

A HISTORY OF
LANCASTER GENERAL HOSPITAL

*in celebration of its
100th Anniversary*

including

**INTERVIEWS OF
PHYSICIANS, MEDICAL ADMINISTRATORS & NURSES**

by

Henry S. Wentz, M.D.

A HISTORY OF
LANCASTER GENERAL HOSPITAL

*in celebration of its
100th Anniversary*

including

**INTERVIEWS OF
PHYSICIANS, MEDICAL ADMINISTRATORS & NURSES**

by

Henry S. Wentz, M.D.

PREFACE

Dr. Henry S. Wentz practiced medicine in Strasburg, later with Eastbrook Family Health Center, from 1948 to 1988. Between 1988 and 1992 he interviewed approximately 35-40 medical administrators, historians, retired physicians and nurses in Lancaster County. These people were chosen at random. Some were friends; some held important positions; some seemed to have a unique role and others seemed interesting to the interviewer. Some were familiar with physicians and medicine in the past.

Some interviews were done with the main purpose of preserving some of the information about medical practices in the mid-20th Century (approximately 1930-1980). Stories and anecdotes were encouraged to help tell their story.

It is the interviewer's desire to preserve these records for posterity so the medical profession and other interested people can look back into the past and observe the changes in medicine and medical practice.

In this package of information about the medical history of Lancaster County, I have included:

- 1. Physicians and Medicine in Southern Lancaster County published in the Lancaster County Historical Society Bulletin, Volume 91/number 4, 1987/88.*
- 2. Our Medical Heritage published in 1994 commemorating the 150th anniversary of the Lancaster City & County Medical Society.*
- 3. Patients Are A Virtue written and published in 1997 telling some of the experiences in the family practice of the author, Henry S. Wentz, M.D.*
- 4. A History of the Lancaster General Hospital compiled from research and interviews between 1990-1993 in the celebration of the 100th anniversary of the Lancaster General Hospital.*

I am greatly indebted to many people who helped me in the research of the first 100 years of the Lancaster General Hospital and people whom I had the privilege of interviewing in their roles in its development. The pioneers of the first 100 years built a great foundation upon which the Lancaster General Hospital of the 21st Century has prospered and grown into a renowned medical institution. The medical community of today must appreciate the work and vision of many of the administrators and physicians and the countless dedicated workers of the past.

I thank Dr. Herbert Tindall for his interview of George Beacher, M.D.

I thank William Atlee, M.D. for his story in Our Medical Heritage of the physicians in his family who practiced medicine in Lancaster County for over 170 years. This book also tells of other physicians in the early days of Lancaster County as well as the Lancaster City & County Medical Society.

Thank you for your vision! Thank you for the opportunity all of you gave me to preserve some of the medical history of Lancaster County.

Henry Stauffer Wentz, M.D.

LANCASTER GENERAL HOSPITAL

HISTORY

TABLE OF CONTENTS

<u>TAB</u>		<u>PAGE</u>
1.	LANCASTER GENERAL HOSPITAL HISTORY	1
2.	HOSPITAL AND MEDICAL PRACTICE IN THE MID- 20 TH CENTURY	29
3.	OBSTETRICS	31
4.	ADVENT OF ANTIBIOTICS	32
5.	CARDIOLOGY	33
6.	TUBERCULOSIS	38
7.	NURSES AND THE NURSING SCHOOL	39
8.	EMERGENCY DEPARTMENT, TRAUMA AND SURGERY	40
9.	LABORATORY	44
10.	X-RAY	46
11.	HEART HAVEN	50
12.	POLIO UNIT	51
13.	MEDICAL EDUCATION AT LGH	53
14.	DR. THEODORE B. APPEL	56
15.	DR. CHARLES P. STAHR	57
16.	STORIES	
	STORIES BY DR. PAUL DAVIDSON	58
	MORE STORIES	59
	STORIES BY DR. HENRY WENTZ	60
	STORIES BY DR. HOWARD ECKHART, ORAL SURGEON	62

17.	BIOGRAPHICAL SKETCHES OF PHYSICIANS CONSIDERED FOR DISTINGUISHED SERVICE AWARDS AT THE LANCASTER GENERAL HOSPITAL	63
18.	SOME THOUGHTS AND VISIONS OF PAUL WEDEL, PRESIDENT & CEO	67
19.	STATISTICS	
	ROOM RATES AT LGH	69
	NUMBER OF BEDS AT LGH	69
	AVERAGE # OF PATIENTS/DAY	70
	AVERAGE COST OF PATIENT/DAY	70
	NUMBER OF ADMISSIONS/YEAR	70
20.	THE EVOLUTION OF TREATMENT OVER 100 YEARS	71
	TREATMENT OF PNEUMONIA 1897 AT LGH	71
	TREATMENT OF PNEUMONIA AT LGH 1903-4	71
	TREATMENT OF PNEUMONIA AT LGH 1915	71
	TREATMENT OF PNEUMONIA AT LGH 1930s and 40s	72
	TREATMENT OF TYPHOID FEVER AT LGH	72
	TREATMENT OF TYPHOID FEVER According to Textbook 1897	72
	TREATMENT OF DIABETES LGH 1897	73
	TREATMENT OF DIABETES TEXTBOOK 1929	73
	TREATMENT OF ANGINA PECTORIS 1897 TEXTBOOK	74
	SURGICAL TREATMENT OF ANGINA PECTORIS TEXTBOOK 1929	74
	TREATMENT OF ANGINA PECTORIS 1951 TEXTBOOK	74
	TREATMENT OF CORONARY THROMBOSIS TEXTBOOK 1929	74
	TREATMENT OF CORONARY OCCLUSION 1951 TEXTBOOK	74
	TREATMENT OF VALVULAR ENDOCARDITIS LGH 1899	75
21.	DIAGNOSES AND PROCEDURES AT LGH	76
	1904-05	76
	1906	77
	1893 - 1908	77
	SURGERY AT LGH 1893 - 1908	78
	MOST COMMON DIAGNOSES	79
22.	MISCELLANEOUS	80
23.	HOSPITAL INTERVIEWS	
	Paul Wedel, CEO	
	Charles Stahr, M.D., Medical Director	
	Bill Jefferson and Kathy Harrison, X-Ray	
24.	NURSE INTERVIEWS	
	Anna Kensinger, Anna Mae Nye and Anna Mary Dings	
	Velma Hart	

25. **SURGEON INTERVIEWS**
 Solomon Pontius, M.D. by John Pontius, M.D.
 Robert Witmer, M.D.
 John Farmer, M.D.
 Paul Davidson, M.D.
26. **OBSTETRICIAN AND GYNECOLOGIST INTERVIEWS**
 Clarence Farmer, M.D.
 William Hartman, M.D.
27. **INTERNIST INTERVIEW**
 William Tinney, Jr., M.D.
28. **CARDIOLOGIST INTERVIEW**
 William McCann, M.D.
29. **ALLERGIST INTERVIEW**
 Stephen Lockey, M.D.
30. **CYTOLOGIST INTERVIEW**
 Roland Loeb, M.D.
31. **FAMILY PHYSICIAN INTERVIEWS**
 William Tinney, Sr., M.D.
 Arthur Martin, M.D.
 Irene Davis, M.D.
 Edgar Meiser, M.D.
 Mary Ellen Smith Meiser, M.D.
 Harold Stauffer, M.D.
 George Beacher, M.D.

LANCASTER GENERAL HOSPITAL

HISTORY

compiled by
Henry S. Wentz, M.D. 1990-1993

HOSPITAL ADMINISTRATORS

William Breitigan, Mgr.	1917 - 1925
F. C. Hilker, Mgr.	1925 - 1929
Ray Hall	1929 - 1949
Dr. Roger DeBusk	1949 - 1952
Dr. Donald Smeltzer	1952 - 1964
Paul Wedel Pres. & CEO	1964 - 1991

MEDICAL DIRECTORS

PRESIDENTS OF MEDICAL & DENTAL STAFF

Dr. M. L. Herr	1893 - 1902
Dr. D. R. McCormick	1902 - 1906
Dr. Theodore B. Appel	1906 - 1917
Dr. Frank Hartman	1917 - 1919 (acting)
Dr. Charles P. Stahr	1919 - 1940
Dr. Dale Carey	1940 - 1946
Dr. Joseph Appleyard	1946 - 1957
Dr. James Z. Appel	1957 - 1965
Dr. Ian Hodge	1965 - 1969
Dr. Ward O'Donnell	1969 - 1973
Dr. Richard Weber	1973 - 1977
Dr. Arthur Jones	1977 - 1981
Dr. Thomas Stuart	1981 - 1984
Dr. Victor Augusta	1984 - 1986
Dr. Marlin Wenger	1986 - 1989
Dr. Robert Johnson	1989 - 1992
Dr. Hugh Hoke	1992 -

ORGANIZATION before 1965

BOARD OF DIRECTORS

EXECUTIVE COMMITTEE

HOSPITAL
MANAGER

MEDICAL
DIRECTOR

DIRECTRESS
OF NURSING

- 1842 Ether first used
- 1853 First hypodermic syringe used
- 1857 Bacteria discovered
- 1865 First antiseptic surgery

1893 In 1893 the population of Lancaster City was over 32,000 and the total population of the county was about 150,000. Electric trolleys were new. The depot of the Pennsylvania Railroad was at North Queen and Chestnut Streets. The houses of Lancaster glowed yellow with gas and kerosene lamps. Grover Cleveland was President. Accounts of lively runaway horses on Duke Street were topics of the hour. Newspapers published railroad timetables. It was in this era that the LGH came into being in a small three story building at 322 North Queen Street. To this building physicians who traveled in buggies and on horseback came to treat their patients. Operations were performed in a made-over parlor. Proudly the people of Lancaster talked about the seven rooms of the hospital, its accident room and the operating room. The gas lights glowed and flickered and in the hall was posted a notice, among other rules, stating, "No reading in bed at night, either by patients or any other person connected with this institution." Another regulation forbade anyone to "smoke tobacco or play at games of chance in the hospital."

Lancaster had two hospitals - the County Hospital known as the Almshouse built in 1799 and St. Joseph's Hospital built in 1883 and ten years later had 370 patients. Hospitals were viewed as a place to go to die. LGH started with two strikes against it: 1.) it started as an outcome of denominational or sectarian feeling, and 2.) it was not necessary to have two hospitals in a city the size of Lancaster.

Rev. D. Wesley Bicksler, (picture is available in July, 1958 Bulletin, Lancaster County Historical Society, page 152) a pastor of Salem Evangelical Church on North Water Street was an early promoter of a general, non - sectarian hospital. The Reverend Dr. C. Elvin Haupt, pastor of Grace Lutheran Church at the corner of North Queen and James Streets, was another staunch advocate. Other prominent business and professional men of the community were great supporters of the concept.

1893

A charter was granted on September 23, 1893 and Judge David McMullen was President, Dr. H. D. Knight, a dentist, was Vice - President, Hugh R. Fulton was Secretary and Charles A. FonDersmith, a banker, was Treasurer.

322 North Queen Street became the first hospital and was rented for \$100/year. In the LGH ECHO (1957) George Heiges tells of the first 25 years of LGH. He was pharmacist at LGH and was President of the Lancaster County Historical Society. The Reverend Mr. Bicksler was the first Superintendent. His family lived in the building. The hospital was heated by steam and lighted with gas. A matron was engaged.

The first quarters of the hospital provided one ward for patients, one operating room, rooms for the chief nurse and a matron, office and living space for the Superintendent and a reception room. (This differs from Harold Eager.)

The medical staff consisted of four surgeons and four physicians who served in pairs - each pair being in charge of the hospital for three months.

Surgeons:

Dr. M. L. Herr
Dr. George R. Welchans
Dr. S. T. Davis
Dr. J. W. Houston

Physicians:

Dr. D. Frank Kline
Dr. Walter Boardman
Dr. C. E. Netscher
Dr. D. W. McCormick

Also serving during the first year were Drs. J. C. Detweiler and J. H. E. Reed.

The first patient admitted was Miss Anne McComsey, 27 years, a domestic from Tayloria - a southern Lancaster County village one week before Christmas. She had typhoid fever, stayed 71 days and was discharged as cured.

53 patients were admitted the first year and 65 patients the second year.

The cost of maintenance the first year was \$2272.

A mastectomy for cancer and removal of a part of a bone in another patient (male) were the first operations performed on December 30, 1893.

1894 A well attended open house was held on January 1.

1895 X-ray was first used in the world.

1896 The hospital moved to 530-32 North Lime Street in April. This large private mansion of Ezra F. Landis was purchased for \$12,500. With its many large rooms, it required few alterations. A few years later a third story addition was built at the rear of the mansion because of an increasing need.

The churches of the community and the Ladies Auxiliaries in many communities were wonderful contributors and kept the hospital afloat during the early struggling years. It seemed as if the Protestant churches and their leaders united to promote and sustain this project (venture).

Donation Days- Each year in the fall the individual auxiliaries held their donation days of canned goods, potatoes, onions, apples, sweet potatoes, cabbages, etc. It was a real inspiration to see those wagon loads of edibles - for many of those were stored- esp. apples - in the old sewing house on the second floor. It is almost unbelievable to one who has not seen the procedure.

Judge David McMullen was Charter President and remained President of the Board of Directors for 23 years. Many of the Board meetings were held in his office.

Charles A. FonDersmith, a Civil War veteran and distinguished banker and layman in Lutheran Holy Trinity Church, was Treasurer and a great supporter of the hospital for many years. After his death, his widow provided a lot of financial help to the hospital in the form of memorials to her husband.

1898 In 1898 the physicians of LGH took part in the transportation of some Spanish-American war soldiers, who were suffering with typhoid fever, from Middletown to Lancaster. A horse train was used for the journey. At that time the treatment of typhoid fever was cold baths. At intervals the horse train would be stopped and icy water would be poured on the fever - ridden patients via tarpaulins.

\$5 a week was the cost to the full-paying patient and included board, doctors' services, medicine and "in fact, everything needed by the patient".

During the first five years of the hospital's existence, 541 patients had been admitted; 233 were medical and 308 were surgical. 340 patients were free, 111 were part pay and 90 paid in full. Of 308 surgical cases, 248 (80%) were fully cured and 16 (5%) died. Of 233 medical cases 119 (51%) were fully cured and 24 (5%) died.

Dispensary added.

1898-99 State appropriated \$6000.

1899 Additional wards were erected.
Garbage furnace was purchased.

1900 In an annual report for the year 1899-1900, there were 10 cases of diphtheria with 10 cured; 12 cases of typhoid fever with 9 cured, 1 death and 2 remaining in the hospital. There was 1 patient who had cancer of the breast that was discharged as cured. The most common abdominal operation was 9 operations for appendicitis. There were 8 surgeries each for amputations and incision and drainage of abscesses. 198 cases had been seen in the Receiving Ward.

1902 Dr. M. L. Herr was the first Medical Director from 1893 until 1902; Dr. David McCormick was Medical Director from 1902 - 1906 when Dr. Theodore B. Appel assumed the responsibility and in those days the Medical Director was in charge of all medical aspects of the hospital. Mrs. Martin L. Herr was the President of the Lancaster Auxiliary and Mrs. J.H. Rathfon was the first vice-president.

Cassius Emlen Urban was hired as an architect to build a north and south wing with an administration building between them. A contract was awarded for \$20,000 for construction of the north wing. This building was completed in 1903.

Appropriations of \$30,000 was granted by the General Assembly at Harrisburg. \$20,000 was to be used for the construction and \$10,000 was to be used toward two year maintenance cost.

In the early years it is interesting to note that very few patients were admitted to LGH with cardiac problems. In 1902, for example, only two cases were admitted all year; one was diagnosed as chronic pericarditis and was unimproved and the other patient had chronic valvular endocarditis and was discharged improved.

There were 36 abdominal operations; 9 for appendicitis, 10 ovariectomy for ovaritis and 10 curettements for endometritis.

1903 First EKG used in U.S.

Dr. Albert Henry became the first resident physician at LGH.

First laboratory was installed with Dr. Charles P. Stahr in charge.

X-ray Department opened with Dr. S. H. Heller in charge.

The LGH Nursing school began. To be a pupil nurse and receive instruction and training in this institution, you had to be a single woman between 21-35 years of age and possessed of a good education, health and moral character.

In the report read at the 10th annual meeting, it was stated that of 361 medical patients admitted, 261 were typhoid fever. There were also 184 operations which included 23 appendectomies and there were 34 x-ray treatments.

1904

A two headed baby was born at LGH on March 22, 1904 who died shortly after birth. The body was placed in formaldehyde in a jar for preservation and placed in the Pathology Laboratory. A staff physician asked to use this specimen as an exhibition for a lecture and removed it from the hospital. On his way across town he realized that he had another appointment before the lecture and went home to deposit the specimen until later. Later his wife walked in the home, saw the specimen and fainted. When he returned to obtain it, she demanded its removal. After he had used it in his demonstration, he loaded the jar in a wheelbarrow. When the wheelbarrow upset, the jar fell to the street and smashed. The specimen was placed in a new container which later began to leak. As a result the specimen was buried at the corner of Frederick and Lime Streets. In 1911-12 during excavation for the new Nurses' Home for LGH, the body was found. An investigation was about to start when the physician told the story and it didn't take long to prove it.

