The original documents are located in Box 3, folder “"The War Cradle" Research - Children's Hospital Brochures and Notes” of the Shirley Peck Barnes Papers at the Gerald R. Ford Presidential Library.

Children's Hosptial 1910 - 1917 New building started 1916

Children's hosptial was built by Allen Fisher. He was the illustrious Denver Architect that contributed much to Denver's rise. He built the City arches at city park gates on 17th/Colorado Blvd., etc.

His wife is a Dr. Ruth Fisher, a Pediatrician, who resides at 730 Franklin Street, Denver, 322-8348. Fisher & Fisher Architects. Wife is Dr. Ruthxx Rauttaman(?

Mrs. Fisher says Alan Fisher would have been 5 years old in 1910 and could not have built the building. She checked building permits clear to 1914 and found nothing to substanitiate story. Also, says there is nothing to document the gates being built by the Fisher firm.

Rocky Moujtain Osteopathic Hosptial occupied building in 1920 to 1950

June Cleveland Community Relations.

In 1929 a fund raising dinner was being held in one of the Denver hotels by the officals of Rocky Mountain Hospital when word came of the Stock Market Crash. Plans were to expand and improve the hospital. The crash stopped all plans.

Dr. Harold Husted
Dr. A. B. Slayter

Dr. Parkinson 477 2310

Gus Economy was on the Board.

The neighborhood in 1925 was a heavy Catholic population. The odld Cxxkx Sacred Heart Church and School was at 27th and Lawrence streets and run by the Jesuits. Slowly the catholics moved out and if you were to go to any Catholic church in the Denver area you are most likely to find old Sacrad Heart parishoners.

John Roach of Ambo Cab on Downing Street lived at 24 tha and

Now Sacred Heart is at 23rd and York.

Tom Farrell, Poet Lauret of Colorado is now in his eithties and lifes 3 doors down from Pierre's.

Last address on George Blau 1656 Zenobia, Denver. Left Stearns-Rogers in 1979.

John Milan Architect to re down old Downing nursing home in 1973 to build new building known as Continetal Care Center.

Everything was disposed of due to the condition, nothing worht saving.

The old nursing home was a "horrible" sight they say. Everyone says so.

It was so neglected becuase no funding to change things. Getting $6 a day per patient back in 60's.

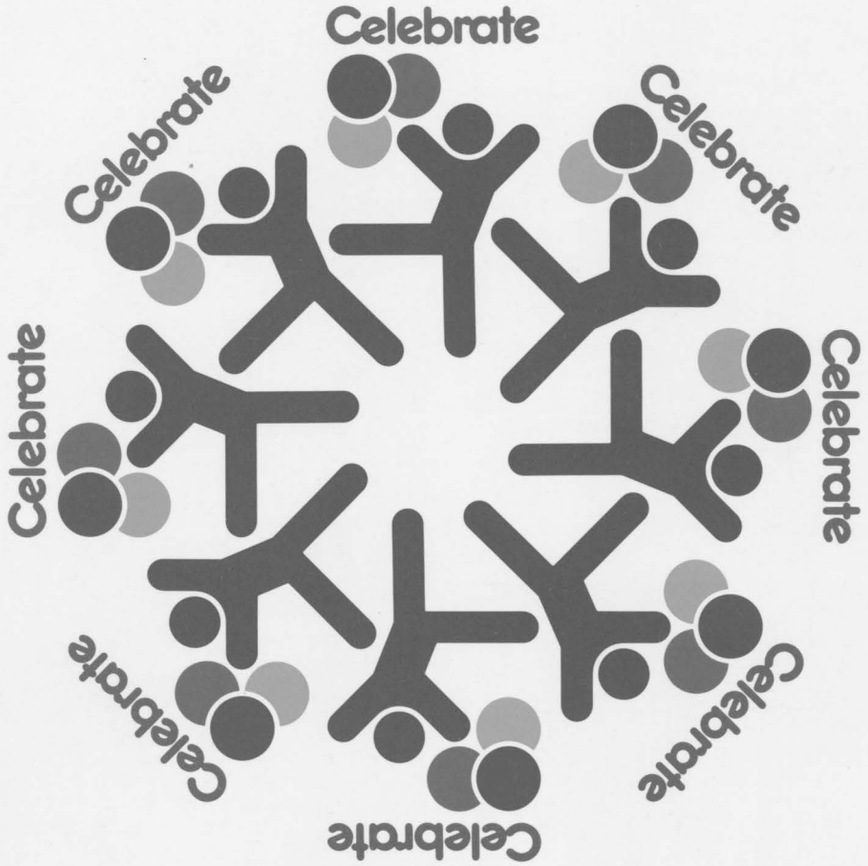
Philosophy of healthcare has changed so much

Sincerely,

Kyla Thompson

Dr.

Celebrate



The Children's Hospital

Denver, Colorado

From a tent hospital in Denver's City Park, in 1897, The Children's Hospital has grown into a modern facility housing today's sophisticated technological equipment, and serving the health care needs of children and youth in Colorado and the surrounding 12 states of the Rocky Mountain Region.

Children are different — they are special. They are smaller, uninhibited and generally more openly inquisitive than their adult counterparts. Children are different because they are caught up in that marvelous and mystifying process called "growth." We know that children are different — their growth and development, their diseases, their responses to disease and their emotional, psychological and social needs. The Children's Hospital is special, too — it serves these needs; not half-way or haphazardly, but in a comprehensive, professional, loving, caring and harmonious manner.

Children's Hospital exists for the sole purpose of restoring and maintaining the health of children and young adults in the Rocky Mountain Region through the provision of total, quality medical care. From the sick newborn infant who requires critical care in our Newborn Center, to the eight-year-old who requires dental surgery and intermediate care in our general wards, to the 16-year-old who requires a physical examination in our Ambulatory Services Primary Care Clinic, Children's care encompasses the whole health picture of young people.

As Denver and the Rocky Mountain Region have grown dramatically over the last ten years, so have the pediatric needs of its children. During that time medical technology also has advanced; so that, today, medical professionals are able to save and cure children on a scale unimaginable ten to fifteen years ago. Over those same years, however, The Children's Hospital physical plant has had to take a back seat to progress.

In 1976 our dedicated board of directors decided that the demands of community and regional growth and the advances of medical science necessitated the construction of a new wing at our hospital — the first such construction for inpatient care in 20 years. Their foresight was, indeed, courageous. But, their commitment to the goal of a regional health care facility brought about the reality of our new five-story patient care addition.

This new facility was planned, designed and built with the physical and emotional needs of sick children as the foremost concerns. We did not add beds; we replaced wards which were built early in this century. By moving all patient beds (with the exception of The Newborn Center) to the new addition, we now, with some renovation, will have more space for expanded clinics and other specialty services in our original facility.

Robert W. Bechtel, executive director and administrator of The Children's Hospital, and Terrence J. Ryan, president of The Children's Hospital Board of Directors.

Our new patient care addition is a very exciting place. Every floor, every hallway and every room was planned around sick children: their happiness, their safety and their quick return to health. A particular color theme is used on each floor; natural, existing light, through the use of skylights and large windows, makes the addition bright and cheerful; and colorful, creative and "touchable" wallpapers adorn at least one wall of each patient room.

The new addition has a serious purpose, but it is a comfortable and "fun" place for our young patients. It contains the technical and modern equipment, systems and diagnostic aids necessary for a child's recovery. But, most of the equipment is kept behind the scenes in a built-in wall panel behind each patient bed, which provides immediate suction, oxygen, compressed air and electrical outlets for portable equipment. The unique Nurse-Call system permits the patient instant verbal, two-way communication with the nurse at the desk, just by pressing a button. The same system allows doctors and nurses to summon aid quickly in an emergency without leaving the sick child.

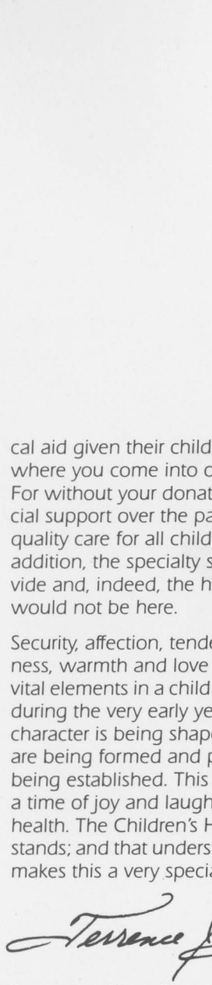
A child's hospitalization can be just as frightening to the parent as it is to the child. The unknown and even the known facets of a hospital stay can take their toll on both the patient and the family; and, most times, the only familiar faces in the unfamiliar hospital environment are the child's parents. Because the sick child's welfare and even recuperation may depend on those familiar faces, we want to make the patient and his family feel at home. With this in mind, our new addition also provides accommodations and conveniences for the parents, especially those parents from out-of-town.

Although the patient rooms were designed with children as the only occupants, the window seats in each of the general care patient rooms can be converted into a bed for the parent. If the parent does not wish to stay overnight in their child's room or if the parent can't because their child is in Intensive Care or Isolation, a sleeping room on the same floor is available. Bathroom and shower, cooking and laundry facilities also are available for parents.

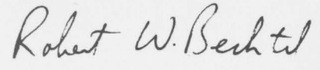
As we celebrate the move into our new patient care addition, we also celebrate the International Year of the Child, which, during 1979, promoted the rights of all children in the world. Among these, children have the rights to: affection, love and understanding; adequate nutrition and medical care; and special care if handicapped. Above all, children have the right to enjoy these rights regardless of race, color, sex, religion, national or social origin.

Medical care is an unquestionable right of every child seen at Children's Hospital. Over the past five years, we have provided nearly $5 million in care to patients whose families could not afford to pay for all or even part of the medical aid given their child. And, that's where you come into our celebration. For without your donations and financial support over the past 82 years, quality care for all children, the new addition, the specialty services we provide and, indeed, the hospital itself would not be here.

Security, affection, tenderness, kindness, warmth and love — these are all vital elements in a child's life, especially during the very early years, when character is being shaped, impressions are being formed and personality is being established. This is childhood — a time of joy and laughter, hope and health. The Children's Hospital understands; and that understanding is what makes this a very special place.



Terrence J. Ryan, President
Board of Directors



Robert W. Bechtel
Executive Director and Administrator

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Celebrate

History

During the summer of 1897, a stroll through Denver's City Park would have brought into view several rows of canvas tents at the corner of 18th Avenue and York. What, at first, may have appeared to be a traveling circus was actually an outdoor children's clinic staffed by Dr. Minnie C.T. Love and a corps of nurses. Here, the sick and crippled children in the Denver area, regardless of race or social condition, all received needed medical treatment, nourishing food, sunshine, fresh air and lots of tender loving care. Unfortunately, the clinic was forced to close at the end of its first year when donations and volunteer efforts were redirected toward the Spanish-American War.

Ten years later, the need for a children's hospital was greater than ever. According to historical accounts of the late 1800s, the sickness and death rates in Denver were shamefully high due to inadequate garbage and sewage disposal. Epidemics also were common among children because of contaminated milk and water.

Dr. Love and a handful of equally dedicated women were determined to make a children's hospital in Denver a reality. Articles of incorporation were written and signed in 1908 and full-scale fund raising began with picnics, bazaars and requests for personal gifts. The people of Denver opened their hearts and pocketbooks to these resourceful women.

In 1910 a remodeled home at 2221 Downing Street was purchased for less than $16,000 — the first Children's Hospital. It had 35 beds. A Nurse Training School was established in an adjacent building, with its first class of three nurses graduating in 1912. During its initial year of operation, the average length of stay per patient was 24-1/2 days, and the average cost per day was $1.46.

Within a relatively short period of time the demand for treatment became greater than the hospital's capacity. In 1917 The Children's Hospital moved to a newly constructed facility, at its present location, with 135 beds. Personnel figures totalled 154 employees.

Spiralling growth continued. Even in its earliest stages of development Children's was building its reputation as an outstanding pediatric medical facility. Greater numbers of patients required additional clinics and services. The success of The Children's Hospital in meeting these medical needs was attributed to the generous support of the men and women in the Denver community, along with the skills and faithful services of the health care teams within the institution.

Limited space prohibits listing all of the individuals who have contributed uniquely to the growth of The Children's Hospital. However, the history would be incomplete without recognition of Agnes and Harry H. Tammen.

On Christmas Day, 1921, the Tammens donated $100,000 for the building of an addition to the original hospital. This new wing would provide spacious quarters for treating orthopaedic cases and various other diseases on an outpatient basis. At the 1924 opening ceremony Harry Tammen, co-founder of **The Denver Post,** dedicated the Agnes Reid Tammen Wing, "for a child's sake," in hopes that no child would ever be turned away.

Following Tammen's untimely death five months later, one-half of his estate was endowed to The Children's Hospital. With Mrs. Tammen as executor, this generous endowment served as the nucleus to funding the high level of care for patients whose families could not afford it. Because of the Tammens, the health of thousands of children has been restored; modern equipment has been purchased; and construction of additional wings has been possible.

In answer to the need for a modern centralized nurses' home, the Tammen Hall Training School of Nurses was opened in 1932. Four years later an addition to the Agnes Reid Tammen Wing was acclaimed as one of the finest therapy units in the United States. An Isolation Wing, which opened in 1942, was designed to accommodate all forms of contagious diseases.

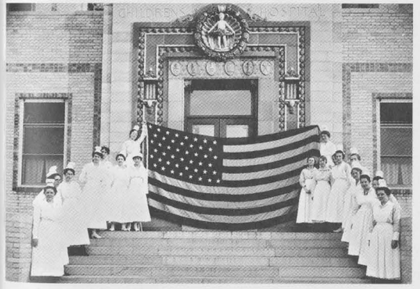
Through community support, The Children's Hospital has changed dramatically over the years. October, 1979, marked the celebration of the opening of a 130,000 square-foot patient care addition, bringing the total bed count to 182. Today, nearly 1,000 medical and lay personnel provide care for these young patients seen at The Children's Hospital.

The Children's Hospital continues its efforts to meet the ever-changing needs of the children it serves. Treatment methods and medical science have advanced, but the task of alleviating human suffering remains constant.

The Children's Hospital, today, stands as a monument to those pioneering women who staffed the early clinics, and to all the men and women who have succeeded them. (Photo by David Cupp)

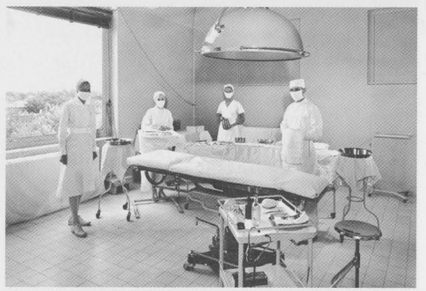
Mrs. George B. Packard and Mrs. James Burger, members of the Board of Trustees turned over earth at 19th Avenue and Downing Street at the 1916 groundbreaking ceremony.

A sampling of the proceeds of the 1915 Donation Day included bolts of material, which later were transformed at sewing bees into linens, nightgowns and other useful items.



June, 1918, graduates of the Training School for Nurses pose with other members of the nursing staff at the main entrance of the hospital.

Oca Cushman, R.N. devoted her life to The Children's Hospital where she served as Superintendent from 1910-1955.

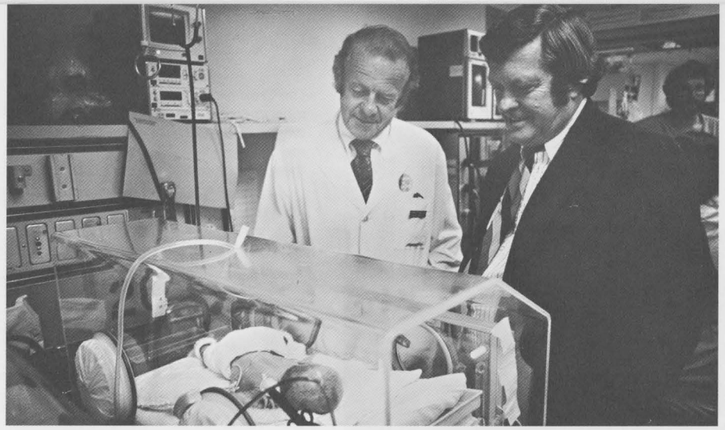


During the Christmas season, over the years, Santa has never forgotten the little hospitalized children. (1920 photo)

Operating Room at The Children's Hospital photographed in 1928. (Mile High Photo Co., Denver)

This 1938 photo shows children absorbing sunshine while resting in a section of the hospital's solarium. (Mile High Photo Co., Denver)

The Children's Hospital Gift Shop and Snack Bar opened for the convenience of families in 1950.



Specialty Programs at The Children's Hospital

It wasn't too long ago that sick children were cared for as if they were miniature adults. Today, all that has changed. Physicians soon realized that a child, although small, is a very complex human being, and one who requires special care when he is sick. With that realization, pediatric medicine began its advancement as a very specialized service.

