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Title of lesson plan: Primary Sources: Healthcare History in Maine

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Content Areas: MHS Bicentennial Theme - Community

• Career & Education Development

- English Language Arts
- Health Education & Physical Education
- Mathematics
- Science & Technology
- Social Studies
- Visual & Performing Arts
- World Languages

Strand and Standard: See page 18 of this packet for additional strand/standard information.

- Social Studies, Grades 6-8: History 1 – F1, F2, D1, D2; History 2 – F1, D1.

- Social Studies, Grades 9-Diploma: History 1 – F1, F2, F3, D1; History 2 – F1

Duration: 4-5 days

Grade Levels: 6-8, 9-diploma

Materials and Resources Required: computer, projector, access to Maine Memory Network (recommended to start a free account – students can gather additional sources into folders using an MMN account), documents and objects listed in "PSD analysis" sections of packet, optional rubric (page 19 of this packet)

Note about "PSD analysis:" For each segment, a number of Maine Memory Network items will be listed. These are linked in the slideshow on the lesson plan page. In pairs or groups, students look at Maine Memory Network items listed in each segment. For documents, students are asked to read the transcripts (linked on the item page) and take notes on anything that may stand out or that they have questions about. For objects, students look at make and materials and take notes about how they think the object may help to contextualize the era from which it came.



Summary/Overview: What will students learn? What is the purpose? (ie. Objectives/Learning Targets)

This lesson plan will give students the opportunity to read and analyze letters, literature, and other primary documents and articles of material culture from the MHS collections relating to how people in Maine have given and received healthcare throughout history. Students will discuss the giving and receiving of medicines and treatments from the 18^{th} - 21^{st} centuries, the evolving role of hospitals since the 19^{th} century, and how the nursing profession has changed since the Civil War. Students will also look at how people and healthcare facilities in Maine have addressed epidemics in the past, such as influenza and tuberculosis, and what we can learn to-day from studying the history of healthcare and medicine.

- **Big Idea:** 21st century healthcare owes its position to the advancements made in treatments and medical accountability throughout history.

Essential Questions:

- How have healthcare providers in Maine responded to health crises (such as epidemics and war needs) in the past?
- How have some of the hospitals in Maine, and treatment methods in Maine, changed over time?
- How have different healthcare facilities and providers respond to the medical needs of people in disadvantaged economic situations?
- How has the nursing profession changed over time, and how have nursing schools grown to meet the needs for nurses in Maine?

- Objectives:

- Students will analyze and draw conclusions from primary source documents.
- Students will be able to discuss how some of the healthcare systems in Maine were created to address timely needs.
- Students will be able to discuss how healthcare needs during the Civil War changed professionalized medical practices.
- **Vocabulary:** folk medicine, inoculation, accountability, Traditional Ecological Knowledge (TEK), sanatorium, epidemic, panacea

Steps:

I. Day 1: Introduction

- a. (If your classroom/school has a land acknowledgement, MHS recommends beginning this lesson with a land/water acknowledgement. More information in Teacher Resources at the end of this packet.)
- b. Introduction
 - i. This lesson plan will give students the opportunity to examine primary source materials including photographs, objects, and documents, all of which relate to the changing nature of healthcare in Maine. Each day will build on students' understanding of how healthcare services (including nursing, establishing hospitals, and distributing medicine) have changed over the past 200+ years, with students being asked to draw comparisons and differences between artifacts from different periods of Maine history.
- c. Folk medicine and other medical services prior to the 19th century
 - i. Folk medicine is medicine of the people, developed within communities and passed down from one generation to the next, rather than by a team researching and developing medications for particular diseases or ailments. Several folk medicinal practices are still in use today (such as certain plants or natural remedies used to help things like headaches or mosquito bites) but should not be considered a substitution for contemporary treatments, particularly with advanced diseases like cancer.

ii. Women in medicine

- Non-Indigenous women living in what is now North America who practiced medicine often practiced midwifery, which was considered a separate profession from the men practicing as doctors. Folk remedies passed down through oral history and written instructions guided many areas of medical practice.
- 2. Wabanaki doctors like Molly Ockett (Pigwacket, ca. 1735-1816) offered medical services to treat wounds and illnesses. Molly Ockett practiced medicine based in oral history and what today is known as Traditional Ecological Knowledge (TEK), and despite the systemic removal of Indigenous people from what has become the Fryeburg area, Molly Ockett offered her medical services to both Indigenous and non-Indigenous members of the community in which she lived. Molly Ockett is known for helping an infant Hannibal Hamlin (Abraham Lincoln's first Vice President and a resident of Maine) recover from illness.
 - a. Traditional Ecological Knowledge/Indigenous Knowledge (TEK/IK) is place-based knowledge based in oral history and tradition passed down through generations of Indigenous peoples. Wabanaki people have been living in what is now known as Maine for more than 13,000 years, and TEK has developed over long periods of time as people learned which natural resources

were helpful and which were harmful to survival. Medical practice, like ecological stewardship, evolves just as any other scientific practice through trial and error.