1905

Central wing was completed at a cost of \$23,000. The board met in the chapel at LGH for the first time. They previously had met in Judge McMullen's office.

In 1904-05 the overall mortality rate was listed as 5.09%. The medical deaths were listed as follows: 1 meningitis, 1 tetanus, 6 typhoid fever, 1 tuberculosis of lungs, 1 leukemia, 3 infants dying within one week of age, 1 acute nephritis due to gas suffocation, 3 chronic interstitial nephritis, 1 chronic parenchymatous nephritis, 1 cerebral hemorrhage and 1 croupous pneumonia. The typhoid mortality rate was 14.6%. The surgical deaths were as follows: 1 burns, 1 crushed thigh, 1 fracture of both femurs and fibula and tibia, 1 appendicitis death which was due to meningitis secondary to an old mastoid condition, 1 intussusception, 1 obstruction by band, 2 peritonitis probably due to appendicitis - non operable, 1 strangulated femoral hernia, 1 rupture of urethra by injury admitted with advanced sepsis, 1 tuberculous abscess of kidney after surgery and 1 sarcoma of hip.

1906

In 1906 there were 5 deaths from typhoid fever; 2 of these were the result of intestinal hemorrhage, 1 from hyperpyrexia and exhaustion, 1 from perforation of the bowel and 1 from meningitis. There had been 42 cases of typhoid fever with 34 cured and 3 patients remaining in the hospital at the time of the report for a mortality rate from typhoid fever of 11.9%.

1907

(There is a picture of Dr. Martin L. Herr in the 1907 annual report.)

In his annual report for 1907, Dr. T. B. Appel said that the hospital had treated an average of 40 cases of typhoid fever annually. In 1907 there were 17 cases with one death - "at least 7 of these were foreign cases, in that they came from the country or contracted the disease outside of Lancaster. This decrease marks very definitely the benefits of filtered water in the city of Lancaster." There were 65 patients with appendicitis with 2 deaths - both gangrenous who died within 2 days of admission. Dr. Appel also noted, "Of 807 patients admitted in 1907, 306 cases were from the county showing the increased interest in the Lancaster General Hospital taken by people in the county. This draws attention to the fact that the hospital must not be prepared to take care of the sick of the population of 50,000, but of 200,000."

Mrs E. K. Young was the President the first year that the Auxiliary was established.

The 16 Women's Auxiliary Societies did a tremendous job in their donations to the hospital - not only money did they contribute, but dishes, linens, crates of strawberries, oranges, crocks of butter and lard, glasses of jelly, canned fruits, onions, salt, chickens, rice, celery and Christmas cakes.

Concern was expressed about the number of people who were not able to pay in full and were imposing on the charity of the institution.

1908

Childrens' Ward was opened with a capacity of seven beds.

It is interesting to be aware of the diagnoses of patients admitted in the early years of the hospital. In 1908 the Medical Director, Dr. Theodore B. Appel, reported on the diagnoses of patients admitted between 1893 and 1908, the first 15 years of operation as follows:

There had been 113 cases of influenza with 113 cured.

There were 338 cases of typhoid fever with 280 patients cured and 48 deaths for a mortality rate of 11.2%.

The main causes for surgery were accidents, appendectomies, incision and drainage of abscesses, fractures and amputations.

Dr. T. B. Appel noted that in 15 years there had been a mortality of 22% of the total of 62 cases of croupous pneumonia. He also said, "The small number of cases of pneumonia admitted to the hospital in 15 years is worthy of note as indicating that in this community, pneumonia is by no means as prevalent as in the larger cities or even in other cities in the same class."

He noted that there had been 701 abdominal operations in the first 15 years of the life of LGH with the most prevalent as follows:

Appendectomy 248, cholecystectomy for cholelithiasis 13, coeliotomy for salpingitis 39, coeliotomy for ovarian cyst 23, coeliotomy for oophorectomy for ovaritis 72, coeliotomy for hysterectomy for fibroid 33, coeliotomy for ventrification for displacement 32, coeliotomy for round ligament suspension for retroversion 26, and herniotomy for inguinal hernia 39.

Incision and drainage of abscesses 377, amputations 164, operations on bones 192 (these include 28 cases of excision of the coccyx for coccydynia, 14 cases of craniectomy for compound fracture and 11 cases of erasion of femur for necrosis).

There were 42 operations on joints, 13 dislocations reduced, 307 diseases of ear, nose and throat, 79 foreign bodies removed and 408 operations for genito-urinary and rectal diseases. These included 97 cases of circumcision for phimosis, 38 cases of clamp and cautery for hemorrhoids, 54 cases of excision of fistula-in-ano, 28 cases of excision of veins for varicocele and 16 cases of incision and drainage of ischiorectal abscesses.

There were 761 gynecological operations. These included: 165 curettement for endometritis, 72 deliveries, 191 periniorrhaphy and 171 trachelorrhaphy for lacerated cervix.

There were 165 tumors removed which included 26 operations for cancer of the mammary gland and 31 for removal of sebaceous cysts.

1909

Annual report has picture of Charles FonDersmith

The hospital had 65 beds in 1909. Two graduate nurses were employed. There were 18 student nurses and the senior student nurse on night duty was responsible for all patients. A candle was used at night by the nurse before the advent of the flashlight. The ambulance was horse drawn. One horse was used for calls in the city and two horses were used for emergency calls or visits to the country. The horses were kept in Powl's livery.

1910

First mass production of automobiles - Model T Ford.

Turkish Bath as complete as could be installed was purchased for \$3000. In 1910 a list of rates for treatment in the Hydrotherapy Dept. were :- Turkish baths \$1, Russian baths \$1, Sitz baths and showers .50, Salt bath and shower .75, Electric light bath and shower .50 and hot and cold tub bath with shower .50.

South Wing called the Women's Wing was completed at a cost of \$90,000.

This building provided a maternity ward, dispensary, x-ray room, contagious disease ward in addition to private rooms and sun parlors on each floor. The hospital capacity was 116 beds. Mrs. M. B. Rohrer of the Strasburg Auxiliary was on the program of dedication as a representative of all of the Auxiliaries, which had a major part in the building of the Women's Wing and contributed more than \$5000.

Dr. Buehrle said, "From an old brick building on North Queen Street to the magnificent pile in 16 years seems almost like a fairy tale."

Frank S. Deen was the first druggist at LGH (I'm not sure of the year he started.) and served in that capacity for 25 years. The Drug Dept. was divided into two sections, one for use of drugs and the other for fumigation, such as mattresses.

In 1910 Dr. Appel reported "attention is particularly called to the excellent results obtained by the medical staff in the treatment of pneumonia and typhoid fever - both diseases presenting an exceptionally low mortality. There had been 36 patients with typhoid fever with 2 deaths and 15 cases of pneumonia with 5 deaths.

1911

In 1911 the mortality rate was even better. There were only 2 deaths out of a total of 71 cases of typhoid fever and only 2 deaths out of a total number of 17 patients with pneumonia. In some cases of typhoid fever, the Widal reaction was not performed which may create some doubt in diagnosis.

The total number of medical and surgical cases were 1719, and there were 1021 operations performed. At this time there were 15 auxiliaries throughout the county.

1912

Charles Allen FonDersmith Nurses' Home was completed. His widow had given \$15,000.

Sallie Krick, R.N. says that the first Cesarean Section was performed in the hospital on June 26, 1912. The second one was done on March 25, 1913. Think of that - 9 months between!

She said, "We scrubbed for 15 minutes in preparation for a surgical operation. Afterwards, we would arm drip to above the elbow potassium permanganate 'til our arms were chestnut brown; second, we would use oxalic acid strong enough to remove the stain, and third, we would follow with bichloride of mercury, 1:1000 solution."

Her notes also say that orders were sometimes written on pieces of scratch paper and were attached to the chart.

A lot between the Nurses' Home and Frederick Street extending west to Cherry St., owned by Mr. Herman Wohlsen was sold to the hospital for the same price it cost him.

In 1912 a case was cited showing the charity and skill of the hospital and its physicians. A 10 year old girl admitted with tetanus received 306,000 units of anti-tetanus serum over 228 hours and recovered at a cost to the hospital of \$248.00.

1913 In 1913 it was reported that the daily number of patients frequently exceeded 100 so that it was necessary to use beds in the sun parlors. In that year there were 112 births at LGH.

1914 The 21st annual report in 1914 said this, "The Lancaster General Hospital is the standing token that the precious Golden Rule of Good Will to all is the motive of action among us... The directorate heartily returns unanimous gratitude for the help of many, for without all of this aid the work could not have been done, nor so many lives rescued from pain and death. It is evident that a charity requiring an outlay of nearly \$70,000 during the past year, having to treat 73% of the cases received free. either in whole or in part, must look to the friends of suffering humanity to unite heart and hands in this work by gifts, amenities and bequests."

1916 In 1916 the annual report showed:

Influenza	67 cases	no deaths
Typhoid fever	46 cases	4 deaths
Circulatory diseases	95 cases	22 deaths
Chronic myocarditis		4 deaths
Valvular endocarditis		6 deaths
Arteriosclerosis		7 deaths
Pneumonia	80 cases	14 deaths

In 1916 the rate for a private room at LGH was \$2.00 a day. Costs of major operations were between \$25 and \$75.

LGH acquires first motorized ambulance. It was a gift from Henry B. Keiper, who also promised to keep the vehicle in repair during his lifetime.

1917 A fire on the night of August 23, 1917 destroyed the J. Frank Bowman box factory not far from the hospital. Patients were moved to areas of the hospital farthest from

the fire. Some hospital windows melted from the heat and woodwork burned, but there were no bad results to patients.

First Social Service Worker, Mrs Boyd Maxwell was hired.

First manager of hospital, William Breitigan was hired.

Laundry building and power plant were erected.

Dr. Stahr goes to War.

The 16 Women's Auxiliary Societies did a tremendous job in their donations to the hospital - they contributed dishes, linens, strawberries, other berries, oranges, crocks of butter and lard, jelly, canned fruits, onions, chickens, celery and Christmas cakes in addition to money..

1918

Dr. Solomon Pontius was an intern in 1918 when the "flu" epidemic spread throughout the nation and included Lancaster County. According to Dr. Pontius, the first case admitted to LGH was Dr. Thomas Reed Ferguson, an Army Medical Officer from Kirkwood who arrived home on leave. He was admitted directly from the train to the hospital and died within 2-3 days.

On October 7, 1918 the Lancaster City Board of Health reported 2516 cases of influenza in one day. All places of public gathering had been closed on October 4th. The hospital was filled and patients were in offices and halls in the building. Moose Hall on East King Street was opened as an emergency hospital. Dr. John Atlee, Sr. was named Director. When Dr. Atlee became ill, he was replaced by Dr. Frank Hartman. Dr. Jesse Plant, house physician, Dr. John Atlee and Dr. Frank Hartman were given thanks for their excellent service during this time.

According to Dr. Pontius, 1/3 of the people admitted to the hospital died during the epidemic. Lancaster had 301 deaths in the month of October. 103 deaths were reported at LGH, 88 in the Receiving Ward.

During the height of the epidemic the acting head of the State Health Dept. forbade trains or automobiles going through the city to stop in Lancaster. Two nurses and one staff physician died during the epidemic.

First whole blood transfusion was given at LGH.

The first person to person, with beds side by side, donor to recipient blood transfusion was given in the Operating Room at LGH in 1918 under the supervision of an intern

and a laboratory technician. The process took approximately two hours. Later the procedure was performed in the Dressing Rooms on the Operating Room floor.

1920 Venereal Disease Dispensary was opened at LGH.
First Dental Dispensary was begun at LGH.

1921 A memorial to Dr. Haupt is in the annual report.

1922 First woman intern, Dr. Hannah Seitzik was hired at LGH. In 1926 Dr. Hogg was only male intern. There were four female interns.

Insulin was developed.

There is a very good annual report. There were 12 typhoid fever cases and 11 cases of tuberculosis, 17 patients with chronic myocarditis with 8 deaths, 9 cases of endocarditis with 3 deaths, 6 cases of ASHD with 1 death and 1 case of angina pectoris.

In 1922 Dr. S.G. Pontius brought back the canopy idea to LGH from Mayo Clinic. It had bad points and good points, but the canopy nurse had to have excellent bladder control. She had to stay there from case to case without any interruption - not even being allowed to go to the bathroom. Some bad things were heard about that. She did not get involved in the case. The canopy nurse took the instruments from the canopy and without becoming contaminated gave the instruments to the nurse doing that particular case. The canopy nurse remained at her post from case to case.

1923 In the mid-twenties automobile accidents began to increase the work of the Receiving Ward. Also at this time, people began to understand the advantages of hospital care and treatment and it was accepted by more people as a place to go for sickness, accidents and childbirth. Prior to WWI Dr. Clarence Farmer had assisted Dr. John Atlee, Sr. who was doing surgery in the homes of patients. They had a cadre of nurses, a portable operating table and surgical instruments. The nurses would go to the home and prepare things for the doctors.

Dr. Henry B. Davis becomes Head of the Radiology Department and remains in that position until 1946.

1924

In 1924 a graph record of the growth of admissions to the Lancaster General Hospital revealed the following:

- # of patients admitted passed 500 in 1903
- # of patients admitted passed 1000 in 1906
- # of patients admitted passed 2000 in 1910
- # of patients admitted passed 3000 in 1913
- # of patients admitted passed 3500 in 1922

In contrast over 7300 patients were admitted in 1943 and there were 1441 births.

1925

Annual report has a picture of young Dr. Charles P. Stahr.

F. C. Hilker was manager of the hospital. Roland Klemmer was on the staff. Martha Brubaker remembers the typhoid fever epidemic and ice and ice packs were used to make patients more comfortable and to try to keep the fever down.

Buckley Diaphragm table was purchased for X-ray Dept.

In 1925 the cost of maintaining a patient in LGH was \$4.57 a day. Telephones were placed in each private room.

1927

First EKG was obtained by LGH. It was replaced in 1937. An Electrocardiographic Department was established with Dr. Roland Klemmer in charge.

Drs. Henry B. Davis and D. G. McCaa were in charge of one of the best equipped and managed x-ray departments in the state of Pennsylvania.

Lindbergh flew Atlantic Ocean - landed in Paris.

Iron Lung developed.

Nurses' Home was moved in order to use area for new maternity building. After removal of a cow from the corner lot, construction of a foundation was started on the new site, the building was jacked up and pulled on rollers over a wooden platform by horse powered winches at a cost of \$25,000.

Dr. J. T. Rugh, an orthopedist, came up to Lancaster weekly from Philadelphia to treat the major orthopedic problems in the community. He had a clinic that dealt with orthopedic cripples especially children. He treated club feet and other congenital deformities. In 1936 the Lancaster County Society for Crippled Children developed from this beginning.

1928

Mrs. Elizabeth McMurray becomes Social Worker.

Rates in 1928 were \$4.50 - 10. a day for private rooms. It cost \$15 for the Operating Room including anesthesia for a major operation and \$10 for a minor operation.

Central Linen Supply room was established.

1929 Maternity building costing \$235,000 was completed adding 80 more beds to the hospital. The total bed capacity was now about 200.

Ray Hall, a manager at Armstrong's, became manager at LGH.

Lime Street Building was extended to Lime Street for administrative offices. Until Duke Street facilities opened in the 50's, the Lime Street building was the principal unit of the hospital.

Penicillin was discovered.

1930 In the 30's the Physiotherapy Dept. had a Honsaker colonic apparatus for colonic irrigation, a Solar arc lamp for heliotherapy and an electric cabinet bath to eliminate acids and poisons from the system. There were 465 births in 1930.

1931 Medical Library was established.

John Weaver was added to the staff as the chief accountant and credit manager.

5000 patients were admitted during the year. There were 581 births. The average number of patients/day was 160.

1932 Infant respirator was purchased.

5,333 patients were admitted during the year. There were 626 births and the average number of patients was 161.

Student nurses worked 12 hour shifts and both graduate and student nurses stayed at the end of shifts many times to prepare supplies for sterilization. Students were forbidden to have dates with interns or any other hospital personnel. Smoking was not allowed. The penalty was being campused and not being allowed to leave hospital grounds.(I am not sure of years for this)

1933 Vitamin B12 recognized.

LGH weathered the worst part of the Depression.

1934 Dr. Wilhelmina Scott became assistant to Dr. Henry Davis in X-ray.

1935 Prontosil - first Sulfa drug produced.

Deep therapy x-ray equipment, the newest thing in x-ray therapy, was installed.

70% of the hospital's income was received from patients able to pay. 45% of patients receive free care.

There were closed wards. Full pay patients have their own physician. Charity and part pay patients are treated by staff doctors assigned to ward service.

Mrs. Joseph Henry Rathfon died. She was the wife of the Treasurer of LGH and was a founder and member of the Ladies' Auxiliary LGH, chairwoman of linen committee from 1896 until her death and worked unstintingly. Her 2 chief interests were LGH and her church and she was honored posthumously by the Board of Directors.

1936 Prior to 1936 patients were sent to Phila. by car for bronchoscopy.

Board of Directors Minutes:

The Medical Director shall be elected annually.