The importance of treating the "total" child lies in the ability to provide "total" care. At The Children's Hospital we provide over 45 pediatric specialties. No specialty at Children's operates as an island — by itself; treating a sick child is a joint effort by the child's private pediatrician and many teams of specialists, who all focus their collective skills on the child's problem.

Approximately 689 privately practicing pediatricians serve as the basic specialists at Children's Hospital. Rather than concentrate on only one aspect of pediatric medicine, over one-half of these physicians are skilled in the general, total care of the child. They are able to treat all children's illnesses, and when hospitalization is required, they send their patient to Children's. The private physician may provide all of the child's care or they may call upon one or several of our specialists in specific areas of pediatrics. In the latter case, Children's Hospital provides the private pediatrician with a "support staff" of 63 full-time pediatric sub-specialists.

The Children's Hospital, besides providing specialty services, also serves in a teaching and research capacity in the Rocky Mountain Region. Our largest teaching/research affiliation is with the University of Colorado Health Sciences Center, also located in Denver. Together, Children's and the University of Colorado Health Sciences Center have combined their staffs and resources in many program areas, including health education, pediatric residency instruction, behavioral sciences, diabetes, genetics, otolaryngology and urology.

As a children's hospital, all of our time, talents, equipment and financial resources are devoted to children. This enables us to provide the extensive roster of specialty programs briefly described in this "Dedication" publication. The amount of space devoted to each service is, in no way, proportionate to its importance. Neither is the order in which the programs are listed.

Over the past eighty-two years, The Children's Hospital has grown in quantity and quality of specialty services offered, as well as in knowledge and expertise in giving special care to sick children. Our purpose today remains the same as it was stated in 1910 — "to provide the best possible health care to the children and youth of the Rocky Mountain Region." We exist "for a child's sake."

Richard W. Olmsted, M.D.
Director of the Medical Staff
The Children's Hospital, Denver

Richard W. Olmsted, M.D., medical director of The Children's Hospital, and L. Joseph Butterfield, M.D., president of The Children's Hospital Medical Staff.

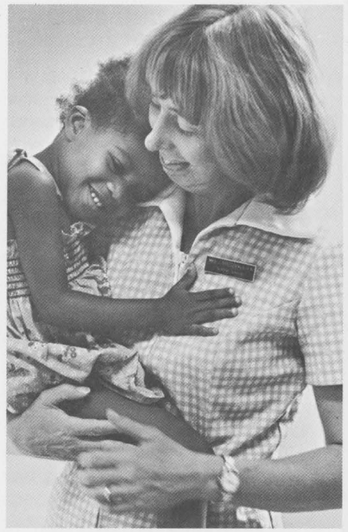
Pediatric Medicine

Ambulatory Services

Seymour E. Wheelock, M.D.
Director of Ambulatory Services
The Children's Hospital, Denver
Associate Clinical Professor of Pediatrics
University of Colorado Health Sciences Center

Tommy, age four, and his six-year-old sister cannot afford proper health supervision under the care of a private pediatrician or family practice specialist — where to go?

Seven-month-old Terri, enroute with her parents by car through Denver to California, has begun to vomit and has become very feverish — what to do?



David is 14 and depressed; his parents disagree violently about everything; he is doing very poorly in school — where can he go for help?

Mary, 16, is the mother of an active, demanding baby. She is alone and overwhelmed — who will support her?

The Ambulatory Services at Children's Hospital provides assistance for these troubled families by means of a well-staffed examining room area, containing specific facilities for the care of pediatric emergencies as well.

Comprehensive health care for children from birth to eighteen years of age is the responsibility of our Primary Care Service staffed by pediatricians and child health associates with the critical needs of the family for social work and public health nursing supplied by representatives of those departments who are on 24-hour call.

Insofar as is realistic, the Outpatient Department of Ambulatory Services attempts to be the "private" physician for the needy pediatric population in the general vicinity of the hospital. Service is provided around the clock and the total support structure of the hospital (radiology, laboratory, and other specialty departments) is utilized as needed.

The examining room area also is open 24-hours a day for the diagnosis, treatment and support of patients who are in need of care and either have no physician of their own or temporarily cannot contact him or her.

Children with troubles ranging from head colds to life-threatening emergencies may call upon all of the resources of our Outpatient Department and the hospital. When the immediate problem is resolved they will be helped to find a medical resource where they can become regular patients — for example, a private physician, a health center or station or pediatric services of an affiliated hospital.

Many patients are referred to our Outpatient Department by private physicians, in the context of consultation, which may or may not lead to hospitalization. The pediatric house staff and attending pediatricians or pediatric specialists provide this service either in a general way or by means of review in one of ten specialty clinics that deal with perplexing pediatric disorders. When the problem is resolved to everyone's satisfaction, a letter and phone call to the family's physician is customary.

Ambulatory Services at Children's means not only primary and emergency care, but Specialty Clinics and their physicians and staff resources. These Specialty Clinics, which operate on a specific weekly schedule include: Genitol-Urinary, Urology, Neurology, Thoracic, Plastic Surgery, Gynecology, Pediatric Surgery, Eye, Cleft Palate, Otolaryngology, Burn, Genetics and Endocrine. Appointments or referrals may be made by calling 861-6890.

The Primary Care Service and General Pediatric Clinic are open and busy from 8 a.m. to 5 p.m. every day. All services after 5 p.m. are regarded as urgent and are dealt with by house staff and attending pediatricians. The Emergency Room facilities are available at any hour of any day. Physicians with special abilities in pediatric disorders are available on short notice.

During the day, appointments for non-urgent situations may be made by calling 861-6536 or 6537. After the appointment desk closes at 5 p.m., the Examining Room/Emergency area may be reached by calling 861-6888, 6889 or 6890.

A convenient driveway at the northeast corner of the hospital, and well-marked entrance to our new Emergency Room simplify the arrival of a child in distress.

Compassionate community pediatric health care resources, aptly describes Children's Ambulatory Services. It is available, at any hour, to any child or young adult in need. Our Ambulatory Services Department is an important supplement to the overall health care program in the surrounding neighborhood, the Denver community and the Rocky Mountain Region.

Cardiology

Charles R. Hawes, M.D., F.A.A.P., F.A.C.C.
Chief of Pediatric Cardiology
The Children's Hospital, Denver

One of the first pediatric cardiologists in the United States was asked in the 1940's to describe his field of interest. "It is a quiet specialty," he said, "consisting simply of a doctor seated on a wooden bench in a quiet room listening to the chest of a child with his stethoscope." Simple it was, and quiet indeed, for the listening was followed by little more than speculation as to the source of the sounds.

Now, in the 1970's, children's cardiology is no longer a quiet specialty — it is a clamor in the world of medicine. Its whirring cardiac catheterization, laboratory cameras and clicking monitors lead to swinging surgery doors and a promise of elimination of the impossibilities of the shortly distant past. Surgical cure or lessening of the pain or the severity is available for most congenital cardiac defects.

Our Cardiology Department, the branch of medicine dealing with the heart, its functions and its diseases, is equipped for and experienced in the management of all acquired and congenital heart disease in children from birth to 16-years-of-age. A modern cardiac catheterization laboratory is available and three pediatric cardiologists, all certified by the American sub-board of Pediatric Cardiology, are available at our hospital on a full-time basis. Dr. Charles R. Hawes, chief of the department, founded the department and has been with The Children's Hospital 28 years. His associates are Dr. Vincent N. Miles, director of the Cardiac Catheterization Laboratory and Dr. Gary Way. The visiting staff of the department includes Dr. Robert Wolfe, head of the Pediatric Cardiology Department at the University of Colorado School of Medicine, and Dr. Leslie Kelminson who is in the private practice of the specialty, as well as several cardiologists with internal medicine board qualification.

The department offers consultation for patients admitted to the institution, and takes referrals from physicians in Colorado and surrounding states. The standard office hours are 8 a.m. to 5 p.m., Monday through Friday, with weekends and holidays covered on an on-call basis by the same physicians. Direct telephone contact may be made at (303) 861-6820 or 861-8888.

Endocrinology and Diabetes

Georgeanna J. Klingensmith, M.D.
Director of Pediatric Endocrinology
The Children's Hospital, Denver
Assistant Professor
University of Colorado Health Sciences Center

Sixth Grade math, English and history grades — above average. Class and gym participation — satisfactory. Plays well with others — above average. All of the above report card marks would seem to indicate a normally developed and healthy 12-year-old.

But, this was not the case for Jo Ellen. Although she had developed mentally to her chronological age, she had not developed physically. Average height for a 12-year-old girl is 5'1". Jo Ellen's stature was that of an average five-year-old, 3'7".

Upon the recommendation of Jo Ellen's pediatrician, she was brought to The Children's Hospital for evaluation in our Endocrinology Clinic where children with disorders of the endocrine glands are tested for growth problems, i.e., children growing too slowly or too rapidly, and children with either delayed or accelerated puberty. Endocrine disorders which are cared for at Children's include diabetes, malfunctioning adrenal glands, growth and development and over active or under active thyroid glands. The medical term "endocrine" is applied to organs and structures in the body whose function is to secrete into the blood or lymph a hormone that has a specific effect on another organ or part of the body.

At Jo Ellen's initial visit to our Endocrinology Clinic, it was immediately apparent that something was wrong with her growth, and she was admitted to the hospital for thyroid and pituitary testing. During a very long and intensive two days, a battery of tests were performed on Jo Ellen. Routine blood tests were done by our Laboratory to determine if Jo Ellen had any other type of illness. Also, a series of x-rays were taken in the Radiology Department to determine Jo Ellen's bone maturation structure.

Tests were made on her pituitary gland, the results of which showed that the gland did not make adequate amounts of the hormones which stimulate the thyroid to make thyroid hormones. The tests also disclosed that not enough growth hormone (only one of the important hormones controlling growth) was being produced for Jo Ellen's body.

With the problem diagnosed, our endocrinologist prescribed both thyroid and growth hormones. The thyroid treatment posed very little problem, consisting of orally taking an inexpensive thyroid hormone tablet, the dosage adjusted to Jo Ellen's body size. The growth hormone treatment was a little more difficult since it is administered through an injection three times per week. Administering the growth hormone was not the difficult aspect of the treatment — parents are taught the procedure so that the treatment can take place in the home. The difficulty with this particular treatment, however, was in acquiring the rare growth hormone.

Growth hormone is a protein hormone, and only human growth hormone works in human children. The human growth hormone is made from extracts from donated pituitary glands and, presently, is used only on an experimental basis. Jo Ellen was fortunate to be at our hospital, which is one in only 12 centers across the country, where the growth hormone is provided for research to our endocrinologist. The National Pituitary Agency, which is a branch of the National Institutes of Health, provides Children's with the rare hormone. The requirements made by the NPA include evaluations every four months on the child receiving the hormone, and that this evaluation process must continue until the child reaches a height of 5'4" for girls or 5'6" for boys or until the bone maturation stops and adult height is reached.

After her first four months of treatment, Jo Ellen returned for evaluation. In just that short amount of time, using the thyroid and growth hormone treatments, she had grown two inches. That may not seem like much to you, but to this 12-year-old, who has had difficulty opening doors or getting a drink from the park fountain, it was a start in the right direction — UP!

Another important aspect of our Endocrinology and Diabetes Department involves detection of underactive thyroid glandular functions in newborns. Although there may be no symptoms, an underactive thyroid gland in a newborn infant may lead to irreversible brain damage if not treated within the first few months of life before the symptoms of the disorder are apparent. Recently, the Colorado State Health Department, in cooperation with The Children's Hospital and other community hospitals, has begun to test newborn infants for underactive thyroids. Within the first two months of this program, our endocrinologist and her staff were able to assist in the diagnosis and treatment of several newborn babies with underactive thyroid glands.

Appointments may be made by calling the Endocrine Office at 861-6627. Appointments by physician referral are preferred, but many appointments are accepted through recommendations by family or friends.

Genetics Clinic

Eva Sujansky, M.D.
Cytogeneticist
The Children's Hospital, Denver
University of Colorado Health Sciences Center

Cytogenetics is the branch of genetics devoted to study of the cellular constituents concerned in heredity, that is, the chromosomes. The Genetics Clinic at The Children's Hospital is involved in the scientific study of the relationship between chromosomal differences and childhood disease conditions.

More and more, modern pediatric medicine is looking back to the prenatal period for answers to questions about diseases and growth disturbances. Cytogenetics is giving us many of the answers we're looking for.

Everyone has chromosomes and genes, and the number of each and their combinations and behavior are largely responsible for our appearance as well as the presence or absence of many serious physical defects, such as Mongolian idiocy, dwarfs and some blood diseases.

In our Genetics Clinic, which operates in cooperation with the University of Colorado Health Sciences Center Cytogenetic Research program, studies are performed which involve blood cells, bone marrow cells and other tissue obtainable by biopsy. A cell that's different or distinctive is identified and isolated for further study. For example, Mongoloids have an extra number of chromosomes above the normal. In Leukemia, there is a special "Philadelphia" chromosome present which looks like an exploded cell. Most diseases have a specific "descriptive" chromosome. The science is to isolate it and then try to find a way to get rid of it, or prevent it in the future.

The relationship of chromosomes to growth failures, birth defects, Leukemia and other malignant disease is of primary concern in our program. Extensive research is in progress today in hope that someday these tragic genetic "accidents" and the heartache they cause can be eliminated.

Gynecology Clinic

Stuart A. Gottesfeld, M.D.
Director of Gynecology Clinic
The Children's Hospital, Denver
Associate Clinical Professor
University of Colorado Health Sciences Center

Embarrassing, painful or something to fear. For adult women an appointment with a gynecologist can mean any or all of these emotions. For an adolescent girl, puberty and these feelings can be compounded because of age and immaturity, and simply because this is an area of extreme privacy.

In the past, these young patients had no choice but to see an adult gynecologist, one who might not be attuned to their special needs or problems. Realizing this and in response to the needs of young adolescents growing up in today's rapidly changing society, The Children's Hospital began its Adolescent Gynecology Clinic. It was hoped that with the establishment of a clinic to meet their specific living problems, these young women would establish good health maintenance habits and lose their fear of this medical specialty — a real or imagined fear that might lead to serious physical problems in the future.

To begin the program, a series of lectures were given to Children's pediatric housestaff and attending physicians to acquaint them with the problems inherent to the young female teenager. Our initial clinical services centered around treatment of unwanted pregnancy and contraceptive counceling. However, it soon became apparent that these patients required all of the services offered in adult gynecology clinics, including treatment of chronic pelvic pain, vaginitis and social diseases. Consequently, these treatment programs were added to our program.

The Gynecology Clinic, however, is not restricted to teenagers. Services have expanded to include treatment of very young children (some as young as four-years-old) who have problems with failure to develop, precocious puberty and unexplained, chronic vaginitis. We also have added the availability of in-house consultations for all patients with pathology (laboratory test results) referrable to the pelvis.

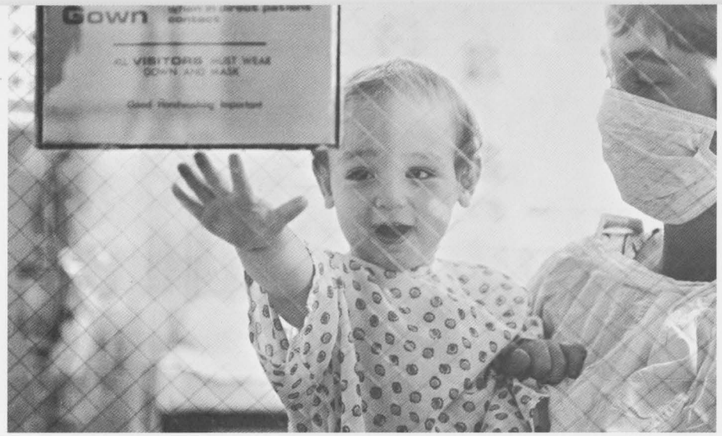
Any child or adolescent receiving services through Children's Hospital can be referred to the Gynecology Clinic by either the housestaff or attending physician. The clinic is held twice each month. Outside referral appointments can be made by calling the outpatient appointment desk at 861-2366.

Infectious Disease Service

James K. Todd, M.D.
Director of Infectious Disease
Associate Professor of Pediatrics
University of Colorado Health Sciences Center

Thirteen-year-old Kristine was a member of her school's swim team and basketball squad. She had played in a basketball game on Thursday, but by Friday morning she had developed a sore throat. The symptoms that followed made her illness seem like the flu — persistent vomiting, high temperature and body aches. By Friday evening, Kristine began to act disoriented and confused.

She was evaluated by her family physician who suggested she be taken immediately to Children's Hospital. During the two-hour drive from her home to Children's, Kristine slipped into a coma. It was nearly four days before she regained consciousness.



