoma patients who had been treated by Dr. Fox or family members of someone treated by Dr. Fox. Most plausible is that Dr. Fox was gifted a Blackfeet name by a few members of the tribe who happened to have positive associations of Dr. Fox and his trachoma work.

The Blackfeet were not the only tribe reported to have gifted Dr. Fox a name. In Feb. 1925 *The Harrisburg Telegraph* ran a story titled "Dr. L. Webster Fox is Now 'Pita Nica' of Navajo Tribe" where again mention is made of Dr. Fox becoming a chief.[203] The article went on to describe that Dr. Fox being made Chief Eagle or "Pita Nica" of the Navajo tribe and that the Navajo perceived Dr. Fox as "the reincarnation of the beloved chief of the same name" whose headdress he wore for the ceremony. While this article could be interpreted as another naming ceremony for Dr. Fox by the Navajo, this report is less reliable than those of the Blackfeet naming ceremony. First, there does not seem to be the same level of corroborating sources for this article as there was for the Blackfeet naming ceremony, especially in local Southwestern newspapers. What is more confusing is the location of the ceremony at "the Glacier National Park Hotel, which is near the

[202] Ibid.
[203] *Harrisburg Telegraph*, "Dr. L. Webster Fox Is Now 'Pita Nice' of Navajo Tribe."

Blackfoot Reservation." If Dr. Fox was being honored by the Navajo Tribe, it does not make sense for this ceremony to have taken place in Montana instead of New Mexico, especially when Dr. Fox was in Albuquerque the previous month.

Still, this *Harrisburg* article is the only one which explicitly listed the names of Native Americans who attended Dr. Fox's naming ceremony. The list of attendees included "Chief Two Guns, White Calf, Chief Many Feathers, Chief Wades in the Water, Chief Bull Calf, Chief Curly Bear and Chief Eagle Child." The contradiction between the Navajo Tribe being listed and the ceremony being held in Montana makes it difficult to determine whether these names refer to Navajo or Blackfeet men. In terms of the Blackfeet Agency records, E.B. Linnen in 1916 listed a household of Wades in the Water, though he was listed as "a policeman stationed at the Agency," not a chief.[204] While Wades in the Water is not recorded as having trachoma at the time of Linnen's inspection, members of his household are. Linnen's report also stated that "John White Calf, wife, 2 girls, and 1 boy live in house" of Peter Whiteman who was the son in law of John White Calf.[205] The report noted that "Mrs. Whitecalf, 1 boy and 1 girl have trachoma". If Dr. Fox had successfully operated on Mrs. Whitecalf or these children, it would provide some rationale for John White Calf wanting to thank Dr. Fox through a naming ceremony. No mention is made of the other Chiefs in Linnen's report. Still, Linnen's report is incomplete as he only listed the names and houses of people who were present and at home during the time of his visit, meaning that it is possible these other names referred to Blackfeet tribal members.

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[204] Linnen, "Exhibit A: List of Indian Homes on the Blackfeet Reservation," Dec. 30, 1915 -Jan. 1916. *DCI 150, File 35332*.
[205] Ibid.

What makes the *Harrisburg Telegraph* article even more suspect is the following articles it ran regarding Dr. Fox's naming ceremony. In May 1925 and June 1926, the *Harrisburg Telegraph* ran an article on Dr. Fox which again made mention of his naming ceremony. The article was accompanied by an etching of Dr. Fox in traditional clothing and headdress. Like other newspapers, these *Harrisburg* articles claimed Dr. Fox was made "Chief Eagle" of the Blackfeet. No mention is made of Dr. Fox's work with the Navajo Nation or being named by the Navajo. The *Harrisburg Telegraph* seemingly dropped the story of Dr. Fox being made a Chief by the Navajo for ones in favor of him being made Chief by the Blackfeet.

Beyond the inconsistencies and lack of corroborating evidence, the historiography on the Southwest campaign further brings the *Harrisburg Telegraph* piece into question. Historians have shown that questions by both patients and physicians arose soon after the Southwest campaign started in 1924.[206] Unlike in the Northwest, the start of the Southwest campaign was not followed by immediate success. By 1925, when the *Harrisburg Telegraph* article was published, there likely was already local pushback to the Southwest campaign. Any initial cooperation among local Native American communities would likely have dissipated by 1925 as the trachoma effort failed to produce results and side effects of botched surgeries became more commonly seen. Therefore, it seems unlikely that Dr. Fox, who had only visited the Navajo reservations once, would have been honored by the Navajo Nation. Likely, the *Harrisburg Telegraph* article is mistakenly referring to a ceremony conducted by a few Blackfeet.

[206] Putney, "Fighting the Scourge," 231-232; Trennert, "Indian Eye Sores," 132; Benson, "Race, health, and power," 54-56.

Unfortunately, few sources that capture the patient perspective have been found to provide a fuller picture of how the Native American patients treated by Dr. Fox viewed him and his work. Without such sources, historians must be cautious to avoid creating falsely celebratory narratives around Dr. Fox and his relationship with the Blackfeet Nation. While newspapers of the era portrayed the entire Blackfeet Nation as highly grateful to Dr. Fox, it is more likely that patients held a variety of views on him. Some Blackfeet might have held negative views of Dr. Fox or the surgical treatments he championed. For patients who Dr. Fox successfully treated, they might have held positive perceptions of him and his work. As will be shown, the few sources that capture the Blackfeet patient perspective generally show that patients, at least initially, held positive views of their surgeries while in the Cut Bank Hospital.

Expansion of the Northwest Campaign

Soon after Dr. Fox's 1924 clinic ended, the Blackfeet Agency expanded the Northwest campaign beyond the Blackfeet reservation. On Sept. 20, 1924, the *Great Falls Tribune* reported that Dr. Fahey conducted his own trachoma clinic at Harve, a local town just west of the Fort Belknap reservation.[207] The *Tribune* wrote that "Four Indians, two from the Rocky Boy reservation and two living in this city [Harve] were operated on Friday morning at a local hospital for trachoma" by "Dr. McKenzie of Big Sandy and Dr. N.A. A of the Blackfeet reservation." Dr. McKenzie was a local physician not affiliated with the OIA. The Harve clinic, though small, was the first clinic run without Dr. Fox's supervision and showed that the local medical community was interested in these latest trachoma techniques. The Harve clinic would be the start of a

[207] *Great Falls Tribune*, "Trachoma Operations Performed at Havre."

collaborative relationship between the Blackfeet Agency and the Montana medical community.

While the *Tribune* article makes it clear that physicians anticipated treating Native American patients, it is unclear why non-OIA physicians expected to be treating trachoma patients. Perhaps local physicians feared trachoma spreading beyond the reservations and wanted to learn the latest techniques in case of this event. Physicians may have also anticipated having to treat Native American trachoma patients at local hospitals if adequate care was unavailable at their reservation. It is also possible that these physicians had already encountered Native American trachoma patients who lived within the local cities and towns. Though their motivations are unclear, the Harve clinic shows that the local Montana medical community became actively involved in the Northwest campaign early on.

By the end of 1924 the Blackfeet Agency was beginning to assess whether other neighboring reservations should be incorporated into the Northwest campaign. In November Chas F. Peirce, Supervisor of Indian Schools, wrote to Commissioner Burke that "about forty cases of trachoma had been operated upon before Dr. Fahey was order to Fort Belknap" and anticipated further operations for students at the Cut Bank Boarding School following his return.[208] Dr. Fahey had been placed in charge of the "medical work of the school and has made frequent inspections of the entire school" for trachoma and other infectious diseases, showing that the reservation schools were incorporated into the campaign. Peirce also reported that "it was decided to place the health program for the

[208] Chas F. Peirce to CIA Burke, Nov. 28, 1924. US. DI. OIA. *BA, DCI 806, Year 1924, File 87831*. Documents. UM Mansfield Library, 1924–1925. From JSTOR.org.

agency and schools in the hands of Dr. Yates…. He will call conferences, outline programs and see that the schools take up the work as outlined." Thus, by the end of 1924 Dr. Yates assumed full authority over the Northwest Trachoma Campaign.

In the beginning of 1925, the Blackfeet Agency again reached out to the local medical community. The Blackfeet Agency demonstrated their trachoma operations for the Montana State Board of Health in March of that year.[209] Blackfeet Agency Superintendent F. C. Campbell reported that "Dr. Yates operated on three cases for the benefit of the State Board of Health." That same year "Dr. C.E. Yates of Heart Butte, Blackfeet reservation; Dr. Ira D. Nelson, Crow Agency" attended a local state medical meeting.[210] That two OIA reservation physicians participated in this state health meeting suggests a growing cooperation between the OIA and the local medical community in 1925.

Finally, in May 1925 the OIA ordered surveys of all government reservations to determine the number of Native Americans suffering from trachoma. The *Great Falls Tribune* reported that a "specialist will be sent to each reservation to treat patients and conduct educational campaigns."[211] The OIA was assessing which reservations would be suitable for their trachoma interventions. The mention of educational campaigns suggests that the OIA had not abandoned education as a part of its eradication efforts. Thus, the expansion of the Northwest campaign did not mean the abandonment of educational

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[209] F.C. Campbell to CIA Burke, Browning, MT, March 4, 1925. US. DI. OIA. *BA, DCI 806, Year 1924, File 87831*. Documents. UM Mansfield Library, 1924–1925. From JSTOR.org.
[210] *Great Falls Tribune,* "State Medical Meeting Opens at Lewistown," July 8, 1925. From Newspapers.com.
[211] *Great Falls Tribune,* "Order Trachoma Survey," May 8, 1925. From Newspapers.com.

programs to prevent disease, even if the campaign did expand the use of surgical intervention.

In June Dr. Yates held a trachoma clinic at the Fort Peck reservation.[212] *The Augusta News* reported "Dr. C.D. Yates, of Browning, an eye specialist on the Blackfeet reservation, assisted by Dr. C.D. Fulkerson, government physician of the Fork Peck reservation and Dr. J. G. Valdhais, government physician at Wolf Point, performed 43 operations for trachoma on the Fort Peck reservation recently." The Fort Peck clinic shows that the OIA was attempting to make the campaign sustainable without the intervention of Dr. Fox or the Blackfeet Agency physicians by training local reservation physicians in the two surgical techniques. Further research is needed to determine whether the clinics conducted at other Montana reservations without the assistance of the Blackfeet Agency physicians or Dr. Fox were successful.