He will have general supervision over professional and technical affairs including professional treatment of patients, character of nursing, laboratory, drug room and the professional side of departments. He will have control over interns.

He will pass on all requisitions of a technical character from any department before their submission to the hospital manager.

He shall establish for guidance of the hospital manager the standards for admission of patients, distribution of patients and proper assignments of patients to physicians and surgeons for treatment.

He shall render to the Board a monthly report covering the type and character of professional work of the hospital, etc.

There were four Departments: Medicine, Surgery, Obstetrics and Eye, Ear, Nose and Throat. The Gynecology Department was dropped and made a part of the Department of Surgery. The Eye Department was merged with the Ear, Nose and Throat Department.

The LGH Nurses Alumnae Association decided that private duty nurses will do only 12 hour duty in the hospital with the exception of tonsil cases when the nurse will remain on duty for the first 24 hours when necessary - or when necessary in a private home. \$1/day for each additional patient will be charged.

1936-37 Annual report has a biographical sketch of Dr. Theodore B. Appel and his picture.

1937 Allergy Clinic was begun by Dr. Stephen Lockey.

Bronchoscopy Clinic was begun by Dr. Hess Lefevre.

Mobile bedside X-ray unit was obtained for the Radiological and Electro-therapeutic Dept.

Dr. Chambers resigned from the staff as orthopedist.

Group hospitalization plans were discussed by the Board of Directors.

Nurses' Home construction was considered.

1938 First Iron Lung (Drinker Respirator) was obtained at LGH for \$1350. This bulky instrument was the only type of assisted ventilation available. It was a cumbersome and large, heavy piece of equipment which also made nursing care difficult. There were portholes through which to work, but the negative and positive pressure had to be maintained all of the time for the benefit of the patient.

There were 844 births and 3506 operations. The average stay in the hospital was 11.2 days and the cost/patient/day was \$4.70.

1939 Rh factor discovered.

Pediatrics Dept. was recommended by Dr. Carl H. Hoover, head of this subsection of medicine.

1940 There were 4 operating rooms: 2 for general surgery, 1 for fractures and 1 for genito-urinary surgery.

Board of Directors entered into an agreement with Intercounty Hospitalization Plan, Inc.

Picture of Ray Hall and Sarah Reinhart in Within These Walls.

There were 856 births in 1940.

- 1941 Three improvements noted by the Board of Directors were:
New Instruments for the administration of oxygen
Curtains to make ward beds more private.
Improvement of equipment for blood transfusion was being considered.
- 1942 Flat rate for OB cases was reduced from 14-12 days because of overcrowding and the need to turn people away.
- 1943 Red Cross volunteers attended Red Cross classes and began serving as Red Cross Volunteers at LGH.

Board of Directors minutes LGH Anniversary Week - a committee of clergy was organized and pastors throughout the county were asked for their cooperation. 96 pastors planned to aid in this celebration with an announcement from the pulpit or in their church bulletin.
- 1945 Private duty nurses reduced their working day from 12 to 8 hours for the same wage as they did for 8 hours.
- 1946 Picture of LGH in Nurses' Yearbook.

Dr. Joseph Appleyard was Medical Director; Dr. Clarence R. Farmer was Chairman of the Obstetrical Dept. Dr. Wilhelmina Scott became Head of the X-ray Department.

Cherry Alley was closed.

In 1946-47 the post-war baby boom began and LGH gained the distinction of having 1439 babies born - more births than any hospital in Pennsylvania outside of Philadelphia General Hospital.
- 1947 Rates for private rooms were \$7.50; Semi-private rooms \$6.00; flat rate for maternity now 7 days with a private room was \$75. The average patient stay was 12 days.

Reconstruction of the present building provided an increased capacity to 411 beds for children and adults and 80 newborn.
- 1949 Dr. George Heid started Blood Bank.

In 1949 Miss Sarah Reinhart announced her retirement after 20 years as Directress of Nurses at LGH. She said that while she was in training school (she graduated in 1911) the student nurses worked from 7 A.M. to 7 P.M. with one hour free; and did their studying and attended their training classes after they finished the day's duty. She

also said it now takes better equipped nurses to take care of the job and "Specialization is necessary to give the proper nursing service required." Although a dental dispensary was begun in 1920, oral surgeons began operating in the Operating Rooms of LGH after WWII. Dr. Irvin Uhler was the first oral surgeon to use the hospital with any degree of regularity for dental surgery in the mid and late 40's. Dr. Howard Eckhart would join him in 1953.

The LGH Auxiliary took over the Gift Shop formerly operated by the Junior League.

The Board of Directors decided they needed a top administrator to run a \$1 million dollar a year business. Drs. Appleyard and Pontius recommended that he be a physician.

Edythe Kistler became Directress of Nurses.

Dr. Roger DeBusk became Executive Director. All employees of the hospital and all Heads of Departments should be responsible to him.

The building facing Frederick St. was completed which housed the enlarged laundry and garage space for the ambulance and two autos. The power plant was converted to use oil fuel.

A large building project was approved.

1950

Ray Hall retired as business manager.

Baby Alumni bought an incubator for the hospital.

Cost of a patient was \$10.73 a day and there was an average of 285 patients/day.

Hospital Sunday was observed annually after the 50th Anniversary.

1951

Heart - Lung machine developed.

Drs. Ward O'Donnell became the Head of the Pathology Dept.

The average number of patients/day was 284 and the cost of a patient was \$12.06/day.

Private room cost \$12/day and a semi-private room cost \$9.50/day.

1952

Color TV was introduced into United States.

Security hired a night watchman .

New building facing Duke Street was completed with a total bed capacity of LGH of 450 beds. There was a new Administrative Office, Dining Room, Kitchens, Library and Prayer Room. In 1952, 172 more beds were dedicated. A new floor was designed for Pediatrics.

1953

Dr. Paul Eyler was hired as Assistant Radiologist.

Nurses were paid \$1.15/hr.

In the School of Nursing marriages of student nurses was permitted after completion of 32 months of training.

Second Iron Lung was given to the hospital.

Dr. Ward O'Donnell started a School for Medical Technologists.

1954

Polio Vaccine first administered by Dr. Jonas Salk.

The LGH Ladies' Auxiliary had 2750 members.

	Patients	Average # of Patients	Average cost/ Patient/day
1953	13891	298	\$14.67
1954	16233	352	\$15.46

TV placed in each room - sponsored by LGH Auxiliary.

Chaplaincy Service began at LGH under the auspices of the Lancaster County Council of Churches. In 1971 the Chaplaincy Program became a Department of the Lancaster General Hospital and at the present time there are two chaplains. The first funeral was held in the hospital chapel in 1965 so a patient could attend the spouse's funeral..

1955

Board of Directors decided to add four floors costing \$1.5 million. These were built 1957-59.

In 1955 a premature baby weighing 1 pound and 14 ounces was born at LGH and survived.

Salmonella epidemic was present with 36 patients to date and the second floor of the maternity building was the isolation area. During the epidemic there were 268 cases

of paratyphoid fever. Vaccine was given to all users of Queen Dairy milk to which the epidemic was traced. Chloroamphenicol was the antibiotic used for treatment.

1956 40 hour week for General Duty Nurses paid \$225/month.

Private room \$16/day and semi-private room \$12/day.

LGH was first accredited by the Joint Commission on the Accreditation of Healthcare Organizations.

1956-57 over 18,000 patients were admitted, 8,890 operations performed, 5,379 blood transfusions, over 18,000 x-rays, over 165,000 laboratory exams, over 15,000 Physiotherapy treatments, 3,329 births, almost 140,000 pharmacy orders, almost 570,000 meals served and over 13,000 emergency visits. An average of 49 patients were admitted per day.

1957 Mrs. L. E. Foster was Chairman of the Red Cross Volunteers, and Mrs. George Brown was Chairman of the Gray Ladies.

1959 Private room \$17-24/day
Semi-private rooms \$14-17/day
Ward beds \$12-13/day.

The Board of Directors inquired whether Blue Cross would accept them as a member and later became a member of Blue Cross. LGH had an open house and a 500 bed? capacity. Four new floors were opened atop its new building. 8th floor contained 8 new major operating rooms and 9 minor ones. There were 23 postoperative Recovery Room beds in the 8th floor Recovery Room.

A new area for Pediatrics was provided on the 9th floor.

1960 Dr. Polcyn became a member of the staff. Prior to Dr. Polcyn's arrival, neurosurgical cases were sent to Graduate Hospital of the Univ. of Pa. to Dr. Grant.

The Board of Directors studied the feasibility of an Intensive Care Unit.

LGH Ladies Auxiliary present a check for \$28,500.

Dr. Andrew Koch started a School for X-ray Technologists.

1961 Alan Shepard made first space flight.

In NYC Blue Cross cost \$8.72/month/family. In 1955 it had cost \$3.56/month/family.

LGH became a corporation.

The Board of Directors decided they needed an experienced administrator. The LGH budget was \$4.3 million.

Air conditioning was installed in a section of the Obstetrical Dept. paid by Women's Auxiliary.

1962

Married students could be admitted to the School of Nursing

Arrangements were made for 12 interns, 1 Surgical Resident and 2 General Practice Residents to be recruited for house staff.

Obtained the first AC defibrillator. Dr. John Esbenshade told about the first use of this instrument which was obtained in 1962-3. A 70 year old resident of Strasburg was playing golf at Overlook and was brought into LGH ER with chest pain. The EKG technicians were running an EKG strip when he went into ventricular fibrillation. Dr. John Esbenshade used the machine (defibrillator) for the first time. The patient's rhythm reverted to normal sinus rhythm. He remained in the hospital three weeks with his myocardial infarction and was discharged and lived to 87 years of age and died of something independent of his heart. Dr. Esbenshade had another experience with an older man developing ventricular fibrillation in his office across the street from the hospital. He called Code Blue and two interns came running over to his office with all of the resuscitative equipment. He was also defibrillated, regained normal sinus rhythm and was admitted to the hospital. He died about one year later. About the same time Dr. Robert Witmer started inserting epicardial pacemakers in patients with complete heart block with syncopal episodes. Previously they would have died suddenly of cardiac arrest. Now they lived a normal life for years. In 1969 transvenous pacing of the cardiac rhythm was performed and this could be done on very sick patients.

1963

Dept. of Inhalation Therapy was established.

Dr. Paul Eyler became Chairman of the Radiology Dept.

1964

LGH worked closely with Heart Haven.

Auto-analyzer and Coulter counter were purchased for the Laboratory.

Dr. Henry Miller became Director of Medical Education.

Paul Wedel was hired as Executive Director.

TV was provided throughout hospital.

Elevators became automatic.

Gray Ladies Report: In early days of WWII their duties included delivering mail and flowers and an occasional feeding of a patient. Now they have a messenger service, work in many areas of the hospital - all have taken the Red Cross standard 10 hour First Aid Course.

CENSUS

Patients cared for	20,000
Patients treated in Receiving Ward	15,000
Dispensary visits	15,000
# operations	10,000
# births	2500
Average # Patients /day	423

1st black nursing school graduate.

New School of Nursing and nursing residence proposed.

1965 Master 2 step cardiac examinations were being done in the Cardiology Dept. 1965 Code Blue started at LGH. Cardiac resuscitation was organized under Dr. John H. Esbenshade. A cart with emergency equipment, electrical equipment, oxygen, etc. with trained personnel arrived any place in the hospital within one minute to begin cardiac massage and/or respiratory aid.

In the early 60's a CCU opened on 6th floor - a medical and separate surgical CCU and heart monitoring equipment was obtained for the medical side of CCU only.

New medical school was being planned at Hershey.

1st funeral held in hospital chapel so a patient could attend spouse's funeral.

Dr. James Z. Appel was elected President of AMA.

LGH Board of Directors canceled Blue Cross.

1966 Emergency Room physicians were hired by the hospital to provide 24 hour coverage of the Emergency Room. Prior to this interns were on call for emergencies with supervision and support from the staff physicians.

- Medicare became a fact.
- General Practice program was continued.
- Computer arrived.
- 1967 Nursing Education Building opened. Student nurses moved from FonDersmith Residence to their present residence when the new School of Nursing was completed.
- LGH had 1067 employees. The medical and dental staff consisted of 162 physicians and dentists and there were 11 interns.
- 1968 Dr. John H. Esbenshade was hired as Director of Medical Education.
- Air-conditioning was placed in LGH.
- Centralized food service was installed.
- No interns or house staff was available and In-House emergency physicians were established.
- In the late 60's in the X-ray Dept. Drs. Dwayne Goldman and John Esbenshade first performed cardiac catheterization in which the right heart chamber was entered.
- 1969 Dr. Nikita Zervanos began a new Department of Family & Community Medicine.
- Moon landing - United States
- 1970 Family Practice Residency Program at LGH was approved by the AMA.
- Dr. William Porter, first pulmonary physician, was employed by LGH.
- Cobalt Unit, a gift of J. Hale Steinman, was installed in Radiation Therapy with Dr. John Ebersole in charge.
- A biochemical profile machine, Technicon SEA 12/60, was installed which did 12 simultaneous chemistry analyses in less than 8 minutes.
- North Wing was built.
- Pneumatic tube - Trayveyor was installed and transported records and other reports from Laboratory, X-ray, Nurses' Stations, etc.

In 1970 the minimum hourly wage was increased to \$2/hour. The base salary for nurses was \$600 a month.

Outpatient Dept. was moved to Duke Street.

1971 Chaplaincy Program previously funded by the Lancaster County of Churches becomes a Department of LGH.

Model Family Practice Unit begun in Quarryville.

End of Lime Street Building.

Heart Haven was demolished for parking.

Emergency Room was moved to Frederick Street.

Electronic thermometers were first used at LGH.

Beds in North Wing were put into use and there were now 528 beds.

Obstetrical Dept was moved to 6th floor.

Entire hospital was air-conditioned.

LGH affiliated with Temple University for Medical Education program.

In 1971 coronary catheterization for coronary heart disease was first done at LGH in the X-ray Dept. by Drs. Richard Mann and Dwayne Goldman.

Treadmill examinations were being done in Cardiology.

Family Practice Department was organized with Dr. Charles Bair as the Chairman.

1972 New CCU was started.

Linear Accelerator was installed in Radiation Therapy Department.

Psychiatric unit was started under the direction of Dr. Robert Kurey.

FonDersmith Residence at Lime & Frederick Streets, the home of nursing students from 1912-67, was demolished.

1973 Dr. John Schubert, first nephrologist physician, was employed by LGH.

Physical Medicine Department has first full-time physician.

First artificial kidney machine obtained.

Ultrasound started in X-ray Department

Defibrillator purchased for Emergency Room

Electric beds put into use.

Neonatal monitoring unit begun.

1974 Laboratory collection begun in physicians' offices by LGH.

Swan-Ganse Catheters were used to obtain the wedge pressure and get some idea of cardiac output and left ventricular function.

Echocardiography was done in the Cardiology Department.

1975 Medical/Surgical Intermediate Care Unit was begun.

Malpractice was becoming a problem.

Cardiac catheterization laboratory established.

In mid 70's an X-ray facility and Laboratory collecting service was provided at Crooked Oak Medical Services.

Idea of parking garage introduced.

1976 Pre-admission testing program was begun.

Therapy for alcohol problems started.

Operating Room Microscope was donated by the John Steinman Foundation so that neurosurgeons could now perform micro-craniotomy procedures.

Ward service ended.

Cardiac rehabilitation started for inpatients.

Credit cards were accepted for payment

- 1977 Total body scanner purchased for X-ray Department.
- Portable X-rays were provided by the X-ray Dept. in Nursing Homes, etc.
- LGH introduced risk management to help prevent and reduce the hospital's and physicians' risks to malpractice claims.
- 1978 Laser surgery was begun. Zap out enemy with one quick blow.
- Permission was granted to install a helicopter pad on the roof of parking garage.
- LGH was second busiest hospital in Pa. with 24,497 admissions.
- 1979 Birthing Room started.
- Feasibility study for heart surgery begun.
- 17 new Operating Suites were added.
- LGH became interested in preventing disease and initiated immunization programs throughout the county for polio and later measles and other childhood immunizations.
- 1980 Special Neurosurgery Unit was established.
- Dr. McCann says new CCU opened.
- 1981 New Family Health Service opened.
- School of Nursing had a record enrollment of 260 students.
- 1982 Short Procedure Unit was established.
- Sports Medicine program was started.
- LGH Foundation was formed as the parent corporation under which the hospital will function as well as a new profit making organization, Lancaster General Services Corporation.
- Birthing chair was purchased.
- 1983 Open Heart surgery began in September under the leadership of Dr. Lawrence Bonchek

- Cardiac Unit was established.
- Discharge planning was begun to assure patients of continued well-being.
- Angioplasty was begun.
- 1984 Rehabilitation unit was established to help rehabilitate patients with neurological disorders.
- Health Maintenance Organizations's began to emerge in an attempt to limit costs.
- LGH had become the county's third largest employer with over 2000 people.
- LGH Foundation and a group of participating physicians begin a Preferred Provider Organization (PPO) which set up pre-determined fee schedules and stringent utilization review procedures to control costs.
- 1985 Neonatologist, Dr. Kaur was employed to manage Neonatal ICU.
- Cardiac Rehabilitation program was started for outpatients.
- Day Surgery was established.
- Linear accelerator was installed in X-ray Department.
- MRI (Magnetic Resonance Imaging) was started at LGH.
- New computerized brain monitor, first in the state, was acquired.
- 1986 Women's Health Pavilion was opened.
- 1987 LGH was accredited as Regional Trauma Center.
- Rohrerstown Diagnostic Imaging Center was established at Rohrerstown by a joint venture of Lancaster Radiological Associates and the LGH Services Corporation.
- Willow Valley Lakes Healthcare was instituted in Willow Street by LGH establishing a medical office, X-ray facilities and a laboratory collecting service.
- 1988 There were approximately 606 Code T's of which 91 required surgery.
- Michael Young became executive vice-president and chief operating officer of LGH.