Kristine was quickly admitted into the Intensive Care Unit, where doctors from the Infectious Disease Service diagnosed Kristine as having Reyes Syndrome, a bodily reaction which occurs after an illness such as an upper respiratory virus, Chicken pox or B-strain of influenza. Reyes Syndrome is characterized by swelling of the brain, which causes the comatose state, and fatty deposits developing in the liver and kidneys, which cause serious malfunction in those organs and a dangerous imbalance in body fluids. Reyes Syndrome is not contagious, but the diseases which can trigger it are contagious.

At present, there are no truly curative therapies for Reyes. All our doctors can do is attempt to prevent a fatally injured brain by monitoring the amount of pressure on the brain and relieving that pressure with therapy. About 10 years ago there was a 50 percent fatality risk for Reyes victims. Now the risk is 32 percent nationally, and much less than that currently in Denver.

Fortunately, Kristine came out of the coma, her brain unaffected; she recuperated at a rapid rate and was sent home after only two weeks in the hospital. Not all Reyes victims are so lucky. Some spend days and even weeks in a coma. Some never emerge from the coma at all.

Although Reyes Syndrome is not contagious, our staff of physicians from the Infectious Disease Service played an important and integral part in Kristine's recovery. The Infectious Disease Service is usually involved whenever a question of an infectious (caused by microorganism) illness — its diagnosis, therapy or epidemiology — is raised. Working closely with Children's Microbiology Clinical Laboratory, diagnostic specimens are obtained and analyzed in an effort to isolate and identify the bacteria, viruses or parasites which cause many common childhood illnesses. In conjunction with the laboratory, antibiotic therapy is selected and monitored to assure the greatest therapeutic benefit with the least side effects.

The Infectious Disease Service is available for consultation on a 24-hour seven day a week basis for both outpatients and inpatients. Referrals will be accepted from a physician, public health agency or school health service. Services and consultations are available at any time. Any request for information should be directed to the Infectious Disease Office at 861-6231, or The Children's Hospital Paging Operator at 861-8888, and ask for the infectious disease fellow.

In conjunction with the Department of Pediatrics of the University of Colorado Health Sciences Center, an ongoing training program in infectious disease fellows is maintained, as well as an outreach educational program for pediatricians, other physicians, child health associates, nurses, medical technologists and other health care professionals. Local, regional, national and international liaison with other infectious disease colleagues helps to assure an up-to-date, high-quality patient care and training program.

Working closely with the Infection Control Committee, our Infectious Disease Service and Infection Control Epidemiologist monitor all children admitted with potential infection to assure they are appropriately isolated to protect other patients. Our wards are flexibly designed to allow optimal nursing care of patients as well as allowing adequate isolation when indicated. Occasionally, an in-hospital exposure occurs which requires preventative action. An active infection prevention program is carefully updated and maintained at Children's Hospital.

With the close cooperation of physicians, researchers, laboratory personnel, nursing staff and many other hospital personnel, the Infectious Disease Service constantly maintains and improves the highest level in infectious disease care for all Children's patients.

Neurology/EEG Laboratory

Paul G. Moe, M.D.
Director of Neurology and EEG Laboratory
The Children's Hospital, Denver
Associate Professor
University of Colorado Health Sciences Center

Eight-year-old Millisa, according to her teachers, was "a terror in the classroom." She was nervous, hyperactive, irritable and sensitive to the slightest criticism. At home she was much the same, and she was complaining more frequently of having headaches.

She had been seen by, what her parents thought, every type of specialist available, including the family physician, the school nurse and school counselors, and she even had gone through a short period of psychoanalysis. Nothing seemed to help. Finally, Millisa's family doctor suggested that she be seen by The Children's Hospital Neurology Service.

Quite often, it is not always clear where pediatric psychiatry ends and neurology begins. When a child complains of a chronic headache, it could be due to emotional problems or there could be a medical cause. The neurologist helps determine the answer.

Millisa was seen by one of our two, full-time neurologists in our Neurology Clinic. At her physician's request, an electroencephalogram (EEG) or brain wave tracing was done. This test is like an electrocardiogram, with wire leads pasted to the head to record brain wave activity. Before the actual testing begins, the neurologist explains the process to the child and the parent(s), afterwhich, the whole procedure is looked upon as fun by most children above the age of infant. Millisa, who was a bit too restless, was given a mild sedation to induce sleep. The EEG took about an hour to complete.

When the results of Millisa's tests were interpreted, our neurologist concluded that her problems were, indeed, medical. She suffered from migraine headaches. Medication was prescribed, and, after only two months, both her parents and her teachers noted a substantial change in Millisa's attitude and activities.

Many of the youngsters seen in our Neurology and EEG Laboratory have epilepsy or suspected seizures, birth injuries or cerebral palsy, suspected or definite school or intellectual handicaps, headaches or migraine, head or spinal cord injuries, meningitis or encephalitis, muscle disease or weakness, sleep disorders, etcetera. In the hospital our neurologists often work with the Infectious Disease experts in the Intensive Care Unit, caring for patients with such serious diseases as Reyes Syndrome, meningitis or prolonged fever seizures.

Like other specialists, neurologists require a wide spectrum of knowledge. Our neurologists and our pediatric and neurology residents are familiar with psychometic techniques, neurophysiologic techniques (EEG, EMG), actual tomography (CAT scan), neuroradiology, neuropathologies (nerve and muscle biopsies), biochemistry, neuropharmacology and genetics.

This department has a close working relationship with the Developmental and Evaluation Clinic, Psychiatry and Physical and Occupational Therapy. A monthly Muscle Clinic is held at Children's Hospital, with the support from the Muscular Dystrophy Association; and a Neurology Clinic also is held at Children's, sponsored by the Colorado Handicapped Children's Services.

The Neurology and Electroencephalography service offers consultation and ongoing care to children from birth through 21-years-of-age. Referrals from physicians are usually the most efficient, but school and community agency referred patients are welcomed. For more information or to make appointments, call (303) 861-6896.

Department of Perinatology

L. Joseph Butterfield, M.D.
Director of Perinatology
The Children's Hospital, Denver

Newborn Country, USA, is the theme adopted by the Department of Perinatology of The Children's Hospital to describe a region of service responsibility, a concept of interdependence of hospitals and professionals and a system of regional perinatal care.

The action centers of the Department carry out their work within that theme which also doubles as a health marketing tool.

In an age of consumerism and cost conscious health planning, cooperation is the name of the game.

Our Newborn Center, which celebrates its 15th birthday February 1, 1980, is the core service of the department. By serving the intensive care needs of newborns in 200 hospitals of a "megaregion" of ten states, the sharing of services, cost containment and improved access to quality care can be expected rather than hoped for.

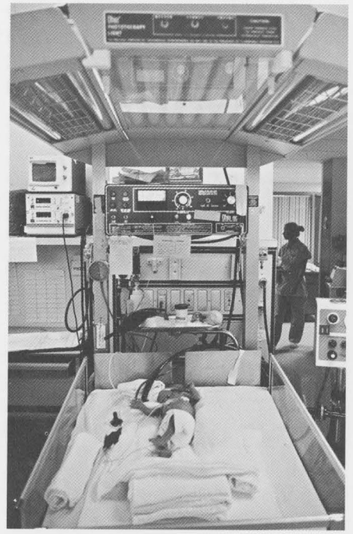
In 1978, our Newborn Emergency Service performed 1,416 newborn transports, the largest such service in the world. A two-page spread in the March, 1979, **National Geographic Magazine** was a deserved recognition of this elastic fiber in the fabric of Denver. A full-feature article in the magazine **America Illustrated,** circulated only in Russia, will tell the story of a NES trip to Espanola, New Mexico, and the happy outcome of a well-baby going home.

The Family Care Program is our statement of concern for families in crisis. The Family Care Coordinator program assists the family of the Newborn Center patient. The Family Care Center is a special care unit for babies about to go home — it is a time and a place where families are "put back together."

Sudden Infant Death Syndrome Center, based near Children's at St. Luke's Hospital, provides an educational and counseling service to the victims of a mysterious disease whose first symptom is death. A new project at Children's funded by the National Foundation/March of Dimes, is "How to Read your Baby," a videotape system of teaching mothers to recognize the cues and clues of a new baby calling for care.

The Children's Hospital - St. Luke's Hospital Perinatal Program is a model of shared services with Children's Hospital leasing and operating the St. Luke's Hospital nursery.

These are the pieces of Newborn Country, USA. Add our Perinatal Outreach Education Activity, a region-wide communications system, a pinch of perinatal planning and you have the recipe for "Improving the Outcome of Pregnancy" — which is the only reason we exist.



The Newborn Center

Jacinto A. Hernandez, M.D.
Director The Newborn Center
The Children's Hospital, Denver
Clinical Associate Professor of Pediatrics
University of Colorado Health Sciences Center

"It is recognized that certain mothers and their unborn infants, because of past pregnancy experience or present complications, are at high risk for development of difficulties and require, for their optimum care, facilities and services which may not be found in all hospitals providing maternity care. When these mothers and babies can be recognized and their problems anticipated there is a growing appreciation of the value of ensuring that they be cared for in hospitals with the best facilities even though this may require referral to another institution."

This is the philosophy of modern perinatal care; perinatal pertaining to or occurring in the period shortly before or after birth. This philosophy has guided the efforts of the Department of Perinatology of Children's Hospital toward improvement of pregnancy outcome in this region. This reduction in reproductive tragedy has been possible through the establishment of a regional network that makes appropriate levels of perinatal care accessible to all, and through extensive educational efforts to upgrade care in all hospitals in which deliveries occur.

During the past 20 years an unprecedented level of interest in the medical problems of the newborn infant has furthered our understanding of newborn patho-physiology more than ever before. Rapid advances in Neonatology have enhanced the survival rate of premature and critically ill full-term newborn infants. Most important of all is that experience over the past decade has clearly demonstrated that application of intensive care not only prevents deaths of infants at greatest risk, but can prevent disabilities that in the past were considered an inherent risk of extreme prematurity.

Baby Marie was born 11 weeks premature in a Loveland, Colorado hospital. At birth she weighed slightly over one pound 13 ounces. She had been born breech and she had severe bruising of her lower extremeties.

The Children's Newborn Emergency Service transport team arrived in Loveland when little Marie was two and one-half-hours-of-age. Four hours later, she arrived at Children's Newborn Center Intensive Care Unit. Her admitting diagnoses included prematurity and Hyaline membrane disease (lung immaturity).

The team attending to Marie when she first entered our Newborn Center care included a neonatologist, neonatal fellow, pediatric residents, newborn intensive care nurses, respiratory therapists, transport nurses and emergency medical technicians. During her more than four-month stay at Children's, she was followed at times by a neurologist, cardiologist, pediatric cardiac surgeon, anesthesiologist, pediatric surgeons, radiologists and an opthalmologist.

Marie entered our newborn ICU connected to a respirator providing 100 percent oxygen; after one full month she finally was taken off the respirator and placed in an oxygen hood at 35 percent oxygen. It was almost two months to the day of her arrival before she was breathing room air.

After nearly four months, Marie weighed four pounds, eight ounces and she was breast milk feeding. At this point she was transferred back to the Loveland hospital to continue growing and to be closer to her family.

Our Newborn Center has been operational since 1965, currently representing a core 45-bed facility with a 360-degree support service system that is the integrating force in a multi-state and multi-institutional perinatal care system. As part of the Denver "perinatal conglomerate" the Newborn Center offers a region-wide resource in tertiary perinatal care, relates to 223 hospitals in portions of 11 states, and assists high risk infants from some 70,000 live births. Last year approximately 650 high risk infants received specialized care in our Newborn Center, 28 percent of these infants with a birth weight of three and one-half pounds or less, and 22 percent were infants with congenital malformations requiring specialized medical and surgical care.

To fulfill this important role, the Newborn Center is organized and equipped with the most advanced instruments to provide and monitor the different therapeutic modalities required by a critically ill newborn. However, the best monitors are still human and this specialized and complicated care is administered by specially trained workers; physicians, nurses, respiratory therapists, social workers, etc. Above all, love is forever the essential ingredient in the treatment and care of sick infants. And, in the Children's Hospital Newborn Center, this love translates literally into survival and life.

Family Care Center

Edward Goldson, M.D.
Director of the Family Care Center
The Children's Hospital, Denver
Assistant Professor of Pediatrics
University of Colorado Health Sciences Center

It may seem strange to some that parents sometimes feel alienated from their newborn infant — feeling as if they don't know the child or that the child is their own. Unfortunately, this is all too often the case when parents have a very sick infant who has been hospitalized for a prolonged period of time. Recognizing that perinatal illness and hospitalization of an infant is a profound stress on a family, Children's Department of Perinatology established the Family Care Center as a means of helping parents cope with these stresses.

Celebrate

Cindy was born two months prematurely and required intensive care for the first month of her life. This was provided in Children's Newborn Center. During the next four weeks of her life, she lived in the Family Care Center, a place where she gained her strength and her health, where continuous medical attention was provided 24 hours a day and where her parents had the opportunity to get to know her. Cindy's parents were encouraged to visit, to hold and feed her at any time of the day or night. And, to make Cindy's living quarters more like home, her parents hung large yellow daisies around her crib and a delicate, colorful mobile above her head. A dainty little night lamp was placed by her bedside.

This is our Family Care Center, a home away from home — a transition period for both the infant and the parents. The center provides a relaxed environment where instruction can be provided and learning how to take care of a new baby can be accomplished. The Family Care Center's major goals are the convalescent and transitional care of the sick infant, and the facilitation of family reorganization. Physically separated from The Newborn Center, the Family Care Center has eight beds, housed in an atmosphere which is less tense and crisis oriented and more congenial to the development of parent/infant interaction. The center is staffed by a pediatrician with support from the hospital's perinatal staff, a social worker and six core nurses who are assigned to the center on a permanent basis and have a special interest in working with infants and their families.

Most of the infants cared for in the center are referred from our own Newborn Center. They are usually babies who have been quite ill, but who are now medically stable and convalescing. Referrals are made by the perinatal staff and/or referring physicians who are interested in using the Family Care Center in the care of their patients. Patients also have been referred from Children's general wards or from other community hospitals. The center works with infants who have failed to thrive who may have congenital defects or whose parents are unsure of their ability to care for them. Since the unit seeks parental involvement in the care of the infant, participation in the activities of the unit, starting at the time of transfer, is emphasized. Parents are welcomed in the unit at any time, and healthy brothers and sisters also are encouraged to visit.

Recognizing that sick infants are at higher risk for developmental problems, the Family Care Center begins very early to evaluate the infant's development, and enrolls every infant in a long-term follow-up program. The Departments of Occupational and Physical Therapy have been active participants in this program, and have helped in the comprehensive assessment, referral and follow-up of infants and families cared for in the Family Care Center.

The Family Care Center serves the function of working with the convalescing and growing infant. It strives to facilitate family interaction and reorganization following the birth of a sick infant. Finally, it attempts to alert the family and the practicing physician to potential difficulties that may arise following the birth of a sick infant.

Our approach involves an interdisciplinary effort that includes the parents and makes them our colleagues in the care of their infant.

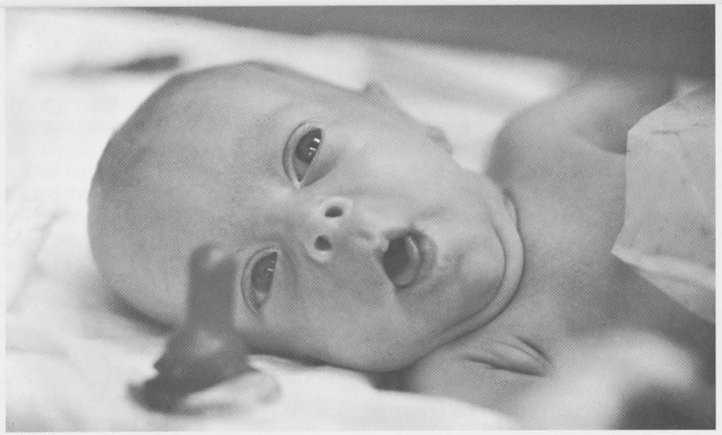
Children's–Saint Luke's Perinatal Program Neonatal Nurse Clinician Program

Peter R. Honeyfield, M.D.
Director of Newborn Services
Children's–Saint Luke's Perinatal Program
Co-Director, Neonatal Nurse Clinician Program
The Children's Hospital, Denver
Assistant Clinical Professor of Pediatrics
University of Colorado Health Sciences Center

Mary Ellen Lunka, R.N.
Supervisor, Children's–Saint Luke's nursery
Co-Director, Neonatal Nurse Clinician Program
The Children's Hospital, Denver

The issuing of a Certificate of Need by the Colorado Department of Health in July, 1978, gave the go-ahead for the development of The Children's Hospital–Saint Luke's Hospital Perinatal Program. Twelve months in the planning, the program called for the merging of The Children's Hospital expertise in the care of the newborn with that of the Department of Obstetrics and Gynecology at Saint Luke's Hospital to provide a comprehensive maternity service.