As knowledge of radical grattage and tarsectomy spread throughout Montana, so too did knowledge of the limits of these procedures**.** When explaining these operations, *The Augusta News* declared that "These operations are delicate" and in long term cases "where injury to the ball[cornea] of the eye had already been done. In such cases it is impossible to do more than relieve the patient of further suffering, without hope for an absolute cure," which suggests a broad public awareness of the limits of the surgical intervention.[213] By 1925 these surgeries were no longer considered a guaranteed cure for trachoma and only to be used when they relieved "the patient of further suffering". When describing Dr. Yates's work, *The Billings Gazette* reported that "He refused to operate

[212] *The Augusta News. "*Many Trachoma Operations," June 25, 1925. From Newspapers.com.
[213] *The Augusta News. "*Many Trachoma Operations."

upon an old Indian about 80 years of age, who has lost the sight of one eye and is virtually blind in the other as the result of this disease."[214] Dr. Yates was aware of the limits of surgical intervention and did not perform surgeries in cases where he was not confident in its success. Dr. Yates at least, was one physician who seemed to abide by Dr. Fox's suggestion to carefully select trachoma cases for surgical intervention.[215]

The OIA also showed restraint in determining which reservations to incorporate into the Northwest campaign. In October 1925 Dr. Collard, an OIA physician, was sent to tour the Flathead reservation.[216] Though his assessment, Dr. Collard determined that the Flathead reservation had relatively few cases of trachoma in comparison to other Montana reservations. Dr. Collard treated the few cases he came across during his visit and conducted a short clinic attended by "Dr. F. D. Pease, city and county health office, and Dr. W. J. Marshall."[217] The Flathead reservation was not incorporated into the Northwest Trachoma Campaign beyond this clinic because of its relatively low trachoma numbers. The reasons for the Flathead reservation's low numbers have yet to be fully explained but present an opportunity for future research into the unequal distribution of trachoma across Native American reservations.

While the OIA and Blackfeet Agency physicians seemed to show restraint in choosing which cases to operate on, they did not limit these surgical procedures to adult patients. Dr. Fahey, in 1924, had treated children in the Blackfeet reservation schools

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[214] *The Billings Gazette,* "Perform Operations on Indian Children, Trachoma Sufferers," Nov. 21, 1925. From Newspapers.com; *The Butte Miner,* "Fight Against Trachoma Scourge of Indian Races," Nov. 23, 1925. From Newspapers.com.
[215] Fox, "The Indian and the Trachoma Problem," 468.
[216] *The Missoulian,* "Few Flatheads Have Trachoma, Is Report," Oct. 23, 1925. From Newspapers.com.
[217] *The Missoulian,* "Few Flatheads Have Trachoma, Is Report."

with surgical intervention.[218] Superintendent Campbell reported that in 1924 "Doctor Fahey operated on thirty-seven children for trachoma" and Dr. Yates operated on "some thirty odd children at the Mission School."[219] In November 1925, Dr. Yates held a clinic specifically for trachomatous children. During the clinic "eight Indian children who are trachoma sufferers, were operated upon here by Dr. C.E. Yates."[220] The low number of cases in contrast to the adult clinics, which treated dozens, suggests that Dr. Yates was selective in the child trachoma cases he operated on. The decision to expand to child patients suggests that the Blackfeet Agency physicians felt confident in the benefits of surgical intervention for some trachomatous children. Sources do not specify whether radical grattage, tarsectomy, or both were used for child patients. It seems more likely that radical grattage was used, as there is evidence that simple grattage was used among Blackfeet children from at least 1916 onwards.[221] Thus, the Blackfeet Agency physicians might have viewed radical grattage as the most updated treatment method for trachomatous children.

By the end of 1925 the Northwest Trachoma Campaign had expanded to incorporate most reservations in Montana. *The Billings Gazette* reported that "Since beginning his work in the state Dr. Yates has operated upon 400 Indians living on the Fort Peck, Fort Belknap, Rocky Boy and Blackfeet reservations and 95 per cent of the operations have effected permanent cure."[222] The report of a 95% effectiveness for Dr. Yates operations seems unlikely given the variation in individual cases, potential surgical

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[218]C. F. Peirce to CIA Burke. Nov. 28, 1924. *DCI 806, File 87831*.
[219] F.C. Campbell to CIA Burke. March 4, 1925. *DCI 806, File 87831*.
[220] *The Billings Gazette,* "Perform Operations on Indian Children, Trachoma Sufferers," ; *The Butte Miner,* "Fight Against Trachoma Scourge of Indian Races."
[221] L.F. Michael "Inspection Report," June 30, 1916. *DCI 150, File 00*.
[222] *The Billings Gazette,* "Perform Operations on Indian Children, Trachoma Sufferers."

complications, and variation in medical infrastructure at each reservation. Still, the confidence of *The Billings Gazette* to report such a high success rate indicates that widespread complications were not seen in the two years since the campaign began. In contrast, in the Southwest reports of botched operations were seen within the first year of the Southwest campaign.[223] That local newspapers were still reporting success two years into the Northwest campaign shows that even to contemporaries of the period, there were significant differences between the two campaigns.

A concerning report at the end of 1925 spurred the local Montana medical community to become more involved in the OIA's eradication efforts. In December several cases of trachoma were discovered at the Great Falls school, a school mainly attended by white students.[224] The report does not explicitly mention a connection between the infected students and the reservations. Still, throughout the period some Native American children had attended local schools.[225] Spread of infectious diseases from the reservations into the local community through Native American students had been a prominent concern in Montana. Reports that supposedly confirmed this fear prompted the Montana health and medical community to become more invested in the OIA's efforts to eradicate trachoma. The local medical community also started to take steps to conduct their own trachoma interventions. *The Butte Miner* reported that "Further action concerning such cases will be taken after the survey has been made and a conference of eye specialist and health authorities has been held."[226] As will be shown,

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[223] Putney, "Fighting the Scourge," 231-232.
[224] *The Butte Miner,* "Seven Cases of Trachoma in Great Falls School," Dec. 11, 1925. From Newspapers.com.
[225] Linnen, "Report of Investigation of Affairs on the Blackfeet Indian Reservation," Jan. 9, 1915., *DCI 150, File 30650*.
[226] *The Butte Miner,* "Seven Cases of Trachoma in Great Falls School."

the Montana medical community would develop their own professional relationship with Dr. Fox to assist their trachoma efforts. Since trachoma was now a problem for the white community of Montana, further collaboration between the local medical community and the OIA was needed.

On the Blackfeet reservation, the trachoma eradication effort continued. A report on the Blackfeet Agency in January 1926 revealed that "one hundred and twenty five operations for trachoma have been performed within the past two months."[227] Supervisor Peirce noted that surgeries for "adenoids and diseased tonsils" had also been conducted, suggesting that the OIA began to incorporate surgery as a treatment for a variety of diseases. The hospital was "always full to its capacity," because of the demands of the campaign. Peirce raised concerns about the danger of hospital closure due to lack of funds and urged for continued funding for the hospital which was vital to the "trachoma and health campaign now being carried on here." It appears that funding for the campaign continued as in 1926 the largest clinic ever was held.

The 1926 Trachoma Clinic

Dr. Fox returned to Browning to conduct the largest trachoma clinic of the campaign in August 1926. The clinic lasted for 10 days and was attended by a variety of people including local physicians, local health officials, members of the OIA, and people from philanthropic organizations. The *Great Falls Tribune* reported that Congressmen Scott Leavitt attended the clinic at the request of Gen. Scott and Superintendent

[227] Chas F. Peirce, "Report on Indians Schools at Blackfeet Agency, Mont. By Chas F. Peirce Supervisor" Dec. 26-30, 1925. US. DI. OIA. *BA, DCI 806, Year 1926, File 2262*. Documents. UM Mansfield Library, 1926. From JSTOR.org.

Campbell.[228] Secretary of the Indian Rights association Matthew K. Sniffen traveled from Philadelphia to attend. In his report on the clinic, Gen. Scott claimed that fifteen OIA physicians were present to be "educated in the technique of Dr. Fox's operations for trachoma. Most of the surgeons performed the delicate operations themselves under the supervision of Doctor Fox and were pronounced by him as competent to carry them on alone."[229] Gen. Scott did not make clear how long physicians were observed before being pronounced competent by Dr. Fox and whether any of them had prior training in these techniques. W.W. Moses wrote a front page spread on the clinic for the *Great Falls Tribune*.[230] Moses gave more detail in his article on the clinic. Moses wrote that "most of the operating, especially in the most difficult cases, was conducted by Dr. Fox individually, many of the ordinary trachoma cases were handled by the attending physicians under his direction."[231] Thus, Dr. Fox seemed cautious to ensure the physicians unfamiliar with the techniques handled easy cases while he attended to the more complex cases.

The local Montana medical community also attended the 1926 clinic. Gen. Scott noted that "There also were surgeons present from Great Falls and neighboring towns, who took advantage of the wonderful opportunity afforded by this clinic to perfect themselves in the technique."[232] Given the concern about trachoma in the Montana schools, it is not surprising that local physicians wanted to learn the latest trachoma

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[228]*Great Falls Tribune,* "Indian Eye Clinic Held at Browning; Leavitt Is Visitor," Aug. 13, 1926. From Newspapers.com
[229] Gen. Scott, "Report on the Blackfeet Indian Agency," Aug. 27, 1926., *DCI 150, File 46533*.
[230] W.W. Moses, "Dr. Fox Restores Sight of Many Indians," *Great Falls Tribune,* Aug. 22, 1926. From Newspapers.com.
[231] Moses, "Dr. Fox Restores Sight of Many Indians."
[232] Gen. Scott, "Report on the Blackfeet Indian Agency," Aug. 27, 1926. *DCI 150, File 46533*.

treatments from Dr. Fox. Moses wrote that Dr. Fox gave informal lectures throughout the clinic on "the various phases of the several diseases," and that "in the first week a formal conference was held."[233] At the conference both Dr. Fox and Dr. Yates presented papers and a general discussion occurred about "the needs of the Indian service with relation to sight and health conditions." Thus, the clinic allowed the medical community in Montana, both local and OIA, to collaborate on potential health interventions needed for the region.

W. W. Moses also gave a more detailed picture of the types of patients and diseases treated at the clinic. Moses stated that while most patients were "of the Piegan tribe of the Blackfeet, two were Crees, members of the tribe of ancient enemies of the Blackfeet, who were brought over from the Rocky Boy reservation. Five were Sioux who had traveled 365 miles from Wolf Point of the Fort Peck reservation, and seven were Indians residing off the reservation." Moses reported on a case where several members of a family were treated at the clinic. Mrs. Ellen Hall "submitted to a double operation," for various eye issues. Her daughter Mrs. Lizzie Lukens and her grandchildren "Elizabeth, 3, Margaret, 4, and Bernadetta, 8, were operated on" for trachoma. Moses also reported on cases treated by Dr. Fox which were not trachoma, including cataracts and other specialized operations. Furthermore, Moses reported that three white patients "Douglas Gold, superintendent of the Browning schools, Walter Hogshead, government farmer at the Blackfeet boarding school, and Mrs. Germain, a former teacher at the boarding schools," were all treated for trachoma. No distinction was made between the type of treatment these white patients received versus the care given to Native American patients.

[233] Moses, "Dr. Fox Restores Sight of Many Indians."

Thus, the 1926 clinic treated a variety of patients from across the region as well as various ages and races.

In his report, Gen. Scott contrasted the 1926 clinic with the one he had attended in 1924.[234] Gen. Scott emphasized the poor facilities of the old Blackfoot hospital where the first clinic was held. At the time of the 1924 clinic the hospital "held but one patient and that was a case of tuberculosis from the Crow Agency," showing that the Blackfeet did not seek care at the old hospital. Likewise, Moses also reported that the old hospital was located "on a bleak prairie" near Blackfoot where "Indian either could not be induced to go to it or else would not remain there if they did ever."[235] In contrast, by 1926 Gen. Scott reported that the new Cut Bank hospital "has been improved by a new operating room, a mortuary chapel and basement under the main building. These improvements had added much to its capacity, and it is now of immense value to the tribe."[236] Moreover, Gen. Scott argued that "this one clinic alone has more than justified the expense of its [the hospital] removal to its present site," showing that the OIA viewed the investment in medical infrastructure as necessary for the Northwest campaign. With these new facilities "results have been achieved which no one would have considered possible at such a small place, with its limited resources." These improved medical facilities were vital to the expansion of the Northwest campaign, as such a large clinic like that held in 1926 would not have been feasible at the old hospital.