During the five-year period ending in 1988 the hospital had contributed \$63 million worth of uncompensated care.

1990

Food service and record facilities are enlarged

Emergency Department and parking areas are expanded.

Annual budget is \$140,000,000 and 2700 people are employed.

Medical and dental staff numbers 525 physicians and dentists.

1991

LGH purchased land along the Route 30 bypass near Rohrerstown for a campus on which to place buildings for outpatient procedures, laboratory, physiotherapy, x-ray, etc.

A facility for Occupational Medicine was opened at Greenfield Industrial Park which contained all of the ancillary services needed for occupational medicine.

More complex surgery is being performed with the average time for a procedure being 128 minutes. There were approximately 14,500 surgeries performed in the past fiscal year. The hospital's inpatient surgery program is increasing at the rate of 2.3% a year, while the outpatient surgery rate is increasing at an annual rate of 2.5%. In addition, the number of open-heart surgeries is increasing rapidly. An estimated 1200 open-heart surgeries are projected for this calendar year.

An MRI became operational at Rohrerstown Diagnostic Imaging Center.

Michael Young becomes the new President and Chief Operating Officer of LGH.

HOSPITAL AND MEDICAL PRACTICE IN THE MID- 20TH CENTURY

There were four wards - 2 surgical and 2 medical - one for males and one was for females. The wards for the men were on the first floor of the hospital and the wards for the women were on the second floor of the old Lime Street building. The medical wards contained six beds along each wall of a large room and 2 beds in the sun parlor when it was crowded. Large white curtains about 7 feet tall reached from the rails near the ceiling to the floor. When curtains were extended they reached around the bed giving the patient privacy for treatments, bathing and toileting. Obviously sounds and odors and conversations were easily transmitted from one area to another. There was one wooden, straight-backed chair for each bed where the patient could sit when out of bed.

Surgical wards were larger with 16-20 beds in each large room. Sun parlors were in vogue in those days as heliotherapy was considered one of the modes of treatment.

There were also three and four bed wards. Toilets and baths were in separate rooms off the halls or commodes, urinals or bedpans could be used.

These large wards were the areas where charity patients were placed - people who could pay nothing or a small amount for their care. Their medical care likewise was free. This is the area - these are the people, who were managed by the intern under the supervision of the Junior and Senior staff physicians. The histories and physical examinations were performed - the orders written and the treatments and diagnostic tests given by the intern. This was his/her on the job education. The Junior physician made rounds every day with the intern, visiting and examining each patient and teaching and learning as they progressed from patient to patient - often within earshot of the patient. Some of the more erudite and delicate discussions took place in the nurse's station within hearing of only the nurses. The Senior physician would make rounds about twice a week with the intern and Junior physician and be a teacher to both. The Senior physician was usually the older, more experienced, sometimes better trained physician in medicine or surgery. The Junior physician was the younger, more frequently less experienced with less formal training. Junior physicians worked four months a year in two months terms. With daily rounds and emergency calls and return to see patients on the wards, he/she worked about 190 hours a year for charity. From the time of establishment of the hospital until the mid 60's physicians on the active staff of LGH had to give of their time for patients in the hospital or at the outpatient clinics in exchange for their position on the staff. 5-10% of a physician's time in those days was spent taking care of free patients.

In 1957 a rule was made that all surgeons who were going to perform surgery on ward service had to be Board Certified or Board Eligible.

With the advent of medicare and other medical insurance, ward service disappeared and the stigma that was associated with charity patients was removed as far as type of room and delivery of care was concerned. All patients had semi-private or private rooms and all patients had their own

private physicians. The hospital and physician were paid by insurance or state subsidization for the care of all patients or the patients paid themselves.

As a result of the medical expense and lack of health insurance by most people prior to the late 50's or early 60's, the patients frequently rationed their own medical care. They would refuse hospitalization because they could not afford it and requested that the best be done for them at home. Among the Amish especially and others, bishops or family representatives would come to see the doctor about another person's medical bill. They would ask whether the bill could be reduced and state that they would pay the bill for the family unable to meet their obligations.

Prior to 1930 the insurance industry regarded illnesses and injuries as uninsurable risks. People were expected to pay for their medical treatment for all services rendered. Blue Cross was created in 1928, but by 1941 less than 10% of the population had insurance coverage for inpatient hospital care. During the war years (1941-46), health insurance covered many employees in factories, especially of large corporations. Hospital insurance had been offered to new employees at RCA in the 40's. This was the first time that this form of insurance had been made available to Lancaster residents. In the beginning insurance was available only for hospitalization for surgical procedures and gradually expanded to include major illnesses treated in the hospital. Since the insured patient could only be paid for his/her illness if he/she was hospitalized, many patients were hospitalized unnecessarily for the benefit of insurance coverage. By the early 60's, 70% of the population had some kind of health insurance.

Since many people were uninsured or under-insured, the federal government attempted to remedy this situation by establishing two programs, Medicare and Medicaid. These programs would provide extended medical coverage for the elderly and the poor, respectively. Since hospitalizations increased dramatically and healthcare costs increased at almost twice the rate of inflation, various attempts have been made to contain the costs. This has been done by encouraging outpatient surgery (in fact, the programs do not pay for inpatient services if outpatient care would attain the same results), paying the cost by diagnosis, getting second opinions and starting a new concept of healthcare. This last new theory was based on two principles: 1) It cost less to keep people well than treat them after they became ill or injured, and 2) since the doctor really controlled the cost of healthcare, they should assume some of the risk or benefits of any insurance program. If costs of care exceeded a certain preplanned amount, the physician shared in the expense; if the costs were less than the predetermined amount, the doctor shared in the savings.

Prior to WWII only the most skilled - in demand - specialists had appointments. In almost all other physicians' offices people would wait their turn - first come, first served. Waiting rooms were just that and patients could wait for a long time. In the 60's appointments became more frequent.

OBSTETRICS

During the first 15 years of the Lancaster General Hospital, there were 72 deliveries. In 1931 there were 581 births and in 1943, 1441 births. In the early '80's there were over 2000/yr and by 1990 there were over 3000/yr.

In the 40's and early 50's postpartum mothers were confined to bed for 12 days - the last 2 days being allowed to dangle. After being out of bed for 2 days, they were allowed to go home. As a result of this physical inactivity deep thrombophlebitis was not infrequent, resulting occasionally in pulmonary emboli with some maternal deaths.

The role of the Rh factor had not been discovered. Later the determination of the Rh factor in the mother and, if necessary, the titre of antibodies in the pregnant woman was able to alert the attending physician of any impending trouble with erythroblastosis fetalis. If the disease was progressing, exchange transfusions were necessary for these affected infants. Later the administration of Rhogam made it possible to prevent antibody formation in the Rh negative mothers.

BIRTHS AT LGH

1893-1908 (first 15 years)	72
1913	112
1930	465
1931	581
1938	844
1940	856
1947*	2499**
1950	2613
1957	3329
1964	2500
1970	1805
1980	2545
1990	2923

* More than any other hospital in Pennsylvania except PGH

** Plus 51 stillbirths

ADVENT OF ANTIBIOTICS

Hydration and transfusions

In the late 30's sulfonamides, chemotherapeutic agents, and later in mid 40's penicillin - the first antibiotic - became available. Alexander Fleming had discovered penicillin in 1929, but it really wasn't used clinically in medicine until the 40's. Although prontosil and later sulfanilamide were the first, sulfadiazene became the sulfonamide of choice in most cases and was given in doses of two grams stat and one gram every four hours. Penicillin was give IM. in doses of 20,000 units every three hours. These agents were only therapeutic for Gram-positive organisms for the most part and other spectra of illnesses were not affected. Penicillin was very scarce and valuable in the early days and frequently physicians carried the unmixed vials in their pockets for safe keeping.

- 1929 Discovery of penicillin
- 1940s Clinical use of penicillin
- 1944 Discovery of streptomycin which revolutionized the treatment of tuberculosis.
- 1947 Discovery of chloromycetin primarily used for treatment of typhoid fever.
- 1948 Discovery of aureomycin
- 1949 Discovery of neomycin
- 1950 Discovery of terramycin

- 1935 Discovery of Vitamin B12 for treatment of pernicious anemia.
- 1945 Discovery of folic acid.

Tap water was used for proctoclysis. Solutions for hypodermoclysis were prepared in the Operating Room area by the nurses. A lot of fluid was given to patients by these two methods before more refined methods became available. Intravenous fluids had been started to be used but were only available in 5% glucose in normal saline or 5% glucose in water. An occasional liter of 10% glucose might be available in normal saline or water. Normal saline and other types of fluids only became available at least a decade later. Vitamins in the form of Solu-B with C were often added to a vial. Salt overload was not an uncommon occurrence in patients amenable to heart failure.

Transfusions were given directly from donor to recipient with beds placed side by side in the 20's in the Operating Room under the supervision of the laboratory technician and an intern. The apparatus that was used was still there 30 years ago. There was a syringe for use for blood from the donor and a stop- cock which allowed it to be delivered to the donor. The syringe was the measuring device. Something was put in the syringe to make the solution go smoothly. The process took approximately two hours. Later, the procedure was performed in the Dressing Rooms on the Operating Room floor.

CARDIOLOGY

Hunter performed an autopsy and provided the first printed record of the connection between coronary calcification and angina pectoris in 1779. Jenner previous to 1779 had observed extensive calcification of coronary arteries in angina pectoris. Heberden also did extensive work in this field. It was thought in the 19th century that coronary thrombosis was always fatal. Coronary heart disease was frequently called chronic myocarditis.

Herrick in 1912 stressed the fact that the occlusion of the coronary arteries was not always fatal. The theory of coronary spasm was brought forward periodically in the 19th and 20th century. He made the first diagnosis of coronary thrombosis.

Laennec with the invention of the stethoscope in 1815 introduced auscultation although his primary interest was the lungs.

Ludwig discovered the measurement of the blood pressure in 1847.

Einthoven developed the string galvanometer in 1903 which evolved into the modern electrocardiograph.

Hypertension was mainly treated by sedation - phenobarbital or sometimes mannitol and phenobarbital. Lumbar sympathectomy or the special rice (Kempner) diet was occasionally utilized for the recalcitrant hypertensive. Later thiocyanates and rauwolfia became available for treatment of elevated blood pressure.

Forssman introduced cardiac catheterization in 1929 and catheterized himself. His attempt was regarded equivalent to suicide at the time. Furthermore after catheterizing his coronary arteries, he walked upstairs to the x-ray department. He had trouble getting a job because everybody who interviewed him said they were interested "in running a clinic, not a circus."

Terms for ischemic heart disease in the 19th and early 20th century were: calcareous atheroma, myomalacia cordis, chronic myocarditis, fibroid disease of the heart, degeneration of the muscles of the heart, fatty heart, cardiac necrosis, cardiac abscess and rupture of the heart.

The incidence of coronary heart disease as determined by postmortem examinations in the London mortuary and St. Bartholomew's Hospital are interesting% of postmortems

Year	Deaths in Hospital	Death on Arrival	% of Postmortems with Coronary Thrombosis
1893-1922	4		.26 - .68%
1923-1927	14	6	1.07% Double
1933-1937	19	20	2.5% Double
1940-1944	21	92	13.4% 5 times
1945-1949	32	124	15.7% 20%
1950s	68	Not Done	Double
1960s	118	Not Done	Double Again
1970s	107	Not Done	Slight Decrease
1980s	95		20% Decrease

Year	London Mortuary Death by Coronary Thrombosis
1870-1900	2 - 6 /Year
1910-1920	14 - 19/Year
1930-1950	18 - 38/Year

In 1923 Harvey Cushing, world famous neurosurgeon, referred to the heart as "the last frontier in surgery". This frontier has been crossed with a vengeance.

1935	Discovery of heparin.
1939	Rh factor discovered in blood.
1941	Anticoagulants Dicumarol.
1941	Radioactive Iodine first used.
1943	Antithyroid drugs - thiouracil discovered.
1938	Ligation of the patent ductus arteriosus
1944	Blalock-Taussig operation for Tetralogy of Fallot.
1948	Bailey did mitral commissurotomy.
1948	Cortisone discovered and used. In 1949 three weeks treatment with cortisone cost \$18,000.
1953	Dr. John Gibbon invented the heart-lung machine.
1967	The first heart transplant was performed.

In the early and mid-20th Century synthetic cardiac glycosides were unknown and digitalis was practically the only cardiac drug used. Oubain was the only method of rapid systemic digitalization. There were no effective oral diuretics and mercurials by Iv. and Im. injection were used and were more efficient if preceded by ammonium chloride for acidification for 3-4 days in doses of 1 Gram four times a day. The only electrolytes in the serum that were available by laboratory testing at the time were sodium and chloride. Potassium was not easily determined until several years later.

Coramine and lobeline were still used occasionally as respiratory stimulants, but were really not too effective.

Oxygen was used by mask and by tent which also kept patients cool. The methods were relatively inefficient. Blood gasses were unable to be determined at this time.

In 1962 LGH obtained the first AC defibrillator. Dr. John Esbenshade told about the first use of this instrument which was obtained in 1962-3. A 70 year old resident of Strasburg was playing golf at Overlook and was brought into LGH ER with chest pain. The EKG technicians were running an EKG strip when he went into ventricular fibrillation. Dr. John Esbenshade used the machine (defibrillator) for the first time. The patient's rhythm reverted to normal sinus rhythm. He remained in the hospital three weeks with his myocardial infarction and was discharged and lived to 87 years of age and died of something independent of his heart. Dr. Esbenshade had another experience with an older man developing ventricular fibrillation in his office across the street from the hospital. He called for help and two interns came running over to his office with all of the resuscitative equipment. He was also defibrillated, regained normal sinus rhythm and was admitted to the hospital. He died about one year later.

In the early 60's Dr. Robert Witmer started inserting epicardial pacemakers in patients with complete heart block with syncopal episodes. Previously they would have died suddenly of cardiac arrest. Now they lived a normal life for years. In 1969 transvenous pacing of the cardiac rhythm was performed and this could be done on very sick patients. In 1965 thoracotomy was performed for insertion of pacemakers. Later transvenous pacemakers were available. A gentleman keeled over and was taken to St. Joseph's Hospital and he needed a permanent pacemaker. He was brought over to LGH by ambulance with Dr. McCann in the ambulance with the patient. Drs. Robert Witmer and Richard Mann put a pacemaker in the patient in the Short Procedure Unit in the X-ray Department - a transvenous, Medtronic with a fixed rate.

In 1965 Dr. J. Howard Esbenshade was in charge of the Heart Department and the Master 2 Step was being performed to determine coronary heart disease; the Treadmill was not yet in use. Code Blue started at LGH. Cardiac resuscitation was organized under Dr. John H. Esbenshade. A Max cart with emergency equipment, electrical equipment, oxygen, etc. with trained personnel arrived any place in the hospital within one minute to begin cardiac massage and/or respiratory aid. The patient was placed on the cart and everything that was needed was in or on the cart.

In the early 60's a CCU opened on 6th floor - a medical and separate surgical CCU; heart monitoring equipment was obtained for the medical side of CCU only.

In the late 60's in the X-ray Dept. Drs. Dwayne Goldman and John Esbenshade first performed cardiac catheterization in which the right heart chamber was entered.

In 1971 coronary catheterization for coronary heart disease was first done at LGH in the X-ray Dept. by Drs. Richard Mann and Dwayne Goldman.

By 1972 Drs. Mann and McCann did catheterizations with cut-downs in the arm in the X-ray Dept. By this time LGH had a Treadmill for testing coronary heart disease. Dr. James Gault came in 1974 and patients for heart surgery were sent to Dr. Horace McVaugh in Phila., first at University of Pa. Hospital and later he moved to Lankenau Hospital.

In 1972 a new CCU was started in which the medical side had open wards and the surgical side had private rooms probably to prevent infection. In 1973 a defibrillator was purchased for the Emergency Room.

Over 4,000 children had been examined in the Children's Heart Clinic since its opening in 1952.

In 1974 the Swan-Ganse catheter was available to measure wedge pressure, which helped to evaluate left ventricular function and cardiac output.

In 1974-5 the intra-aortic balloon became available which was good for handling patients with left ventricular dysfunction and was frequently used by the surgeons post-operatively to buy some time. This device maintained diastolic pressure for coronary perfusion, but decreased systolic pressure.

In 1975 the first Cardiac Catheterization Laboratory was completed in the Cardiology Dept. Echocardiography was performed and interpreted in the Heart Dept. by Dr. McCann.