- 3. Non-Indigenous midwives like Martha Ballard (1735-1812), who lived in Kennebec and kept a record of her practice, used folk remedies to assist women with childbirth. In addition to midwifery, Martha Ballard treated illnesses and offered mortuary services. Physicians (generally male doctors) would often be called in to help midwives if needed for a difficult birth, but it was not until the invention of forceps that more physicians than midwives began delivering babies. However, because of cleanliness issues in early hospitals, midwifery was often the safer option women and children were more likely to survive deliveries at home than in hospitals until cleanliness standards for doctors improved in the latter part of the 19th century.
- Women in Maine were rarely formally recognized or registered practitioners of healthcare services in the 19th century until the Civil War. More on this will be discussed on Day 3.

iii. Inoculation

- 1. Inoculation combatting a disease by exposing a small amount of the live virus to a healthy person via injection has been part of medical remedies for hundreds of years, and was likely first practiced in what is now the United States by African people enslaved by white colonists. In Massachusetts in 1720-21 (during which time Maine was a province of Massachusetts), a controversy arose over the practice of inoculation, with Puritan leader Cotton Mather arguing for the reliability of African oral testimony regarding the benefits of inoculation against an epidemic of smallpox (as well as arguing for the practice of inoculation by religious leaders like himself), and Edinburgh-educated Doctor William Douglass arguing against African medical knowledge and campaigning for rigorous testing.
- Vaccination—artificially activating a body's immunity to diseases by administering a vaccine containing a living, dead, or weakened virus or bacterium—has widely replaced inoculation as of the 20th century with advancements in cures for epidemics like smallpox, polio, measles, and tuberculosis.

iv. Hospitals

1. Before the 19th century in much of the Western world, healthcare happened at home. Folk remedies were used within the home and physicians and midwives made house calls to treat patients. Hospitals were established as places for people too sick to be kept at home, and most people who went into the hospital died while there. This began to change in the 19th century as medical professions formalized, and hospitals became institutions for caring for several people at once.

- d. Primary Source Analysis: MMN item #7574 (recipe for piles treatment, ca. 1790), MMN item #7572 (medical recipe for unknown ailment, ca. 1790), MMN item #7566 (letter from Benjamin Vaughan to Dr. Page about treating a patient using bloodletting, 1801), MMN item #104255 (prescription from Dr. Benjamin Vaughan to Elizabeth Atkins for pain relief from phthisis pulmonalis, 1802), MMN item #1474 (birchbark box made by Molly Ockett, ca. 1770), MMN item #33430 (receipt for medical services from Dr. William B. Gooch, 1830), MMN item #82305 (statement of expenses for family receiving smallpox care at Portland City Hospital, ca. 1825), MMN item #17527 (advertisement for Dr. Josiah Flagg's dentistry services, 1789), MMN item #23889 (letter from Josiah Pierce to father about influenza and measles, 1815)
- **e. Discussion:** It is recommended to work on Day 1's discussion as a full group, and then split students into pairs or small groups from Day 2 onward.
 - i. Dr. Benjamin Vaughan described his prescriptions for his bloodletting patient and for treating a woman with a form of tuberculosis (items 7566 and 104255). What remedies is he using? He was working with the medical knowledge of the time – do you think his methods were effective? Why or why not?
 - ii. What are some commonalities that you notice in the medical recipes and Dr. Vaughan's prescriptions? Are there any similarities between his prescriptions and Dr. Lincoln's prescriptions for Josiah Pierce's influenza and measles in 1815?
 - iii. Did anything stand out to you in Dr. Josiah Flagg's dentist advertisement? Why?
 - iv. What questions do you still have about early 19th century Eurocentric medicine?

II. Day 2: The Hospital

- a. Civil War Hospitals and the Maine Camp Hospital Association
 - One of the major changes in the formalization of hospitals happened during the Civil War (1861-65). With a rising need to treat wounded soldiers, temporary hospitals were set up in army camps or by repurposing nearby buildings such as hotels.
 - ii. The Maine Camp Hospital Association was established in 1862 to assist Maine soldiers in the Army of the Potomac. The association, and several other sanitary associations established in towns throughout Maine, raised money and collected donations to be sent to military camp hospitals. Maine nurses like Rebecca Usher would often write to relatives or to the Association with requests for supplies camp hospitals most desperately needed. More about this will be discussed on Day 3.
 - iii. In 1866, one year following the end of the Civil War, specialists were able to identify bacteria under a microscope, which led to further changes in medical research, treatments, and searches for cures.
- b. Hospitals in the 19th and 20th centuries
 - i. Maine General Hospital/Maine Medical Center
 - With a need for a new hospital in Portland, the Maine General Hospital
 was incorporated by committee in 1868, shortly after the end of the
 Civil War. \$100,000 was raised from the Portland community for construction.

- With only one wing completed, Maine General Hospital (MGH) began
 accepting patients in 1874. Additional wings were built in phases until
 the completion of the central building in 1892. The original staff was
 made up of nine physicians, and the original facility housed 20 beds. In
 its first year of operation, MGH tended to 114 patients.
- 3. A surgical amphitheatre was built at MGH in 1885. Operating theatres were common ways for medical students to observe surgeries and autopsies. The MGH operating theatre could seat 200 people.
- In 1951, Maine General Hospital merged with the Maine Eye and Ear Infirmary, Brighton Medical Center, and the Children's Hospital to create Maine Medical Center, which remains Maine's largest medical center as of 2020.
- 5. Today, Maine Medical Center is a teaching hospital affiliated with Tufts University School of Medicine (MA), as well as the University of Southern Maine and St. Joseph's College (ME), and Dartmouth College (NH).