Reports on the 1926 clinic suggest that many patients were successfully treated. *The Fairfield Times* had reported that "Nearly 100 cases of Trachoma and half a dozen of

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[234] Gen. Scott, "Report on the Blackfeet Indian Agency," Aug. 27, 1926. *DCI 150, File 46533*.
[235] Moses, "Dr. Fox Restores Sight of Many Indians."
[236] Gen. Scott, "Report on the Blackfeet Indian Agency," Aug. 27, 1926. *DCI 150, File 46533*.

Cataract have been registered for treatment," near the start of the clinic.[237] After the clinic ended, Gen. Scott reported that "one hundred and fifty cases were operated on at this last clinic and the patients received adequate after treatment and others were coming for trachoma operations after the clinic ended." The mention of aftercare might have been a subtle response to the complaints coming from the Southwest, where debates on timeline of post-operative care occurred. A memorandum on the Blackfeet Indian Reservation in Oct. 1926 mentioned that "for several days preceding our visit about 50 to 60 Indians were operated on at clinics held by Dr. L. Webster Fox of Philadelphia and several physicians of the Indian Bureau," suggesting Dr. Fox stayed in the area to assist beyond the formal clinic. [238] A Report to Commissioner Burke on November 11, 1926, stated that "two hundred and twenty were operated during the Fox clinic" in August and about "twenty cases since that date."[239] While surgeries continued after the trachoma clinic the pace of the campaign slowed.

By the end of the clinic Gen. Scott claimed he was "more impressed than ever with the optimism and enthusiasm of the medical corps of the Indian Service." Gen. Scott also heavily praised those involved in the Northwest campaign, including Superintendent Campbell, Dr. Fox, and Dr. Yates. Gen. Scott wrote that the work from these men had brought the "operative cases of trachoma from 35 to two per cent, the results of which will be permanent." Likewise, the *Great Falls Tribune* claimed that "the percentage of trachoma among the Indians of the reservation had been reduced from 30 to 3 per

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[237] *The Fairfield Times,* "State Briefs," Aug. 19, 1926. From Newspapers.com.
[238] Administrative Assistant E. K. Burlew and Chief Inspector J.F. Gartland, "A Memorandum for the Secretary: Blackfeet Indian Reservation Browning, Montana" Oct. 11, 1926. US. DI. OIA. *BA, DCI 150, Year 1926, File 48633*. Documents. UM Mansfield Library, 1926–1927. From JSTOR.org.
[239] F. C. Campbell to CIA Burke, Browning, MT, Nov. 11, 1926. US. DI. OIA. *BA, DCI 150, Year 1926, File 48633*. Documents. UM Mansfield Library, 1926–1927. From JSTOR.org.

cent."[240] While these low prevalence rates did not endure, such a drastic reduction in case numbers had not been accomplished by any prior trachoma efforts on the Blackfeet reservation. Gen. Scott went on to praise the OIA for "its support of this movement here and elsewhere," referring to the OIA's effort to expand its trachoma campaigns across the west.

An Unusual Event at the 1926 Clinic

One key aspect of the 1926 clinic has been scrutinized by modern scholars who call into question why the OIA believed in the effectiveness of tarsectomy.[241] In his 1926 report Gen. Scott recounted an event that had taken place at the 1924 clinic he attended.[242] Gen. Scott reported that "Two Indian women, who had been operated on for trachoma when they were students at Carlisle [Indian Boarding School], thirty years ago, came to the clinic with their children who were suffering from the eye disease. The eyes of these women were found to be entirely free from trachoma although they had been constantly exposed to its infection all during the thirty years. These and similar cases, give assurance that the results attained here will be permanent." Local Montana newspaper coverage on the 1924 clinic corroborated Gen. Scott's recounting of this event.[243]

Historians have generally viewed these two patients as the primary evidence that the OIA used to justify its adoption of surgical intervention and thus have argued the

[240] Moses, "Dr. Fox Restores Sight of Many Indians."
[241] DeJong, *'If Only You Knew the Conditions',* 94; Putney, "Fighting the Scourge," 236.
[242] Gen. Scott, "Report on the Blackfeet Indian Agency," Aug. 27, 1926. *DCI 150, File 46533*.
[243] Moses, "Dr. Fox Restores Sight of Many Indians."; *Great Falls Tribune,* "Doctors Study Fox Method of Curing Trachoma Among Indians at Browning Clinic."

surgeries were untested.[244] While Gen. Scott's assessment of the permanence of the surgery is overly optimistic, there is reason to understand why he and other physicians were so optimistic at the time. By the time the 1924 clinic occurred over a hundred Native American patients had been treated with these surgical procedures. Archival sources do not report widespread surgical complications in the Northwest. Moreover, the surgical techniques that Dr. Fox demonstrated were existing medical techniques that had been used by ophthalmologists for decades. As a prominent ophthalmologist, Dr. Fox's endorsement of these surgeries would have carried weight within the medical community. Moreover, it was not just the OIA that was optimistic, as by this time the local Montana medical community also viewed surgical intervention as the most promising route for controlling trachoma in the state.

It is also possible, to some extent, to verify the claims made about the two specific Blackfeet women Dr. Fox treated. The Blackfeet Agency did sometimes send Blackfeet children to off reservation schools like Carlisle to be educated.[245] While Gen. Scott's report does not mention the name of either woman, the *Great Falls Tribune* listed one of the women as Mrs. Labreche, of Cut Bank. The *Great Falls Tribute* wrote "While the clinic was in progress Dr. Fox was visited by Mrs. Labreche, of Cut Bank, who had been operated upon by him 25 years ago at Carlisle. Her eyes are now in perfect condition, but she brought with her for trachoma treatments her daughter and two grandchildren. Another woman, whose eyesight is perfectly clear as the result of an operation performed

[244] DeJong, *'If Only You Knew the Conditions',* 94; Putney, "Fighting the Scourge," 236.
[245] For example, McDowell reported 60 children being sent for non-reservation schools, most sent to Carlisle, for education in 1917. Secretary Malcolm McDowell to Hon. George Vauz Jr., Nov. 31, 1917. *DCI 150, File 12419*.

by him at Carlisle 20 years ago, also called upon Dr. Fox."[246] Unfortunately, since no name is given for one of the women, it is impossible to verify who she was and if she received treatment from Dr. Fox. It is possible to track Mrs. Labreche in the archive of the Carlisle Indian Boarding School. Student records from Carlisle list a Minnie Perrine who attended from March 26, 1890, until August 9, 1892.[247] Minnie's student file listed her as a member of the Piegan Tribe, the largest group that made up the Blackfoot Confederacy. Minnie was also listed as married to a Dave Labreche. Given the timing of events, it is likely that Minnie Perrine is the former Carlisle student treated by Dr. Fox, though her student records from Carlisle do not mention any treatment for trachoma, a visit to Philadelphia, or Dr. Fox specifically. The only other student listed in connection to a Mrs. LaBreche is Claudie Morgan who had a Mrs. C. R. LaBreche listed as his mother in his student file.[248] Claudie Morgan attended the school from March 11, 1914, to June 8, 1918 and was listed as a member of the Blackfeet Nation. No mention is made of Claudie being treated for trachoma in his student file. It is possible that Claudie Morgan is the son of Minnie Perrine, though the newspaper reports only mention that Mrs. LaBreche brought her daughter and grandchildren to the 1924 clinic.

Even though the full treatment history of these two Blackfeet women cannot be fully verified, these two patients were not the only patients Dr. Fox had treated with these surgical methods prior to working with the Blackfeet Agency. Over his career Dr. Fox

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[246] Moses, "Dr. Fox Restores Sight of Many Indians."
[247] "Minnie Perrine Student Information Card," 1890. National Archives and Records Administration (hereafter NARA), RG 75, Series 1329, box 7. From Carlisle Indian School Digital Resource Center (hereafter Carlisle Digital Center); "Minnie Perrine Student File," 1890. NARA. RG75, Series 1327, box 56, folder 2830. From Carlisle Digital Center.
[248] "Claudie Morgan Student File Information Card," 1914. NARA, RG 75, Series 1329, box 15. From Carlisle Digital Center; "Claudie Morgan Student File," 1914. NARA, RG 75, Series 1327, box 128, folder 5092. From Carlisle Digital Center.

had developed a relationship with the Carlisle Indian Boarding School. Student records from Carlisle indicate that the school enlisted Dr. Fox's help in treating severe eye cases among its students.[249] Records going back to the 1890s show the school staff requesting funding to send students to Philadelphia to be treated by Dr. Fox.[250] It appears that these students were treated at the Germantown Hospital where Dr. Fox worked and were treated free of charge, with funding only needing to be obtained for transport and lodging. Dr. Fox appears to have treated a variety of eye diseases including trachoma and cataracts. There is no indication that Dr. Fox treated these Native American patients with different methods than those he used on his white patients, with changes in treatment coming more likely because of advancements in medical knowledge.

Post-Clinic Efforts in 1926

Later that year, at the request of the OIA, Dr. Fox held an additional clinic at the Crow reservation.[251] Dr. Fox's clinic at the Crow reservation marked the first time he had conducted a clinic at another reservation in Montana. Prior to this OIA physicians had been responsible for conducting clinics at other reservations in Montana. Dr. Fox's willingness to conduct this clinic suggests that he likely endorsed the OIA's expansion of the Northwest campaign. Additionally, in 1926 Dr. Crane, an OIA physician, conducted a

[249] "Correspondence Regarding the Request for the Return of Maggie Venne," Nov. 18 1902- July 12, 1904. NARA, RG 75, Entry 91, box 2562, 1904-#46796. From Carlisle Digital Center; "Dispute Regarding Judson Bertrand and Outing System," April 25, 1910- May 19, 1910. NARA, RG 75, Entry 121, #36651-1912-Carlisle, 820. From Carlisle Digital Center; "Request for Enrollment of Elizabeth and Martha Redthunder," Feb. 1-28, 1912. NARA, RG 75, CCF Entry 121, #11865-1912-Carlisle-820. From Carlisle Digital Center; "David Cabay Student File," 1913. NARA, RG 75, Series 1327, box 109, folder 4583. From Carlisle Digital Center.

[250] "Pratt Forwards Vouches for Eye Treatment of Two Students," March 7, 1895. NARA, RG 75, Entry 91, box 1174, 1895-#10347. From Carlisle Digital Center; "Authority Sought to Pay for Expenses Related to Eye Treatment," Dec. 31, 1895. NARA, RG 75, Entry 91, box 1272, 1896-#38. From Carlisle Digital Center; "Pratt Requests Authority to Pay Expenses in Treatment of Three Students," July 23, 1897. NARA. RG 75, Entry 91, box 11440, 1897-#30251. From Carlisle Digital Center.