Dr. Gentzler joined the cardiology group in 1976. In 1982 Drs. Slovak and Smith joined the Cardiovascular Associates.

In 1978 discussion began about cardiac surgery at LGH and in 1979 their application for starting cardiac surgery was turned down.

In 1980 the present CCU opened. Cardiac Rehabilitation had begun in 1977 and for outpatients became available in 1985.

The Cardiac Catheterization Laboratory expanded in the 80's and at the present time there are 4 catheterization laboratories

A lot of patients were resuscitated and were on a ventilator in those days. Dr. Richard Mann complained that as the senior man of the group he was the one that always had to make the decisions when to pull the plug. He told the nurses, "These partners of mine never make a decision to stop treatment." He walked over and pulled the plug and left the room.

Nurses ran after him and called, "You pulled the wrong plug. That plug is attached to the electric bed."

Two patients entered the hospital with dissection of the thoracic aorta and lay in beds in CCU side by side. No surgery was available at that time. They were given sodium nitroprusside to decrease their blood pressure and then inderal. Both of them walked out of the hospital.

In 1979 a feasibility study for heart surgery at LGH was begun.

The first open heart surgery was performed at LGH by Dr. Lawrence Bonchek on Sept. 6, 1983. A new Cardiac Unit was established. 425 open heart surgical operations were performed the first year necessitating a second open heart surgical operating room. The number of open heart surgeries increased rapidly and 1200 open heart operations are projected for 1992.

In 1984-5 angioplasty was done and in 1990 atherectomy was done.

By 1987, 3413 procedures had been performed in the Cardiac Catheterization Laboratories requiring the construction of a third one.

From the Master 2 step in the early 60's to the Treadmill examination in the late 60's to cardiac catheterization in the 70's and cardiac surgery in the 80's, the advances in cardiology have been earth-shaking. There were also advances in other parameters to assess the status of the circulation to the heart muscle as well as the functional ability of the heart. Advancing with the changes in the diagnostic and therapeutic ability were the improvements in patient care. The Board of Directors had discussed the feasibility of an Intensive Care Unit as early as 1960. Along with the Code Blue regimen, the Constant Care Unit was instituted in the early 60's. LGH was among the first to begin this advanced and concentrated nursing care for very ill, high risk patients. This unit was opened on the 6th floor with a separate medical and surgical unit of four beds each. The medical unit had heart monitoring equipment. Since that small beginning, there has been a progressive increase in the size of the units, the sophistication of equipment, the specialized training of the nurses and the use of monitoring in intensive care units, intermediate care units, Recovery Rooms, Neurosurgical Trauma Unit and other specialized areas.

TUBERCULOSIS

Tuberculosis, the White Plague, was a common infectious disease. In 1838-39, 30% of the deaths among English laborers were caused by tuberculosis. Mortality was 500/100,000 in 1850. It fell to approximately 50/100,000 in 1945 just before the advent of chemotherapy. No chemical agents nor antibiotics were available and the treatment was bed rest, fresh air, heliotherapy and a good diet. A diet high in calcium was believed to be beneficial, so milk and eggs were emphasized in their diet. Ancillary treatment was pneumothorax, pneumoperitoneum, phrenic nerve paralysis and thoracoplasty to collapse the diseased lung, including the cavities and allow healing. Pneumothorax was a temporary procedure requiring refills about once a week, while collapse of the lung by thoracoplasty was a permanent method. Drs. Robert Witmer and William Atlee were the surgeons in these cases. Streptomycin, PAS and isoniazid accelerated the decrease in mortality. The main emphasis was placed on prevention of spread of the disease; the family and close contacts were studied and watched for any sign of disease activity. This was mainly done by skin tests and chest X-rays. Since so many people had positive skin tests in those days, chest X-rays became the main diagnostic tool. By 1954 Trudeau Sanatorium, the first institution created for the treatment of tuberculosis had closed its doors, an event symbolizing the extraordinary decrease of tuberculosis in the United States. In 1920 there were 150 deaths in Lancaster County from tuberculosis. Miss Mary Herr was Superintendent of Rossmere for 31 years from the time of its inception to its closure. There was a home for nurses connected with the institution. Dr. Murray Spillman was Medical Director. 2800 patients were given care at Rossmere. All patients had a positive sputum when they were admitted. The average length of stay was 2-3 years. At times 50-60 patients were accommodated. Rossmere opened in June, 1925 on Juliette Avenue and closed in May or June, 1957. In 1953, 121 patients were cared for during the year and there were 42 deaths in Lancaster County from tuberculosis.

NURSES AND THE NURSING SCHOOL

In the 30's if you were married, you could not be a student nurse. There was a six month probationary period limited to class work. After that the training was in the classroom and on the floors of the hospital. The length of the training for an R.N. degree was three years. They had 12 hour duty from 7 A.M. to 7 P.M. These same nurses had to go to classes during the day. Graduate nurses worked from 7-7 with 2 hours off (usually 2-4). They would get ½ day off during the week and a half day every other Sunday. Every two to three weeks they would get a week-end off duty. They learned how to take care of the patient and gave a lot of patient care. With the exception of two orderlies, there was nobody to help the nurses. They served the trays and fed the patient if this was necessary. Student nurses even at the end of the first year were in charge of sections of the hospital at night with one supervisor on duty for the entire hospital. Narcotics were kept at the nurse's station at Men's Surgical Ward in the 40's, 50's and early 60's. The nurses had to leave their floor and get the narcotics from the nurse at Men's Surgical Ward. Student nurses made up supplies, cotton balls, gauze, etc. and saw that everything was sterilized. Every floor had its sterile supplies in cupboards. The nurses mopped the big wards before visitors arrived. In the morning after the nurses had finished bathing the patients, the wards were damp dusted with Lysol solution and every table, chair and bed was dusted to prevent the spread of infection. Nurses were responsible for preparation of food in Diet Kitchen. They were responsible for the preparation of vegetables, desserts, chicken, etc. for the main meals. The kitchen had a large electric potato masher. A young student nurse had cooked the potatoes, put them into the potato masher and turned on the switch. These whole potatoes started flying all over the place and out into the hall as Drs. James Appel and Sol Pontius were walking by. Dr. Pontius said, "My God, what's going on in there?"

The young girl said, "I don't know what to do. I don't know what to do." Her supervisor in the kitchen was so mad, but she went over to the switch and turned it off. Potatoes were all over the place.

In the Operating Room the nurses sewed the long and short tapes on gauze sponges. They were folded and the gauze was cut. Later they had an electric cutter. They had a sewing machine in the Operating Room area. The gloves had to be washed, dried, powdered and placed in glove covers and sent to the Operating Room to be autoclaved. Dr. Pontius brought back the Mayo technique and that included the canopy where all of the sterile things were kept.

Miss Aucher was in charge of Central Supply in the 30's and 40's and she always said, "Keep plenty of supplies on hand in case there is a train wreck."

Student nurses went to the Lancaster County Hospital for their rotation in Psychiatric Nursing. Patients used to be "babied" by doing everything for them. Now they must do much more for themselves which is much better for them. Private duty nurses really waited on patients hand and foot. Nurses knew their patients better, had more contact with them and had a more personal relationship. Modern technology and the superior training of nurses has greatly improved patient care.

EMERGENCY DEPARTMENT, TRAUMA AND SURGERY

Miss Anna Mae Nye remembers a Saturday night that she was on call for the Operating Room, probably in the late 30's or early 40's. Dr. John Atlee, Sr. called her on the phone and said, "Miss Nye, I have a stab wound of the heart and it has to be done right away. Unfortunately, I have to go to St. Joseph's Hospital to operate and Dr. John Atlee, Jr. is going to do it." Miss Nye got out of bed and went over to the hospital. Dr. Atlee, Jr. was there and the patient was there and Dr. Atlee said, "Just give me the instruments the way you think without taking too much time." She gathered the instruments, placed them in a dose of alcohol and the anesthesiologist carried them down to the Operating Room and said to the nurse, "Put them right on the table." We started on the case and the patient was absolutely gone. There was no reaction at all from the patient. We operated. Miss Nye remembers that Dr. Atlee, Jr. had the heart in his hand and she could see the heart beating and he sutured it. The patient talked to us before he left the Operating Room. The patient survived.

Minor surgery was frequently performed in the office by the general practitioner or surgeon under local anesthesia. Procedures as incision and drainage, repair of lacerations, contusions, fractures, ingrown toenails, removal of skin lesions or sebaceous or other cysts were commonly performed in the office. Abdominal and thoracic paracenteses were not infrequently done in the home, especially in patients with chronic diseases such as heart failure, carcinoma or liver disease.

General surgery in the 50's included care of fractures, all kinds of trauma (except neurosurgery), abdominal surgery, gynecological surgery, in some cases urological surgery - at least prostate - , breast surgery, neck surgery (especially thyroid), and surgery on the extremities. Vascular surgery was rarely performed at that time. Thoracic surgery was performed by thoracic surgeons and usually consisted of lobectomy (Pneumonectomy was uncommon), and thoracoplasty. Orthopedic surgery became available in the 40's in Lancaster. Neurosurgery became available in Lancaster in the 60's.

In 1940 there were 4 operating rooms, 2 for general surgery, 1 for fractures and 1 for genito-urinary surgery. In 1959 four new floors were opened atop its new building and the 8th floor contained 8 new major operating rooms and 9 minor ones. There were 23 post-operative recovery room beds in the 8th floor recovery room.

Dr. Polcyn became a member of the staff in 1960. Prior to his arrival, neurosurgical cases were sent to Dr. Grant at the Graduate Hospital of the Univ. of Pa.

In 1975 an Intermediate Care Unit was established for the medical and surgical depts. In 1976 an operating room microscope was donated by the John Steinman Foundation so that neurosurgeons could now perform micro-craniotomy procedures.

In 1977 a record high of 82 surgical procedures had been performed in one day. The next year laser surgery was begun and the enemy could be zapped out with one quick blow.

In 1979, 17 new O.R. suites were added, and in 1980 a special neurosurgery unit was established. A new CCU unit was opened in 1980 according to Dr. McCann.

In 1982 a short procedure unit was established, and a Sports Medicine Program was started.

In 1983 a new era in surgery dawned at LGH when Open Heart surgery began in September under the leadership of Dr. Lawrence Bonchek. This new service was to be the outstanding innovation at the hospital. Another cardiac catheterization laboratory had begun. Angioplasty was begun. Cardiac Rehabilitation program was started for outpatients. The first open heart surgery was performed on Gary Ghee in September, 1983. A new Cardiac Unit was established. 425 open heart surgical operations were performed the first year necessitating a second open heart surgical operating room.

Day Surgery was begun at LGH in 1985. Paul Wedel says, "The technology in surgery is unbelievable. Ten years ago 15% of our surgery was performed on out patients; now it is 40-45% and it is going to increase."

A new computerized brain monitor was acquired and was the first to be used in the state of Pa.

In 1987 LGH was accredited by the State of Pennsylvania as a Regional Trauma Center. Two years later there were approximately 606 Code T's of which 91 required surgery. A new trauma-neurosurgical unit was provided for super-intensive care of neurological injuries. Paul Wedel says, "The Trauma Center is very rewarding. Some of the things, the neurosurgeons and orthopedists do, are remarkable."

Today more complex surgery is being performed with the average time for a procedure being 128 minutes. There were approximately 14,500 surgeries performed in the past fiscal year. The hospital's inpatient surgery program is increasing at the rate of 2.3% a year, while the outpatient surgery rate is increasing at an annual rate of 2.5%. In addition, the number of open-heart surgeries is increasing rapidly. An estimated 1200 open-heart procedures are projected for this calendar year.

In 1991 Dr. Paul R. Davidson wrote the advances of surgery at LGH over the last 50 years.

1. One of the great improvements has been in the quality of surgeons. At the time I came to Lancaster 40 years ago, we had three surgeons qualified by the American Board of Surgery. I became the fourth. St. Joseph's Hospital had four.
2. At the time I came here (1950), Dr. Robert Witmer established his practice and brought intra-thoracic and limited cardiovascular work to LGH. This required modern anesthesia and he brought the late Dr. Gerald Zimmerman here from the University of Pennsylvania Hospital who induced others to come and with a modern Anesthesia Department, a Department of Board Certified Surgeons began to form - not without considerable opposition from the older

men. This was all done with the aid and encouragement of Dr. John Farmer, himself a Board Certified Surgeon and Chairman of the Department of Surgery.

3. The result of this has been an explosion of heavy radical procedures in cancer surgery, cardio-thoracic surgery, urologic and orthopedic surgery, etc. that continues on.
4. Undoubtedly the crown jewel has been the development of our modern cardiac surgery department by Dr. Lawrence Boncheck. He was encouraged to come here by the late Dr. Richard Mann and Mr. Paul Wedel. There was much opposition to this because some felt we were traveling too far too fast and that this work might be done better at Hershey Medical Center which is close by. In spite of all of this, it has turned out well. Dr. Boncheck has organized an excellent department that has grown by leaps and bounds and LGH has profited in many ways far beyond our expectations. Dr. Boncheck has proved to be a brilliant surgeon - scientist of international reputation. We have, indeed, become a regional medical center in spite of ourselves.
5. The end is not in sight and nobody knows where it will go and when it will stop. The only thing we can say is that the past has been glorious and the future is bright. Many have participated and contributed.

The emergency system changed completely. In the 40's, 50's and early 60's, the general practitioner or other physicians were called to the scene of an accident. These accidents required immediate care and necessitated leaving a full office of patients during office hours many times or leaving a warm bed at night. Ambulance crews were poorly trained or not trained at all in the care of accident victims. In serious cases the doctor often rode along in the ambulance. The Emergency Room, then called the Receiving Ward, was staffed by a good Emergency Room nurse who really knew her business and an intern that was a neophyte in emergency care, but who had an attending staff physician available at his/her beckoning to assist him/her. Before WWII the only ambulances available were from the hospitals. After the war there was a flare of community ambulances that became available. The crews on a hospital ambulance, at least had some training. In the beginning crews on community ambulances had little or no training. By the mid 60's training was required for all ambulance crews and emergency room physicians contracted with hospitals to take care of all of the admissions to emergency rooms. The name Receiving Ward was changed to Emergency Room but many patients continued to come without having an emergency - for an earache, a sore throat, skin rash, etc. as before. Emergency Room physicians became trained and certified in emergency care as well as seeking services from specialized physicians and surgeons as the occasion demanded.

Later emergency technicians were trained and provided more specialized surgical or medical care at the scene of the accidents. In the 80's Trauma Centers came into existence. These centers required available hospital beds, all up-to-date equipment - diagnostic and therapeutic, certified emergency physicians and trauma surgical specialists to be on call for any trauma emergency. Electronic communications equipment provided the ambulance crew constant contact with any specialist needed for any type of emergency until the patient arrived in the Emergency Room.

Emergency care in the Receiving ward and outside the hospital began to undergo revolutionary changes. The name of the Receiving Ward was changed to Emergency Room. In 1966 LGH emergency room physicians were hired by the hospital to fully staff this vital area and at least one was in the department at all times. Prior to this time resident physicians attended to the patients that arrived here. They, of course, had access to help from staff physicians who could be called when needed. Training was required for all ambulance crews and later emergency technicians were trained and provided more specialized surgical and medical care at the scene of an accident or emergency. The Emergency Room was moved to Frederick Street in 1971. A fully equipped Intensive Care ambulance became available whenever necessary. All of this became coordinated through a central communications network. In 1987 LGH was accredited as a Regional Trauma Center. In 20 years emergency assessment and treatment had been upgraded to an optimum degree.

LABORATORY

includes interviews with Drs. Ward O'Donnell and Gerald Fahs

In 1903 the first laboratory was established with Dr. Charles P. Stahr in charge. In 1925 Dr. Roland Klemmer became the first pathologist at LGH followed by Dr. Louisa Keasby and Dr. Boughton and Dr. George Heid. Dr. Ward O'Donnell began his tenure as Pathologist at the Lancaster General Hospital in 1951 as the only pathologist until 1958.

A lot of autopsies were done and they were considered an important teaching tool for the clinical staff. With the advances in radiology and clinical laboratory which improved diagnostic accuracy, the autopsy decreased in relative importance. In the 1950's, approximately 35% of deaths were subject to autopsy. Today 10-20% of patients, who die in the hospital, are autopsied resulting in approximately 100 autopsies being performed a year at LGH.

Frozen sections for immediate diagnosis in the Operating Room were performed infrequently in the 40's and 50's, but are used very commonly (5-6 a day) to-day in the Operating Room.

Surgical pathology has progressed from 5000-6000 surgical specimens processed a year to 25,000 surgical specimens being processed in 1990. The nature of surgical specimens has changed. Many specimens are derived from needle biopsies on internal organs to establish the diagnosis. Many parameters are required in the examination of this material which requires more detail and time than in previous years. Cytology has entered the picture and at LGH pulmonary cytology for the diagnosis of lung cancer is common. There are many more cutaneous biopsies and there is an increase in melanomas. There has also been a great increase in multiple myeloma. Lung cancer really increased in incidence from 1951 to 1981. In 1951 only five cases of lung cancer were diagnosed and autopsied. 30 years later patients with lung cancer that died at LGH were over 100 a year. In the 80's it became possible to use immunohistochemical techniques to determine the site of origin of a tumor that has metastasized.