In a unique arrangement, Children's Hospital operates all newborn services within Saint Luke's. Saint Luke's provides a remodelled nursery facility, consisting of a 30-bed, well-baby nursery



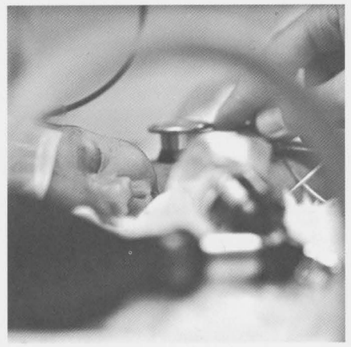
and a 12-bed intermediate intensive care unit. Children's leases the nursery space and provides care with its own staff and equipment. At the time of delivery, the baby is formally admitted as a Children's Hospital patient, while the mother remains a patient of Saint Luke's. Ancillary services are shared on an integrated basis, with Saint Luke's providing laboratory, radiology, housekeeping, maintenance, laundry and pharmacy, and all other services provided by Children's.

This program brings a new dimension of health care to both mothers and their babies by combining the expertise of Saint Luke's in the care of high-risk mothers and the expertise of Children's in treating illnesses of newborns. Well-babies and infants born with moderate degrees of perinatal illness are cared for at Saint Luke's, while critically ill newborns will be transported to the Children's Newborn Center — less than three blocks away. Conversely, the new Saint Luke's unit will serve to accommodate babies being transferred from the critical care unit at Children's to a more moderate level of care.

In addition to patient services, a vigorous combined obstetric-pediatric education program has developed with weekly conferences between both hospitals' staffs to discuss problem cases. Private physicians, neonatologists and neonatal fellows provide the care for the newborn infants along with eight neonatal nurse clinicians and staff nurses.

The Neonatal Nurse Clinician Program was established in October, 1978, in order to provide for a greater volume of newborn care. The neonatal nurse clinicians function in an expanded role to provide specific services which traditionally have been the province of the physician. Nurse clinicians have been functioning at The Children's Hospital in the Newborn Emergency Service since 1974. Recent increases in the number and complexity of high-risk newborns admitted to our Newborn Center, together with the development of the intermediate intensive care unit at Saint Luke's Hospital, have created a demand for increased 24-hour in-house supervision of patient care. Since the number of medical housestaff in the Children's–Saint Luke's program is limited, nurse clinicians now provide the needed coverage. In addition to supervision of patient care, the neonatal nurse clinician is available to respond to emergencies in the nursery and delivery room and is highly skilled in resuscitation techniques.

The philosophy of the combined Perinatal Program and Neonatal Nurse Clinician Program is to foster a family-oriented approach to maternity care, and to provide the highest level of service attainable to the parents and babies.



Newborn Emergency Service

Daniel Hall, M.D.
Director of Newborn Emergency Service
The Children's Hospital, Denver
Assistant Clinical Professor
University of Colorado Health Sciences Center

The first 24 to 48 hours of any newborn infant's life is crucial. But this is especially true with infants born prematurely or full-term infants born with some type of illness.

The Children's Hospital Newborn Emergency Service, an integral part in regional perinatal health care delivery, is involved in the intensive care of sick infants coming from a referring hospital and travelling to one of four Denver area hospitals providing comprehensive newborn care — including Children's Hospital, Denver General Hospital, Fitzsimons Army Medical Center and the University of Colorado Health Sciences Center.

Nearly 1,500 newborn transports are accomplished annually by this service, involving babies from over 100 hospitals, 50 cities and eleven states in a 500,000 square mile area of the Rocky Mountain region. Our Newborn Emergency Service is the largest such function in the world.

And it all begins with a phone call to our Newborn Center . . .

Casper, Wyoming — Kellie was born nine weeks prematurely, weighing only two pounds, six ounces. Besides being premature, Kellie suffered from hyaline membrane disease — her lungs were too immature to take in the oxygen she needed to keep her brain and her body alive. Her attending physician telephoned our Newborn Center. Within minutes one of Children's two specially equipped leased Beechcraft King Air planes was dispatched to Casper. Kellie, less than four-hours-old, was brought back to our Newborn Center.

Denver, Colorado — Normal human gestation is 38 weeks. Brent was born at a Denver hospital after only a 28 week gestation. At birth he also weighed only two pounds, six ounces, and he suffered from extreme prematurity. Children's, recently purchased, specially equipped ground transport ambulance was dispatched to bring him to our Newborn Center when he was four-hours-old.

This interhospital care is provided by a special team of highly skilled emergency care nurses, respiratory therapists and emergency medical technicians. From the moment our staff enters the hospital to pick up an infant they take charge. It is their task to stabilize the baby's vital functions prior to transfer, and to continue that care during transport. The team is supported, on land or in the air, by an elaborate communications network which allows constant contact with physicians in the Newborn Center.

As the infants begin to recover many are returned, via our Newborn Emergency Service, to hospitals closer to home to reunite the baby and family.

From across the street, or from hundreds of miles away, critically ill newborns have a fighting chance at survival because of Children's Newborn Emergency Service.

SIDS Counseling and Information Center

Susan Perron, RN, MS
Director of SIDS Center
The Children's Hospital, Denver

Approximately 100 infants die every year in Colorado from a mysterious disease called Sudden Infant Death Syndrome (SIDS), also known as Crib Death. The typical circumstances are an apparently healthy, normal infant, usually between one and six months of age, is laid down for the night or for a nap and is found lifeless soon after. Upon a thorough autopsy or post-mortem examination, no adequate cause of death is found.

The sudden death of an infant is devastating to the family and is usually the most severe crisis they will ever experience. Because the death is sudden and unexpected there is no warning and, therefore, no time to prepare. SIDS usually occurs to young parents who have had no previous experience with death. It's out of order, untimely and unacceptable that an apparently healthy infant is suddenly dead for no known reason. There are no answers to the inevitable question, "Why did my baby die?", because we still don't know what causes SIDS or how to prevent it. Quite naturally the parents tend to blame themselves. Feelings of guilt and responsibility are inevitable. All parents have their own list of, "If only I had . . . it never would have happened!" statements. Parents are enraged; they feel cheated, and ask, "Why did this happen to us? . . . Why doesn't it happen to parents who don't want or love their babies?" Frequently there is blame. "Why didn't the doctor pick this up?" or "Why did God do this to us?"

The parents are truly the victims of SIDS as they face a myriad of extreme physical and emotional reactions.

The purpose of the SIDS Counseling and Information Center is to coordinate and provide crisis and long-term grief support free of charge to all Colorado SIDS families. We are interested in hearing, immediately, when a sudden, unexplained infant death has occurred in Colorado, and we invite anyone to refer such a case. Our SIDS Center Personnel will then contact the family to provide initial information and counseling support services. Long-term, follow-up services are also provided through the help of local health resources, including the community health nurse, the local community mental health center and the family physician. Counseling support services are provided for at least one year following the death.

The SIDS Center makes certain that autopsies are performed on all these infants, and that the parents receive the autopsy results as soon as they're available. If SIDS is the diagnosis, the center ensures that it is written on the death certificate. A 24-hour HOTLINE, 861-8888, is maintained at the SIDS Center and is available to SIDS families and emergency services for referrals. We encourage anyone who wishes to contact us to use our toll-free number (800-332-2125) if they live outside the Denver area. Our office is open Monday through Friday from 8 a.m. to 5 p.m. To make a referral or an appointment during office hours call 861-6695 or 861-6696.

Educational sessions about SIDS also are provided to the professional and lay Colorado community to assure those most closely involved with the family are optimally supportive. Literature on SIDS is always available at the Children's Hospital SIDS Center and will be mailed free of charge upon request.

Oncology/Hematology

David F. Tubergen, M.D.
Director of Oncology/Hematology
The Children's Hospital, Denver
Associate Professor of Pediatrics
University of Colorado Health Sciences Center

Taru Hays, M.D.
Pediatric Hematologist
The Children's Hospital, Denver
Assistant Professor of Pediatrics
University of Colorado Health Sciences Center

The alien mass had infiltrated in the most vulnerable area and now it was growing wildly, uncontrollably. Before long it would totally overwhelm its victim. The defense troops were reeling from the initial attack and now seemed paralyzed as sector after sector succumbed to the invader.

The strange invader from unknown places had attacked and killed before, many times. Scientists could not penetrate the mysteries of how it grew and killed in the process. The world cowered in terror before this strange force which was immune to all defenses.

But now the odds were beginning to even. Scientists were beginning to find the vulnerabilities in the alien attacker. A multipronged attack began to curb the wild growth of the mass. The attack was not without ill effect on the victim, but in many cases the victim was saved from death. People began to breathe easier; hope began to return.

It sounds a little like science fiction, but it's real life. The above is a description of what happens in a cancer victim's body. The tide began a slow reversal 20 years ago. Five years ago researchers and doctors began daring to hope. Two years ago even more breakthroughs occurred.

Today there are very cautious uses of the word "cure." No one can say, "Yes, we have a cure for cancer," because no one can say with finality that the patients who have survived for two years, five years, ten years, disease free, will not have a recurrence of the disease. But it's beginning to look like many of them will live normal cancer-free lives. The Children's Hospital Hematology/Oncology efforts have been part of that long sought after hope for a permanent cure from cancer.

The Oncology Center was begun in 1968 and by 1969 64 patients were diagnosed, treated and followed. Today, our Oncology Center has grown into a regional Oncology Clinic, serving 11 states in the Rocky Mountain region as the primary source for the care of children with malignant tumor or blood diseases. Approximately 150 new patients are evaluated each year for tumor diseases, of whom about 100 are found to have cancer. The Hematology Division of the center deals with childhood blood diseases, some acute and some chronic in variety. This division evaluates approximately 100 new patients a year who have different hematological disorders. In total, over 900 children who have tumor or blood diseases are undergoing therapy or who have had cancer in the past are being followed by the center's staff of four oncologists, a hematologist, oncology nurses and a pediatric oncology nurse practitioner.

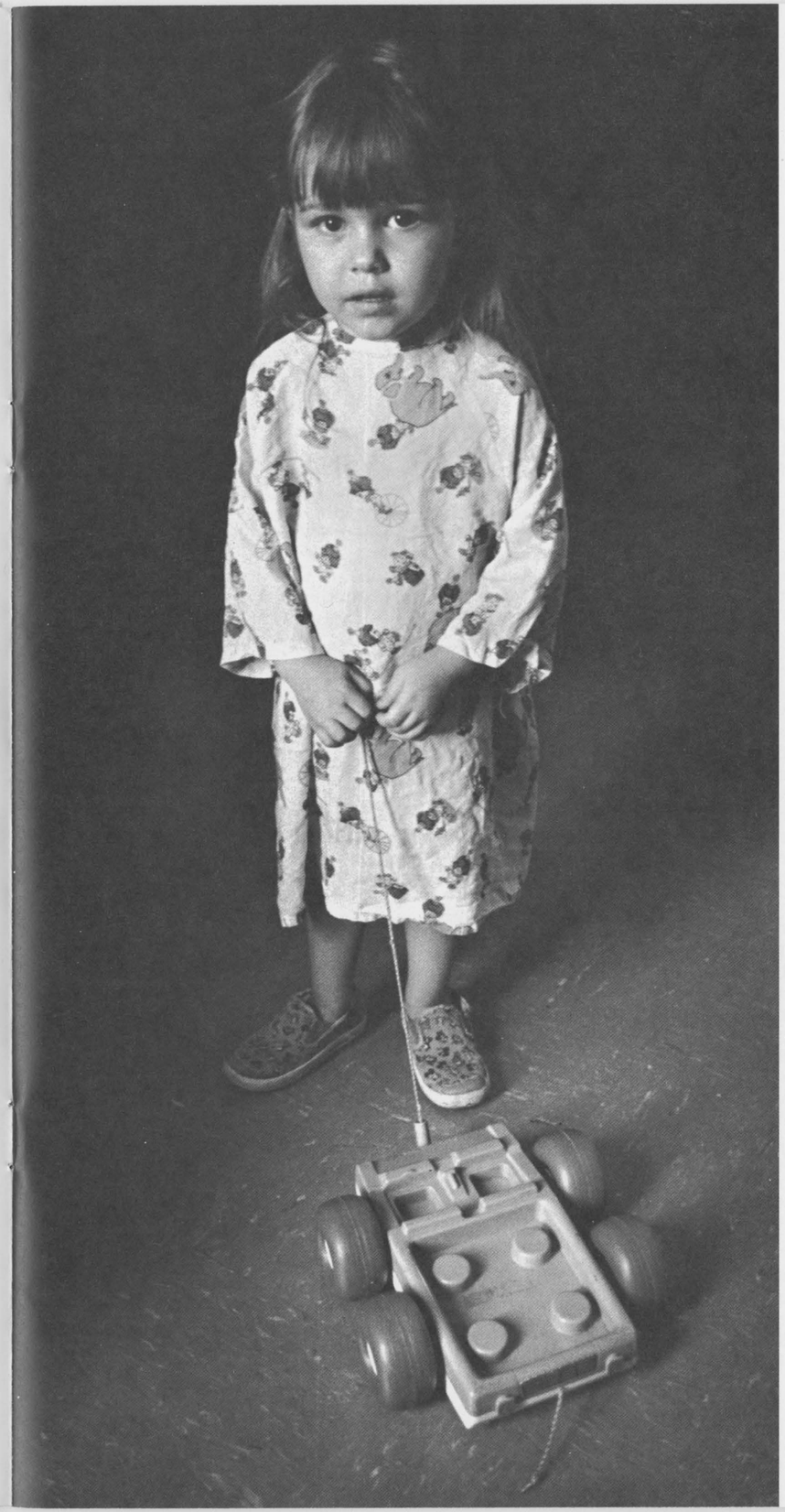
The emphasis of our hematology/oncology professionals is on delivery of multidisciplinary care, utilizing the various medical approaches including surgery, radiation therapy and chemotherapy to provide the optimum opportunity for cure of the malignant disease with the supportive care necessary for the patient and his family to withstand the rigors of therapy and the emotional burdens associated with the diagnosis of cancer. With this in mind we attempt to minimize the trauma of hospitalization by having a clinic very much oriented to outpatient therapy.

In a number of types of pediatric cancer, the results have dramatically improved in the past six to 10 years. We are now able to look at several types of cancer common in childhood and expect cures in 80 percent of these children. However, the improved survival seen in children with a variety of tumors forces us to take a much larger view of the patient with cancer and introduces an entire new set of problems. Cancer in children must no longer be viewed as an acute, or subacute, fatal illness, but as a chronic and often curable disease. The treatment program must not only be designed to provide the optimum likelihood of survival, but it must do so with a view of decreasing both short and long-term morbidity, and making the patient's psychological adjustment to the disease and therapy as healthy as possible. In no situation, however, have we yet arrived at the point of ideal therapy, and, therefore, all of our efforts at Children's Hospital are carried out with the goal of improving therapy for children to be treated in the future.

The successful approach to the child with cancer begins with an awareness that cancer may be the cause of the child's complaints. It continues with a definitive diagnosis and a thorough assessment of the stage of the disease and multidisciplinary planning of therapy. The actual conduct of treatment will involve close cooperation between the family physician or pediatrician, surgeon, radiotherapist and pediatric oncologist or hemotologist. It also will involve nurses, social workers, school nurses and, often specialists in rehabilitation.

The team, at times, seems to become almost prohibitively large. The effort expended is great, but so are the rewards as we are increasingly able to help the child with cancer and enable him to lead a relatively normal life.

The Oncology/Hematology Center is open Monday through Friday, 8 a.m. to 4:30 p.m., and appointments may be made by calling (303) 861-6740. For emergencies after hours, call the hospital operator at (303) 861-8888.



Pediatric Surgery

Anesthesiology

Charles H. Lockhart, M.D.
Director of Anesthesiology
The Children's Hospital, Denver
Associate Clinical Professor of Anesthesiology
University of Colorado Health Sciences Center

Four thousand children who require anesthesia for surgical procedures are cared for annually at The Children's Hospital. It is the responsibility of the Anesthesiology Department staff to ensure that each child's experience is as physiologically and psychologically atraumatic as possible. The complexity of surgical procedures varies widely — from open heart surgery to tonsillectomy, from premature infants to 20-year-old young adults. Each patient offers a special, unique challenge, and Children's has a specially trained and experienced staff of seven anesthesiologists available 24 hours daily to cope with these challenges.

The operating room can be a frightening place. The doctors and nurses in their "funny green clothes", the surgical instruments and the large, shiney spheres, circling bright lights are intimidating enough, but the anesthetic mask, which the anesthesiologist places over a child's face, can be the most alarming aspect of the entire surgical procedure.