[251] *The Anaconda Standard,* "Indians Learning to Earn on Lands," Aug. 22, 1926. From Newspapers.com.

trachoma clinic at the Rocky Boy Reservation.[252] By the end of 1926 most reservations in Montana had been assessed as part of the Northwest campaign and either a clinic had been conducted or the reservation was determined to not need intervention for trachoma. The only exception appears to be the Northern Cheyenne reservation, though given its proximity to the Crow reservation it is possible it was included as part of Dr. Crane's 1926 clinic. A report by Chas F. Peirce on the Blackfeet schools claimed that "there are no known active cases of trachoma or tuberculosis, in the school at the present time," suggesting the trachoma situation had greatly improved by the end of 1926.[253] The Northwest campaign was seemingly successful in reducing trachoma throughout the reservations in Montana.

Questions about the Northwest Trachoma Campaign

Even with its apparent success, there were complaints raised about the Northwest campaign. In particular, the running of the Cut Bank Hospital, on the Blackfeet reservation, came under scrutiny. In February 1926, F.C. Campbell raised concerns about the capacity of the hospital.[254] While the hospital had "been running sixty patients" it was "originally a twenty-four-bed hospital". The increased capacity had "been done because of the trachoma campaign and as a rule trachoma people aside from their eyes, are in health and it was not inconvenient to crowd a little more than would be done if the patients were sick." Still, it was clear that "we [the Blackfeet Agency] must greatly reduce it soon" or the hospital would have to be closed, which would be detrimental to

[252] *Great Falls Tribune*, "Indian Agents Here on Business Trip," April 20, 1927. From Newspapers.com.
[253] C. F. Peirce, "Report on Schools at Blackfeet Agency, Mont." Dec. 31, 1926. US. DI. OIA. *BA, DCI 150, Year 1927, File 596*. Documents. UM Mansfield Library, 1926. From JSTOR.org.
[254] F.C. Campbell to CIA Burke. Browning, MT, Feb. 6, 1926. US. DI. OIA. *BA, DCI 806, Year 1926, File 2262*. Documents. UM Mansfield Library, 1926. From JSTOR.org.

the campaign. A report to the Commissioner in November said, "The sanitary conditions existing at this hospital, and other places visited by us, to a great extent explain the reasons why trachoma is not only rife among the Indians but prevalent among white employees and their families."[255] The OIA recognized that surgical intervention did not negate the influence of poor environment on disease spread. The reference to trachoma spreading among white employees and the larger white community shows that the OIA was concerned about disease spillover. The report noted that trachoma patients were made to work small tasks while at the hospital as "it would not have been possible during the clinic period for the small corps of hospital employees to have done all of the work that was necessary" without the help of patients. This practice came under increased scrutiny by both Native American patients and OIA investigators. The report also noted that during the clinic "their [the patient's] families and relatives were present and many small children were running in and out of the hospital." The policy of allowing families to stay at the hospital was another practice which came under criticism in 1926. Such concerns about the running of the Cut Bank Hospital, by both OIA staff and Blackfeet, eventually prompted the OIA to formally investigate the hospital.

[255] E. K. Burlew and J.F. Gartland, "A Memorandum for the Secretary," Oct. 11, 1926. *DCI 150, File 48633*.

Patient Narratives: The 1926 Investigation of Cut Bank Hospital

Archival gaps mean that little is known about what Native American patients treated during the Northwest campaign thought about Dr. Fox, the OIA physicians, and the surgeries they underwent. One source that captures a few voices of trachoma patients is the records of a 1926 OIA investigation of the Cut Bank Hospital. Members of the Blackfeet Nation, including trachoma patients at the Cut Bank Hospital, were interviewed in 1926 by Investigator Samuel Blair as part of a wrongful death investigation. The Blackfeet Tribal Council had asked for an official investigation into the death of George Wren, a Blackfeet man who died of pneumonia on Feb. 24, 1926 while at the Cut Bank Hospital.[256] Council member Robert J. Hamilton claimed that the death was due to the "neglect and carelessness of Field Matron Mrs. Ada Moore." Evidence had been brought to the Council which showed "the death of Mr. Wren was attributed to the carelessness of the Bureau employees." The Council formally asked for the removal or dismissal of Mrs. Ada Moore, and Superintendent F.C. Campbell. When the Council requested the investigation at Cut Bank, the OIA had already sent Inspector Blair to investigate an unrelated matter at the reservation. The OIA instructed Blair to investigate the claims brought forward by Robert Hamilton and the Blackfeet Tribal Council.[257]

George Wren was a Blackfeet man who had suffered from eye issues for several years. He was one of the patients originally treated during the 1924 clinic.[258] In 1926 Dr.

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[256] Robert J. Hamilton to Hon. B. K. Wheeler. Browning, Montana, March 16, 1926. US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [1 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.
[257] Acting Commissioner E.B. Meritt, "Memorandum for the Secretary," March 10, 1926. US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [1 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.
[258] *Great Falls Tribune,* "Doctors Study Fox Method of Curing Trachoma Among Indians at Browning Clinic."

Yates had examined George Wren and noted that "his eyes had been operated and that it was not a complete success," referring to the 1924 surgery.[259] It is unclear who conducted George's initial surgery or the exact reasons why it failed. Dr. Yates decided to perform another surgery. George Wren was admitted to the hospital on Jan. 9, 1926, for trachoma treatment.[260] Tarsectomy was performed on Jan. 10th by Dr. Yates, assisted by nurse Sandstrom. Miss Sandstrom testified that George Wren was given chloroform as an anesthetic for his surgery and came out of it well.[261] Dr. Yates claimed that the surgery was "a success. George Wren said he could look out of the windows and see the trees and the mountains and everything that he had not been able to see for years. A week before he died I got him a pair of spectacles and had him sign his signature to a paper and he said it was the first time he has seen his signature for a long time."[262] According to Dr. Yates, George Wren had been in bed for "two or three days" after his operation. After two weeks "he began to go out around on nice days," suggesting his recovery was progressing well. Miss Sandstrom claimed that it was a "month and five days" between George's surgery and him catching pneumonia. No complications resulting from his tarsectomy operation are reported by Inspector Blair or any witness interviewed that would have caused George Wren's death.

Blair tried to determine whether hospital policies and hospital staff were to blame for the wrongful death. The central question of the investigation was whether Mrs.

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[259] Inspector Samuel Blair, "Investigation by Inspector Blair, at the Blackfeet Agency Hospital," March 14, 1926: 24-28. US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [1 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.
[260] "Hospital Case Records: George Wren, Man Age 57. Admitted November 22nd, 1925," US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [1 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.
[261] Blair, "Investigation by Inspector Blair, at Blackfeet Agency Hospital," 24-28.
[262] Blair, "Investigation by Inspector Blair, at Blackfeet Agency Hospital," 21-24.

Moore's request for George Wren to fetch water from outside, on a potentially cold winter day, resulted in him developing pneumonia. The OIA debated whether the actions of Mrs. Moore, hospital policies, or both were to blame for George Wren's death. Testimonies from hospital patients, George Wren's family members, and the Blackfeet Tribal Council showed reoccurring problems with the management of the hospital. Ultimately, Blair suggested that Mrs. Moore be reassigned, Dr. Yates be replaced as head of the hospital, and changes be made to hospital policies regarding patient care.[263]

Trachoma Patient Testimonies

As part of the investigation, several trachoma patients who were at the hospital during the time of George Wren's death were interviewed. These interviews were conducted by Inspector Blair and, for some patients, mediated through interpreters. It is unlikely that the interviews reflect the accurate and unbiased views of the patients. Still, given that Inspector Blair was investigating a wrongful death these interviews provided the patients an opportunity to raise any criticism they had about their medical care and treatment by hospital staff. Though the Northwest campaign was not the main topic of the interviews, trachoma patients commented on their surgeries and overall impressions of the hospital staff.

Blair conducted his first interview, with Joseph McKnight and John Sanderville serving as interpreters, on March 14, 1926 with John Iron Pipe, a 30 year old trachoma patient.[264] John Iron Pipe had been admitted to the Cut Bank Hospital in January 1926 for

[263] Blair, "Blackfeet Agency, Report of Inspector Blair, of investigation of charges involving the administration of Superintendent Campbell and his responsibilities together with that of Mrs. Moore, the Field Matron in the death of George Wren," Browning, MT, March 19, 1926: 13. US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [1 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.
[264] Blair, "Investigation by Inspector Blair, at Blackfeet Agency Hospital," 1-6.

trachoma treatment. Iron Pipe testified that the operation was successful, though he made no mention of which surgery he received. Iron Pipe had been recovering in the hospital for forty-seven days, a recovery length typical of the trachoma patients interviewed. Of the hospital staff, John Iron Pipe stated that "they are all good people. I have nothing to say against them" though he qualified this statement by saying that "I have done nothing to cause them to mistreat me," suggesting cooperation factored into how the staff treated patients. Of Dr. Yates, Iron Pipe stated that "Ever since I have been here Doctor is sure good to me and he likes me," and had positive words to say of nurse Sandstrom and field matron Mrs. Moore. John Iron Pipe's testimony was concise but positive about his hospital care and trachoma surgery.

The next trachoma patient interviewed was Dan Bullplume.[265] Like John Iron Pipe, Bullplume had been admitted to the hospital in January to "have my eye treated, to have them cleaned up" and stayed for forty-seven days. Bullplume had a very positive views of his trachoma treatment. Dan Bullplume stated that "It was successful work that they did on my eye. I have been troubled with my eye for three years and I know I am thoroughly cured," showing he believed in the effectiveness of his surgical operation. Furthermore, Bullplume claimed that George Wren's surgery had been a success because "George could see just the way I see today." Dan Bullplume expressed confidence that he was "cured" from trachoma because of his surgery, showing that three years into the Northwest campaign confidence in the surgeries remained high among some patients. Dan Bullplume's testimony also emphasizes the benefits surgery could have for patients.

[265] Ibid, 6-10.

For Bullplume, surgery had not only restored his vision but ended three years of pain and suffering.

Moreover, Dan Bullplume had positive impressions of the hospital staff. Bullplume stated that Dr. Yates was "very good," and nurses Hattie Cayton and Sandstrom were "good and kind." Dan Bullplume declared that "I think the world of it [the hospital] since I received my sight back at this hospital." Thus, Bullplume's positive views of the hospital staff were directly connected to their trachoma work. Dan Bullplume went on to praise the staff for helping "these people [Blackfeet] to get their eyesight back" and even championed the expansion of the Northwest campaign by wishing "you [Investigator Blair] would help me and have Dr. Yates remain here at this hospital and clean up the trachoma and get all these Indians sight back again." Clearly, Dan Bullplume viewed the Northwest campaign as a positive force on the reservation and hoped others received the same benefits from it that he had.

Such high praise for the Northwest campaign did not stop Dan Bullplume from raising questions about the conduct of Mrs. Moore. While Bullplume had no personal negative experiences with Mrs. Moore, he alleged that "some of the people say that Mrs. Moore mistreats them." Bullplume's willingness to reiterate the concerns of other patients suggests he was willing to raise criticism of the hospital staff when he thought it was warranted. Clearly, Dan Bullplume trusted the testimonies of other patients about Mrs. Moore enough to reiterate them to Investigator Blair. Dan Bullplume's lack of critique for Dr. Yates, the surgeries, and his experience at the hospital suggest his positive experience of the Northwest campaign was likely a genuine reflection of his views at the time of the interview. It is impossible to know whether or not Dan

Bullplume's views on the Northwest campaign changed after he was released from the hospital.