In the early 50's there was very little quality control. In the 80's there were at least 18 external quality control groups sponsoring programs to evaluate the accuracy of laboratory data. Dr. O'Donnell thinks that the Joint Commission on the Accreditation of Healthcare Organizations, sponsored by the American Medical Association and the American Hospital Association, was the best thing in medical advancement that ever happened. The first such accreditation of the Lancaster General Hospital took place in 1956.

The LGH School of Medical Technology was started under the direction of Dr. Ward O'Donnell in 1953 with four students. The School of Medical Technology developed an affiliation with Millersville and Shippensburg University to train students in all aspects of laboratory medicine. At the present time 4-8 students are educated each year.

In the 50's all technology was performed manually. By the 90's practically all laboratory procedures are done by automation and computers. The first automated chemistry set up at the LGH

was a simultaneous glucose-BUN machine. In 1964 LGH purchased an auto-analyzer and a Coulter Counter to perform automated complete blood counts. The Technicon SEA-12/60 apparatus was bought in 1970 which did twelve tests in chemistry analysis in a few minutes under the supervision of the chemist, Sam Martin. The laboratory is on the 3rd or 4th generation machinery to do this biochemical screen in the 90's. Automated procedures are more accurate and do things in great volume. The volume of work done to-day would require at least 500 people if it were done manually. In 1966 there were 47 employees; in 1991 there are 204 employees in the Laboratory.

Nuclear Medicine in Pathology began about 1970 under the supervision of Dr. O'Donnell.

A Blood Bank was started by Dr. George Heid in 1949. In the 50's the laboratory provided blood for about 1500 transfusions a year. Now it would be closer to 11,000-12,000 a year. In the 40's rubber tubing and glass bottles were used; later plastic bottles and tubing were used. The success of the Lancaster General Hospital to provide blood transfusions with a high degree of safety was the donors, who came largely from Lancaster County - friends and relatives and others who were responsive to the need of their neighbors. Autologous blood transfusions (people giving their blood before surgery for their own use during surgery) started in the 80's and gained momentum with the publicity about AIDS.

In 1951 Dr. O'Donnell was a single pathologist. In 1991 there are six pathologists with Dr. Gerald Fahs as chairman. To-day the responsibilities of the six pathologists are divided into: Administrative, Microbiology and Serology, Chemistry and Radio-isotopes, Cytology, Blood Bank, and Hematology.

In 1974 a laboratory collection service was begun for physician's offices. Specimens were collected and blood was drawn for laboratory testing at Crooked Oak Medical Services in 1975. In 1987 these services were also provided at Willow Valley Lakes Healthcare and Rohrerstown Diagnostic Imaging Center.

X-RAY

Includes interviews with Drs. Paul Eyler and Andrew Koch

In 1903 Dr. McCormick, Medical Director, said, "X-ray work should be assigned to one or both residents working under the supervision of an x-ray surgeon." Dr. S. H. Heller was placed in charge. Concern was expressed about the cost of maintaining x-ray. Thirty-four x-ray treatments were administered that year.

In 1907 Dr. Theodore B. Appel commented, "A first class x-ray machine was installed during the year."

In 1908 80 X-rays were taken and 39 cases were treated by x-rays including epithelioma, Addison's Disease, chronic articular rheumatism, eczema, herpes zoster, acne, papilloma, lupus and one case of carcinoma.

In 1911 Dr. Appel commented on the efficient service given in the X-ray and Electrotherapeutic Department.

In 1914 Dr. Park Breneman took charge of the X-ray Department. He was an electrotherapist and x-ray surgeon. It is interesting to note that in 1914 there was no chest x-ray performed, only x-rays of bones and abdomen to show gall bladder and renal stones.

In 1915 Dr. Park Breneman said, "A new x-ray machine is needed to replace one used for the last 10 years."

In 1927 Drs. Henry B. Davis and D. B. McCaa were in charge of one of the best equipped and managed x-ray departments in the state of Pennsylvania. Dr. Davis was the Head of the X-ray Department from 1923 - 1946.

In 1935 deep therapy x-ray equipment, the newest thing in x-ray therapy, was installed.

Dr. Wilhelmina Scott was Head of the Radiology Department from 1946-1963. Dr. Paul Eyler was hired in 1953. The X-ray Dept. purchased one of the first x-ray machines in the country that had the tube attached to the ceiling. It was made by the Franklin Co. in Phila. and they were pioneers. The X-ray Dept. had a 220 kilovolt machine, which was called deep therapy, and was used almost entirely for malignant neoplasms. They also had a 120 kilovolt x-ray machine for superficial therapy because a lot of skin and superficial conditions were treated at that time. These consisted of bursitis, carbuncles, etc. Radium was used for cancer of the uterus and was inserted in the uterine cavity by a radiologist. A head machine was obtained that was really advanced and again was purchased from the Franklin Co.

Dr. Andrew Koch became a member of the Radiology Dept. in 1957 as the third radiologist. In 1960 he started a School of X-ray Technologists. The training is two years. It started with two

students and now there are 28. It is considered one of the best schools in Eastern Pennsylvania and the graduates are in demand. Dr. Koch headed this school until 1970 when he became Chairman of the Department. Over 220 students have graduated from this program and approximately 95% have completed their Board Certification, which is very good compared to other schools.

Dr. Paul Eyler became the Head of the Radiology Dept. in 1963 until 1970 and he retired in 1975. When he came in 1953, there were two radiologists and when he retired there were eight.

Dr. Koch feels that the discovery of x-ray was the most important medical advance in history. Prior to that there was no way of knowing what was inside the body except by seeing and feeling. X-ray has essentially opened the body up.

Martha Wagner was one of our long-time employees. She put a gentleman in a dressing room and gave him a gown and a little cloth draw bag and told him, "This is for your valuables." When she opened the door to get him, he had the draw bag around his privates and was otherwise naked.

Dr. Emmet Cooper began Nuclear Medicine in the early 60's. William Jefferson became the first Certified Nuclear Medicine Technologist.

Dr. Dwayne Goldman started the Division of Angiography (later known as Special Procedures because they did more than angiography) in the mid 60's. Cardiac pacemakers were inserted. The first cardiac catheterization was performed by Drs. Dwayne Goldman and John Esbenshade in the late 60's in which the right heart chamber was entered. In 1971 Drs. Richard Mann and Dwayne Goldman first performed coronary catheterization in the X-ray Department.

Dr. Andrew Koch started mammography at LGH in the late 60's and did the first localization of breast biopsy about 1970.

Dr. Paul Eyler in the late 60's wanted to get cobalt therapy for the X-ray Dept. which was the most up-to-date therapy in that day. He also thought there needed to be a division in radiologists - some diagnostic and some therapy radiologists. This provoked considerable controversy among the members of the medical staff, some of his radiological colleagues and the Board of Directors and Administration.

Dr. John (Jack) Ebersole arrived in 1969 as a full time radiation therapist. Prior to this, physicians in diagnostic x-ray did therapeutic x-ray. The installation of a Cobalt Unit in 1970 and a Linear Accelerator in 1972 in the James Hale Steinman Radiation Center as gifts from the Steinman Foundation placed LGH in the forefront of cancer therapy by radiation under the supervision of Dr. John (Jack) Ebersole.

Dr. Paul Eyler envisioned a new facility for the X-ray Department and worked with William Jefferson, the Administrative Director during the late 60' and early 70's to develop a layout and design for the Department. The plan would provide a central service area, a separate entrance for inpatients and outpatients, a facility with proximity to the Emergency Room and an area that could be easily

expanded as the need arose. This plan came to fruition in 1975 at its present location. According to Ms. Harrison, the present Administrative Director, the X-ray Department at the Lancaster General Hospital has been laid out as well as any X-ray Department in the United States. Practically all of the components are contained in the area.

Lancaster Radiology Associates was incorporated in 1972. Prior to that time the radiologists had been working as employees of the hospital.

Dr. William Young started Ultrasound in 1973 with the help of Ultrasound Technologist, Robert Hess. About the same time Neuro-Radiology was separated as a Division.

In 1977 a total body scanner was purchased for x-ray. Also, in that same year a very needed service was begun providing portable x-rays by the LGH X-ray Department outside the hospital as in nursing homes, etc. Two hundred and ninety-three patients were so studied.

In 1981 a second Linear Accelerator was purchased to replace cobalt therapy treatment which had been in use since 1970. In 1985 the first Linear Accelerator was replaced.

A new improved Cat Scanner was purchased to replace the former one in 1984.

Magnetic Resonance Imaging - MRI was started in 1985 at LGH.

It became apparent in the 80's that off-site imaging centers were becoming quite popular. In conjunction with the Lancaster General Hospital Services Corporation the Lancaster Radiology Associates established the Rohrerstown Imaging Center in 1986.

An MRI became operational at the Rohrerstown facility in 1991.

An x-ray facility was established by LGH at Crooked Oak Medical Services in the mid 70's and in the 1987 at Willow Valley Lakes Healthcare.

When Dr. Koch had resigned as the head of Radiology in 1985, there were divisions of general diagnosis, radiation oncology, special procedures, nuclear medicine, ultrasound, neuroradiology, CT, MRI, and mammography.

In the 1950's about 50 patients were seen each day in the X-ray Dept. A radiologist was called in to the Dept. at night about once or twice a week. In the fiscal year, 1965-66, 30,000 patients were seen in the X-ray Department and there were 25 employees. In 1990, 220,882 procedures were performed and there are 19 radiologists and a total of 140 employees.

In 1950 the finest fluoroscope could be purchased for \$25,000. A fluoroscopic machine was bought for over a half a million dollars in 1990. The Radiology Department has an Administrative Director, 85 x-ray technologists and is staffed 24 hours a day, seven days a week. There has been a full-time physicist since 1985.

A Few Stories by Dr. Andrew Koch

One day the orderly, Claude brought a patient to the Department in a rolling commode chair with no braking system. Poor Claude lost control of the chair and the patient and contents of the commode went flying through the air.

Dr. Charles Duttonhoffer had rectal bleeding and was having a barium enema. He was having a lot of cramps. He jumped off the table, yanked the tube out of his rectum and barium went all over the place. He said, "The hell with this" and never returned.

The Lancaster Osteopathic Hospital sent a little old lady over for a special examination that they were unable to do at their hospital. She was not in too great shape and she had a big sign that read DO NOT RESUSCITATE. While I was examining her, she said, "I feel funny."

I said, "What do you mean, you feel funny." Her eyes rolled up. She lost control of her bladder and bowels and couldn't talk and she stopped breathing on the table. By all clinical parameters she was dead.

Lancaster Osteopathic Hospital was called and her physician happened to be there and said, "Oh my God, don't let her die over there." So I jumped on the table and started CPR and gave her some intravenous adrenaline and she revived.

HEART HAVEN

Heart Haven was started in 1950 by the Lancaster Heart Association for the care of children with heart disease, especially rheumatic heart disease - for long term care, convalescence and rehabilitation. Doctors were assigned to care for these patients on a rotation basis. Children with active rheumatic fever after the acute phase had subsided were admitted for chronic care. School was arranged for the children in small groups or individually. The sedimentation rate was the yardstick of activity of rheumatic fever and children were kept at rest until this test and all physical signs of disease activity had subsided and returned to normal. Heart Haven was under the direction of Dr. J. Howard Esbenshade and the head nurse was Mrs. Kathryn Hawk who lived there. Dr. Esbenshade and Paul Murray had been the promoters of Heart Haven. During its 18 years of operation it had provided free services to a majority of its patients.

After 18 years medical advances had brought about dramatic improvement in the prevention and treatment of rheumatic fever and a resulting decline in the number of admissions to Heart Haven. In 1968 Heart Haven turned over its property and funds, together worth a total over \$400,000 to the Lancaster General Hospital to develop a Heart Haven Cardiovascular Center of LGH.

POLIO UNIT

The Polio Unit began at LGH in the 40's with Dr. Wm. Saul as director from 1944-46. In 1946 Dr. Edgar W. Meiser was placed in charge and remained in charge until the disease was fairly well eradicated by the Salk and later the Sabin vaccine in the late 50's and early 60's. Dr. Louise Slack was the pediatrician and Dr. Henry S. Wentz assisted both. The Polio Unit was designated by the Pennsylvania Department of Health as the unit for the entire county and later included Lebanon County. Through financial aid of the March of Dimes and other agencies, an iron lung was purchased and at one time LGH had five of these in operation.

Edna Shreiber, a nurse, was sent to learn the Sister Kenny treatment and returned to indoctrinate the nurses and physicians in the use of this mode of therapy. The Kenny treatment consisted of hot packs placed on the affected limbs and backs of polio patients. The material was placed in washing machines with very hot water. As the machine revolved, it would wring out the material so it could be picked out of the machine and placed on the patient while real hot. The purpose was to relieve the spasm and pain of the victims. The Kenny treatment also consisted of muscle reeducation which was supervised and performed by Edna Shreiber.

A portion of the hospital was reserved for polio patients. During the polio season which usually reached its peak in August and September, this unit was the clearing house for all infectious diseases with fever, stiff neck and vague gastro-intestinal or respiratory complaints. Patients with pneumonia, rheumatic fever, meningitis, encephalitis, tetanus and many other diseases were first admitted to an observation area in this unit. Many cases of so-called "non-paralytic" polio were seen in certain epidemics. These patients never developed paralysis. Later it was discovered that many of these patients were infected with Cocksackie or ECHO viruses and were really not cases of polio.

Dr. Meiser developed great diagnostic acumen to diagnose polio as well as other diseases simulating polio. The history and physical examination along with the results of the spinal fluid examination were essential for making the diagnosis. Frequently a fall on the way to the bathroom was one of the first reliable symptoms of an early paralytic disease. It was depressing to see youngsters and young adults develop weaknesses of their extremities, and worse of their respiratory muscles under your very eyes. The doctors were so helpless and there was nothing to do except support them as best could be done. Dr. Meiser was required to place many patients with bulbar polio or paralyzed respiratory musculature into iron lungs to assist their breathing. Many patients would "fight" this machine and he would frequently give the patient sedatives or even morphine to relieve their anxiety and allow their body to work with the machine instead of wasting their energy and the strength of their weakened muscles to "fight" the iron lung. Nursing care became very difficult with these patients. The nurses had to work through portholes with rubber closures to maintain the positive and negative pressures for breathing. Weaning patients from these machines was equally difficult and required a lot of patience on the part of the nursing staff, physicians and patients alike.

One patient was transported in her iron lung to Johns Hopkins, Baltimore, Md. where there was established a center for people in need of this respiratory assistance. This was a gigantic

undertaking with a large van, and electricians from PP&L, policemen and many others were needed to make this journey of 70 miles possible. Dr. Meiser supervised the whole thing.

1954 was the peak year with 118 patients admitted with possible polio and 80 patients finally diagnosed as definite poliomyelitis. 28 were paralytic, 38 non-paralytic and 14 had bulbar involvement. 62 returned home, 4 died and 14 were transferred. No polio patients were admitted in 1958 until late in the year when 2 were admitted. Gamma Globulin was found effective to prevent paralytic polio in 1952-53 and thousands of children were given this by injection. In 1955 the killed vaccine discovered by Dr. Jonas Salk was administered to children. The polio unit was phased out by 1957. Dr. Meiser directed the local program of immunization of thousands of children and adults in 1962-63 at the local schools by the newly effective live orally administered polio (Sabin) vaccine.

MEDICAL EDUCATION AT LGH

Includes interview with Dr. John Esbenshade

The first intern arrived at the Lancaster General Hospital in 1903 in the person of Dr. Albert Henry. The first woman intern was Dr. Hannah Seitzik in 1922. It may be of some interest that in the late 20's through 1940, approximately 50% of the interns were women. In the 40's, 50's and 60's they were practically all male. In the 70's there was a beginning resurgence of women and in the 80's the house staff were frequently 25-50% female. In 1969 there were no interns at LGH.

Working hours of interns were extensive in the 20's- interns getting only 4 hours a week - 8-12 midnight, one night, and one weekend a month off duty. Later, this was expanded to every 2nd to 3rd night off and every other week-end. After 1925 pay was increased to \$25 a month - later increased to \$75 a month. Prior to 1925 there was no pay. Even in 1937 they were not allowed to be married.

Until 1960 rotating internships were the usual post-graduate hospital training for physicians. In the 60's some specialties: internal medicine, general surgery, obstetrics and gynecology and pediatrics no longer required an internship training in all of the major specialties. This change started a decline in applicants for programs with rotating internships.

As a result of this reformation, it became necessary for hospitals to place a higher value on education as opposed to service in their training programs. Directors of Medical Education were hired and placed in charge of this effort. In the mid-60's Dr. Henry Miller, who was an obstetrician and had been in the United States Navy, was employed by LGH as the DME. In 1962 arrangements were made to recruit 12 interns, 1 surgical resident and 2 general practice residents. I'm not sure how many were obtained. The competition between hospitals for interns increased and in 1968-69 the Lancaster General Hospital was without any interns. During the 50's and 60's LGH did have a General Practice Residency program - a one year program for general practitioners after completion of their internship or completion of their military service. This program was for one or two physicians and was intermittently used.