ii. Bangor General Hospital/Eastern Maine Medical Center

- The need for a hospital in Bangor was the subject of a public meeting in March 1891, during which 70 citizens signed a petition to build one. Bangor General Hospital opened in June 1892. Elizabeth Spratt was signed on as superintendent and overseer of the nurse training school. The hospital was supported by annual fundraising efforts from the Woman's Hospital Aid Society. The original facility was made up of patient rooms and one operating room, and served 150 patients in its first year.
- 2. In 1895, the hospital staff was divided into a 4-person medical staff and a 5-person surgical staff, and a dental surgeon joined the staff as well.
- 3. The name of the hospital was changed to Eastern Maine General Hospital in 1896. It would later be changed again to Eastern Maine Medical Center in 1969.
- 4. The hospital was filled over capacity in March 1904 due to an epidemic of typhoid fever in the Bangor area. In 1913, students of the nursing school (more to be explored on Day 3) were vaccinated against typhoid, and in 1917, a ward for contagious diseases was listed among the most urgent needs according to the trustees of the hospital one year before the influenza pandemic of 1918 hit. More than 300 victims of the 1918 influenza were admitted to Eastern Maine General Hospital. The 1918 pandemic disproportionately affected young adults (20s-40s) and spread rapidly in military barracks and training camps during World War I.

iii. Queen's Hospital/Mercy Hospital

 Queen's Hospital in Portland was incorporated in direct response to the 1918 influenza pandemic. It was founded by the Sisters of Mercy, a charitable organization of Catholic nuns dedicated to helping the sick, poor, and underserved. The "Queen" in the original hospital's name was meant to refer to Mary, mother of Jesus Christ; the hospital was later renamed Mercy Hospital. The Sisters of Mercy, as an order, were founded by Mary Catherine McAuley (1778-1841) of Dublin, Ireland. McAuley and other volunteers working with her were dedicated to helping the underserved. Following the work of the Sisters of Mercy, Queen's Hospital was known for providing services at reduced, probono, or deferred fees for those who could not pay.

- 2. The original Queen's Hospital facility opened in December 1918 with equipment enough for 25 patients. The 1918 pandemic hit hardest in the autumn and winter of that year. In its first year of operation, Queen's Hospital admitted 360 patients, often operating over capacity. It grew to housing 60 beds, but alternative spaces were sought out for patients when the demand exceeded available beds.
- Queen's Hospital was renamed Mercy Hospital in 1941, and a larger facility opened in 1942, at the height of World War II. The new hospital had 150 beds and 36 bassinets. Mercy Hospital continued expanding due to need in the 1950s, 1960s, and 1980s, and a second facility opened in 2008.

iv. Specialized Hospitals

- 1. Tuberculosis treatment facilities
 - a. To address the epidemic of tuberculosis in the early 20th century, many states and private organizations built sanatoria in open-air places. A sanatorium was a housing and treatment facility, built to provide patients with the fresh air, rest, and proper diet prescribed to tubercular patients.
 - b. Of the facilities in Maine, the Maine State Sanatorium in Hebron was intended as an option for patients most likely to recover, while more serious cases were sent to other facilities. It was incorporated in 1901 with Dr. Estes Nichols (1874-1944) as its medical director until the state took over the facility in 1915. Dr. Nichols was a lung disease specialist who had served in the Medical Corps in World War I.
 - c. By the time the Maine State Sanatorium Association was formed in 1901, nearly 1,300 Mainers were dying of tuberculosis every year. The Maine State Sanatorium first opened in 1904 with "cottages" for men and women designed by Portland architect John Calvin Stevens and his son, with wings extending from the cottages to allow fresh air into the rooms from both sides. Central to the operations at Maine State Sanatorium was an onsite farm for dairy cows, allowing patients to receive the recommended diet from the most local source.
 - d. Dr. Nichols' treatment relied on fresh air, with patients sleeping on the porches or patios, or with windows open, while wrapped in fur coats and blankets with their feet in straw-lined boxes.

- This treatment had changed considerably by the time Dr. Lester Adams became the director in 1928, but fresh air was still considered to be a vital part of tuberculosis treatment.
- e. Dr. Nichols was known for helping to admit patients at reduced rates, as the cost of housing and treatment for the length of a patient's stay could run steep for the mostly middle- and lower-class communities that sought treatment at the facility (around \$10-\$12 per week). Despite charitable efforts to cover patient costs, the piecemeal payments were not sustainable. The state took over the sanatorium in 1915, capping rates at \$5 per week and subsidizing payments with state funding.
- f. After the state took over the sanatoria in both Hebron and Fairfield, another was built in Presque Isle, and the facilities were renamed the Western Maine Sanatorium, Central Maine Sanatorium, and Northern Maine Sanatorium, respectively. Hebron and Presque Isle closed in 1959; the others closed in 1969. Closings were the result of both new therapeutic drug options and changes in the philosophies of care, including the idea that state institutions were no longer ideal for medical or psychological care.