John Madplume was another trachoma patient Blair interviewed during his investigation.[266] Though Madplume did not know when he had been admitted to the hospital, he had stayed for forty-eight days. Madplume stated that the hospital staff had "cured" his eyes of trachoma. Like the other trachoma patients, John Madplume claimed that Dr. Yates "was sure kind to me" and had positive views on the rest of the staff as well, including Mrs. Moore. While opinions of Mrs. Moore differed, trachoma patients all seemed to have positive impressions of Dr. Yates and the nurses. Dr. Yates's positive reputation among patients might have contributed to these patients' positive views on their surgeries.

Still, not all trachoma patients interviewed by Blair had good hospital stays. On March 15, Hairy Coat, a 53-year-old trachoma patient, recounted his negative experience at the hospital.[267] Treated for trachoma in February, Hairy Coat asserted that "the operation was fine but they turned me out too soon. That woman [Mrs. Moore] turned me out too soon and one of my eyes has been effected since then." Hairy Coat went on to claim that Mrs. Moore "told me that the Dr. told her that my eyes were all right and that I could go home that day or the next day. The Dr. that performed the operation told me that I could stay two weeks longer and then go home." In her interview with Blair, Mrs. Moore defended her actions toward Hairy Coat. Mrs. Moore stated that "I asked Hairy Coat if he would mind sleeping on the floor and let this sick boy have his bed and he

[266] Ibid., 10-12.
[267] Ibid., 15-20.

protested. I asked him this because he was leaving the next morning," suggesting she believed he was being discharged. Mrs. Moore alleged that Hairy Coat refused to "give up [his] bed to a Cree," implying he had a racial bias against other patients in the hospital. For his part, Hairy Coat never mentioned the tribal identity of other patients. Mrs. Moore also claimed that Dr. Yates had informed her that Hairy Coat was cured and free to leave the hospital, a claim Dr. Yates contradicted in his testimony. Dr. Yates testified that "before any patient left the Hospital it was his custom and practice to call the patient into his office, give him a careful physical examination, give him good advice, and also give him any necessary medicine to be used and taken with him to his home," which had not been done for Hairy Coat.[268]

While most trachoma patients had a month-long post-operative recovery in the hospital Hairy Coat had been forced to leave after only a few days, resulting in complications to his recovery. Hairy Coat's story mirrors that of many Southwest campaign patients who suffered surgical complications because they did not receive proper post-operative care.[269] However, unlike in the Southwest, Hairy Coat's complications seem to be the exception rather than the norm. Hairy Coat's testimony reinforces the importance that post-operative recovery had in surgical outcomes, a fact that Dr. Yates appeared aware of given the prescribed recovery lengths he typically gave to his patients. Unfortunately, miscommunication between Dr. Yates and Mrs. Moore led Hairy Coat's to suffer preventable surgical complications, resulting in an ineffective operation.

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[268] Blair, "Report of Inspector Blair, of investigation in the death of George Wren," March 19, 1926: 6. *DCI 154, File 11887 [1 of 2]*.
[269] Trennert, Indian Eye Sores, 132-134; Putney, "Fighting the Scourge," 239-240.

Some trachoma patients also seemed to have surgeries which were not completely successful despite proper care. Antoine Monroe was one such patient who had been treated at the hospital "three days before Thanksgiving" only to leave the hospital months later on March 14th, 1926.[270] Antoine Monroe appears to be a case that never fully healed despite ample recovery time and care. Monroe claimed that his eyes "are getting better right along, and I came back here just to have them touched up." Unfortunately, there is no elaboration on what "touched up" referred to, whether it was additional post-operative treatment or another surgery. Still, Antoine Monroe's need for additional treatment shows that surgical treatment, even without complications in the operation or post-operative care, was not always successful in clearing trachoma. As will be shown, cases of post-operative trachoma would be seen in the later years of the campaign.

Cases like Hairy Coat and Antoine Monroe show that the Northwest campaign did not have a 100% success rate. For cases like Hairy Coat, hospital staff were to blame, an occurrence which seemed far less common in the Northwest than the Southwest. Unsuccessful surgeries like Antoine Monroe were likely more common as it became apparent that surgeries did not always heal completely and did not prevent reinfection. And yet neither Hairy Coat or Antoine Monroe expressed a negative view of the surgery itself nor their surgeon Dr. Yates. Despite less than perfect results, Hairy Coats and Antoine Monroe do not call into question the use of surgery. Once again, it must be recognized that the focus of the interviews was not the surgeries. The limited references to trachoma surgeries should not be accepted as encompassing patients' complete views on the subject.

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[270] Blair, "Investigation by Inspector Blair, at Blackfeet Agency Hospital," 35-39.

While patients expressed faith in the surgeries, they continued to raise concerns about Mrs. Moore. Like Hairy Coat, Antoine Monroe had heard negative stories of Mrs. Moore though "she never said anything to me but she had outs with others." From Monroe's perspective, Mrs. Moore "did not talk very good to them[patients] when she ordered them around to do anything. That is, not in a way that a fellow would be willing to do any kind of work for her." Once again, the actions and attitudes of Mrs. Moore are linked to poor treatment of patients, even from patients who did not receive this poor treatment. That the several trachoma patients interviewed did not raise similar objections to other hospital staff, especially Dr. Yates, suggests that Mrs. Moore's actions did not reflect a larger hospital culture of hostility towards patients.

George Wren's Family

The family of George Wren was also interviewed on his hospital stay, his treatment by hospital staff, and their opinions on the cause of his death. William Wren, George Wren's brother, chose to give a single testimony rather than undergo a traditional interview.[271] William Wren was a trachoma patient admitted to the hospital on Feb. 22 to "have my eye operated on for trachoma. The operation was performed on Tuesday morning by Dr. Yates, the physician in charge of the hospital. The operation was successful. During the time I was in the hospital I received good treatment from the doctor and the two nurses, Miss Sandstrom and Miss Cayton." William also asserted that he "believed that if he [George] had not been sent for the water he would not have had the relapse [of fever] and would not have taken pneumonia." William Wren saw the actions of Mrs. Moore rather than hospital policies as responsible for the death of his

[271] Ibid., 12-13.

brother. William asked for Mrs. Moore to be transferred but stated that he had "only the highest praise" for the rest of the staff. William asserted that "I have received, personally, the very best of care and attention since I have been in this institution," suggesting an overall positive impression of the hospital. William Wren's decision to not be more critical of the rest of the hospital staff might have been due to his positive experience at the hospital.

Mrs. Wm. Kipp, a sister of George Wren, was interviewed by Blair on March 17.[272] Mrs. Kipp stated that when she visited her brother a few days after his surgery "he was so proud of his eyes," suggesting George Wren had a positive initial reaction to his surgery. Mrs. Kipp also stated that this was her brother's second operation as he had received an operation the year prior at the old hospital location, near Blackfoot. Newspaper reports of Dr. Fox's 1924 trachoma clinic confirm that George Wren was one of the patients treated, though it is unclear if Dr. Fox performed this initial surgery. [273] Mrs. Kipp reported that during the initial hospital stay George Wren had been in a room with a woman who "had erysipelas and the room had not been fumigated before they put my brother in there. It was not the Doctor's fault that his eyes were bad."[274] Mrs. Kipp blamed the failure of George Wren's first surgery on hospital staff not the doctor who performed the surgery or the surgery itself.

Of the second surgery, Mrs Kipp stated that "Doctor Yates, who is in charge of the Cut Bank Creek Hospital, drove to the home of my brother George Wren to take him

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[272] "Investigation by Inspector Blair," March 17, 1926: 1-3. US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [1 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.
[273] *Great Falls Tribune,* "Doctors Study Fox Method of Curing Trachoma Among Indians at Browning Clinic."
[274] "Investigation by Inspector Blair," March 17, 1926: 1-3. *DCI 154, File 11887 [1 of 2]*.

to the Cut Bank Creek Hospital to have his eyes operated on for Trachoma. When Doctor Yates arrived at my brother's home he found him sick in bed with the flu. Owing to the fact that my brother was considerable better Doctor Yates got him out of bed and took him down to the hospital." Mrs. Kipps testimony shows that Dr. Yates would personally transport trachoma patients to the hospital, providing him an opportunity to build relationships with his patients. After the operation when Mrs. Kipps visited her brother, he asked his sister to help him test out his eyesight post-surgery. After testing his eyesight "he was so pleased to know his eyes were getting along so good," suggesting George Wren's eyes were healing well after the second surgery. Mrs. Kipps also claimed that George Wren "spoke very highly of the doctor's treatment of his eyes. My brother was so pleased to know he was getting along so well and he was telling me that as soon as he got out of the hospital he would be ready to go to work again and pay up a few small bills that he owed." For patients like George Wren, regaining vision would have been beneficial because it opened more opportunities to work. While George Wren "spoke very well of the nurses that were there," Mrs. Kipp recalled that he had stated he "did not like the way she [Mrs. Moore] treated the sick." Like other patients, George Wren seemed to have a distinctly negative impression of Mrs. Moore and her treatment towards patients.

Another sister, Mrs. Mary Jane Goss was interviewed on March 17.[275] Mrs. Goss stated that George Wren had "been in poor health for five or six years. You see he had a lick in his eye clearing timber. That was the first starting of his bad eyes, but he has had Rheumatism for four or five years before that," suggesting trachoma was just one of the

[275] Ibid., 1-3.

eye issues he had dealt with throughout his life. While Mrs. Goss had not seen any negative treatment of patients while visiting her brother, she did relate a story told to her from Mrs. Antoine Munroe. Mrs. Munroe told her of her poor treatment by Mrs. Moore but claimed that Mrs. Moore's behavior was corrected through the intervention of Miss Sandstrom. A clear pattern of negative behavior by Mrs. Moore was established by patient testimonies.

John Wren, a brother of George Wren, was interviewed by Blair on March 19th.[276] John Wren was also a member of the Tribal Council and had been part of the group that asked for an investigation into the death of his brother and the hospital. John recalled that when he saw his brother in the hospital "it was the first time he could see any distance in two years." According to John, George Wren "thought a good job had been done on his eyes" and made no complaints about his treatment by Dr. Yates. Additionally, John Wren remembered that his brother said "he received fine treatment from the nurses. He spoke very highly of Miss Sandstrom and also of Hattie Cayton." Though John relayed the positive views of his brother, he personally expressed far more critical views of the hospital and its staff. John Wren argued that there was no discipline at the hospital as "all the patients that are convalescing going from one room to another and all the children running in the halls…there were cigarette stumps lying all over the floor, tobacco juice on the floor and the bedding is what I call dirty and filthy and the pillow cases looked like they had never seen a laundry and the bandages on my brother's eyes looked like they had not been changed and it was about noon when I saw him." John Wren viewed the

[276] "Investigation by Inspector Blair at Blackfeet Agency Testimony," March 19th, 1926: 1-4. US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [1 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.

hospital as a poorly run, unsanitary, and an unhealthy environment for patients. Moreover, John blamed the entire hospital staff for his brother's death when he stated that "my brother lost his life through neglect and through the carelessness of the hospital employees. I think it a little on the Doctor's [Dr. Yates] part on account of the slackness of the hospital. Of course I have nothing against the Doctor at all but then when the Doctor is placed in the charge of the hospital I think he should have some discipline about it and see that the patients are looked after. As far as the Doctor is concerned I believe he is a very good eye specialist according to everyone that went to him." John Wren was direct in his criticism of Dr. Yates. As head of the hospital Dr. Yates was criticized for failing to run the hospital in a safe and effective manner. In contrast, John Wren accepted that as a surgeon Dr. Yates was effective and well-liked by his patients.