Dr. Miller resigned and Dr. John H. Esbenshade, Jr. was recruited and began as Director of Medical Education in 1968. The Millis Report on Graduate Medical Education was made public in 1968 recommending an increase in primary care physicians. About the same time in 1969 at the persistence of the American Academy of Family Practice, the American Medical Association approved a Specialty Board in Family Practice. A three year Family Practice Residency Program was required with a Model Family Practice Unit in which to train physicians in outpatient medical care. These men of vision, Drs. Ian Hodge and Ward O'Donnell, President and Vice-President respectively of the LGH Medical and Dental Staff, began to work with Dr. Esbenshade to begin a Family Practice Residency Program at the General Hospital. This project required support of the staff and with Dr. Richard Mann and others they began to encourage the members to accept this program.

Dr. Nikitas Zervanos, who had interned at LGH, desired to practice a primary care specialty and had taken additional training in Internal Medicine and Primary Care at the University of Pennsylvania and Harvard. No time was lost to recruit him to return and organize and head the program. The Outpatient Dept. which consisted of the medical clinic and other specialty clinics was reorganized to become an educational facility as well as a place to provide medical and dental care for the indigent people of Lancaster County. As such it was named the Family Health Service. Another prerequisite for training Family Practice Residents was the Model Family Practice Unit. With the help of Dr. Charles Bair, this facility was developed in Quarryville, a community of 1500 with a population of 15,000-20,000 in the surrounding area about 15 miles south of the hospital. In addition, members of all of the Departments of the Medical and Dental Staff had to be recruited and asked to participate in this new program as teachers.

The Family Practice Residency Program, which had obtained approval of the AMA, began in 1970 with 5 Family Practice Residents under the direction of Dr. Nikitas Zervanos, assisted by Dr. Henry S. Wentz. It was very successful and gradually increased to 12 residents in each class of three years for a total of 36 residents. The location of the Family Health Service was changed and later a new building was built to enlarge and improve this facility. Likewise, the Model Family Practice Unit, which was started in a house in Quarryville in 1971, had to be replaced with a modern and larger building in 1974.

In 1971 the Lancaster General Hospital became affiliated with Temple University Medical School and the Department of Family Practice was organized with Dr. Charles Bair as the Chairman of the Dept.

In 1981 a new facility was opened for the Family Health Service.

This new and innovative program was nurtured and supported by the Board of Directors and the Administration of LGH. It became a nationally renowned program and an excellent training center for developing family physicians. It also resulted in several benefits for the hospital:

1. It stimulated medical education in the hospital.
2. It provided much needed services for patients in the hospital.
3. Many of the graduates of the program stayed within Lancaster County to practice medicine and a referral base was enhanced for the hospital.
4. The model family practice unit provided medical care for a rural underserved area of the county.
5. The quality of care for patients in LGH was improved.

The visions and dreams of the pioneers who developed this approach were realized and fulfilled beyond their expectations.

Another phase of post-graduate education at LGH probably started around 1960. Dr. Robert Witmer developed a senior surgical residency rotation at LGH for six months. This program lasted about six years. The next affiliate situation was a Urology Residency with Hershey Medical Center which began in the early 80's. Under this arrangement a Urology Resident from Hershey spent six months at LGH during his/her 4th or 5th year of residency.

Also in the early 80's, the American Medical Association established transitional residency programs which required the co-sponsorship of two residency programs. Since the Lancaster General Hospital had the family practice and urology residency programs, it was eligible for the transitional program which was started in 1983. LGH has usually had 2-3 transitional residents each year since that time.

In the 40's and 50's there was a medical conference held for 1 hour each Tuesday morning in the library. In the mid 60's, an educational program with visiting professors usually from Phila. talked on a medical subject from 11-12 A.M. on Tuesdays. In the early 70's a Friday morning medical conference was begun. Until 1970 internists were interested in general medicine and each internist took care of patients with all types of medical problems. In the 70's subspecialties in medicine became popular and the general internist faded away. With it the medical conferences decreased in attendance because the subspecialists were only interested in cases pertaining to their special interest and expertise.

Dr. William Porter became the first physician employed in clinical medicine. He was a pulmonary specialist who came to LGH in 1970 and has greatly expanded the lung department to four physicians and a large pulmonary laboratory. Together they have brought modern medical diagnosis and treatment of pulmonary diseases to Lancaster.

Dr. John Schubert was employed by LGH as the first nephrologist and he established the Renal Dialysis Program in 1973. Dialysis machines have advanced a couple of generations so that now a patient time on the machine has decreased from six to two or three hours. Up-to-date medical management of kidney disease has been made available at LGH.

DR. THEODORE B. APPEL

Dr. Theodore B. Appel served the Lancaster General Hospital for more than thirty years as a member of its professional staff, and played an outstanding role in its development from early days until his death in the late 30's. He became a member of the medical staff in 1895, visiting surgeon and secretary of the staff in 1897, associate medical director in 1906 and was elected Medical Director in 1907, a position he held for 13 years. From 1920 to 1936 he acted as chief of the Obstetrical Department, and during eight of these years he also served as Secretary of Health of the State of Pennsylvania.

He graduated from F & M. and Univ. of Pa. Medical School in 1894. In 1927 he served as Secretary of Health of the State of Pennsylvania under Governors Fisher and Pinchot and was responsible for the establishment of the Hospital for Crippled Children at Elizabethtown. He was President of the Pennsylvania Medical Society in 1910.

As an administrator for the professional activities of the hospital, Dr. Appel worked faithfully and enthusiastically to develop the technique of the care of patients to its present high plane, keeping in touch with modern improvements and endeavoring to maintain the Lancaster General Hospital in its position of leadership among sister institutions. As the professional head of the nurses' training school and staff of resident physicians, he furnished inspiration to hundreds of student nurses and physicians to excel in their chosen profession. He was kindly in his suggestions and criticisms and firm in the execution of what he saw to be the requirements of any given case. He was respected by all.

DR. CHARLES P. STAHR

Dr. Stahr received his medical degree from Univ. of Pa. Medical School in 1900, interned at Methodist Hospital in Phila. in 1901 and joined the staff of LGH. He spoke at the cornerstone laying ceremony in 1902 when Dr. Appel was at a meeting of the Pennsylvania Medical Society. In 1903 the first laboratory was installed at LGH with Dr. Stahr in charge. As a member of the Pa. National Guard, he served with it in the Mexican border skirmish in 1916 and in France in 1917-18 in WWI. Soon after being called to active duty as Division Surgeon of the 28th Division in 1941 for WWII, he was retired at 65 years of age with the rank of Brigadier General.

In 1919 Dr. Stahr became Medical Director of the Lancaster General Hospital, a post which he held until 1940. The Medical Director was the administrator of the hospital with the help of the business manager. Both of them were governed by the Board of Directors. He hired the interns, determined the staffing of the hospital and was responsible for the management of the medical aspects of the hospital.

He was the Medical Director of Armstrong Cork Co. At one time he was medical inspector of the Lancaster Public Schools and during his tenure introduced the first vaccination program. He wrote Lancaster's first Pure Milk Ordinance which became a model for other Pa. communities. Dr. Stahr was responsible for the construction of the filter plant in Lancaster City ending the use of unfiltered water by city residents. Between 1916 and 1952 he was Secretary of the Lancaster City and County Medical Society.

Dr. Appleyard once said of Dr. Stahr, "You may not always agree with Charlie, but there's no question of where he stands."

Dr. Stahr was a living example that if you want a job well done, give it to a busy man.

Dr. Stahr was a tall, erect individual who usually had a stern expression on his face - the picture of a military officer. Though of stern visage, he did have a good sense of humor which was not always recognized. Once, in the Receiving Ward of LGH, he asked for a splint to apply to a patient's broken arm. A student nurse opened the door of the splint cabinet and all the splints fell to the floor. The embarrassed student was bent over picking up the splints off of the floor, when she happened to look up and exclaimed, "You laughed!"

Dr. Irene Davis says that Dr. Stahr and three interns including Dr. Davis provided artificial respiration for a 12 year old girl with polio who was unable to breathe on her own. They spared each other for three days and Dr. Stahr, Medical Director, did his share. They were hoping to tide her over until she could regain breathing herself, but this never happened and she died. This was before iron lungs were available.

STORIES BY DR. PAUL DAVIDSON

Dr. Paul Davidson tells several interesting incidents that occurred shortly after he began practice in Lancaster.

A patient was riding a horse about dusk and this horse ran him into a wire clothesline across his neck resulting in severe respiratory problems. He was sent to LGH in an ambulance and this boy was obviously in severe respiratory distress and just about making it. We took him to the operating room practically immediately because he needed an emergency tracheostomy and I don't like to do them "on the barroom floor". I like to do them in an operating room - it is so much better. I made an incision into his neck and I couldn't find the trachea. It had retracted below his sternum so he was breathing through the soft tissues of his neck. His trachea had been completely divided. After hustling around trying to find the other end of this thing, I was able to grasp it with a forceps and pull it up. Then I had the situation under control and reconnected the trachea and did a tracheostomy. This boy made a good recovery but of course both his recurrent laryngeal nerves had been severed. I sent him down to Dr. Putney at Jefferson who did some sort of procedure on him which gave him a voice - not a good voice - but a speaking voice.

One of the first vascular surgical cases around here was done on a policeman who is still living. One day he was pursuing a criminal of some sort who turned on him and fired at him and the bullet hit his femoral artery, dividing it above the knee. So they brought him into the Emergency Room and I was in the Operating Room and I came down to see him. Things were just ideal for taking care of this so I transferred him from the E.R. to the O.R. where we repaired his femoral artery and got an excellent result.

MORE STORIES

Dr. John Farmer tells the story about a county physician who had prostatic trouble and was admitted to LGH with a heavily infected bladder. This physician carried a catheter in the brim of his hat and when he couldn't void, he catheterized himself with the catheter from his hat without any sterilization.

In the earlier days at LGH, there was a little room over the garage at LGH where some of the staff physicians would meet occasionally after staff meetings. One time Dr. Pontius had just had a birthday. He was there and took his tie out from under his vest and he said, "This I love. My wife got it and she paid \$10 for it." It was a very pretty tie.

An intern, Dr. Tom Andes said, "I'd like to see it." He took hold of it as if to examine more closely, pulled out his bandage scissors and cut off the lower portion. The silence that followed was deadly.

An electrocardiograph machine was out of order. The service man came and said, "You'll have to get a new one. It can't be fixed".

Dr. Simons, an intern, took a look at it and said, "Let me work at it." and 24 hours later it was working.

He later joined the Air Force and did a lot of research and experimentation in space and speed and gravity.

Dr. John Farmer also showed me some old letters about St. Joseph Hospital and the result of admitting a female physician to the staff. Dr. Mary Bowman applied to be admitted to the staff of St. Joseph Hospital. After considerable debate and discussion, the staff approved her admission to the staff. However, the Order of Sisters were quite upset about this action and wrote a very strong letter to the President of the staff, Dr. Roland, in effect saying that they were in charge and ran the hospital and the staff would have to rescind this action. As a result of this letter, on Jan 1, 1914 the entire staff resigned and the hospital ran without an organized staff for some time until it was reorganized by Dr. Newton Bitzer. A few days after this action was taken and the staff resigned the President of the staff, Dr. Roland, suddenly died.

STORIES BY DR. HENRY WENTZ

In the 1950's I was called to a farm to see a patient who had severely injured his arm and hand in a corn picker. In the field I had no splints with me and used a newspaper that the farmer had as a splint for his arm and hand. He was taken to the Emergency Room where X-rays were taken and he was immediately taken to the Operating Room for debridement and treatment. The next morning the patient was eager to show me the original newspaper splint had been reapplied.

In the 1960's when CCU's were only beginning to be used, a 55 year old man was admitted with a heart attack. After weeks in CCU the medications being given intravenously were unable to be discontinued without his blood pressure falling to very low levels resulting in mental confusion. Several weeks later when I explained the situation to the family and the cardiologist suggested discontinuing the medicine, the family said, "Are you trying to play God?" Since the physicians did not like being compared to an Omnipotent Deity, the intravenous medications were continued. This was before modern technology or surgery was available to improve this pump failure. Several weeks later the family suggested that this couldn't continue indefinitely and maybe the medication should be stopped. 24 hours later the patient was sitting up and talking alertly. He was discharged improved although he finally died about 6 months later of his heart problem.

At 3 A. M. a physician needed a surgeon to see a patient. He called a surgeon he knew real well. When a woman answered, he said, "May I talk to the man in bed with you?" She immediately hung up the phone and to this day the physician is not sure whether he had the correct telephone number.

In the mid 40's refrigeration anesthesia was coming into use because of the total anesthesia and few side effects. An elderly woman needed an amputation of her leg. A large wooden box lined with metal was prepared and the leg was placed in the box surrounded by ice. The operation was successful and painless.

In 1945 there was a black male patient with central nervous system syphilis in Men's Medical Ward. A student nurse was trying to take care of his needs. He became irritated and chased her down the corridor hitting her over the head with a urinal.

In 1945 there was a railroad accident between two passenger trains at Leaman Place. I went out with the ambulance and there were a number of injured people. I assessed their injuries as rapidly as possible. The nurse and attendant with me put dressings on open wounds and splints on possible fractured bones as rapidly as possible. We placed tags on their clothing to identify them, their possible injury/injuries, the emergency treatment given and any medications as morphine, codeine, etc. and sent them to waiting physicians in the Receiving Ward. There was no other method of communication between the medical attendants in the ambulance and the medical people in the hospital.

In another railroad accident of a freight train about that same time, I remember going out with the ambulance on a very frigid cold night. A man was pinned in an open car in which the entire weight

of sheets of metal had shifted and caught both of his legs below his knees against the end of the car. The only thing I could do until he was released was to give him something for pain. I asked the nurse to give me 1/4 grain of morphine which she promptly did, but I couldn't push the plunger into the syringe to give him the medicine. We tried another syringe full of medicine and again I was unable to push it. It then dawned on me that the solution had frozen by the time the medication had gotten to me. I told the nurse to load another syringe, place it inside her clothing against her body to keep it warm and then immediately hand it to me. It finally worked and we were able to give the man some relief until his legs were freed as cranes pulled the sheets of metal away from the end of the car. This gentleman lost both legs, but survived.

Dr. Clarence Farmer was a dignified Southern gentleman with a sweet North Carolinian accent. He was a great physician and surgeon greatly admired by physicians and patients alike. It was a wonderful lesson to see him stay outwardly calm during an emergency. I remember a woman who had a severe postpartum hemorrhage after delivery of her baby. He asked the nurse for the packing in an unhurried way and slowly but deliberately inserted the packing in the bleeding uterus to stop the hemorrhage. He would never seem to get rattled, but worked in a calm unhurried manner to properly treat any unexpected happening.

Dr. Farmer told most interns this, "Always have enough change that you can change a \$100 bill. Sometime you will run into some smart alec who has no intention of paying you. He may owe you \$5 and he will throw a \$100 bill down on your desk knowing that you can't change it and you'll never see him again." Dr. Wm. Tinney always remembered to carry change for \$100. Shortly after he started practice some son of a gun did that very thing and the patient was really surprised when he was able to change it.

One night I had a patient in labor. I had come home and gone to bed to await the call from the nurse that my presence was needed. I awoke out of a sound sleep and felt something was wrong. I called the nurse in the delivery room who assured me that all was well. When I could not return to sleep, I went into the hospital and the cord was prolapsed (had preceded the baby out of the birth canal). We immediately delivered a live baby as rapidly as possible. The baby's head placing pressure on the umbilical cord could stop all circulation from mother to baby until the pressure was relieved usually by birth of the baby.

STORIES BY DR. HOWARD ECKHART, ORAL SURGEON

Dr. Elmer Toth was eating crackers - chewing - making a lot of noise while giving anesthesia to a patient on whom Dr. John Atlee, Jr. was operating. Dr. Atlee was annoyed by this noise and asked him to stop. Dr. Toth continued eating the crackers and again, Dr. Atlee said, "Elmer, stop that."

Elmer continued and John said a third time, "Elmer, I said, stop that!"

Dr. Toth reached down and picked a pair of ear muffs, one blue and the other red and kept on chewing.

The dentists had used the hospital for years, but oral surgeons began operating in the Operating Room in the late 40's after WWII. Dr. Irvin Uhler was the first oral surgeon in Lancaster to use the hospital with any degree of regularity for dental surgery. Dr. Howard Eckhart joined him in 1953 and they worked in the same office.

LGH had not obtained any surgical instruments for the dentists, so that they had to use their own and see that they were sterilized and ready for use. It was Dr. Eckhart's job to see that the instruments were sterilized. One night as he went to bed, he suddenly realized that he had not brought the instruments to the office for sterilization and they needed them for surgery in the morning. He put on some old clothes and proceeded over to the hospital to get the instruments. As he stepped off of the elevator, he was met by the Chairman of the Surgical Department, Dr. Sol G. Pontius.

Dr. Pontius said, "What are you doing over here at this hour of night?"

Dr. Eckhart responded, "I forgot to get the instruments and sterilize them and we need them in the morning."

"Doesn't the hospital have instruments for you oral surgeons?"

"No, we bring ours from the office."

"You and Irv make up a list of the instruments you need and give it to me by Saturday and I'll see that you get them."

Two weeks later they had five sets of instruments.