2. Other specialized hospitals

- a. The Maine Eye & Ear Infirmary opened in Portland in 1886, primarily to treat the socioeconomically disadvantaged for eye and ear infections or other needs. The Children's Hospital opened in Portland. Both organizations, along with Brighton Medical Center, merged with Maine General Hospital to become Maine Medical Center in 1951. The Children's Hospital is today known as the Barbara Bush Children's Hospital, and is located within Maine Medical Center in Portland as its own specialized wing.
- c. PSD analysis: MMN item #7708 (first meeting of the Corporators of Maine General Hospital, 1869), MMN item #5388 (letter concerning Sanitary Association, 1862), MMN item #28343 (letter concerning need for Portland hospital, 1832), MMN item #7516 (MGH surgical amphitheatre, ca. 1894), MMN item #16255 (operating room, Eastern Maine Medical Center, 1974), MMN item #36584 (sanatorium staff wearing PPE, Hebron, ca. 1914), MMN item #7390 (Maine General Hospital building, ca. 1876), MMN item #104368 (Queen's Hospital administration building, ca. 1930), MMN item #23550 (Stevens' plan of Maine State Sanatorium, 1908), MMN item #23516 (Maine State Sanatorium cottage, ca. 1909), MMN item #23637 (patients of Western Maine Sanatorium, 1929), MMN item #23573 (letter from former tuberculosis patient Jennie Small to Dr. Estes Nichols, 1908), MMN item #23546 (letter from Lutie Eaton to Dr. Nichols asking for financial assistance for her son, 1908), MMN item #22642 (film of Western Maine Sanatorium, 1924), MMN item #23533 (Maine State Sanatorium diet, ca. 1906), MMN item #7444 (MGH hospital ward, ca. 1930), MMN item #16204 (Eastern Maine General Hospital's first ambulance, 1900), MMN item #15263 (Eastern Maine General Hospital,

ca. 1910), MMN item #105192 (Maine Medical Center, 2008), MMN item #9821 (Dr. Salustiano Fanduiz, ca. 1895), MMN item #7569 (Maine General Hospital medical staff, ca. 1874)

d. Discussion:

- i. Looking at the photos of the surgical amphitheatre from the 1890s and the operating room from the 1970s (images 7516 and 16255), what similarities can you draw? What differences? What do you notice in the photo of the amphitheatre that tells you about the conditions of surgery in the 1890s? How did that change by the 1970s? Look closely at both images what do you notice?
- ii. Compare the architectural styles of the hospital and sanatorium photographs. How has the image of a "hospital" changed over time?
- iii. Looking at the images, letters, and film from the tuberculosis sanatorium, what can you conclude about what life was like for the patients? How were treatment methods at the sanatorium different from the prescription from 1802 you looked at on Day 1?
- iv. Looking at the photographs of doctors (Dr. Fanduiz in image 9821 and the MGH staff in image 7569), what can you conclude about how doctors were perceived and presented themselves professionally? Would you have been able to tell they were doctors without knowing they were already? Why or why not? What do you think of when you think of a doctor today?
- v. In the letter from 1832, a Portland lawyer is expressing his support for a needed hospital in Portland. Looking at the letter from the corporators of MGH from 1869, were Portland's needs addressed? Why or why not?

III. Day 3: Nursing

- a. Maine nurses in the Civil War
 - i. The Civil War (1861-65) fundamentally changed many aspects of healthcare in the United States, particularly with regard to nursing. The Maine Legislature authorized the governor to allow women to enlist as army nurses. Most of the women who signed up as nurses during the Civil War did so without compensation for any of their work. When the Maine Camp Hospital Association dissolved at the end of the Civil War, the remaining funds held by their treasurer were distributed to women from Maine who had served as voluntary nurses.
 - ii. Civil War nurses from Maine, and elsewhere, did not receive any formal training for their work, but learned what to do out of necessity on the field. Maine nurses were instructed to care for Maine soldiers first, and then any other soldiers who needed their assistance.
 - iii. In addition to providing medical services for injured soldiers, nurses would also write home asking for supplies, especially used clothing and fabric that could be repurposed as cloths to clean injuries, as well as needed entertainments for soldiers such as books and tobacco.
 - iv. Prior to the Civil War, the vast majority of women in the United States did not work outside the home. Nursing began to open more opportunities for women seeking professional work; in the mid-19th century, most nursing was practiced in home care (such as sanitizing a room for medical care, preparing patients for

- surgery, and administering anesthesia), but quickly underwent professionalization in the later 19th century and into the 20th century.
- v. The Maine Nurses Association would be incorporated in 1914, and a law stating that nurses needed to be registered by the state was passed in 1915.

b. The Red Cross

i. The American Red Cross was founded in 1881 by Clara Barton, who had been a nurse in the Civil War (and who was, incidentally, the grand-niece of Martha Ballard, one of the most well-known of Maine's midwives due to her detailed diary of activities in the late 1700s and early 1800s). The American Red Cross was established to provide humanitarian services in the wake of disasters, and several Red Cross centers were established throughout Maine during World War I, with women fundraising and signing up as volunteer nurses both in the US and abroad to assist soldiers as they had during the Civil War.