John Wren's criticism of the hospital was echoed by other family members. George Wren's father-in-law Peter After Buffalo was interviewed on March 25 through interpreters Joe Brown and Robert Hamilton.[277] After Buffalo confirmed other family members reports of George Wren's eye issues. Peter After Buffalo recalled that his son-in-law was "taken down to the Hospital for eye treatment and he stayed there too long and owing to the length of the time he stayed there his death occurred. What I mean is, that he was detained down there longer than he should have been and if he had been released at the time he should have, his death might not have occurred." Peter After Buffalo blamed the length of George's hospital stay for his death, critiquing another aspect of the hospital management. While long hospital stays ensured that trachoma

[277] "Testimony of Peter After Buffalo on the Mrs. Moore Case," March 25, 1926. US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [2 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.

patients received proper post-operative care, the extended stays in the hospital placed them a greater risk for contracting other diseases present in the hospital.

Peter After Buffalo was also the main family member who criticized the Northwest campaign. Beyond blaming Mrs. Moore's actions, After Buffalo blamed "the Doctor that went after George Wren," and originally brought him to the hospital. It is unclear which Blackfeet Agency physician this was, but Peter After Buffalo claimed it was not Dr. Yates but "a small man and he wore a white hat." Peter After Buffalo's hostility toward the Agency physicians was due to his personal negative experiences with them. As part of the Northwest campaign this unknown physician had visited After Buffalo and asked, "if I would not give up my children to be taken down to the Hospital for eye treatment." When he "refused to give the children up and owning to refusing to give the children up, the Doctor decided that they should not go to school; that they were not allowed to go to school any more." While it is understandable that the Blackfeet Agency was attempting to stop the spread of trachoma in the schools, the decision to unenroll Peter After Buffalo's children was likely viewed as punishment for his refusal to allow his children to be treated at the hospital. Peter After Buffalo's story suggests that parents might have felt coerced into agreeing to trachoma treatment through a threat of unenrollment. It is unclear how many parents like Peter After Buffalo might have resisted trachoma treatment for their children and how heavily the Blackfeet Agency pressured parents to comply with the Northwest campaign. Peter After Buffalo's story is a necessary reminder that not all Blackfeet benefited from the Northwest campaign and not all viewed it is a positive force on the reservation.

Finally, the last family member interviewed was Mrs. George Wren.[278] Like her father, Mrs. Wren was critical of how the hospital was managed. Mrs. Wren recounted that "during those visits [to the hospital] I found that the patients who we thought go down there for treatment are made to work. That situation did not meet my approval and I criticized the Hospital for making the patients perform work. I was under the impression all the time that they were sent down there to be kept quiet and get cured. That feature of the Hospital is one of the things I found to exist which did not meet my approval." Mrs. Wren and other Blackfeet raised objections to patients being asked to work. The policy of having some patients do work to help run the hospital came under heavy scrutiny through Blair's investigation.

Like others interviewed, Mrs. Wren blamed Mrs. Moore for the death of her husband. Near the time of George Wren's death, she confronted Mrs. Moore and said "you are to blame and no one else in this institution is to blame. You made him carry water which caused his relapse and he will not recover and that is just the same as killing him." In response, Mrs. Wren also claimed that Mrs. Moore had "mumbled a few words I did not catch in a sarcastic manner" which caused Mrs. Wren to lash out in anger and hit Mrs. Moore in the back of the head before the confrontation was broken up by others in the room. Mrs. Wren claimed that "The Doctor knew and realized that she [Mrs. Moore] was to blame" because Dr. Yates sympathized with her and her anger towards Mrs. Moore. Mrs. Wren took this as an admission by Dr. Yates that Mrs. Moore caused George Wren's death. Perhaps her positive experiences with Dr. Yates caused her to

[278] "Testimony of Mrs. George Wren, Browning Montana," March 26, 1926. US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [2 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.

avoid blaming him for her husband's death. Instead, Mrs. Wren stated, "I blame the Government just as much as I blame Mrs. Moore," showing that Mrs. Wren held the entire OIA responsible for the circumstances that caused her husband's death.

The Blackfeet Tribal Council

The Blackfeet Tribal Council initially requested an investigation into the hospital after concerns were raised in one of their meetings regarding the death of George Wren. Investigator Blair interviewed several members of the Council on March 18 to understand what had led them to request a formal investigation. Joseph P. Spanish, elected councilman, was one member present when the Council passed a resolution asking for the removal of Superintendent Campbell and Mrs. Moore.[279] Spanish recounted negative views of Mrs. Moore that aligned with what had already been said of her from hospital patients. In contrast to his views on Mrs. Moore, Spanish said the Blackfeet were satisfied with Dr. Yates. Spanish proclaimed that "I do not believe you could get any better doctor than Dr. Yates. He is on the go day and night." Likewise, Richard Grant, secretary for the Council, testified that he knew of "some complaints made from the people that were place there [at the hospital] as patients against Mrs. Moore."[280] Beyond these complaints, Grant raised no further criticisms against hospital personnel or the administration of the hospital.

Wolf Plume's interview, conducted with Richard Grant and Joe Brown serving as interpreters, provided more insight into the Council's decision to request an

[279] "Inspector's Investigation at Old Agency," March 18, 1926: 1-2. US. DI. OIA. *BA, DCI 154, Year 1926, File 11887 [1 of 2]*. Documents. UM Mansfield Library, 1926–1929. From JSTOR.org.
[280] "Inspector's Investigation at Old Agency," 2-5.

investigation.[281] Wolf Plume stated that at a council meeting "Hairy Coat, John Mad Plume, Daniel Bullplume, John Iron Pipe" all spoke about their experiences at the hospital. Wolf Plume confirmed that the Council passed the resolution to ask for the removal of Mrs. Moore based on these and other testimonies. Wolf Plume elaborated on his reasons for voting for the resolution as follows:

> Q.[Blair] State just what you wish to state and it will be sent back to Washington.
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> A.[Wolf Plume] My reason that I voted against Mrs. Moore is because of this; you take a white doctor and whenever they have a patient under their hands they take care of them very carefully; they are not forced to work. Through my own experience, I have visited the different hospitals, one in Conrad [Montana] where I saw the doctors taking care of the patients and I saw how carefully they were cared for also in Kalispell [Montana] where I was for a year.
>
> Q. Have you anything else you want to say about Mrs. Moore?
>
> A. I saw how the doctors were taking care of the patients in some cases where they were operated on and were put to bed. They were taken care of very carefully and even after they were sent home the doctor would keep in touch with that patient as to how the patient should be taken care of. In all my experiences I have never known of a patient being made to work.

It is clear from Wolf Plume's testimony that he was aware of the racial bias that existed against Native American patients in medical settings. Wolf Plume's testimony showed that he held the physicians and hospital staff at Blackfeet to the same standard of care that he had witnessed being shown to white patients throughout Montana. In voting against Mrs. Moore, Wolf Plume called out her negative treatment of Native American patients. Like others interviewed, Wolf Plume, when asked, declared that he had no knowledge of Dr. Yates treating patients unkindly. That he did not raise objections to the conduct of other staff members implies that Mrs. Moore's treatment of patients was

[281] Ibid., 6-7.

uncommon at the hospital. It appears most of the staff at the Cut Bank Hospital provided quality medical care to their Native American patients. Some medical staff members treated Native American patients with the same dignity, care, and attention that Wolf Plume had seen given to white patients. The investigation into the death of George Wren and Mrs. Moore showed that Native American patients demanded proper and attentive medical care from all medical staff at the Cut Bank Hospital and were vocal in calling out discrimination when it occurred.

Aftermath of the Investigation

The testimonies of trachoma patients, George Wren's family, and the Blackfeet Tribal Council raised various objections and caused the OIA to reassess how the Cut Bank Hospital was managed. The objections raised by John Wren of Dr. Yates aligned with the conclusions eventually made by the OIA. Like John Wren, the OIA eventually ruled that Dr. Yates, despite being a good eye specialist and surgeon, had poorly managed the hospital. In the aftermath of Blair's investigation Dr. Yates was removed as head of the hospital though not let go of as a physician. The OIA also followed up on the criticism of Mrs. Wren and chastised the hospital for using patients as workers. When asked about whether he had instructed Mrs. Moore on which patients were fit to work, Dr. Yates stated "I will confess that our system has been at fault….we really ought to furnish you the list of patients that you could call on and those that were not able to work, but we have not done that."[282] Miscommunication between Dr. Yates as head of the hospital and the rest of the staff had led to mistreatment of patients like Hairy Coat and George Wren. Dr. Yates also raised the need for an additional nurse for the hospital,

[282] Blair, "Investigation by Inspector Blair, at Blackfeet Agency Hospital," 20-24.

suggesting that the hospital was understaffed. Staffing issues might have been one of the reasons why the hospital turned to patients to help with upkeep. Miscommunication, the use of patients as workers, and the poor conduct of Mrs. Moore led the OIA to censure the hospital.

Some of the flaws of the hospital management were directly connected to the Agency's focus on the Northwest campaign. As head of the campaign Dr. Yates "would go on the road as a trachoma specialist," meaning he split his time between the hospital and field work. Thus, Dr. Yates was not always present to manage the hospital personally, leading to miscommunication between him and the hospital staff. Additionally, some of the policies Dr. Yates had put in place to benefit the Northwest campaign came under scrutiny. Superintendent Campbell summed up the problem when he wrote that "in order to get the consent of many of the Indians to operate, Dr. Yates felt that it would be necessary to bring the entire family, although possibly only one or two of the family would be afflicted. While this was probably the best thing to do under the circumstances, nevertheless, it brought about a great deal of confusion in the management of the hospital." The overcrowding at the hospital that John Wren had witnessed was the result of Dr. Yates's decision to allow entire families to stay at the hospital. While this policy benefited the Northwest campaign, it led to further problems with managing the hospital. Campbell argued that "The condition of the hospital was greatly overlooked in trying to get the Trachoma cleaned up before Dr. Yates left that would not have been overlooked under ordinary circumstances, although we did many times talk these matters over with Dr. Yates, but he felt that the only way he could get the Trachoma people in would be to bring the entire family and we probably left the situation too much to him."

Dr. Yates's prioritization of the Northwest campaign caused him to neglect his role as head of the hospital. Superintendent Campbell eventually wrote to Commissioner Burke that Dr. Yates was "proved to be absolutely unsuited to have charge of a hospital and I do not think it would be possible to conduct a hospital with Dr. Yates in charge, regardless of the amount of detailed attention and supervision we could give it." Investigator Blair agreed that "Dr. Yates is certainly deserving of censure for his lack of supervision and administration, and Mrs. Moore should likewise be criticized for her officiousness and assumption of unwarranted authority." As a result of the investigation Dr. Yates was removed as head of the hospital but allowed to continue his work for the Northwest trachoma campaign because of his proficiency as a surgeon. Mrs. Moore was formally censured and removed from the Blackfeet Agency.