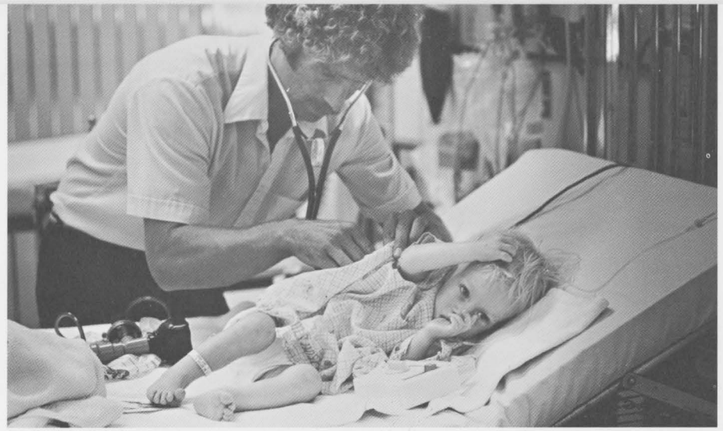
At Children's, before a child is wheeled into the operating room he or she is taken to the surgery playroom, a cheerfully decorated and relaxing room filled with toys and fun things to play with. While the child is in the playroom, one of our anesthesiologists will go into the room and talk to the child, explaining what will happen in the operating room. The pleasant interaction between the anesthesiologist and the patient helps replace the fears and the fantasies with facts and alleviates the anxiety of surgery.

An often forgotten consequence of hospitalization and surgery is the emotional trauma suffered by a child placed in a strange environment, separated from parents and subjected to a variety of unpleasant stimuli. In recent years efforts by anesthesiologists have been instrumental in the development of an "outpatient" day — surgery program designed to approach this problem. Through the program, patients are admitted to and discharged from the hospital the same day. Before hospitalization a preoperative orientation and informational package is available at the surgeon's office. A tour to familiarize patients and parents with hospital environment, personnel, and procedures is offered through the Department of Therapeutic Recreation. The child is away from parents for only a few brief hours during the actual hospitalization, sleeping and eating at home the night before and after surgery. More than 40 percent of our surgical procedures are now performed on this one-day basis.

A substantial reduction in cost of hospitalization is a welcomed fringe benefit of this program. But, besides the cost reduction, another benefit has emerged from the "outpatient" day-surgery program, as two mothers expressed in letters to the hospital. One mother wrote: "My daughter was in only for a half-day for ear tubes. It was a very pleasant morning. When we got home she ran up the street to her friends and said, 'Boy, did I have fun this morning!' When children say this with no reservations of fear, it means the world to a parent." The other mother wrote: "Our son was a day surgery patient, but in the event of any additional care, we would not hesitate to bring him to Children's Hospital. It was indeed a unique experience by today's standards. Thank you for caring so much!"

The breadth of a modern-day anesthesiologist's activities are not limited to the operating room, but are integral in many departments, including the Intensive Care Unit (ICU) and the Department of Respiratory Therapy, which are detailed elsewhere in this publication.

Information about the day-surgery program, and/or other services, can be obtained by calling the Department of Anesthesiology at 861-6226.



Burn Center

Wm. Carl Bailey, M.D.
Director of the Burn Center
The Children's Hospital, Denver

Sammy was a happy, healthy 10-year-old before he was burned in a house fire which took the lives of his mother and sister.

Four-year-old Janie was the victim of a freak flash-fire and explosion which occurred while her father was refueling his farm tractor with the engine running.

Carol, just learning to walk, received second and third degree burns over 80 percent of her body when she tumbled into a scrub-bucket full of hot water.

Kathy, another toddler, suffered third degree burns of her entire arm when she accidentally pulled a hot fondue pot off the table.

Other children, sometimes accidentally, and occasionally not, have been scalded in a bathtub full of hot water. Some have been burned by pulling a pan of boiling water down upon themselves.

Recently, a 17-year-old boy received third degree burns of his face, hands and torso in an airplane crash in Louisiana; and 15- and 19-year-old sisters received severe flash burns at a truck stop in their hometown in North Dakota. All three victims were rushed to Children's via air transport and specially equipped ground transport ambulance service.

What do these patients share in common? All were children or adolescents who were treated by the Children's Burn Team. All sustained disfigurement and possibly permanently incapacitating burns with which they will have to live for the rest of their lives.

Every year over 8,000 Americans die of burns and thousands of others receive burn injuries. About 30 percent of that total are children. Accidents are the leading cause of death in the pediatric age group, and burns are the leading cause of accidental death in preschoolers.

The impact of these injuries upon young and still developing human beings, in terms of personal pain and suffering, and the long range economic and societal effects, can scarcely be calculated. In an instant, a major burn can leave a child/adolescent with permanent facial and body scars, with frozen, contracted hands and limbs that prevent normal work or play and a potentially destroyed personality. Indeed, sometimes the family unit itself is destroyed by the impact of such an injury on a child.

The work of alleviating the pain and suffering of such burn victims and their families, of minimizing the loss of appearance and body function and the restoration to useful, happy lives has been the task of our Burn Team.

With the opening of the new addition and its eight-bed burn ward and attached facilities, the Burn Team has a new home and becomes a full-fledged Pediatric Burn Center. The building of this physical plant was made possible by the generosity of the Coors Brewing Company which provided a $250,000 grant for its construction.

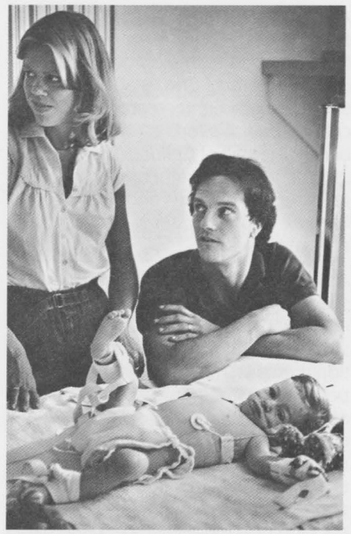
At its inception five years ago, the Children's Hospital Burn Team marked the first organized team approach to burn care in Colorado. The establishment of the new Burn Center represents the culmination of efforts of over 40 members of the staff of Children's Hospital to provide total comprehensive care to pediatric burn victims and their families, at primary, secondary and tertiary care levels.

Among the various disciplines with special expertise in burn management in the Burn Center are burn nurse specialists, physical therapists, occupation therapists, recreational therapists, a pediatric psychologist and a psychiatrist, social workers, a chaplain, dietician, as well as pediatric surgeons, plastic surgeons, hand surgeons and experts in infectious disease and pediatrics. In addition, there is the back-up of a full-service pediatric specialty hospital.

The Burn Center receives patients by self-referral or from any physician or health agency. Transport and direct admission may be arranged by a telephone call to the center at (303) 861-8888. Advice and consultation concerning the management of a burn patient who may or may not be severe enough to require transfer to a tertiary/intensive care unit is freely available to any physician desiring it. Evaluation of reconstruction and rehabilitation problems may be obtained by referral to the Burn Clinic at the same number. This clinic is conducted twice monthly.

Inquiries may be addressed to any physician member of the Burn Center staff, or by calling Director Dr. Wm. Carl Bailey, or Co-Director Dr. John Mara at (303) 861-8888.

Celebrate



Cardiovascular and Thoracic Surgery

George Pappas, M.D.
Chief of Cardiovascular and
Thoracic Surgery

The human heart, life's center force, is intriguing, intricate and delicate. The size of a normal adult heart is about the size of a small grapefruit. In a full-term newborn, weighing five pounds, the heart is the size of a medium peach and the blood vessels are only about 1.0 centimeters in diameter, about the size of a BIC pen.

Imagine, then, the size of a heart and the vessels in a premature infant weighing less than two pounds. It takes a special skill, acquired only with years of experience, to operate on these "premies" born with congenital heart defects. The success in surgically managing premature babies is based on the excellence in care provided by the nursing staff, neonatologists, cardiologists, anesthesiologists, house officers and the transport team. It also takes this same special skill and knowledge to operate on older pediatric patients suffering from heart disease or lung disorders. Children's cardiovascular and thoracic surgeons have that skill and knowledge, and a dedication toward helping our young patients begin and lead a healthy/productive life.

Heart surgery has been performed for many years at Children's Hospital, but it wasn't until 1976 that an active program was begun and a Cardiovascular and Thoracic Surgery Department established. In 1973, 38 operations were performed; five years later the case load was at 171.

The heart surgery patients seen at Children's range in age from the tiny premature infant on up through the teen years, and includes emergency and elective surgery for acquired and congenital heart disease. Our cardiac surgeons perform many different types of heart and vascular surgeries, and repair the entire range of operable heart lesions. Some examples would be surgical repair of a "hole in the heart," aberrant blood flow to the heart and lungs or a malfunctioning heart valve.

Patients needing cardiac surgery are referred to the cardiac surgeon by a pediatric cardiologist and/or pediatrician after a diagnostic work-up has been done. The cardiac surgeon then discusses the case with the referring physician. The cardiac surgeons on our active staff include: Doctors Charles Brantigan, Robert Brown, Alan Hilgenberg, Richard Parker, Gerald Rainer and Theodore Sadler Jr. At that time, considering the patient is a candidate for surgery, the parents are consulted and provided with a detailed description of the nature and outcome of their child's lesion, the operative procedure(s), the risk and the potential complications. A cardiovascular nurse clinician then instructs the parents about the intensive care unit, various tubes, I.V.'s and monitoring devices used. A mannequin is used to demonstrate where these devices are to be attached. We encourage the parents to visit the Intensive Care Unit (ICU) beforehand.

A tremendous amount of time is spent with the patient and family, to make them aware of what cardiac surgery entails and its effect on their child, and to answer any questions they might have. Post-operatively, care to the patient is provided by the surgeon, an anesthesiologist, the cardiologist, respiratory therapists, residents and fellows and the nursing staff. The child's hospital stay is usually from one week to ten days.

Parents may call the Cardiovascular and Thoracic Surgery Department at 861-6660, from 8 a.m. to 4:30 p.m., Monday through Friday, concerning the surgical aspects of congenital and acquired heart disease in children. For emergencies after business hours, referring physicians and/or parents may call the operator at The Children's Hospital at 861-8888.

Pediatric Dental Surgery

George L. Beedle, D.D.S. M.S.
Director of Pediatric Dental Surgery
The Children's Hospital, Denver
Assistant Professor
University of Colorado, School of Dentistry

At Children's Hospital we treat the total child; and that includes a child's mouth.

Here, our dentists are reassuring friends, especially to those children who are our patients for a long time or who have illnesses which often require dental care in addition to the medical treatment of the disease that brought them to us.

The Dental Service provides both intermediate and critical care for children in the Rocky Mountain area, with a special emphasis on our own inpatients and outpatients, which includes services provided for children with unusual dental disorders, as well as medical disorders requiring special dental care. Many of the patients receiving care through our dental program include children with autism, blindness, cancer, cerebral palsy, cleft lip and palate, deafness, developmental delay, facial burns or other unusual problems.

Dental care at Children's Hospital is provided in different ways depending upon a child's needs. Ten-year-old Stephan, who had spastic cerebral palsy and was a patient in our Physical Therapy Department, was having trouble with his teeth. He was referred to our Dental Service. During his initial visit, our pedodontist (childrens' dentist) obtained a dental and medical history, took the necessary x-rays and provided an oral hygiene evaluation instruction for Stephan and his mother.

After reviewing the x-rays and consulting with Stephan's physician, our pedodontist set up Stephan's treatment plan. Stephan had only two minor cavities. His dental needs were cared for in our newly renovated and remodelled Pediatric Dental Surgery Clinic.

Four-year-old Michelle was moderately delayed in her development, and she was a patient seen by our Development and Evaluation Department. Her initial visit to the pedodontist was similar to Stephan's. However, Michelle had many cavities. Since she was not able to cooperate in the clinic, her care required hospitalization and treatment under general anesthesia with the cooperation of the Children's Hospital Department of Anesthesiology. Michelle returned to our Dental Clinic for a post-operative examination. She now returns twice a year for her regular dental check-ups.

The Children's Hospital dental staff is composed of pedodontists, oral surgeons, orthodontists, periodontists and general practitioners. Children from birth to 20-years-of-age are treated in this facility, which is open Monday through Friday, from 8 a.m. to 4:30 p.m. Referrals may be made by calling (303) 861-6789. Emergencies after regular hours should be directed through the hospital's operator at 861-8888.

General Pediatric Surgery

Jack H. T. Chang, M.D.
Chairman, Department of General Pediatric Surgery
The Children's Hospital, Denver
Assistant Clinical Professor of Surgery
University of Colorado Health Sciences Center

On Christmas morning, six-year-old Allan was happily playing with a new toy, a space ship which projected small plastic missiles. Shrieks of laughter changed to coughing and wheezing when one of the missiles was accidentally discharged into his mouth and aspirated (inhaled) into the airway. Allan was immediately taken to Children's Hospital where the pediatric radiologist and surgeon confirmed, by X-ray, the location of the missile. Using a ventilating fibroptic bronchoscope, which allows the pediatric anesthesiologist to maintain the child's breathing, the foreign body was removed. Within 48 hours, Allan returned home to continue his holiday activities.

That same evening, a two-and-one-half pound baby boy was born, in Wyoming, with a defect of the abdominal wall resulting in exposure of the intestine. The Newborn Center's transport team, consisting of a neonatologist, transport nurse and respiratory therapist was dispatched and, within hours, the baby arrived at Children's Hospital. Because the amount of exposed intestine could not be returned into the abdomen, the pediatric surgeon constructed a synthetic silastic sac to enclose and protect the bowel, and then secured it to the abdominal wall. In the ensuing week, the silastic sac was gradually reduced in size, and the bowel returned into the abdomen. Finally, the sac was removed and the abdominal wall closed. Because the inflammed bowel could not function properly, a special silastic catheter was inserted from a neck vein to a location near the heart. Through this catheter high caloric solutions were given. For three weeks the baby gained weight normally without eating. Slowly, his intestine began to function and oral intake replaced the intravenous fluids. After six weeks of hospitalization, a happy growing baby was taken home by his mother.

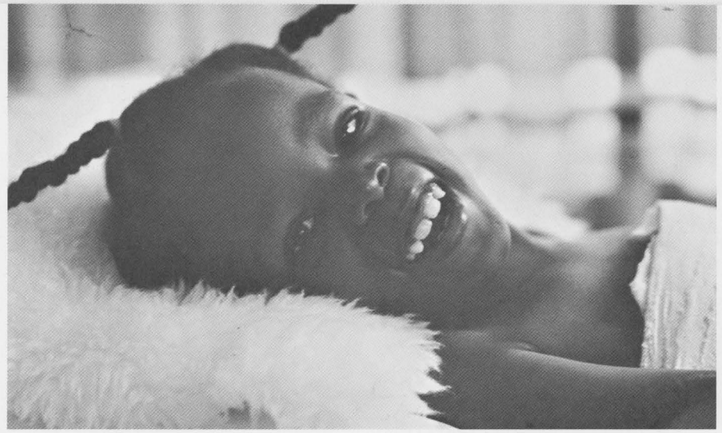
General pediatric surgery encompasses a wide variety of disorders from the common inguinal hernia and appendicitis to the complex multiple congenital anomalies and cancer.

While pediatric surgical procedures were performed as early as 1465, pediatric surgery, as a science, has only developed since the 1940s. Surgery at The Children's Hospital began in 1910, and was restricted to simple procedures which neither violated the chest nor abdomen. The high mortality due to infection and malnutrition made such procedures prohibitive. Since the development of aseptic technique, antibiotics and intravenous nutritional support, the number of cases performed in one week today often exceeds the annual procedures of the 1920s. Modern technology has demanded a team approach in the care of the pediatric surgical patient. The pediatric surgeon with his colleagues in Pediatric Radiology, Anesthesiology, Medicine Nursing, Oncology and Neonatology provides comprehensive care for his patients.

In 1977, over 1,000 general pediatric surgical procedures were performed at Children's Hospital. One hundred and seventy-seven were on infants less than one-month-of-age.

The Department of General Pediatric Surgery is staffed by nearly one hundred surgeons, five of whom restrict their practice entirely to the pediatric age group. Seven or more years of residency and fellowship training are required before special certification in pediatric surgery may be obtained. The Department provides training for surgical residents and fellows, and is active in pediatric surgical research. The keynote of the service is excellence in patient care which is maintained through continued education and critical peer review.

More information may be obtained by calling (303) 861-0070. After regular hours, a pediatric surgeon may be reached through the hospital operator, (303) 861-8888.



Neurosurgery

Robert W. Hendee, M.D.
Director of Neurosurgery
The Children's Hospital, Denver

Very few children, especially the younger ones, are hypochondriacs. So if a child complains frequently of a headache, he should be heeded. Headache, vomiting and sudden lack of interest in play activities or school can simply mean faulty vision — but, occasionally it means a brain tumor. Many brain tumors in children are benign; some are malignant but operable; a few are deadly.

PJ was a very active, into everything, seven-year-old. Although noisey at times, he was the joy of his entire neighborhood. One morning he began vomiting soon after jumping out of bed. Since he had no other symptoms, his mother sent him to school. However, the same event took place the next morning, and the day after he started to complain of headaches. PJ became less active and he slept more, changing from a boisterous boy to a very quiet one. Instead of running and jumping, he began to walk, slowly and with an awkward gait.