c. Nursing schools in Maine

- i. Queen's Hospital/Mercy Hospital Nursing School
 - Nursing became professionalized following the Civil War, and most
 Maine hospitals established nursing schools to fill the growing need for
 professional nurses. The influenza pandemic of 1918 spurred an increased need for nurses, and several young women were trained in the
 profession at Queen's later Mercy Hospital, which itself opened in
 direct response to the pandemic.
 - 2. While Mercy was and is a Catholic institution, nurses from within and outside of the Catholic faith began working at the hospital. The Queen's Hospital Training School was established in response to the rising demand for nurses in Portland. The school provided a three-year program for certification. The first student to receive her diploma was Loretta Kilfoil, who graduated in 1923. The 1924 class graduated five women. Male students were accepted until the US entered World War II, and remained all-female until the 1960s. The final class graduated in 1987.
 - 3. The school provided practical training as well as scholarly study. Changes to students' textbooks reflected the changing nature of medicine throughout the 20th century (from bloodletting to bacteriology), as well as teaching ethics as they related to nursing. Applicant qualifications for acceptance into the program by the 1950s included a high school diploma, good health, and a psychological test.
 - 4. Mercy trained students from throughout Maine, including Wabanaki students, as well as students from Canada and some from Europe.
- ii. Maine General Hospital/Maine Medical Center Nursing School
 - Alida Leese was the first superintendent of nurses and director of MGH's Training School for Nurses, starting in 1885. Nursing students at Maine General Hospital in the late 19th century learned and worked in the hospital, and were trained in elementary massage and cooking for the sick. Housing for nursing students was constructed on MGH's

- campus in 1902, and named in honor of Leese. The residence was home to 58 nurses upon opening.
- 2. The Maine General Hospital Training School for Nurses accepted applicants who were between 22-34, unmarried, healthy, and able to provide a letter attesting to their good character. Student nurses' days were structured, and if a nurse was going to be late to lunch due to working over schedule with a physician, they were instructed to call the cafeteria using the internal phone system.
- 3. When MGH became Maine Medical Center, the school's name was renamed the Maine Medical Center School of Nursing. The final class graduated in 1967. Today, many nursing students in Maine are educated at the University of Southern Maine, University of New England, University of Maine, St. Joseph's College, and other colleges and universities with teaching affiliations with Maine hospitals like Maine Medical Center.
- d. PSD analysis: MMN item #13259 (Act concerning female army nurses, 1861), MMN item #18561 (news office storefront, Portland, ca. 1918), MMN item #105645 (Red Cross "Join" poster, 1917), MMN item #18344 (Red Cross staff, Portland, 1926), MMN item #17837 (blood drive on railroad car, Houlton, 1952), MMN item #34336 (Grey Lady uniform, Bangor, ca. 1942), MMN item #7386 (student nurses from MGH, Portland, ca. 1895), MMN item #7388 (Alida Leese, ca. 1885), MMN item #7589 (Alida Leese Nurses' Home, MGH, ca. 1925), MMN item #7844 (MGH School of Nursing graduates, 1941), MMN item #17249 (nurse's cape, Bar Harbor, ca. 1940), MMN item #5263 (illustration of US Hospital, Georgetown, DC, ca. 1865), MMN item #81017 (Rebecca Usher letter about history of military hospital, 1863), MMN item #10456 (Mercy nursing students relaxing after capping night, 1953), MMN item #104151 (Mercy Hospital laboratory technician, ca. 1943), MMN item #104149 (Mercy Hospital technician, ca. 1941), MMN item #102299 (Sumner Cobb letter to mother from Camp Taylor, discussing precautions against flu, 1918), MMN item #102300 (Sumner Cobb letter to mother from Kentucky, discussing flu, 1918)

e. Discussion:

- i. On Day 2, you looked at images of doctors in the late 19th century, and today you saw some images of nurses from the 19th and 20th centuries, as well as images of nurses' uniforms and Red Cross uniforms. What was the image of a "nurse" during the periods in these photos? What do you think of when you think of a "nurse" today? What has changed? What hasn't?
- ii. What do Rebecca Usher's experiences, detailed in her letter, tell you about the role of a nurse in a Civil War hospital? How do the legislative act and illustration of a hotel converted into a hospital, along with Usher's letter, provide more information about healthcare for soldiers during this time?
- iii. Mercy Hospital was founded during the flu pandemic of 1918. What do Sumner Cobb's letters from war training camps tell you about the disease? How do you think that the nurses at Mercy might have benefitted from the previous experiences of wartime nurses in the 1860s?

iv. What do you still wonder about how nursing professionalized? What can you infer about changes to the profession by looking at the photographs?

IV. Day 4: Medicine

- a. Advancements in medication were made in the decades following the Civil War, but the American pharmaceutical market had also been subject to quackery from the time of the Revolution. While natural remedies continued to be used to some extent, patent medicines were on the rise in the late 19th century to the early 20th century. Prior to modern regulations, accountability in patent medicines mostly came from the fact that, for the most part, the people who bought patent medicines did feel better after taking them however, with most issues needing to be cured (such as the common cold), this would happen naturally regardless. Most of the medicines for everyday illnesses were marketed as panaceas, or cure-alls.
- b. The most common type of patent medicines were tonics. Tonics would combine plants and roots with healing properties, like sarsaparilla, with other ingredients and be bottled and sold as medicines. Tonics used as stimulants for the lungs, blood, or brain, such as Moxie Nerve Food, would later be altered and sold as soft drinks. Many soft drinks are still referred to as tonics in parts of the US. Moxie Nerve Food was repackaged as Moxie soda created in Maine, Moxie is the first and longest-operating soft drink made in the United States.
- c. Many patent medicines contained natural elements along with opiates and alcohol. During Prohibition, which had beginnings and strong support in Maine, doctors would need to show their license in order to purchase and prescribe medicines with large amounts of alcohol. Drug abuse could be attributed to the over-consumption of medicines with high opiate and alcohol contents.
- d. Vaccines began development for highly infectious diseases starting in the late 19th century. As doctors began to understand more about how dangerous, highly infectious diseases like tuberculosis and smallpox worked, they could prescribe better cures for patients, isolate and study bacteria (first visible under a microscope shortly after the end of the Civil War), and develop vaccines that could prevent a person from contracting or spreading these diseases altogether. Medical staff were required to be vaccinated for certain diseases in Maine hospitals starting in the late 19th and early 20th centuries.
- e. Medicine distribution and availability, 19th-early 20th centuries
 - i. Retail
 - 1. In the 19th century, patent medicines could be purchased in retail establishments, and even in post offices. The most common establishment selling medications over the counter were apothecaries, which would later give way to the modern pharmacy.