The 1926 investigation not only uncovered flaws in hospital management but also showed the various perspectives of the Blackfeet towards the Northwest campaign. Some like Dan Bullplume benefited and were grateful for the campaign. Others like Peter After Buffalo raised criticism toward the campaign and chose not to engage with it. Since the investigation came at the height of the campaign, the idea of surgical intervention was not new to any of those interviewed. Most comments on surgical intervention were positive which suggests that widespread surgical complications were not seen. Had they been, it is likely that most Blackfeet would have been critical or suspicious of the continued use of surgery on the reservation. Most trachoma patients expressed positive views of the surgeries, Dr. Yates, and the hospital nurses. Still, the trachoma patients were interviewed either during or soon after their hospital stays. While these patients might have initially had positive thoughts on their surgeries, their opinions could have changed over time.

Unfortunately, archival gaps make it difficult to decern what the overall lasting memory of the Northwest campaign was.

End of The Northwest Trachoma Campaign

Despite problems at the Cut Bank Hospital, the Northwest campaign continued. By this time there was clear evidence that the Northwest campaign had lowered the number of trachoma cases in the region. A report on the Cut Bank Boarding School in June 1927 noted that "the latest survey on that shows 87 yet on this Reservation [Blackfeet] have Trachoma."[283] Dr. Yates was anticipated to return to the reservation in October to "clean up everybody with that disease." Support for continued cooperation with the local medical community was also confirmed with the passing of a resolution "That every encouragement and help be given to eradicate the disease of Trachoma, and that we co-operate with the [Montana] State Board of Health and our own local Doctors to that end."[284] The adoption of this resolution emphasized the continuing collaboration between the Montana health community and the OIA, who worked together to contain trachoma in the state. Superintendent Campbell wrote that "Since this reservation is so nearly cleaned of Trachoma, the feeling is pretty general, that the few cases that are now left should be taken care of in order that the contagion might not spread. The eradication of Trachoma had been a matter of education, continued over a number of years and the present attitude of the Industrial Organization that will be of course helpful when we plan on trying to clean up this disease in October, when Doctor Yates plans on returning here." [285] Clearly, the Blackfeet Agency saw the eradication of trachoma as imminent by 1927. As case numbers decreased the Blackfeet Agency once again stressed the

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[283] "Conference of Chapter Officers-Five Year Program," June 28-29, 1927. *DCI 054, File 44097*.
[284] "Resolutions Presented by Resolutions Committee," June 28, 1927. US. DI. OIA. *BA, DCI 054, Year 1927, File 44097*. Documents. University of Montana Mansfield Library, 1927. From JSTOR.org.
[285] F. C. Campbell to CIA Burke, Browning, MT, Sept. 3, 1927. US. DI. OIA. *BA, DCI 054, Year 1927, File 44097*. Documents. University of Montana Mansfield Library, 1927. From JSTOR.org.

importance of education and sanitation. With proper education and improved sanitary conditions, the Agency felt confident that it could eradicate trachoma and prevent a resurgence of the disease.

The Blackfeet Agency failed to recognize that views on the use of surgical intervention for trachoma had shifted within the OIA. The OIA decided to formally restrict the use of surgical intervention for trachoma in September 1927. Responding to the vocal critics of the Southwest campaign, Indian Service Chief Medical Director Marshall C. Guthrie sent out a memorandum halting all trachoma surgeries without the express permission of the Washington D.C. office.[286] Formal written approval was required to conduct surgeries, ending their widespread use throughout the country. While some physicians may have sought permission for select individual cases, surgery was no longer viable as the primary trachoma treatment method for Native American patients.

A year later Gen. Scott responded to the memorandum in his 1928 report on the Blackfeet reservation.[287] In his section on trachoma Gen. Scott noted that the "treatment with bluestone, which often continued daily for year with intense suffering" was "usually inefficient" to cure the disease. Gen. Scott went on to mention his attendance at the 1924 Dr. Fox clinic where "A number of his patients operated on many years before at the Carlisle Indian school appeared before the clinic showing the happiest result of the Fox System of Tarsectomy." Gen. Scott praised Dr. Fox's methods which provided "a means of ridding the Indian people of this terrible scourge." Thus, Gen. Scott was "discouraged at the seeming withdrawal of this support by the Bureau" for Dr. Fox's methods and

[286] Meriam et al., *The Problem of Indian Administration,* 214.
[287] Gen. Scott, "Report on the Blackfeet Agency," Browning, MT, Sept. 25, 1928. *DCI 150, File 57302.*

criticized the OIA for going back "to the former inefficient treatment with bluestone." Gen. Scott thought the OIA's reversal of support was "caused by a few bad results of the operation," referring to the complaints of botched surgeries being made in the Southwest. Gen. Scott argued that these were the result of "inexperience operators, but this is no reason for rejecting the operation at the hands of competent operators," like Dr. Yates, and suggested that "the vast majority [of operations] have been highly successful". Dr. Yates was praised for "his sympathy, kindness and devotion…[that] has brought about the happiest results" in the Northwest. Clearly, Gen. Scott was appealing to the success of the Northwest campaign to defend the use of surgical intervention.

Despite Gen. Scott's criticism, the OIA did not waver on its decision to ban surgical intervention. In a March 1929 Memorandum Chief Medical Director Guthrie defended his decision to restrict trachoma operations. [288] By this time Guthrie saw the restrictions as "wise" because it was "recognized that the radical operative procedure is not a 'cure all' for trachoma and according to the best medical thought is applicable to certain types of advanced cases of trachoma." Furthermore, Guthrie argued that "most physicians who have had extensive experience in trachoma regard the radical procedure as unsuitable for small children." Guthrie viewed the use of surgical intervention as unsuitable for most cases of trachoma and especially unsuitable for trachomatous children. The OIA stuck to its decision to restrict surgical intervention. Gen. Scott also seemed to be in the minority about continuing these procedures. Critics of the Southwest campagin were glad for the OIA's shift. The Blackfeet Agency appears to have complied

[288] Chief Medical Director Marshall C. Guthrie, "Memorandum for Mr. Meritt," March 14, 1929. US. DI. OIA. *Blackfeet Agency, DCI 150, Year 1928, File 57302*. Documents. UM Mansfield Library, 1928–1929. From JSTOR.org.

with the 1927 memorandum and discontinued the widespread use of surgical intervention for trachoma.

Dr. Noguchi's Trachoma Discovery

In the same year that the OIA changed direction on surgery, the medical community shifted its understanding of the biological mechanism of trachoma because of a new scientific discovery. In 1927 Dr. Noguchi, renowned scientist of the Rockefeller Institute, proclaimed he had discovered the causal agent of trachoma. Dr. Noguchi declared the disease was viral, causing a major shift in how the medical community perceived trachoma at the time. Dr. Noguchi was incorrect in declaring trachoma a viral disease, as modern scientists have confirmed it is a bacterial disease. Still, at the time Dr. Noguchi's discovery changed how physicians conceptualized trachoma. With this new framework, scientists began to develop new trachoma treatment methods.

The Philadelphia Inquirer suggested that Dr. Fox's work with the Blackfeet might have directly contributed to Dr. Noguchi's discovery.[289] Dr. Fox stated in the article that he had been sending Dr. Noguchi reports yearly on his work among the Blackfeet, providing him information on the cases he saw and the treatments he used. Whether or not Dr. Noguchi viewed Dr. Fox's correspondence as useful to his own trachoma research is less clear. Clearly though, Dr. Fox was a well-known trachoma expert in the country and well respected in the medical community to be mentioned alongside the likes of renowned scientist Dr. Noguchi.

[289] *The Philadelphia Inquirer*, "Trachoma Suffered by 300,000 Indians," May 20, 1927. From Newspapers.com.

After the Campaign: Trachoma on the Blackfeet Reservation

Even though the Northwest Trachoma Campaign had reduced the number of cases on the Blackfeet reservation trachoma continued to be seen. In February 1928, Campbell wrote that "some cases of Trachoma that have developed in the school among children that were not in school last year."[290] Campbell requested that Dr. Yates be sent to the reservation because "at the present time we do not have a Physician on the reservation that has very much, if any, familiarity with Trachoma." The lack of an eye specialist at the Blackfeet reservation is a testament to the substantial decrease in trachoma cases. Unfortunately, the letter also revealed the reoccurring issue of trachoma among children. As children became reinfected with trachoma, cases continued to be seen in the schools on the reservation.

Surgeon D.C. Turnipseed wrote that at the Heart Butte day school "three others had trachoma" of 20 children examined in October of 1928.[291] Dr. Turnipseed also remarked that "one of the trachoma cases was an uncured post operative case," suggesting the student had been treated during the Northwest campaign. Reports of post-operative cases would continue to emerge at the Blackfeet reservation. At the Old Agency Public School "four cases of trachoma and four other cases of post operative trachoma, needing further treatment" were found. At the Holy Family Mission Boarding School "there were 6 cases of trachoma" as well. Dr. Turnipseed also mentioned that at

[290] F.C. Campbell to CIA Burke, "Reference report of Supervisor Peirce," Browning, MT, Feb. 15, 1928. US. DI. OIA. *BA, DCI 150, Year 1927, File 53300*. Documents. UM Mansfield Library, 1927–1928. From JSTOR.org.
[291] Dr. D.C. Turnipseed, "Inspection Report Blackfeet Indian Agency," Browning, MT, Nov. 9, 1928. US. DI. OIA. *BA, DCI 150, Year 1928, File 54419*. Documents. UM Mansfield Library, 1928. From JSTOR.org.

the Browning Public School, which enrolled both Native American and white students, an investigation was conducted "to ascertain how many if any white children are infected with trachoma by being associated in school with Indians." The investigation was conducted in collaboration with the Montana State Board of Health and concluded that "the danger of spreading the infection of trachoma from Indian children to white in this school was very slight." Still, later Montana State Board of Health reports would continue to raise concerns about the potential spread of trachoma within the schools.[292]

Dr. Turnipseed also reported on conditions at the Cut Bank Hospital. The Cut Bank Hospital treated 325 patients in 1928.[293] The report did not mention how many of these cases were trachoma cases and what type of treatment was offered. Dr. Turnipseed recounted the result of a recent health assessment of the reservation made by Dr. Yates. Dr. Yates made an examination of the reservation and found "out of 1060 examinations, 84 cases of trachoma", a substantial decrease from the numbers reported in the late 1910s. Still, the continued reports of trachoma among the Blackfeet meant that the Northwest campaign had failed to eradicate the disease. In his concluding remarks, Dr. Turnipseed stressed "the importance of post-operative and follow up treatment by school nurses, after trachoma operations," a response to the post-operative cases discovered. While the Northwest Trachoma Campaign had greatly reduced trachoma on the Blackfeet reservation it was not successful in eradicating the disease. Still, the Northwest campaign

[292] J.H. Crouch, "A Trachoma Survey of 29 Public Schools on or near Indian Reservations in Montana," *Public Health Reports (1896-1970)*, vol. 44 (March 22, 1929): 637-645; *Great Falls Tribune,* "Trachoma Expert Starts Survey in State Week Late," Sept. 18, 1928. From Newspapers.com.
[293] Turnipseed, "Inspection Report," Nov. 9, 1928. *DCI 150, File 54419.*

came closer than most trachoma interventions that the OIA attempted during the early twentieth century.

