Model Medicine

A Brief History of Healthcare in Northwestern Vermont

This digital exhibition focuses on the people, places, and practice of medicine in our community through the lenses of health, education, art, technology, and social history.

The exhibition is divided into five sections: Education & Community, Instruments & Equipment, Apothecary, The 1918 Pandemic, and Norman Rockwell.

Created with support from RL Photo and a ReVTA grant. This PDF has been adapted from the original web-based version of this exhibition. Some content has been edited for clarity.



Above: The Family Doctor by Norman Rockwell



Education & Community The St. Albans Hospital

In 1883, the St. Albans Hospital became the second hospital in the State of Vermont (after Mary Fletcher Hospital, which opened in 1879. A third Vermont hospital (this time in St. Johnsbury) wouldn't open for another eleven years.

The hospital building started life as the "handsome and spacious residence" of Edward A. Smith, before it was purchased by Chauncey Warner of Cambridge, Vermont and converted into a hospital. Mr. Smith, as a public service, sold the property for less than a third of its value.

In 1888, a major fire gutted the hospital. Reconstruction began quickly and it reopened just eighteen months later. Improvements included a fireplace and hot water in each room.



Above: The St. Albans Hospital, undated photograph.



Education & Community

John Warner, First Physician

Many fine doctors, nurses, and other medical professionals have been serving the needs of the St. Albans public for generations. Prior to 1793, most settlers were attended by Native American healers, as was custom in all frontier areas.

The first non-Native physician in St. Albans was John Warner, brother of Revolutionary War hero Seth Warner. He began to practice in 1793.

"He came from Bennington with a large family, and was, for several years, the only physician in town. He [...] had large experience in the diseases of that time prevalent, and possessed great knowledge of the medicinal qualities of the indigenous plants of Vermont. In this knowledge of the medicinal botany of the country he probably had no equal, and in the diseases incident to a new country, he was successful to an extent rarely exceeded by any practitioner."

-Abbey Hemenway for the Vermont Historical Gazeteer, 1871



Above: Plaque at Dr. Warner's gravesite.





Education & Community Howard Jacobs, First Anesthesiologist

Dr. Howard "Jake" Jacobs was born in Enosburg Falls in 1920. He settled in St. Albans in 1945 after graduating from the University of Vermont Medical School in 1945. In 1950, at the urging of his professional colleagues, he began a twoyear residency in anesthesiology at the Medical Center Hospital of Vermont. Anesthesia had previously been administered in St. Albans by general physicians and nurses.

During the first ten years of his practice as an anesthesiologist, Dr. Jacobs used ether by the drip method. For many years, he would travel to dental offices and administer IV pentothal anesthesia. He retired in 1985 and passed away in 2004.



Above: Undated photograph of Dr. Jacobs.



Education & Community The Two Charlottes

The retirement of these two remarkable leaders marked the end of an era. Stricter regulations, more patients, and the increased complexity of medicine itself mean that running a hospital now requires more personnel, more layers and more specialization at all levels.

Charlotte Donlon, R. N. graduated from the UVM School of Nursing in 1943 and immediately became head nurse at the Mary Fletcher Hospital, where she worked for 3 years. She then became a supervisor at the St. Albans Hospital until 1950, when she helped open the medical-surgical unit at the Kerbs Hospital. She was a supervisor there until 1958 when she returned to the St. Albans Hospital, this time as the superintendent. She knew all the patients and interacted with the doctors as they made morning rounds. She retired in 1978.



Above: Undated photograph of Charlotte Donlon.

Below: Undated photograph of Charlotte Montgomery.



Charlotte Montgomery, R. N. graduated from the St. Albans School of Nursing in 1934. She became the OR supervisor at the hospital. Before the Kerbs Hospital opened, she trained in Boston in running an out-patient department, which she did for the new hospital until she was promoted to Director of Nursing, a position she held until retiring in 1978.

At Kerbs, she often served as the backup and interim administrator. Like her counterpart Charlotte D., she was involved with every part of the hospital.





Education & Community Dr. Beaumont treats Alexis St. Martin, 1822

Northwestern Vermont has also seen its share of complicated medical cases, ones that have created opportunities for questions and advancement. Together, these members of the community, both providers and patients, have strengthened St. Albans' medical pursuits.

On June 6, 1822, Alexis St. Martin, a 28-year-old French Canadian, was in the American Fur company store just outside Fort Mackinac when a musket was accidentally discharged less than 3 feet away from him. The charge entered the left side of his body. Dr. William Beaumont, who had trained in St. Albans, was called and found a wound larger than a man's fist. Martin's sixth rib was partially destroyed, his fifth rib was fractured, his lower left lung was lacerated, and the charge had gone through his diaphragm and into his stomach. Dr. Beaumont wrote: "I considered any attempt to save his life entirely useless."