ii. Mail-order

- 1. Patent medicines rose in popularity mostly due to newspaper advertisements. Some manufacturers and apothecaries would also offer consumers the option of ordering medicines by mail.
- iii. Clairvoyants in the 19th century
 - 1. In the latter half of the 19th century, "Botanics" and clairvoyants offered metaphysical services for patients for whom practical medicine was not

working; this phenomenon was concurrent with the phenomenon of Spiritualism, with several occultists becoming high-profile for their claims of having the ability to communicate with the dead. As with patent medicines, clairvoyants would spread the word through newspaper advertisements and even broadsides. The advent of Christian Science doctrines also offered healing through a combination of medication and prayer. Some newspapers in the late 19th century reported that religious services had their own time and place, while doctors were perhaps the ones delivering the cures that God intended. Clairvoyants claimed to be able to assess a patient on sight and cure them without hospitalization.

iv. Regulation

- The Food and Drugs Act was passed in Congress in 1906. The Act was created after direct observations in how patients reacted to patent medicines either showing that they had no effect, or were dangerous. The passing of the Act was a critical first step in providing accountability in medicine. Today, medications must be approved by the Food and Drug Administration (FDA) before they can be prescribed to patients or purchased over-the-counter at pharmacies, and all medicinal products must clearly display their intended use and functions on the packaging.
- 2. In Maine, Henry Pope Clearwater, Ph.D., was a pioneer in the mail order patent medicine business, shipping his medicines to customers who could order from a catalogue as well as from his pharmacy in Hallowell. He claimed to have developed a cure for rheumatism, taken in three pink pills, in the 1930s. The first pill was composed of ferrous carbonate, magnesium dioxide, sulfur, and a zinc compound. The second contained cascara, and the third aspirin and starch. The federal government took Dr. Clearwater to court in 1942 for misleading patients in his labels, and on claims that his pills were useless in preventing and/or treating the ailments they claimed to treat and prevent. He entered a plea of *nolo contendere* and was fined \$150. After his death in 1952, his business was liquidated.
- f. PSD analysis: MMN item #8811 (United Society of Shakers' herb catalogue, 1864, reprinted 1981), MMN item #98914 (artificial leg, 1865), MMN item #98915 (Wesley Martin with artificial leg, 1916), MMN item #20393 (children's pills, ca. 1938), MMN item #31710 (vaccination notice, Scarborough, 1902-03), MMN item #100289 (botanic physician's letter of diagnosis, 1886), MMN item #99373 (handbill for a clairvoyant physician, 1861), MMN item #20390 (insulin syringe, ca. 1938), MMN item #82279 (alcohol use permit for Dr. Giguère, 1922), MMN item #1149 (advertisement for liniment for human and animal use, 1880), MMN item #20151 (advertisement for vegetable bilious bitters, 1872), MMN item #33327 (Mitchell's Genuine Balsam Remedy, 1904), MMN item #70491 (Mabee Drug paregoric preparation, ca. 1930), MMN item #29190 (Henry Pope Clearwater, ca. 1950), MMN item #29185 (Dr. Clearwater's Pharmacy, ca. 1904), MMN item #29207 (Dr. Clearwater's "Oint-Ease," ca. 1942), MMN item #29186 (Dr. Clearwater patent medicine advertisement, ca. 1935), MMN item #28980 (homeopathic

medicine box, ca. 1850), MMN item #28979 (medicine kit, ca. 1860), MMN item #6963 (surgical kit, ca. 1770), MMN item #102250 (Dana's Sarsaparilla advertisement, ca. 1890), MMN item #80360 (Moxie Nerve Food shipping box, ca. 1900), MMN item #10720 (Buxton Rheumatic Cure Co., ca. 1900), MMN item #81389 (Foley's Honey and Tar Compound bottle, ca. 1895), MMN item #20262 (D.W. Heseltine Apothecaries, ca. 1890), MMN item #8877 (Maine General Hospital pharmacy, ca. 1945)

g. Discussion:

- i. In the Shakers' herb catalogue, find 3-5 herbs, plants, etc. listed and their suggested use (make note of the abbreviations on page 4). Do any of the items you found listed in the catalogue have the same use as the ingredients in the recipes you looked at on Day 1? Do any of these ingredients appear in the labels of bottled cures in this PSD set? Do you recognize any of these herbs or ingredients in medicines or natural remedies still in use today?
- ii. Do you believe the claims made in the broadside for Mrs. Greenlaw, the clair-voyant physician (item #99373)? Why or why not?
- iii. Compare the medical tools and kits from this PSD set. What similarities can you find over time? How did medical equipment change? What conclusions can you infer about medical practices in a given period of time based on the tools used by practitioners?
- iv. What claims are being made on medicine bottles and in patent medicine advertisements in this set? Do you think that these medicines were effective for their purported treatments? Why or why not?
- v. Looking at the photographs of apothecary and pharmacy services, how has distribution of medicine changed over time? What stands out to you and why?