**BIOGRAPHICAL SKETCHES OF PHYSICIANS CONSIDERED FOR
DISTINGUISHED SERVICE AWARDS AT THE
LANCASTER GENERAL HOSPITAL**

DR. MARTIN L. HERR

Dr. Martin L. Herr was the first Medical Director of the Lancaster General Hospital from its beginning in 1893 until his death in 1902. He also served as a surgeon on the staff of the hospital during that time.

DR. CLARENCE R. FARMER

Dr. Clarence R. Farmer joined the Medical and Dental Staff of the Lancaster General Hospital as a member of the Surgical Department in 1912. He was Chief of Surgery at the Lancaster General Hospital from 1924 to 1939. He served as Chairman of the Department of Obstetrics from 1944 to 1952. He was adviser and confidant to many young physicians.

DR. CHARLES P. STAHR

Dr. Charles P. Stahr was the Medical Director of the Lancaster General Hospital from 1919 until 1940. In 1903 the first laboratory was established at the hospital with Dr. Stahr in charge. As a member of the Pennsylvania National Guard, he served on the Mexican Border in 1916, in France in WWI in 1917-18 and retired as Brigadier-General in 1941 shortly after United States involvement in WWII.

DR. JOHN C. POLCYN

Dr. John C. Polcyn came to Lancaster in 1954 and joined the Medical and Dental Staff of the Lancaster General Hospital in 1960 as the first neurosurgeon in Lancaster. Dr. Polcyn organized the first neurosurgical section in the hospital. He was a pioneer in the treatment of neurological diseases in Lancaster and improved the quality of care in this discipline.

DR. HARRY C. FULTON

Dr. Harry C. Fulton became the first Board Certified Specialist in Lancaster as a Board Certified Ophthalmologist in 1935. He had become a member of the Medical and Dental Staff of the Lancaster General Hospital in 1930 and later organized the Eye Department which at that time was a part of the Eye, Ear, Nose and Throat Department.

DR. ROLAND N. KLEMMER

Dr. Roland N. Klemmer was the pathologist at the Lancaster General Hospital from 1925 - 1928 and started the Heart Department in 1927. He was an outstanding internist who organized and became Chairman of the Department of Medicine in 1936. He may have been the first physician on the Medical and Dental Staff of the Lancaster General Hospital to limit his medical practice to Internal Medicine. He served as a Lieutenant Commander in the United States Navy during WWII and died en route home.

DR. J. HOWARD ESBENSHADE

Dr. J. Howard Esbenschade was the Chief of Cardiology at the Lancaster General Hospital from 1950 until his retirement in 1967. He was a charter member of the Lancaster Heart Association. In 1950 he founded Heart Haven as a residence for rehabilitation treatment for children with heart disease, notably rheumatic heart disease.

DR. SOLOMON GILMORE PONTIUS

Dr. Solomon G. (Sol) Pontius was Chairman of the Department of Surgery at the Lancaster General Hospital from 1939 - 1957. He was the first residency trained surgeon on the Medical and Dental Staff of the Lancaster General Hospital. He was the first physician member of the Board of Directors of the Lancaster General Hospital from 1946 - 1969.

DR. RICHARD H. MANN

Dr. Richard H. Mann joined the Medical & Dental Staff of the Lancaster General Hospital in 1954 and served 33 years as an internist and cardiologist, 19 of these years as Chief of the Cardiology Department. He brought modern cardiology and cardiac surgery to the Lancaster General Hospital and to the Lancaster community. He played a vital role in the continuing medical education, development of the Family Practice Residency Program and high quality of medical care at Lancaster General Hospital. He served on the Board of Directors of the Lancaster General Hospital from 1985-1987.

DR. WILHELMINA S. SCOTT

Dr. Wilhelmina S. Scott was chairman of the Radiology Department from 1946 - 1963. She had served as a clinician for the Family Planning Clinics of Lancaster and received the American Cancer Society Pennsylvania Division Award for the Volunteer of the Year in 1973. She was known for her kindness, compassion and concern for patients.

DR. THEODORE B. APPEL

Dr. Theodore B. Appel became a member of the Medical and Dental Staff of the Lancaster General Hospital in 1895. He was the Medical Director of the Lancaster General Hospital from 1907 - 1919. He served as Chief of Obstetrics from 1920 - 1936 and served as Secretary of Health of the State of Pennsylvania during eight of those years. He was President of the Pennsylvania Medical Society in 1910. He provided inspiration to many nurses and physicians to excel in their chosen profession.

DR. JOSEPH APPLEYARD

Dr. Joseph Appleyard joined the Medical & Dental Staff of the Lancaster General Hospital in 1926 and served as Chief of the Urology Department. He was Medical Director and President of the Medical and Dental Staff from 1946 - 1957. Dr. Appleyard founded the Medical Bureau in 1949 to assist people who were in immediate need of medical or dental care and were unable to locate a physician or dentist.

DR. CHARLES BAIR

Dr. Charles Bair was Chief of the Clinics (Outpatient Department) from 1960 - 1971. The Department of Family Practice was established at the Lancaster General Hospital in 1971 with him as Chairman. Dr. Bair was Family Physician of the Year in 1961. He was the Chairman of a committee that recommended hiring full time qualified physicians for the Emergency Department in 1965 which greatly improved the quality of emergency medical care. He was responsible for the development of the Model Family Practice Unit in Quarryville for the training of the Family Practice Residents at the Lancaster General Hospital.

DR. WARD O'DONNELL

Dr. Ward O'Donnell was President of the Medical and Dental Staff of the Lancaster General Hospital from 1969 - 1973. Dr. O'Donnell promoted the idea of the Family Practice Residency Program and obtained the support of the Medical and Dental staff. He was the Chief of the Pathology Department for 30 years from 1951 - 1981. He began the School of Medical Technology at the Lancaster General Hospital in 1953. He was a pioneer in relating lung cancer to asbestosis.

DR. ARTHUR F. JONES

Dr. Arthur Jones was Chairman of the Ear, Nose and Throat Department and was President of the Medical and Dental Staff of the Lancaster General Hospital from 1977 - 1981.

DR. IAN G. HODGE

Dr. Ian Hodge was the first urologist in Lancaster, certified by the American Board of Urology. He was President of the Medical and Dental Staff of the Lancaster General Hospital from 1965-1969, and was a member of the Board of Directors from 1969-1980.

SOME THOUGHTS AND VISIONS OF PAUL WEDEL, PRESIDENT & CEO

An area was remodeled for Day Surgery. Paul Wedel says, "The technology in surgery is unbelievable. Ten years ago 15% of our surgery was performed on outpatients; now it is 40-45% and it is going to increase."

A new computerized brain wave monitor was acquired and was the first in the state. An entirely new field was started at LGH with the purchase and operation of a MRI (Magnetic Resonance Imaging) which was a joint venture with LGH Services Corporation and Lancaster Diagnostic Imaging Associates.

In 1986 the Women's Health Pavilion was opened. "The Labor, Delivery, Recovery, Postpartum Program has been very successful and has increased the census of women at LGH", says Paul Wedel. "We were having between 2200-2300 births a year and this year, 1991, we're up to 3000-3100. It's a better place, attractive and gives women the privacy they desire."

The next year, 1987, LGH was accredited by the State of Pennsylvania as a Regional Trauma Center. Two years later there were approximately 606 Code T's of which 91 required surgery. A new trauma-neurosurgical unit was provided for super-intensive care of neurological injuries. Paul Wedel says, "The Trauma Center is very rewarding. Some of the things, the neurosurgeons and orthopedists do, are remarkable."

Satellite facilities were becoming popular and the Lancaster General Hospital increased and improved its expertise in this area by building ancillary and complete medical plants in outlying neighborhoods. Rohrerstown Diagnostic Imaging Center was established at Rohrerstown by a joint venture of Lancaster Radiological Associates and the LGH Services Corporation. Willow Valley Lakes Healthcare was instituted in Willow Street by a shared undertaking of the Lancaster General Hospital Foundation and the Willow Lakes Medical Group establishing a medical office, X-ray facilities and a laboratory collecting service in the vicinity of a retirement complex.

LGH purchased land along the Route 30 bypass near Rohrerstown for a campus on which to place buildings for outpatient procedures, laboratory, physiotherapy, x-ray, etc.

A facility for Occupational Medicine was opened at Greenfield Industrial Park which contained all of the ancillary services needed for occupational medicine.

More complex surgery is being performed with the average time for a procedure being 128 minutes. There were approximately 14,500 surgeries performed in the past fiscal year. The hospital's inpatient surgery program is increasing at the rate of 2.3% a year, while the outpatient surgery rate is increasing at an annual rate of 2.5%. In addition, the number of open-heart surgeries is increasing.

In 1988 Michael Young became executive vice-president and chief operating officer of LGH. He would succeed Paul Wedel upon his retirement in 1991.

It is interesting to note that everything goes around in cycles. The first order posted in the hospital in 1893 was "No Smoking" and now this order is again put into effect in 1989 in the entire hospital.

ROOM RATES AT LGH

1895	\$5/Week	(included board, doctors' services, medicine and everything needed by the patient)
1916	\$2/Day	(Cost of major operations were between \$25 and \$75)
1928	\$4.50-\$10/Day \$15/Day \$10/Day	Private Room or with Anesthesia Major with Anesthesia Minor
1947	\$7-12/Day \$75	Private Room Flat rate Maternity including Delivery Rom and 7-day stay.
1951	\$12.00/Day \$9.50/Day	Private Room Semi-Private Room
1956	\$16.00/Day \$12.00/Day	Private Room Semi-Private Room
1959	\$17 - \$24/Day \$14 - \$17/Day	Private Room Semi-Private Room
1970	\$48/Day	Private Room
1975	\$54/Day	Private Room
1977	\$62/Day	Private Room
1981	\$125/Day \$115/Day	Private Room Semi-Private Room
1990	\$205/Day \$175/Day	Private Room Semi-Private Room

NUMBER OF BEDS AT LGH

1909	65
1910	116
1929	200
1940	280
1950	450
1968	487
1971	528
1975	555
1980	555 PLUS 40 BASSINETS
1990	553 PLUS 40 BASSINETS

AVERAGE # OF PATIENTS/DAY

1931	160
1950	285
1954	352
1963	423
1970	411
1975	475
1980	480
1985	410
1990	453

AVERAGE COST OF PATIENT/DAY

1938	\$4.70
1950	\$10.73
1954	\$15.46
1960	\$20 - \$25
1970	\$42.86
1980	\$160.69
1990	\$626.13

NUMBER OF ADMISSIONS/YEAR

1903	Passed 500
1906	Passed 1,000
1910	Passed 2,000
1913	Passed 3,000
1922	Passed 3,500
1931	Passed 5,000
1943	Passed 7,300
1954	Passed 16,000
1958	Passed 18,000
1963	Passed 20,000
1975	Passed 24,000

During the latter part of the 20th Century more treatments and surgical procedures were performed as an outpatient because it was more economical and efficient.

THE EVOLUTION OF TREATMENT OVER 100 YEARS

Mrs. Jeanne DeNezza, Record Librarian at LGH, was kind enough to use some of her interns to retrieve medical records for me since the beginning of the hospital. I asked to have some charts of patients with the diagnoses of pneumonia, heart disease, diabetes mellitus and typhoid fever over the course of the hospital's first 100 years. These treatments are taken from actual charts in the denoted year. Additional treatments are taken from standard textbooks of the day demonstrating the popular treatment for that particular medical problem at that time.

TREATMENT OF PNEUMONIA 1897 AT LGH

Veratrum 10 drops every 2 hours
Quinine sulphate grs ii every 2 hours
Ice bags to back and chest
Sponge and/or sponge baths
Magnesium sulphate
Whiskey
Dovers powder grs ii prn
MS grs 1/6 prn
Pill digitalis gr 1/25 every 3 hours
Hypo strychnine sulphate gr 1/20 prn

TREATMENT OF PNEUMONIA AT LGH 1903-4

Creosote 3 drops after meals
Calomel gr ii in 1/4 gr doses followed by an enema
Heroin gr 1/12 every 3 hours prn for cough
Camphoric acid gr xx if night sweats are marked
Mustard plaster to right side of chest
Phenacetin and salol gr v tid
Cascara sagrada aromatic i fluid ounce prn

TREATMENT OF PNEUMONIA AT LGH 1915

Antiphlogistine to right side
Mustard plaster to epigastrium
Oil Ricini (Castor Oil) 1 fluid ounce stat
Tr digitalis 10 drops tid
Tr nux vomica 8 drops tid
Cereus 10 drops tid
If pulse becomes weak give strychnine gr 1/30 every 3 hours

TREATMENT OF PNEUMONIA AT LGH 1930s and 40s

Chest x-ray

Radiation therapy 1 treatment 100 R to right chest

Specific Pneumococcal anti-serums were used in the 20's and 30's

Sulfonamides late 30's

(Penicillin discovered in 1929 and used clinically in early 40's)

TREATMENT OF TYPHOID FEVER AT LGH

Let us examine the treatment of typhoid fever. Remember that typhoid fever was endemic in the community during the first 15 years of the hospital. Water filtration in Lancaster City reduced the incidence of this disease in city residents after 1907.

In 1897 the following orders were written for two patients with typhoid fever at LGH:

Sponge baths and ice packs
Milk orally 6ozs. every 2 hours
Quinine grs.ii every 4 hours
Dilute HCL, qtts. X every 4 hours
Whiskey prn.

Elaborate flow sheets were kept with the TPR recorded and the time ice packs and sponge baths were given and the time that the milk, quinine and HCL were administered. Quinine was ordered by one physician for a patient, and Dilute HCL was ordered by another physician for a different patient. Both patients were discharged as cured.

TREATMENT OF TYPHOID FEVER ACCORDING TO TEXTBOOK 1897

Absolute bed rest

Good nursing care

Food most important mostly liquids to semi-liquids as improved
mainly milk barley water raw eggs or eggnog

Antipyretics phenacetin or antipyrine

Cold packs or sponge with cold water

Treatment of symptoms

Calomel for constipation

Oil of Turpentine 5-10 drops 3-6 times a day in
capsule or emulsion

Turpentine stupe for abdominal pain

Strychnine gr 1/30 every 6 hours

Alternate with Cocaine gr 1/4 every 6 hours

Patients with the diagnosis of typhoid fever in 1916 received the following orders at LGH:

Specimen to Lab
Mouth wash
Nasal spray
All excreta, utensils, etc. to be treated with chlorinated lime
Sponge when temp. over 102
Nitro-Hydrochloric Acid drops 4 every 4 hrs
Widal
Complete blood count
Strychnine grs. 1/40 by mouth every 4 hrs.
Soap suds enemas every other morning
Castor oil qs prn
Brandy ½ oz. every 4 hours
Tr. Digitalis 5 drops every 4 hours
Sodium bromide grs. xx stat
Urotropin grs. viiss every 4 hours
Chloral grs. xx stat
Diet as ordered by physician
Turpentine stupes to abdomen prn for pain

The above written orders are a composite for several patients treated for typhoid fever in 1916 at the Lancaster General Hospital.

Chloromycetin use started in 1947

TREATMENT OF DIABETES LGH 1897

Diet no sugar, no starch saccharin may be used
Jambul checks action of diastase on starch
Extract of opium checks progress of disease
Start with 1/4 gr tid and slowly increase to 10 gr daily

TREATMENT OF DIABETES TEXTBOOK 1929

Diet CH₂O Protein Fat
Insulin Regular 4x a day.

1951

Diabetic diet	1-1.5 Gm/kg. protein/day	75 Gms
	60-110 Gms fat/day	75 Gms
	Remainder carbohydrate	150 Gms

Insulin

Regular
Protamine Zinc
Globin

TREATMENT OF ANGINA PECTORIS 1897 TEXTBOOK

Amyl nitrite inhalation

Nitroglycerin

MS

Strychnine gr 1/20

Avoid emotional storms, violent exercise, smoking and abuse of

Alcohol

SURGICAL TREATMENT OF ANGINA PECTORIS TEXTBOOK 1929

Cervical sympathectomy

Alcohol injection paravertebral cervicodorsal sympathetic chain.

Medical treatment

Nitroglycerin 1/100gr sublingually

Theobromine and theophylline

TREATMENT OF ANGINA PECTORIS 1951 TEXTBOOK

Whiskey

Nitroglycerin

Caffeine sodium benzoate

Coramine

Papaverine/Hcl

Aminophylline

TREATMENT OF CORONARY THROMBOSIS TEXTBOOK 1929

Relieve distention by rectal tubes, enema or colonic irrigation.

Hypodermoclysis 1500-3000cc

Caffeine for respiratory difficulty.

M.S.

TREATMENT OF CORONARY OCCLUSION 1951 TEXTBOOK

MS or Demerol

Complete bed rest 4-6 days and most of time for 4-6 weeks

Dicumarol/heparin

No return to work for 3 months

TREATMENT OF VALVULAR ENDOCARDITIS LGH 1899

Tr belladonna 20 drops tid

Tr digitalis 10 drops tid

Strychnine gr 1/30 tid

Potassium bromide 15 drops in water every 4 hours

Soda bicarbonate in spirits of peppermint

Whiskey for dyspnea

Tr strophanthus 10 drops tid