The shot was removed and first aid was applied. Within 24 hours, St. Martin developed a fever and pneumonia, which was treated with bleeding. His fever broke after eight to ten days. Using compresses and an adhesive strap over the hole to prevent the stomach contents from escaping, St. Martin was able to eat and drink. Slowly but surely, the wound healed. Dr. Beaumont and his wife took St. Martin into their home and employed him as a servant.



Within two years of the accident, St. Martin was in good health, except for the hole in his stomach which never fully closed. By chance, a valve-like fold of scar tissue formed over the opening. Simply depressing the "valve" with a finger gave access to the stomach for experiments.

Above: Dr. Beaumont performing experiment on Alexis St. Martin, mannequin display at the Saint Albans Museum.



Education & Community

Phineas Gage's Accident, 1848

In Cavendish, Vermont on September 13, 1848, 25-year-old foreman Phineas Gage was working for the Rutland and Burlington Railroad. In order to clear rock for the new roadbed, a crew would drill a hole in the rock to be blasted. A fuse was placed in the hole, then black powder was poured over top and carefully tamped down. This was then covered with sand and packed tightly. It was Gage's job to tamp down the black powder and the sand. He used a custom-made tamping iron from a local blacksmith. It was three feet, seven inches long and weighed over thirteen pounds.

On that fateful day, Gage was tamping down the black powder when something to his right distracted him. Turning, he accidentally dropped the iron into the hole where it struck hard rock, creating a spark that ignited the black powder and shot the tamping iron into the air with incredible force. The iron shot clean through his head at a point below his left eye and exited through the top, landing nearly 75 feet away.



Above: Gage at the moment of the accident, mannequin display at the Saint Albans Museum.

Gage was knocked over backwards and had a brief seizure, but within minutes he was speaking and able to walk to an oxcart, which took him to the nearby town for medical attention.

Gage's life after that point has been the subject of continued research, debate and discussion. Some accounts claim that the accident turned him from a hardworking, honest man into a vagrant, an alcoholic, a problem gambler, and even a psychopath. However, modern historians believe that the most dramatic changes to his personality were only temporary, In the last years of his life, he became a stagecoach driver in Chile, a job that required a high degree of intelligence and fine motor control. After experiencing a series of seizures, he passed away on May 21, 1860.





Instruments & Equipment

Advancements in medical knowledge have been accompanied by an ever-evolving world of medical instruments and equipment. Tools used by the profession have changed with the times throughout history. From early devices such as the simple lancet used for bleeding, to the first introduction of the stethoscope in the early nineteenth century, and to the regular use of electricity therapy well into the twentieth century, these and many other interesting medical implements help demonstrate the rich and complex history of Vermont health and wellness throughout our recent history.



Above: The Davis & Kidder Magneto, an electroshock device introduced in 1854. It was used to treat a wide range of ailments, including asthma, fever, bronchitis, bruises, and constipation.



Instruments & Equipment Bleeding

Bleeding, also known as bloodletting, began as a treatment well before the 5th century BC, reached its peak in the 1800s, and continued on until the 1900s. It was based on an ancient system of medicine in which the four "humors" (blood, phlegm, yellow bile, and black bile) had to be kept in balance to maintain physical and mental health. Bleedings were prescribed by physicians, but were often performed by barber-surgeons. The typical amount of blood that was taken would vary, but would usually be enough to make a person faint.

Right: 1639 Illustration of a woman using leeches for bleeding. Courtesy of the National Library of Medicine.





Above: Assorted bleeding tools.





Instruments & Equipment The Stethoscope (1816)

From the time of Hippocrates, physicians listened to patients' hearts and lungs by placing their ears directly against the chest. In 1816, a French doctor named René Laennec invented the stethoscope, partially to avoid the embarrassment of placing one's head against a woman's chest. He wrote:

"I was consulted by a young woman presenting general symptoms of disease of the heart... The patient's age and sex did not permit me to resort to direct application of ear to chest... Taking a sheet of paper I rolled it into a very tight roll, one end of which I placed on the precordial region, whilst I put my ear to the other. I was both surprised and gratified at being able to hear the beating of the heart with much greater clearness and distinctness than I had ever before by direct application of the ear."



Above: A reproduction wooden stethoscope.

He then developed a wooden instrument and published his *Treatise on Mediate Auscultation* (indirect listening) in 1819. Each buyer of his book received, as a bonus, a hand turned wooden stethoscope made by the author himself.

By the mid-1800s, rubber tubing was available to create a flexible scope for one ear, and in 1852, the first two-ear stethoscopes were devised.

SAINT ALBANS





Above: A Civil War-era doctor's kit (left) and close-up (right).