V. Final discussion:

- i. What do you still wonder about healthcare history in Maine?
- ii. How has Maine been equipped to combat epidemics in the past? Were resources and medical experts in Maine successful? Why or why not? How do the efforts to combat epidemics in the past, such as influenza and tuberculosis, compare to 21st century efforts to combat the novel coronavirus, COVID-19?
- iii. What does medical accountability look like in the 2020s? What makes you say that?
- iv. Optional extension activity: Dig deeper into the history of hospitals, nursing, medicine, or another issue from this lesson plan and present your findings in a short research paper (recommended 2-3 pages for grades 6-8, 3-5 pages for grades 9-12). Utilize at least two additional primary sources (Maine Memory Network items included).

Teacher Resources

Maine Memory Network Online Exhibits:

- 100 Years of Mercy Hospital http://mercyhospital.mainememory.net/page/4528/display.html
- **Among the Lungers: Treating TB** https://www.mainememory.net/sitebuilder/site/286/page/549/display?use mmn=1
 - "Dear Dr. Nichols:" Letters About Treatment https://www.maine-memory.net/sitebuilder/site/286/slideshow/429/display?use_mmn=1&for-mat=list&prev_object_id=549&prev_object=page
 - San Life: the Western Maine Sanatorium, 1928-1929 https://www.maine-memory.net/sitebuilder/site/210/page/469/display?use_mmn=1
- Doing Good: Medical Stories of Maine https://www.maine-memory.net/sitebuilder/site/2984/page/4673/display?use-mmn=1
 - Maine Medical Center/Maine General Hospital https://www.maine-memory.net/sitebuilder/site/2984/slideshow/1740/display?use_mmn=1&for-mat=list&prev_object_id=4673&prev_object=page
 - One Hundred Years of Caring: Eastern Maine Medical Center https://www.maine-memory.net/sitebuilder/site/121/page/380/display?use-mmn=1

Articles

Estes, J. Worth. "The Pharmacology of Nineteenth-Century Patent Medicines." *Pharmacy in History,* Vol. 30, No. 1 (1988), pp. 3-18.

Gabriel, Joseph M. "Restricting the Sale of 'Deadly Poisons': Pharmacists, Drug Regulation, and Narratives of Suffering in the Gilded Age." *The Journal of the Gilded Age and Progressive Era*, Vol. 9, No. 3 (2010), pp. 313-336.

Wisecup, Kelly. "African Medical Knowledge, the Plain Style, and Satire in the 1721 Boston Inoculation Controversy." *Early American Literature*, Vol. 46, No. 1 (2011), pp. 25-50.

Books

McBride, Bunny. Women of the Dawn. Bison Books, 2001.

Ulrich, Laurel Thatcher. *A Midwife's Tale: The Life of Martha Ballard, Based on Her Diary, 1785-1812.* Vintage Books (Random House, Inc.), 1991.

Teacher Resources

Tips for Acknowledging Indigenous Land/Water: Acknowledgement is a relatively recent practice, and is ideally practiced as a respectful way to address the Indigenous inhabitants of what is now North America, acknowledge human and non-human relatives, address the ongoing effects of the structure of settler-colonialism, emphasize the importance of Indigenous sovereignty and self-governance, and help students be aware and conscientious of the fact that we are living on unceded Native Homelands. Land/water acknowledgements are best developed through meaningful connections; acknowledge with respect and use a format that lets you speak from the heart. Making connections with neighbors of a Nation near to where you live is one of the best places to start when creating a land acknowledgement from the heart. Talk with your school administrators and colleagues about creating a land acknowledgement at the institutional level.

A great online resource with more information can be found here: https://drive.google.com/file/d/08_CAyH4WUfQXTXo3MjZHRC00ajg/view. For information about the Nations nearest where you live/teach, a good starting point is the map at: https://native-land.ca

What we know of as "Maine" today is part of the unceded Homelands of the Wabanaki peoples. "Wabanaki" translates into English as the "Dawnland," with the Wabanaki peoples being the People of the Dawnland, meaning those who see and greet the first light of the day. They share common oral histories and belong to Algonquian/Algonkian language groups, but have unique languages.