He was brought to The Children's Hospital where a CAT scan (X-ray) revealed a tumor at the base of his brain.

PJ's parents, despite the assurances from the neurosurgeon, felt that their son would never be the same; either his brain would be damaged or he would die. The neurosurgeon removed a slow growing cystic tumor filled with fluid, of a type unlikely to recur. After a few anxiety-filled days for his parents, PJ began to show improvement — his nausea and headaches were gone. Ten days later he was sent home. Soon he was walking, then running. The neighborhood returned to normal. PJ could be heard for blocks.

Our neurosurgeons also operate on many other disorders and injuries of the brain, spinal cord and central nervous system. Children may be born with congenital malformations such a hydrocephalus, a collection of fluid within the brain which causes enlargement of the head. Or they may have myelomeningocle, a protrusion of part of the spinal cord through an incomplete closure of the spine.

The Neurosurgery Department sees children from the premature newborn to young adults of 21-years-of-age. These children are first seen in our Neurology and EEG Laboratory, where referrals from physicians, schools and community agencies are accepted. For more information or to make an appointment, call (303) 861-6896.

Ophthalmology Department/Eye Clinic

Robert A. Sargent, M.D.
Chairman of the Department of Ophthalmology
The Children's Hospital, Denver
Assistant Clinical Professor
University of Colorado Health Sciences Center

When asked which body organ or physiologic function that an adult would least like to lose, most people respond, "loss of vision." Vision develops and matures only in the first seven to nine years of life, after which it cannot improve beyond the normal 20/20 level. Our role at Children's Hospital is to ensure that visual growth proceeds normally.

Five and one-half-year-old James had just entered kindergarten. One part of the pre-school testing given these youngsters was an eye chart vision test. When James read the chart with both eyes and with his left eye covered, he did very well. But with his right eye covered, he did not fare so well. The school nurse sent a note home with James, suggesting to his mother that he be taken to an ophthalmologist for further examination.

James' mother brought him to the Children's Eye Clinic where his eyes and vision were thoroughly checked. What the school nurse had suspected was diagnosed. James had amblyopia of his left eye. Amblyopia is most commonly due to deviated or crooked eyes (strabismus), a condition where one eye is not aligned, and, in comparison to the other, better eye, it is simply not being used. As a result, the vision in the crooked eye becomes lazy and weak. In order for James to im-

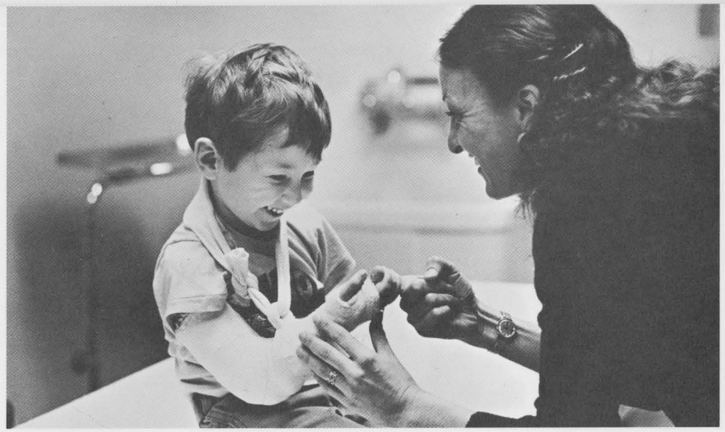
prove his weak eye, his doctor patched his good eye. Patching is not meant to straighten the eyes, only to improve the vision in the lazy eye. James wore his patch for nearly a month until his vision was normalized. He continued to come to Children's until he was nine-years-old for periodic check-ups, just in case the vision slipped back. Only once in that time did James need partial patching treatment.

Amblyopia is probably the most common cause for poor vision in children. James was lucky that his problem was detected early, because improvement cannot occur for this problem after visual maturity is reached, or beyond seven to nine-years-of-age. It is important that these children, in whom poor vision is suspected, be examined at four to five years of age. At this age, they are verbally responsive for an eye chart test. Waiting until later elementary school years usually is too late.

Children's eye department also evaluates children with ocular, neurologic and medical diseases that affect the eyes. Included would be ocular exams for diabetes, juvenile rheumatoid arthritis, congenital viral infections, developmental anomalies of the brain and eyes, etc. We also evaluate children who have developmental delays, and premature infants who are subject to blinding disease from prematurity and oxygen toxicity. The most frequent patient is the child who fails the routine screening on pediatric or school vision testing.

Children's Department of Ophthalmology is affiliated with the University of Colorado Health Sciences Center through its eye residency program. Over forty attending ophthalmologists are on the Children's Hospital medical staff. The clinic is open to any patient by direct telephone call or physician referral. Appointments may be made by calling Children's Outpatient appointment desk at 861-6536. If no answer, the hospital operator (861-8888) can give assistance. Eye examinations are held Tuesday and Friday mornings from 8 a.m. to 12 noon.

All pediatric age levels are treated, including teenage years. Ophthalmology consultations for other pediatric departments are available at any time, as is coverage of the emergency room for eye injuries.



Orthopaedic Center

Robert E. Ellert, M. D.
Chairman of Department of Orthopaedics
The Children's Hospital, Denver
Assistant Clinical Professor
of Orthopaedic Surgery
University of Colorado Health Sciences Center

A child with a deformity strikes a note of sadness in the heart of anyone who sees him. For this reason, one of the earliest medical specialties was concerned with the treatment of childhood deformity. Orthopaedics translates literally, "to straighten the child," and dates from the times of Charles Dickens.

Fourteen-year-old Sally had a striking spinal curvature associated with a large rib hump and a tilt of her shoulders and pelvis. She was referred to the Orthopaedic Center at Children's Hospital. The deformity had developed slowly, but her parents were alarmed at its severity. Lung function was impaired due to the distortion of the chest, and Sally was distressed by her warped appearance.

Our orthopaedists at Children's Hospital straightened Sally's spine with an operation that stabilized her in a straight position, markedly decreasing the hump in her back. Her whole outlook has brightened, and tests show no further deterioration in lung function and an excellent outlook for a productive life.

Fortunately, Sally's younger sister was examined in school for scoliosis and the curve in her back was discovered at a younger age. Presently, she is being treated by bracing in the Orthopaedic Center and should not require any operative treatment since she was detected at an earlier stage of the disease. Orthopaedists at Children's have participated in screening programs in many parts of the state for over five years, and early cases of scoliosis are being effectively treated by bracing and exercise.

Other deformities, such as a dislocated hip or clubfoot discovered at birth, can be treated, effectively preventing a deformity which would cause a child to limp, be clumsy or not be able to keep up physically with his peers.

Billy was born with damage to his brain, resulting in spasticity of his legs and an inability to walk. At an early age, he was seen in a cooperative Orthopaedic Clinic with the Development and Evaluation Clinic, and diagnosed as having cerebral palsy. Physical therapy treatment began immediately, followed by correction of contractures by tendon lengthenings and a vigorous program aimed at education and habilitation. Today, Billy is able to walk with the use of only a cane for support. He is progressing in school and should be able to have an independent life due to the long-term treatment program, which helped him to strengthen both his mental and physical abilities in spite of his chronic handicapping condition.

Celebrate

Other chronic physical handicaps are treated in the Orthopaedic Center, including spina bifida, congenital amputations and other birth defects. There are special clinics staffed by orthopaedists from the Denver community who are generous in using their time to help children with chronic handicapping conditions.

Injuries to bones and muscles are common in children, and fractures are treated by our orthopaedists on a regular basis in the emergency room and in the outpatient center at Children's Hospital.

The Orthopaedic Center treats children, from newborn to 21-years-of-age, with any type of dysfunction, deformity or pain related to the bones, muscles or nerves or conditions producing deformity of joints, limbs or spine. The Orthopaedic Center is open Monday through Friday, and accepts referrals from physicians, nurses, health agencies and public referrals from families who do not have a regular physician. Appointments may be made by calling the scheduling secretary at (303) 861-6600. A short description of the child's problem will help our secretary to direct the prospective patient to either a general orthopaedic clinic or one of our many specialty clinics that can deal with the child's problem.

Pediatric Otolaryngology Clinic

Thomas Balkany, M.D.
Director of Pediatric Otolaryngology Clinic
Assistant Professor of Otolaryngology
University of Colorado Health Sciences Center

It's invisible. No one can see a hearing loss. And, because it is painless, children with hearing loss usually go unnoticed until significant problems arise in school. Of all handicapped children, the hard of hearing are probably the most numerous. They are also among the least recognizable and, because of secondary behavior problems, are often mistakenly branded with vague, fashionable psychologic labels.

Michael was such a child. He seemed to be normal with the exception of having two or three serious earaches each year. He was a behavior problem at school, he was labeled hyperactive; and he was having a difficult time learning to read. The school's hearing test showed that he was unable to hear properly, so he was referred to Children's Hospital for coordinated care in the Pediatric Otolaryngology Clinic and the Department of Audiology and Speech Pathology.

At Children's, his hearing was tested by audiologists, experts in evaluating the hearing of children. Michael was found to have a significant hearing loss. Next he was seen by the otolaryngologist (ear doctor). Fortunately, he had the type of hearing loss which could be completely corrected by medical treatment.

Following his treatment, Michael's parents and teachers all noted improvement in his attention span, behavior and learning ability. With the help of speech and language specialists, Michael is making up for lost time with his education.

In addition to problems of the ears, the Pediatric Otolaryngology Clinic cares for children whose illnesses arise in the nose, sinuses, throat and voice box. Children of all ages, from newborns to adolescents, are seen routinely in the Otolaryngology Clinic. The patients may refer themselves, or more commonly, are seen after referral from pediatricians and other primary care doctors. The clinic is conducted every Tuesday morning from 9 to 11 a.m., and appointments may be made by calling 861-6800.

Plastic and Reconstructive Surgery

John E. Mara, M.D.
Director of Plastic and Reconstructive Surgery
The Children's Hospital, Denver

"Before anyone can love you, you've got to love yourself." An old cliche — but for a child who was born with a viable congenital deformity, such as cleft palate or birthmark, or a child who suffers from the trauma of severe burns, that self-esteem and self-worth, that loving yourself is often hard to come by. When a child, himself, is afraid to look in a mirror, how can he expect others to look at him with love in their eyes instead of pity or curiosity.

The process of growing up is as much emotional as it is physical, and a child with a physical deformity is subject to more pressure than a normally developed child. Without meaning to, a child's peers sometimes can be very cruel. The Plastic and Reconstructive Surgery Department is here to help these children; because for them, plastic surgery is not a luxury — it is a necessity.

The majority of congenital deformities are treated in childhood. The plastic and reconstructive surgeon is one of the specialists at Denver's Children's Hospital involved in their surgical treatment, along with oral and pediatric surgeons. Many of these patients, such as one with a deformity of lip or palate, need to be under continuous review by the plastic surgeon throughout childhood and adolescence and into adult life. At Children's Hospital, it is through the Cleft Lip/Cleft Palate Clinic and the patient is followed by a team of physicians and other specialists.

Other deformities requiring the reconstructive ingenuity and technical skill of our reconstructive surgeons are deformity of the external ear, sometimes involving an absence of major portions from birth; facial injuries in children, resulting from dog bites, athletic activities or automobile accidents; and haemangiomas, commonly known as birthmarks. There is, as indicated by these few examples, a very wide range of head, neck, trunk and limb deformities included in the scope of pediatric plastic surgery.

In the treatment of burns, the reconstructive surgeon plays an active role as a member of Children's burn team. The mortality, lengthy periods of surgical rehabilitation, residual disablement and disfigurement arising from these accidents provide a world-wide problem. Prevention of burns is, thus, the primary concern of the International Society for Burn Injuries. The plastic surgeon is involved in diagnosis, treatment and prevention of infection, care of the burned surface and skin grafting of the burn patinet. Working with the burn patient and his parents takes many months, a lot of patience and a lot of love.

Every child possesses a different growth and healing potential. Therefore, treatments are individualized to meet the specific deformity and age range. Appointments or referrals may be made through the hospital's Outpatient Clinic by calling (303) 861-6890. Our Plastic Surgery Clinic is held every third Friday, beginning at 2 p.m.

Helping the child to gain confidence and look normal, instead of "different" is the goal of plastic and reconstructive surgery.

Urology

William C. Campbell, III, M.D.
Director of Pediatric Urology
The Children's Hospital, Denver

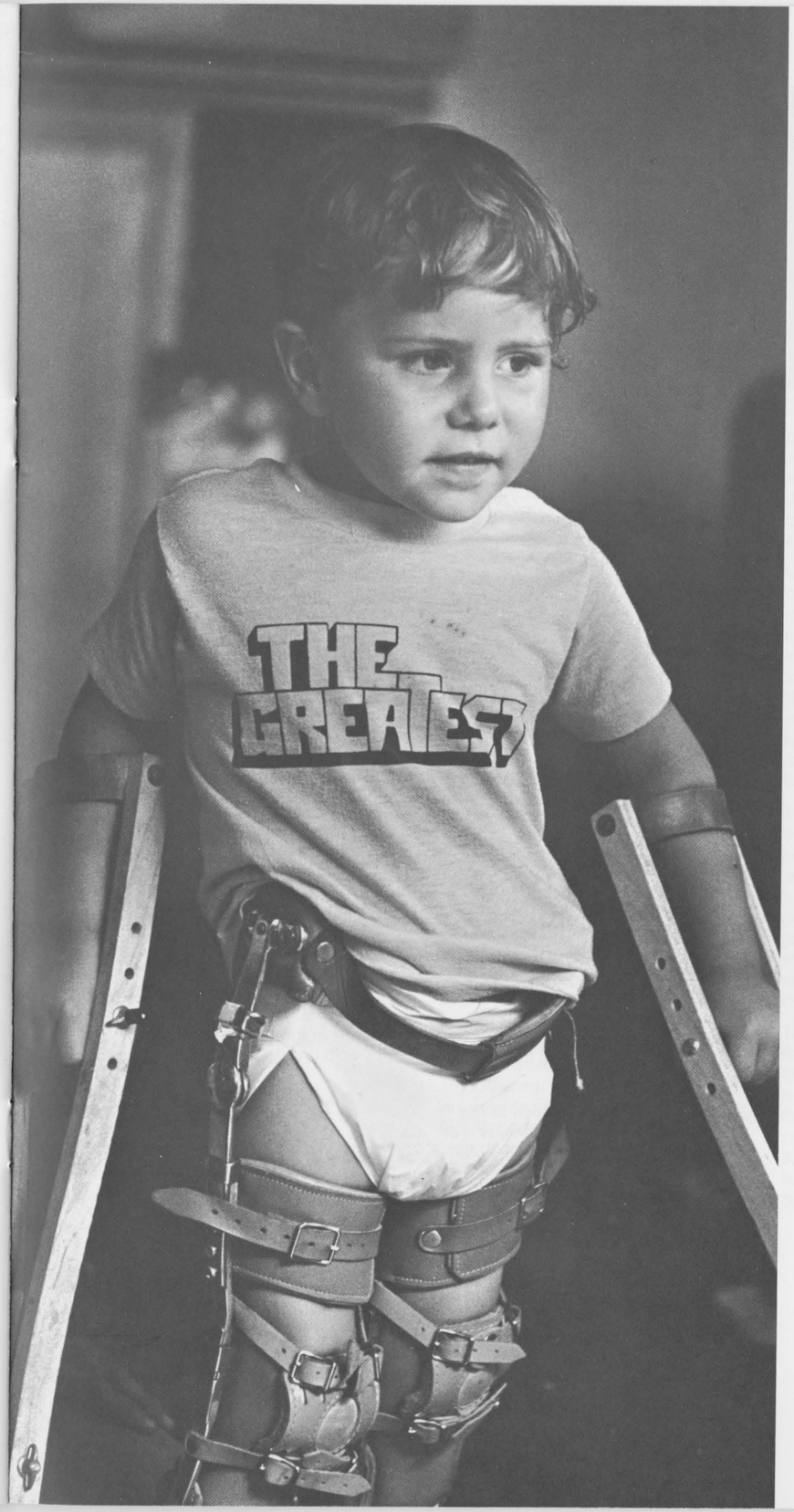
Renee sits in the center of her second grade classroom. She has a funny feeling. But before she can raise her hand and ask for permission to be excused to the restroom, the accident happens, just as it has happened many times before. Can you imagine the scene that follows? It's not hard to visualize Renee's embarassment, the smiles, snikers and unkind remarks from her classmates and the teacher's look of silence. Renee doesn't understand why this has to happen to her.

At Children's, our urologists understand, and they know that children, like Renee, can be helped to eliminate this problem. Pediatric urology isn't just surgery on another part of the body. It is surgery that can help a youngster stay reliably dry — like his friends — whether the problem is spina bifida, with its damaged bladder nerves, or simple bed wetting.