Left: A microscope used by Emmaline Perrault at the St. Albans Hospital.

Below: A leather doctor's bag.









Left: Fowler's sounds used to dilate the urethra.

Below: Obstetrical forceps used to aid in childbirth.





Left: Chains like those used to restrain psychiatric patients. More humane methods of restraint are used today, but the practice of restraining patients at all remains controversial.







Right: Instrument case used by Dr. Branch of St. Albans.

Left: Hemocytometer kit used for counting blood cells under a microscope.





Left: Suction machine used by Dr. Henry Baby of St. Albans.







Above: Tonsil guillotine used to remove the tonsils.

Below: Splint used to stabilize the leg after a fracture, holding the bones in place while they healed.







Apothecary Abenaki Medicine

"The native people of Wbanakik (Abenaki) believe that the natural state of things is health and balance. Sickness or accident is intrusive, entering one's mind or body, a force that must be neutralized to reestablish the balance in one's life... Techniques were developed long ago for taking the spirit inherent in the plant and transforming it into a tool that could enter the ailing body and treat the illness."

-Frederick Wiseman, The Voice of the Dawn

Willow bark has been used for thousands of years by the Abenaki and other Indigenous peoples to treat colds and other minor ailments. In 1829, salicin, the parent of the salicylate drug family, was first isolated from willow bark. In 1897, acetylsalicylic acid, better known as aspirin, was first synthesized.

Right: Bottle of aspirin tablets.







Apothecary Anesthesia (1842)

Ether was discovered in 1275, and its hypnotic effects were noted in 1540, but it was not used as an anesthetic for surgery until the 19th century. Dr. Crawford Long of Jefferson, Georgia had first encountered ether while still a student. He had attended "ether frolics," parties where participants inhaled ether for amusement. During these parties, he observed some revelers shrug off injuries they sustained while intoxicated. In 1842, he successfully used ether as an anesthetic to remove a tumor from a patient's neck, but did not publish his findings until seven years later.



Above: Empty bottles of ether and chloroform.

Without knowledge of Long's experiments, Dr. William T. G. Morton of Boston independently discovered ether's potential as an anesthetic around the same time. He performed a demonstration in front of a medical audience at Massachusetts General Hospital in 1846 and published his findings that same year, creating a bitter controversy over who should be credited with discovering ether. Long had done the first surgery, but Morton had been the first to publicize the discovery.





Apothecary Photo Gallery



Right: A bottle of carbolic acid sold by R. Brainerd of St. Albans.

Left: A box of Smith Brothers Black Cough Drops.





Left: A bottle of alcohol sold by D. Dutcher of St. Albans. During Prohibition, which was in effect from 1920 to 1933 and outlawed the production and sale of alcohol, doctors were still allowed to prescribe "medicinal alcohol" to their patients. Throughout the 1920s, doctors wrote an estimated 11 million prescriptions for alcohol every single year.





Apothecary Photo Gallery



Right: A portable pill press and a vial of strychnine, which was once used to treat a wide variety of ailments but is now used as a pesticide. Left: A bottle of Idoit, a "blood purifier" sold by Fred K. Dutcher of St. Albans.

Right: A bottle of castor oil manufactured by the Burlington Drug Co. of Burlington, VT.









Apothecary Photo Gallery



Above: A pharmacist's case containing various pills and powders.



Left: A mortar and pestle used to grind solid ingredients into powders.





The 1918 Pandemic

The pandemic widely known as the Spanish Influenza of 1918 ravaged the globe, leaving many regions devastated in many ways. It was slow to find northwestern Vermont but when it finally arrived, it hit hard. The confusion and dismay of families left waiting for word from loved ones out of state was commonly witnessed in newspapers, including the St. Albans Messenger. While some attempted to capitalize on the pandemic by selling "cures" in the form of ointments and balms, the true heroes were found among the medical community.



Above: Ads for Hill's Bromide Cascara Quinine, which ran in many newspapers nationwide during the 1918 pandemic. Quinine is still used today as a treatment for malaria, but is unproven against influenza and other viral infections.



Norman Rockwell

Prolific artist Norman Rockwell created several illustrations related to the medical field, including "The Family Doctor" from 1947. Rockwell used the offices of Doctor George H. Russell for the study room depicted in this piece. Dr. Russell and his family moved into the St. Albans area and gave the furniture pieces to the Museum for display.



Above: The Family Doctor by Norman Rockwell

The gallery on the next pages is a collection of photographs of the actual set used by Norman Rockwell. Although structural pieces of the room have been fashioned to fit the display, all artifacts are from the original office as drawn by Rockwell.



Norman Rockwell Photo Gallery









Norman Rockwell Photo Gallery