Conclusion: Medical Fatalism, Principles for Authentic Public Health, and the Rare Success of the Northwest Trachoma Campaign

In the early twentieth century medical fatalism dominated debates on Native American health. Many believed that Native Americans lacked "natural immunity" which made them a particularly susceptible population to infectious diseases.[294] The idea of no "natural immunity" was directly tied to the belief of Native Americans as "primitive", "uneducated", and "dirty". As a result, many people argued that Native Americans were a "doomed race" that could not be saved even if granted access to modern medical care. Thus, it was seen as futile to provide Native Americans with medical infrastructure, medical education, and healthcare. Medical fatalism came to dominate how the OIA discussed Native health and planned their healthcare interventions. The failure to provide medical care until a critical health situation occurred reflected the dominance of these beliefs within the OIA.

Even when providing medical care, the OIA often had ulterior motivations beyond a desire to improve Native American health and provide modern medical care to a vulnerable population. Pro-assimilationists often advocated for providing medical care to "save" Native children so they could be assimilated in the boarding schools. Likewise, medical care for Native American adults was advocated so that these adults could be workers, in particular farmers, and thus were tied to larger assimilation goals. Lastly, fear of disease spread into white communities was often a catalyst for the creation of Native health interventions. Thus, a desire to improve Native American health and provide them

[294] Jones, "Virgin Soil Revisited," 703-742; Tuchman, *Diabetes,* 102-144.

access to modern medical care was overshadowed by beliefs in assimilation and medical fatalism.

The Northwest Trachoma Campaign of 1923-27 was a rare example of federal Native health intervention that was not hindered by medical fatalism. While some like Dr. Fox held common stereotypical views of Native Americans as "primitive" and "unhygienic", these racial views did not dictate the design and execution of the campaign. Rather, the Northwest campaign was deliberately designed to meet the fundamental aspects necessary for any successful public health campaign and driven by the goal of improving Native American health. The Northwest campaign was the Blackfeet Agency's third attempt to eradicate trachoma, suggesting the Agency truly believed in their ability to improve the health of the Blackfeet. The Blackfeet Agency deliberately sought out the latest trachoma treatments and pursued education and training for their physicians in these latest methods. Lastly, the Agency seemed particularly aware of the needs of the patients they sought to treat. The Agency seems to have designed the campaign to address patient concerns, emphasized the importance of positive doctor-patient relationships, and worked to gain patient trust.

In contrast to its Southern counterpart, the Northwest Trachoma Campaign was largely successful. While it did not eradicate trachoma, it did substantially decrease the number of cases at the Blackfeet reservation. The use of surgery successfully restored the vision of many patients and prevented permanent blindness. These surgical interventions improved the quality of life for patients whose vision was restored. Though post-operative trachoma cases were seen in the years following the campaign, the number of these post-operative cases were substantially lower than the pre-campaign rates of

trachoma. The Northwest campaign's success proved the OIA's ability to conduct an effective public health campaign, deliver modern medical care, and improve Native health.

Several factors are responsible for the Northwest Campaign's success. The first is the personal involvement of Dr. Fox, who conducted trachoma clinics during the summer months. Dr. Fox's involvement in the campaign allowed him to personally treat trachoma patients and spend months training and monitoring the surgical work of the other physicians. Thus, by the time Dr. Fox left the campaign in the hands of the Blackfeet Agency physicians he was confident in their ability to perform both surgeries. Dr. Fox came back yearly to conduct clinics, meaning he was able to track the progress of the campaign and advise as needed. The longer training periods given to the Blackfeet Agency physicians is one of the main distinctions between the Northwest and Southwest campaign. While the Northwest physicians received yearly demonstrations, the Southwest physicians often received just one training session by a single physician who had observed one of Dr. Fox's demonstrations.[295] Dr. Fox appears to have only visited the Southwest once to conduct a trachoma clinic, having far less involvement than he did in the Northwest.

The Blackfeet Agency physicians already had some experience with surgical treatments for trachoma, having used them since the 1916 sanitary campaign. The familiarity with simple grattage meant that Blackfeet physicians had a base knowledge of how to conduct this surgery. Thus, they only had to learn the specifics of Dr. Fox's recommendations for radical grattage. Though tarsectomy was a new technique that had

[295] Putney, "Fighting the Scourge," 237.

to be learned, their familiarity with surgical operations likely made learning this advanced technique easier. Additionally, the extended training of Dr. Yates meant that he was uniquely knowledgeable in these surgical techniques in a way no other OIA physician was. His role as head of the Northwest campaign was beneficial to the campaign, though some of his decisions led to mismanagement of the Cut Bank Hospital.

Still, the existence of the Cut Bank Hospital attests to the differences in investment in the Northwest campaign compared to the Southwest. After the first year, the Blackfeet Agency recognized the need for proper surgical facilities. While the reservation had an old hospital, originally designed as a sanitorium, the facilities were run down and not accessible for patients. The Blackfeet Agency decided to move the hospital to a new location and update the facilities. The hospital was moved from the town of Blackfoot, near the train station, to Cut Bank, near the existing boarding school. Reports continually mentioned that the new hospital facilities helped ensure that medical care was accessible to patients and that physicians had proper surgical facilities.

Dr. Yates attempted to ensure that the campaign was designed with the needs of trachoma patients in mind. One of the major issues to overcome was patient hesitancy to travel to the hospital for treatment. While relocating the hospital ensured that patients did not have to travel far, there was still hesitancy to use the hospital and rely on white medicine. To overcome this hesitancy, Dr. Yates personally traveled throughout the reservation to initiate contact with trachoma patients. In this way, Dr. Yates was able to develop personal relationships with the families affected by the disease. Such personal relationships were beneficial, as Dr. Yates appears to have been largely liked among the

Blackfeet, with most patient testimonies reporting positive views of Dr. Yates and most of the hospital staff.

As head of the hospital, Dr. Yates tried to ensure hospital policies fit the needs of the Blackfeet patients. Dr. Yates created a hospital policy that allowed family members to accompany and stay with patients. The ability for families to stay in the hospital helped overcome patient reluctance around the hospital. Unfortunately, this policy led to overcrowding of the hospital. Overcrowding exposed more patients to potential diseases. Additionally, overcrowding led to issues of hospital management. Due to overcrowding and understaffing, hospital staff relied on patients to work and help run the hospital. Such policies were eventually discontinued because of their negative effect on patients, who suffered under the mismanagement of the hospital.

While clearly a detrimental policy long-term, there is an additional reason for Dr. Yates to have initiated the policy. The ability to visit family in the hospital became important because of the length of hospital stays. In contrast to the Southwest campaign, where a two-week post-operative care limit was enforced, the Northwest campaign was not restricted in the time of post-operative care. With the earlier sanitary campaign and school efforts, the Blackfeet Agency learned that proper post-operative care was essential to ensuring the long-term success of surgery. Thus, post-operative care was given more attention by the Blackfeet Agency physicians. As a result, the Blackfeet Agency physicians appear to have instituted long post-operative recovery periods. Testimonies from several patients in 1926 suggest the average hospital stay was over a month. No mention is made of surgical complications that would warrant longer than expected hospital stays for these patients. Thus, it is likely that the average post-operative care for

trachoma patients was around a month long, twice the length of what was enforced in the Southwest. The extended post-operative care is likely one of the factors that helped avoid the surgical complications that were so quickly seen in the Southwest.

Lastly, while the Northwest Trachoma Campaign was centered on Blackfeet patients it expanded to treat many types of patients. As the number of cases among the Blackfeet decreased the OIA expanded the campaign to include other reservations in Montana. Further research is needed to fully uncover what impact the Northwest Campaign had on these other reservations and what patients at these reservations thought of the campaign. Beyond incorporating various Native American communities, the Northwest Campaign incorporated the white communities in Montana. Local physicians from the surrounding area participated in the trachoma clinics. This is likely because trachoma had spread to the white communities surrounding the reservations. White trachoma patients were treated at the trachoma clinics with the same surgical techniques as Native Americans. This suggests that the use of surgical intervention in the Northwest was not a racially motivated practice reserved solely for Native American patients. This assumption is supported by the fact that the Montana medical community developed their own relationship with Dr. Fox and sought his advice on trachoma. Dr. Fox gave lectures on the same trachoma treatments to the Montana State Health Board that he had given to the Blackfeet Agency.[296] After the OIA abandoned surgical intervention for trachoma, the Montana medical community continued to rely on Dr. Fox and his recommendations. Though the Northwest campaign initially targeted Native Americans it was part of a

[296] *The Billings Gazette,* "Butte to Send Two Health Officers to Session in Billings," May 26, 1926. From Newspapers.com; *The Billings Gazette,* "Fox Clinic Treats Indians' Trachoma by New Eye Method," July 16, 1928. From Newspapers.com.

larger effort during the period to track and treat trachoma throughout Montana and the greater Northwest.

The Northwest Trachoma Campaign is a rare example of successful federal health intervention for Native Americans. The Northwest campaign succeeded because it followed the basic principles for public health rather than being driven by medical fatalism. Scott Frank, MD, MS, laid out several "principles for authentic population health" that are critical for any successful modern public health campaign.[297] While the Northwest campaign did not adhere to all these modern principles it came closer than any other trachoma intervention of the period to fulfilling the standards of modern public health. The first principle is the belief that "everybody=anybody", reflecting an idea that any population can benefit from public health. The Northwest campaign expanded to various reservations and white communities, showing the campaign was not limited to specific groups but open to any population that could benefit from it. The second is a belief that health is a right as well as a personal and public value. While members of the campaign held racial biases against Native Americans, this did not cause them to deny their right to health and healthcare. Medical care under the Northwest campaign was provided regardless of race and racial views held by individuals involved in the campaign. The third tenet is to "be bold", which Dr. Frank qualifies as "calculated risk, pushing boundaries, and calling others to do the same." The Northwest campaign was bold in choosing to use the latest surgical methods, though it was cautious in ensuring that the physicians under the campaign were well educated in the techniques they used.

[297] While different terms in the field of public health, for the purposes of this discussion population health and public health are used interchangeably. Scott Frank, "Principles for Authentic Population Health," *American Journal of Preventive Medicine* 41 (2011): S152—S154.

The fourth principle is to always keep the public in mind when conducting a campaign. The Northwest campaign seems to have kept the needs of patients in mind and been responsive when concerns were raised. Lastly, Dr. Frank emphasizes the relationship between patients and providers. The Northwest campaign appears to have emphasized building a trusting relationship between patients and physicians. Though archival gaps mean that the range of patient perspectives are unknown, the limited sources suggest that most Blackfeet Agency physicians and hospital staff had a respectful relationship with their patients.

Though the Northwest campaign does not meet all of Dr. Frank's modern principles for public health, these principles help explain why the campaign succeeded despite the dominance of medical fatalism.[298] Medical fatalism during the early twentieth century often overshadowed such basic public health principles, resulting in failure to create sustainable health progress for Native Americans. In the rare historical cases where authentic public health principles were prioritized, effective interventions could be conducted, and improvements made in the health and healthcare of Native Americans despite this dominance. The Northwest campaign is a reminder that these public health principles have always been vital components of the success of public health and necessary to create improvement and change in Native American health and healthcare.

[298] In particular, Dr. Frank's emphasis on social justice and policy changes are modern tenants of public health that did not apply to the Northwest campaign.

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