Almost daily, children with some type of urological distress come to our hospital and receive a thorough diagnostic work-up of these functional problems. The urologist decides upon the child's training and medical treatment which may involve electronics, radiology, developmental processes, medications and sometimes surgery. However, parents are assured, before any type of corrective surgery is performed on their child, that our urologists have made a precision investigation. The urologist will discuss with the parents how they made their final diagnosis. The entire urinary tract can be: visualized on X-rays and the parts probed; catheterized for specimens; and viewed directly internally, with the advanced optics of modern cystoscopes. The parents are instructed that the urinary passages depend on coordinated muscular activity which can be affected by congenital weaknesses and obstructions or by injections, and that these passages can be measured by pressures and flow notes. Many times, for cure, the child may need the aid of precise operative techniques.

Another aspect of our Urology Service is that of helping small babies born with an indeterminate sex — a rare condition which would be heart breaking were it not for surgical intervention. The genitalia, both internal and external, may be maldeveloped and even ambiguous between male and female. When this rare condition is discovered, a cooperative/consultative/diagnostic effort between the urologist and parents, endocrinologists, psychologists and social workers occurs and surgery is the final prognosis. In infancy, refurbishing of the genitalia is done by our genito-urinary surgeons, using special plastic surgery techniques. The urinary and genital systems, like others, are apt to be involved in widespread, abnormal, birth syndromes, and continued, thoughtful observation helps prevent advancing damage to these organs.

Children's Hospital has a daily, morning outpatient clinic which accepts self or doctor referrals for pediatric urologic diagnosis, treatment and followup. Coordination with other specialists and clinics is assured. This clinic is staffed by Drs. William A. Campbell, Ronald R. Pfister and the Urology resident of the University of Colorado Health Sciences Center affiliated rotation. Nearly all of the Denver metropolitan urologists are on the Children's Hospital Medical Staff, participating in both outpatient and inpatient urologic activities. Appointments are obtained by asking for Urology through outpatient appointments, 861-6536, and referring diagnosis will facilitate assignment to Urodynamics, UTI, Surgery, Enuresis, or other special clinics scheduled on different days.



Celebrate

Audiology and Speech Pathology

Carol H. Ehrlich, Ph.D.
Director of Audiology and Speech Pathology
The Children's Hospital, Denver

The ability to communicate ideas and feelings distinguishes humans from lower animals. However, because of health problems, such as hearing loss, brain dysfunction, muscle disorders or emotional problems, some children suffer communication disorders, which then can lead to learning and social/behavioral problems.

Two-year-old Si had all the words but no one could understand him. He couldn't put words together to form a sentence or express his ideas. Si's parents brought him to Children's Department of Audiology and Speech Pathology where he was diagnosed as having an "expressive language disorder." Si was enrolled in one of the department's many outpatient speech programs, and after two and one-half years he was considered a graduate. According to his mother, Si had become so expressive, he never wanted to stop talking.

Si is just one of the success stories from Audiology and Speech, a department which handles 25 to 30 thousand patient visits per year and helps to make productive changes in the lives of children and their parents. Accredited by the American Speech-Language-Hearing Association, this department has provided diagnostic and treatment services for children since 1948.

Our clinical staff includes eleven speech-language pathologists, three audiologists, three learning specialists and a social worker. All are educationally credentialed at the Master's or Doctoral level, with certification in their respective areas. They have been handpicked for their exceptional expertise in meeting the special needs of young children.

Referrals may be made by physicians, schools, health agencies or parents by calling 861-6800. Fees for services are determined by financial ability and families who need financial help are directed to the Scottish Rite Foundation, which has been a giving partner of the department for twenty-seven years. Clinic hours are 7 a.m. to 5:30 p.m. weekdays, with additional hours by arrangement.

Diagnostic service is provided to any persons 0-21 years of age. Therapy is offered to children who have the potential to profit from intervention, but not to children whose primary diagnoses are retardation or autism.

Special equipment, materials, furniture, schedules and staff are provided to serve a pediatric population so testing can be valid and thorough, so parents' questions and concerns can be met so therapy can be effective. In addition, unique programs are offered; therapeutic kindergarten and pre-schools developmental disabilities stimulation group, language groups and summer learning skills groups. In addition, staff members provide consulting and teaching services to community clinics, agencies, schools and hospitals by arrangement with the director.

A consulting multi-disciplinary cleft palate team is coordinated by the Department of Audiology and Speech. Plastic surgeons, orthodontists, prosthodontists, otologists and speech pathologists from the hospital community rotate with our team for monthly clinics, providing recommendations for care to the referring physicians. Appointments for cleft palate clinic are also made by calling 861-6800.

Behavioral Sciences

Patricia was a severely depressed 13-year-old. Her performance in school grew steadily worse since her parents' divorce. One day she took money from her mother's purse, and ran away from home. A few days later she was returned home by the police.

Seven-year-old Keith suffered from serious destructive behavior. Keith's family history revealed he had been severely abused as an infant. As a result, Keith was taken from the custody of his mother. His uncontrolable behavior caused him to be moved from one foster home to another.

Both Patricia and Keith were referred to The Children's Hospital Behavioral Sciences Department. The Behavioral Sciences staff includes three child psychiatrists, twelve psychologists and five psychiatric social workers who make an average of 925 patient contacts a month. This staff represents the outpatient and, particularly, the inpatient psychiatric components at Children's, and provides a wide range of psychiatric and psychological services to children, adolescents and their families, including psychiatric evaluations for referring pediatricians, schools and social agencies as well as custody evaluations for the courts and supervised visitations for divorced parents. The department also provides psychiatric and psychological consultation to other departments in the hospital such as Oncology, Occupational Therapy, Physical Therapy, Burn Center, Speech and Audiology and Social Services.

Psychiatric problems in children can usually be divided into two distinct categories: endogenous and reactive. Patricia was very typical of a child with a reactive disorder. She had been very unhappy since her parents' divorce. During her first visit to Children's, she had told her therapist that she had hoped running away would force her parents back together. Patricia's clinician set up a treatment program which included therapy for the family as well as Patricia. After a few weeks, the family began to resolve their feelings about divorce and Patricia was doing better at both school and home.

A child suffering from a reactive disorder, such as Patricia, usually has a short-term problem which is treated on an outpatient basis. The problems are in response to some kind of upset, conflict, accident, death of a relative or birth of a new sibling. Usually the child will resume a normal level of functioning after receiving outside help.

As in the case of Patricia, a divorce can cause strain on a family, as well as raise various legal questions. Our Department of Behavioral Sciences also has custody teams who recommend to the court which parent should obtain custody of a child. Approximately 50 custody evaluations a year are done in the department including a visitation program for the children of divorced parents.

Unfortunately, Keith suffered from an endogenous disorder. This disorder is not in response to a specific, recent incident in the child's life, but reflective of long-standing intrinsic problems that require more intensive treatment. While Keith undergoes therapy which may continue for several months or several years, the Behavioral Sciences staff provides supportive counseling to his current foster parents.

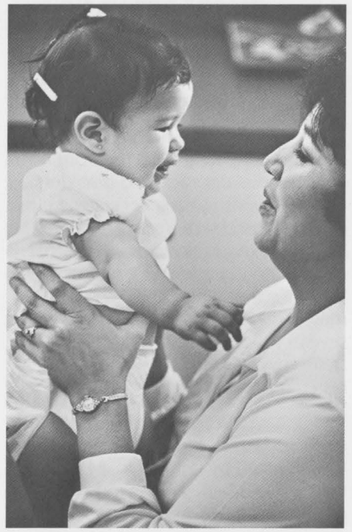
The Behavioral Sciences Department also includes a Mental Health Inpatient Unit directed by Ron Rabin, M.D., which is for children with more serious problems. The 10-patient capacity unit provides intensive psychiatric treatment and a structured therapeutic group living setting where children can grow emotionally and develop the necessary skills for living in the real world.

The Department of Behavioral Sciences had been designated a specialty clinic by the Division of Mental Health, thus receiving State funding for indigent families. Referrals may be made between 8 a.m. and 4:30 p.m. by calling 861-6200, Monday through Friday. After hours emergency referrals can be made by calling 861-8888.

Department of Development and Evaluation Child Development Unit

Pamela McBogg, M.D.
Director of Development and Evaluation
Child Development Unit
The Children's Hospital, Denver

One of the most distressing and frustrating experiences for a parent is to know his or her child has a learning and/or emotional problem, but is unable to define it and thus determine how to help the youngster. The trouble might be a learning disability, mental retardation, developmental delay, emotional disturbance or a combination of any of these. The Child Development Unit of the Development and Evaluation (D&E) Clinic is designed to diagnose such problems and assist the family in developing and carrying out a comprehensive plan of treatment.



The Child Development Unit evaluates children ages 0 to 21 years. The child is viewed from the medical/physical, social/emotional and intellectual/performance standpoints. Directed by Pamela McBogg, M.D., the clinic's permanent staff, which includes developmental pediatricians, pediatric nurse practitioners, social workers and rotating staff (pediatric fellows and residents), utilizes the diagnostic language, behavioral sciences, physical and occupational therapy and medical specialists, as dictated by the child's problem. The unit staff then discusses evaluation results and recommendations with the child's family.

Referrals for services are accepted by the unit's social worker from parents, physicians, teachers and other professionals during clinic hours, 8 a.m. to 4:30 p.m., Monday through Friday. After the referral has been taken and the parents agree to the evaluation, appointments for further evaluation will be scheduled.

The Child Development Unit also sponsors an active educational outreach program, directed toward professionals in the community, as well as to parents and the general public. More information may be obtained by calling the Child Development Unit at (303) 861-6630.

Rehabilitation Unit

Jean L. McMahon, M.D.
Chairman of Development and Evaluation Rehabilitation Unit
The Children's Hospital, Denver
Associate Clinical Professor of Pediatrics
University of Colorado Health Sciences Center

To have a child born with a physical defect is always a disappointment and, many times, a shock to the parents. To have a child who appears normal at birth, but fails to keep up with other children, or to have a normal child who experiences trauma, which results in a physical impairment, can be equally devastating.

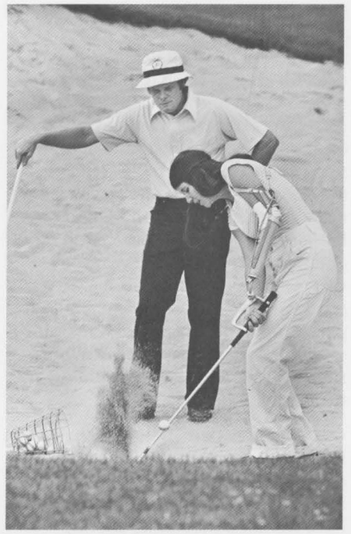
But more importantly, every child is an individual with his or her own personality and capabilities — with his or her own need for love and acceptance in order to develop to full potential. The child is also part of a family who needs to know the child's strengths and weaknesses, and how those capabilities can be used or assisted in order for the family to provide their child with appropriate care while developing a mutually rewarding relationship.

The Rehabilitation Unit of the Department of Development and Evaluation (D&E) is a multi-disciplinary clinic which provides complete diagnostic services for the multi-handicapped child with an orthopaedic component such as cerebral palsy, spina bifida, congenital amputations, etc.

The clinic's staff consists of three physicians and two social workers. The diagnostic work is provided not only by the clinic staff, but by physicians in all of the hospital's specialty areas, as well as Physical Therapy, Occupational Therapy, Audiology and Speech Pathology and Behavioral Sciences.

D&E Rehabilitation Unit staff members attend the various clinics in which these children are seen; they interpret and discuss with the family what the various diagnostic procedures mean with regard to their child; and they work with the family to develop a program which encompasses medical care, therapies and education. If indicated, they contact other outside agencies or schools to discuss the medical findings and physician recommendations.

Patients from an eight-state area have been referred to the clinic because of the many specialty clinics offered in the hospital. Patients, from birth to 21-years-of-age, who are referred by private physicians, state health departments, schools or parents, are accepted for diagnostic work by the clinic staff. Physician or agency referrals are preferred. The clinic is open Monday through Friday, 8:30 a.m. to 4:30 p.m., and appointments may be made by calling (303) 861-6630.



Handicapped Sports Program

Duane G. Messner, M.D.
Co-Director of the Amputee Clinic
Medical Director of the Handicapped Sports Program
The Children's Hospital, Denver

Eugene V. Bigelow, M.D.
Co-Director of the Amputee Clinic
The Children's Hospital, Denver

Elizabeth Williams, R.N.
Coordinator of Rehabilitation
Director of the Handicapped Sports Program
The Children's Hospital, Denver

Carol J. Page, R.P.T.
Co-Clinical Supervisor of Physical Therapy
Coordinator of the Neurologically Impaired Ski Program
The Children's Hospital, Denver

"If I can do this, I can do anything," is the motto of the National Handicapped Sports and Recreation Association. It also is the motto of the children who participate in The Children's Hospital Handicapped Sports Program. And, it all began with the Children's Amputee Clinic, established in 1965.

Designed as a regional juvenile amputee center, the clinic, which is conducted twice a month, provides a comprehensive team approach in treating children, from newborn through age 20, who have congenital, malignant or traumatic amputation. The clinic fits the child with prostheses (artificial limbs), working with and training the child. The Amputee Clinic's professional staff consists of orthopaedic surgeons, pediatricians, oncologist, physical and occupational therapists, medical social worker, psychologist, rehabilitation nurse and certified prosthetists.

The idea of amputee skiing for the Children's Hospital amputees, as part of the total rehabilitation program became a reality at Colorado's Arapahoe Basin on January 3, 1968. Fifteen boys, ages seven to 15, joined the Three Track Ski Club, so named because of the tracks left in the snow from a one-legged skier using two outriggers (forearm crutches with short skis attached at the base). Before that first day was over, the certified instructors, who had worked so hard to develop the technique of three track skiing, were all made aware that these skiers were very normal youngsters who just happened to be missing a limb.

The success of amputee skiing did not "just happen." Many hours of planning and gathering of equipment went into the program before it met with success. Skis were donated by manufacturers; boots were donated by various ski shops in Denver and national manufacturers; outriggers were assembled at brace shops in the Denver area; funds were donated by groups and individuals to charter a bus for the skiers each week; and Arapahoe Basin generously donated the tow tickets. Also, doctor and nurse teams always went along with the amputees to provide on-the-spot first aid, which, fortunately, has seldom been needed.

In 1971, the Three Track Ski Club was invited to bring its program to Winter Park, Colorado. It was felt that this new ski area would give the youngsters variety and new experiences, since many of them ski only with the club. We were right! The move to Winter Park proved to be as exciting and successful as the first year of the program.

Celebrate

During the last nine years at Winter Park, our program has grown in popularity and, consequently, in size. Approximately 30 children, with either upper or lower extremity amputation, participate annually in the amputee ski program, which is held weekly for ten weeks. Winter Park generously donates season passes for all the handicapped skiers each year; and, as in the early years, the program continues with an all volunteer staff. The instructors are under the direction of Hal O'Leary, P.S.I.A., director of Handicapped Skiing at Winter Park. Our skiers are eager to prove themselves — they learn quickly, and develop into remarkably confident skiers after only one season. One of our teenager's is a national champion and has competed in international races.

The program worked so successfully for amputees that in 1975 a ski program was begun for children afflicted with cerebral palsy and other neurological defects. Because of the type of handicap, these youngsters require more training and a different educational approach. Usually after his second year, the skier with cerebral palsy has progressed enough to ski along on more difficult terrain. The Children's Neurologically Impaired Ski Program is also hosted by and at Winter Park — every other week, beginning in January, for seven sessions.

This program begins with evaluations of the youngsters' physical picture in order to establish a motor skill baseline, and to provide information regarding their physical limitations, establish a realistic guideline for their skiing potential and determine their need for ski equipment/technique adaptations.

Following these evaluations, the equipment is readied and all participants begin a series of group exercise sessions at the hospital and a home exercise program. These exercise programs are designed to help ready them for the physical demands of skiing.

In the meantime, volunteer ski instructors, many of them medical professionals, are trained by Winter Park's Hal O'Leary; preparing the instructors for specialized ski instruction for these children. The instruction techniques are individualized, and each child skis on a one-to-one basis with a volunteer instructor. Initially this often means actual physical control. Independence from this support is an early goal.

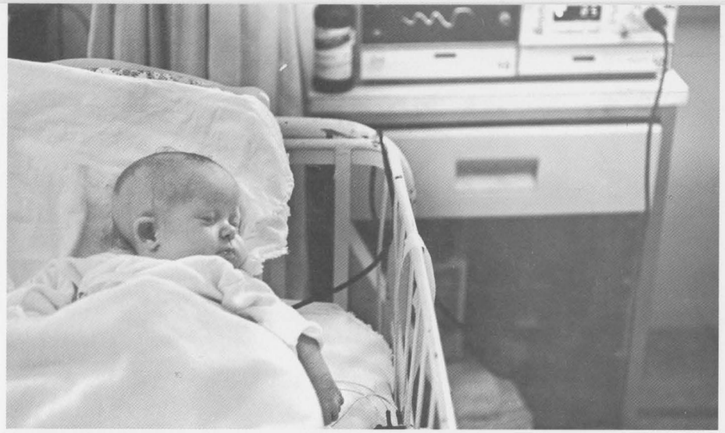
Equipment is also personalized and often includes: a lift on one ski to compensate for a leg length discrepancy; mismatched boots for differences in foot size; metal ski bras to help control the ski position and, therefore, to aid in control of the skiers legs as one unit; outriggers to give a wider base and greater stability/control; and other special adaptations that might be necessary.