About the Wabanaki: We encourage you and your school to reach out to the tribal communities in Maine to expand your learning. More information about the four federally-recognized tribal communities in Maine can be found here:

- The Aroostook Band of Micmacs: http://www.micmac-nsn.gov/
 - Micmac Tribal Government: http://micmac-nsn.gov/html/tribal government.html
- The Houlton Band of Maliseets: http://www.maliseets.com/index.htm
 - o Maliseet Tribal Government: http://www.maliseets.com/government.htm
- The Penobscot Nation: http://www.penobscotculture.com/
 - Penobscot Tribal Government: http://www.penobscotculture.com/index.php/8-about/81-tribal-facts
- The Passamaquoddy Tribe
 - Indian Township (Motahkomikuk): https://www.passamaquoddy.com/
 - Pleasant Point (Sipayik): http://www.wabanaki.com/
 - Passamaquoddy Tribal Government: http://www.wabanaki.com/wa-banaki_new/chief_council.html
 - Passamaquoddy Joint Tribal Council: http://www.wabanaki.com/wa-banaki new/joint council.html

The Abenaki are the fifth Wabanaki tribe today; however, the Abenaki are not a federally-recognized tribe as of 2019. Not all Tribal Nations that exist in North America today have received federal recognition, and not all Native Nations seek federal recognition. There are no tribes in New Hampshire or Vermont that, as of 2019, have received federal recognition, but four tribes in Vermont have received state recognition. Federal recognition provides a federal relationship between Indigenous sovereign nations and the US government. Tribal Nations throughout North America are sovereign nations, and actively

work to maintain their self-governance. Federal recognition is not related to Tribal Nation sovereignty; it affords certain rights to Indigenous peoples within the laws of the United States.

It is important to recognize that not all Wabanaki people live in what is now Maine, and not all Indigenous peoples living in what is now Maine today are Wabanaki. Native and non-Native people alike live throughout Maine, the United States, Canada, and countries around the world. Maine as we know it today exists within unceded Wabanaki Homelands; the federally-recognized tribal communities in Maine own trust land throughout the state as presented through treaties.

About Maine Historical Society: Maine Historical Society (MHS) is the third-oldest state historical society in the United States, following Massachusetts and New York, respectively. Founded in 1822, only two years after Maine separated from Massachusetts and became a free state as part of the Missouri Compromise, MHS today is headquartered at 489 Congress Street in Portland. The campus contains an office building and museum, the Brown Research Library (est. 1907), and the Wadsworth-Longfellow House, the childhood home of American poet Henry Wadsworth Longfellow. An enormous online database containing digitized images and objects from MHS's robust collection can be found online at Maine Memory Network: https://www.mainememory.net/ Teachers can create free accounts on Maine Memory Network to save images to albums for classroom use.

MHS's mission: "The Maine Historical Society preserves the heritage and history of Maine: the stories of Maine people, the traditions of Maine communities, and the record of Maine's place in a changing world. Because an understanding of the past is vital to a healthy and progressive society, we collect, care for, and exhibit historical treasures; facilitate research into family, local, state, and national history; provide education programs that make history meaningful, accessible and enjoyable; and empower others to preserve and interpret the history of their communities and our state."

Strand and Standard Information

- Social Studies, Grades 6-8 History: Students draw on concepts and processes using primary
 and secondary sources from history to develop historical perspective and understand issues of
 continuity and change in the community, Maine, the United States, and world.
 - History 1: Students understand major eras, major enduring themes, and historic influences in the history of Maine, the United States, and various regions of the world by: (F1) Explaining that history includes the study of past human experience based on available evidence from a variety of primary and secondary sources; and explaining how history can help one better understand and make informed decisions about the present and future. (F2) Identifying major historical eras, major enduring themes, turning points, events, consequences, and people in the history of Maine, the United States, and various regions of the world. (D1) Analyzing interpretations of historical events that are based on different perspectives and evidence from primary and secondary sources. (D2) Analyzing major historical eras, major enduring themes, turning points, events, consequences, and people in the history of Maine, the United States, and various regions of the world.
 - History 2: Students understand historical aspects of unity and diversity in the community, the state, including Maine Native American communities, and the United States by:
 (F1) Explaining how both unity and diversity have played and continue to play important roles in the history of Maine and the United States. (D1) Explaining how both unity and diversity have played and continue to play important roles in the history of the world.
- Social Studies, Grades 9-Diploma History: Students draw on concepts and processes using primary and secondary sources from history to develop historical perspective and understand issues of continuity and change in the community, Maine, the United States, and world.
 - History 1: Students understand major eras, major enduring themes, and historic influences in United States and world history, including the roots of democratic philosophy, ideals, and institutions in the world by: (F1) Explaining that history includes the study of the past based on the examination of a variety of primary and secondary sources and how history can help one better understand and make informed decisions about the present and future. (F2) Analyzing and critiquing major historical eras: major enduring themes, turning points, events, consequences, and people in the history of the United States and implications for the present and future. (F3) Tracing and critiquing the roots and evolution of democratic ideals and constitutional principles in the history of the United States using historical sources. (D1) Analyzing and critiquing varying interpretations of historic people, issues, or events, and explaining how evidence from primary and secondary sources is used to support and/or refute different interpretations.
 - History 2: Students understand historical aspects of unity and diversity in the United States, the world, and Native American communities by: (F1) Identifying and critiquing issues characterized by unity and diversity in the history of the United States, and describing their effects, using primary and secondary sources.

Teacher Resources – Assessment Rubric

Did the student meet the expectations of the lesson?

Task	1 – Did Not Meet	2 – Partially Met	3 – Met	4 – Exceeded	Notes
Student can discuss how the medical field has changed in Maine since the Civil War.					
Student can make comparisons and find contrasts between evolving best practices in the 19 th , 20 th , and 21 st centuries.					
Student can discuss the importance of accountability in medical practice.					
Student can read, analyze, and discuss primary source documents.					
Student participated respectfully in classroom discussion.					
Student gave thoughtful responses to the discussion prompts and utilized critical thinking to draw conclusions and ideas.					

Total Score and Notes:	