For both the amputee and neurologically impaired ski programs, reassessment at the end of the ski season shows considerable gains in strength and endurance, as well as improvement in flexibility. Although these improvements are of considerable benefit, the most remarkable gains are seen in the handicapped skiers happiness, good feelings about themselves, association in a sport with their peers and family, and last, but certainly not least, it's measured in their SMILES! As one youngster puts it, "It's kind of like a dream because movement, like walking, doesn't come easily for me. But in skiing, I don't have to fight it. The mountain does it for me."

Because skiing involves only the fall and winter seasons, a year-round schedule for rehabilitative sports was initiated in 1969. During that summer, a golf program for handicapped youngsters began at Hiwan Country Club in Evergreen, Colorado. It has since been moved to the Denver Country Club. The club and its professional instructors donate their time and facilities to the handicapped golf program. In 1977, the Denver Country Club's tennis professionals began a program of teaching these children to play tennis. These two programs, along with the skiing, have met with great success and have proven to be great confidence builders.

Our Handicapped Sports Program has been successful mainly because of many special friends and equipment manufacturers and retail outlets, who have donated their time, talents, equipment and financial resources. Several of these very special friends are: Vance Giddings, a licensed Golden, Colorado, gunsmith, who assembles the rocker mechanism for the skiing outriggers; Mr. and Mrs. Joseph Sperte, owners of Denver's LaFitte Restaurant, who annually sponsor a benefit and donate all of the proceeds to our Handicapped Sports Program; and ReMax Realty, which also sponsors an annual fund raising event for this special program.

Two color sound films — "Two, Three, Fasten Your Ski," about our amputee skiing; and "The Mountain Does It For Me," about our neurologically impaired skiing — are available for rental or purchase. For more information about the films or our Handicapped Sports Program, call (303) 861-6607 or 6794.



Intensive Care Unit

James I. Gilman, M.D.
Director of Intensive Care
The Children's Hospital, Denver

For most of the patients at Children's, hospitalization means an overnight stay. For others it means multiple operations and weeks of intensive care. The Intensive Care Unit (ICU) is reserved for critically ill children who require a high concentration of skilled care and survival equipment. Here, time is of the essence. Years of training and experience are compressed into a few moments when the right decision must be made instantly and hands must perform unfalteringly. These young patients are in the greatest need and their care means life.

Five-year-old Charla was left unattended in the bath tub while her father ran to answer the door. She stood up to get out of the tub and slipped, hitting her head on the side of the tub as she fell. Her father came back within minutes and found her face down in the water. With mouth-to-mouth resuscitation he revived her breathing, then telephoned for help. Charla was rushed to Children's hospital and into surgery to close up her head wound.

Following surgery, she was transferred to the Intensive Care Unit, where the electronic heart monitors remained attached to the chest. A day later her heart stopped, but with the warnings given the ICU nurses by the monitors, immediate action was successful in re-establishing a regular heart beat. Artificial ventilation was begun immediately.

Charla spent a total of four weeks at Children's, most of it in our Intensive Care Unit. One can come no closer to death, yet Charla was discharged with the prospect of a healthy life ahead of her.

The Pediatric Intensive Care Unit is a 32-bed patient care area divided into four, eight-bed segments. One segment is set aside for the care of burn patients with acute burns and chronic or rehabilitative needs. The other 24 beds are for medical and surgical patients. In general, the age range for ICU patients is from one month through 21 years. However, exceptions are made for patients younger than one month who have particular intensive care or isolation needs that can be provided for only in the pediatric unit. Also, on occasion, patients older than 21 receive care for congenital anomalies or other conditions closely related to pediatric disease in our ICU.

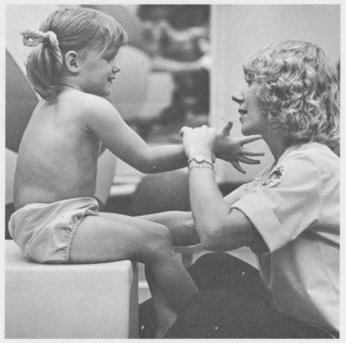
The ICU is staffed by the Director James I. Gilman, M.D., an anesthesiologist and Associate Director Robert Dobrin, M.D., a pediatrician who also will administer the pediatric transport team. In addition, there is a group of full-time and part-time staff physicians who act as monthly attending physicians in the unit. The housestaff consists of a critical care fellow and residents at the PL-1 and PL-3 levels. Nursing coverage is provided by a head nurse, several clinical specialists, permanent team leaders for all shifts and staff nurses who have the assistance of other paramedical personnel and ward clerks.

The Intensive Care Unit is open to referrals of patients from physicians and hospitals in the Rocky Mountain area. A pediatric transport system is being developed and expanded to provide critical care, in transit, for patients referred from outside of Children's Hospital. It is expected that approximately one-quarter of the patients in the unit will be admitted directly to the ICU for critical care. The other patients will come either from surgery or from the wards when their condition warrants a transfer to the ICU.

In 1978, there were 1,038 admissions to our Intensive Care Unit, divided almost equally between medical and surgical patients. The unit is equipped to handle all kinds of medical and surgical problems, including the use of advanced life support systems. There is housestaff present at all times in the unit and referrals can be made at any time of the day or night through the hospital admitting resident, the resident in the Intensive Care Unit or directly through attending physicians either in medicine surgery or any of the subspecialty areas.

The Burn Unit utilizes eight of the intensive care beds; four are open ward beds and four are single bed isolation units. Burn patients will receive their care from the Intensive Care Unit nurses as well as from specialized burn nurses who are part of the larger Burn Team.

The goal of the Intensive Care Unit is to provide the highest level of critical care to any pediatric patient in the Rocky Mountain area in need of this care. In addition, our ICU will serve as a center for education and training of pediatric housestaff, fellows and critical care specialists whether in training or returning for updating of their critical care skills.



Occupational Therapy

Ann Grady, OTR, FAOTA
Director of Occupational Therapy
The Children's Hospital, Denver
Affiliate Faculty
Colorado State University

Imagine the difficulties which arise when something so basic as feeding/eating is interrupted by movement disorders. A tiny baby in one of Children's perinatal centers or a baby recently taken home by his new parents may be having difficulty coordinating suck-swallow patterns for feeding. At stake with poor feeding patterns is adequate nourishment for growth and interruption in relationships between parents and child which usually begin developing with satisfactory feeding experiences.

Or, think of the child who should be self-feeding — a definite step toward independence. Some children cannot feed themselves because they have neurological or muscular disorders which delay development of postural ability to control movement and prevent repetition of movements needed to develop automatic patterns for self-feeding. Without well-developed movement patterns, the child may not be able to take in and chew all types of food. Or, the child may not develop hand-to-mouth patterns by first, finger-feeding, followed by spoon-feeding and eventually adapting movements to knife and fork skills. A child who cannot get his hand or other objects to his mouth, because of movement disorders, is severely handicapped in the development of self-care and independence.

Occupational Therapy's goal is to facilitate a child's acquisition of self-care (feeding, dressing, etc.) and developmental (writing, skipping, ball playing, etc.) skills. Childhood skills develop progressively as the child adapts general movements through purposeful activities from which skills evolve. For example, a child progressively watches and manipulates blocks, strings beads, places pegs in pegboards, etc., in order to develop intricate hand movements and visual guidance of movement needed to skillfully color with a crayon, then write with a pencil. Or, a child adapts balance and movement originally learned from walking to variations of running and hopping, and eventually to skipping skills. When a child's normal development of skills is interrupted by slow development, disease or injury, an occupational therapist evaluates the extent and degree of the problem and plans a remediation program based on the normal skill development process.

Our Occupational Therapy Department at Children's evaluates and treats children with congenital and acquired physical and/or perceptual dysfunction which interferes with a child's development. Occupational Therapy is part of the total inpatient and outpatient (re)habilitation program at the hospital. Children, aging from newborn to 21 years-of-age, are referred to O.T. by their private physician or by a hospital staff physician, or from specialty clinics within the hospital. Parents, schools, agencies, etc., may make referrals with physician collaboration. All children are evaluated by means of specific occupational therapy standardized tests and clinical evaluations, administered by one of our nine registered occupational therapists. Recommendations for therapy at Children's or at other centers are made in accordance with the results of the evaluation.

Children who benefit from occupational therapy include those with diagnoses of cerebral palsy, sensory integration/perceptual problems, burns, amputations, hand injuries, juvenile arthritis, spinal cord injuries or deficiencies, head trauma or central nervous system infections, developmental delay, failure to thrive or infants at risk for developmental problems.

Children with cerebral palsy have abnormal muscle tone which must be controlled through therapy while more normal postures and movements are facilitated through activity. Children with sensory integration dysfunction need activities which require perceptual judgments to coordinate postures and movements into smooth skillful patterns. Children with trauma such as burns, hand injuries, etc., need therapy to restore functions which may be lost through the trauma itself or the interruption in development. An occupational therapy program following trauma usually consists of splinting to maintain functional positions of joints during recovery, range of motion to maintain the ability to move while normal activity is limited and, finally, activities to restore active movement patterns and functional ability.

From babies to adolescents, movement through activity, independence in self-care and proficiency in other childhood-school skills is the key to the occupational therapy program at Children's. Fortunately, activities are natural child motivators. With our occupational therapy expertise in designing activities to promote development whenever dysfunction has interrupted the process, we give these children a better chance to achieve life-long independence; an independence which is crucial to both their mental and physical well-being.

Pathology/Laboratory

Blaise E. Favara, M.D.
Chairman of the Department of Pathology
The Children's Hospital, Denver

The evolution of pediatrics over the past several decades has been associated with a trend toward testing of biological fluids and tissues, resulting in more precise diagnoses, accurate monitoring of the condition of sick patients and response to therapy. It is not unusual for the physician to be reluctant to make a diagnosis before laboratory test results are available. Also, important decisions regarding the administration of many types of drugs are made only on the basis of laboratory test information.

Children's Pathology/Laboratory Department embodies state of the art facilities and instrumentation used by highly trained technical and professional staff with special expertise in this discipline as it relates to the infant and child. Because there are so many diseases, our laboratory has a correspondingly wide variety of special disciplines within it.

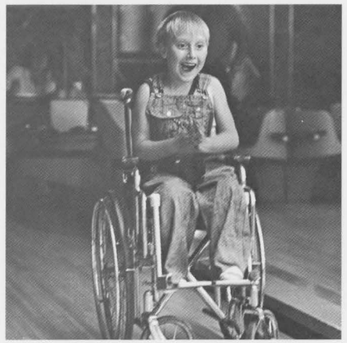
Babies dictate the necessity for small samples, and thus ultramicro techniques are routine in our chemistry and hematology laboratories. The Blood Bank, which is dependent on its own registry of voluntary donors, is accustomed to providing microtransfusions for small babies, specific blood components for patients with leukemia or cancer and for children undergoing surgical procedures.

The microbiology laboratory has a repertoire of tests designed for clinical relevance and rapid reporting. A cytogenetics laboratory provides modern techniques in identification of disorders associated with abnormal chromosomes. The tissue laboratory is capable of in-depth study of surgical and biopsy specimens, including the use of transmission and scanning electron microscopy, and is unique in the nation in regard to these capabilities and its orientation to rapid and meaningful service.

All of the various laboratories within our Department of Pathology are integrated into a cohesive patient care oriented unit and all data processing is carried out through a sophisticated computer system, which ensures accuracy and rapid availability of test results.

The pathologist's function is to examine a specimen, whether it be urine, cerebrospinal fluid, tissue samples or blood, and determine the nature and extent of disease present. This is particularly important when malignancy is suspected. In such cases, the pathologist is responsible for determining whether the surgeon must remove a limb or an organ.

The practice of pathology carries with it a tremendous responsibility one which requires great technical knowledge and experienced skill. The absolute basis of this highly specialized service lies in the department's personnel and their dedication to serve the patient, the family and the physicians at Children's Hospital.



Physical Therapy

Lou Shannon, RPT
Director of Physical Therapy
The Children's Hospital, Denver

Fifteen weeks early, Peter was born on January 1. Besides being severely premature, weighing only one pound and nine ounces, he suffered from a cerebral hemorrhage, bleeding in the main portion of his brain. Peter was rushed to the Children's Newborn Center Intensive Care Unit, where our doctors worked over him for many long hours, and where his parents began to hope and pray that their son would not be severely brain damaged, would not be abnormal and would live.

Little Peter did live, but he had suffered brain damage, which affected his central nervous system. At less than two-months-of-age, he was diagnosed as having cerebral palsy, with involvement of both sides of his body and including his facial muscles. At that point, even before he was literally to have been in this world, our Physical Therapy Department entered into his young life and his treatment picture.

Everyday, one of our registered physical therapists would provide therapy to this tiny baby, housed in his isolette unit in the Newborn Center. Normal babies, no matter how small, are able to move around on their own; they are able to bring their hands into contact with their mouths and their bodies; and they have the developed facial muscles necessary for sucking and feeding. Because of his brain damage, Peter was severely disoriented and could do none of these things.

Physical therapy for Peter began with the therapist moving his arms, hands legs and entire trunk for him, which helped develop his muscle coordination and break up the rigid tone of his body so he could relax. Through these relaxation activities, Peter began feeding better and he also gained head and neck control. Also, in order to develop body image, the physical therapist would put Peter's hands to his face and mouth, and touch his hands to other parts of his body. After only three months, Peter had gained enough muscle control to do this on his own.

Physical therapy on such a young patient, or on any patient, requires patience, understanding and a lot of love. Those same elements of care also are provided to the parents. When Peter's mother tried to pick him up to comfort him, his body would become rigid and he would pull away from her. Her feelings of rejection and despair were quickly soothed by Peter's physical therapist who explained that this was a normal reflex reaction of a child with brain damage. Our therapists instruct, train and counsel parents. They help them understand what normal development is, and they help the parents appreciate and celebrate in their baby's every accomplishment.

During his stay at Children's, Peter was followed not only by our Physical Therapy and Perinatal Departments, but by several pediatricians, a pediatric surgeon (surgery was required for a collapsed lung), the Occupational Therapy Department and the Development and Evaluation Clinic. On June 1, five months to the date of his arrival, Peter was permanently reunited with his family and sent home.

Twice per week, during the next year, Peter was seen as an outpatient in our Physical Therapy Department. In the year following, his visits were reduced to once a week. After that he was referred to a treatment center in his community for both physical and speech therapy. A priority goal of this department is to get the child out into his own community or school, not to keep them here forever.

Now, four-year-old Peter returns annually for reevaluation. Because our physical therapists were able to help Peter to use his own muscles at an early state of development, he is walking, running and playing independent of any physical supportive devices. Our therapist, who was most involved in Peter's care and who fell in love with him, confidently states that Peter's future is with normal people.

Our Physical Therapy staff, consisting of ten licensed/registered physical therapists, treats children who have developmental delay from brain dysfunction, cerebral palsy, spinal defects, congenital or traumatic amputees, burns, scoliosis and other postural defects, fractures and other orthopaedic conditions, diabetes, post-surgical conditions, dysfunction due to cancer or tumors, juvenile rheumatoid arthritis or muscular dystrophy.

All patients must be referred by physicians on The Children's Hospital staff. However, other physicians may refer patients by written referral, countersigned by a full-time Children's staff physician. The Physical Therapy Department is open from 8 a.m. to 4:30 p.m., Monday through Friday, for treatment of both in and outpatients. Inpatients only are treated on Saturdays. Appointments may be made by calling the Physical Therapy Department at (303) 861-6794. A therapist is on call through the hospital operator, 861-8888, for emergency treatment at all other times.

As a part of the total Children's pediatric team concept, our Physical Therapy Department's goal is to "habilitate" or rehabilitate" children to their maximum potential: assisting them in adapting to their disability; recognizing and including the entire family as a part of the child's total care; helping in educational or vocational planning; and assisting each patient in taking his place in society.

Radiology

John B. Campbell, M.D.
Director of Radiology
The Children's Hospital, Denver

A frail, prematurely born infant in severe respiratory distress is transferred to The Children's Hospital. What is the cause of his breathing difficulty? A three-year-old child is found by her mother to have a firm abdominal mass. How is this mass evaluated? For three months, a teenage boy has had intermittent, burning pain in his upper abdomen — aggravated by eating spicy food, and partially relieved by antacids. Does he have a peptic ulcer? A six-year-old boy has pain and swelling about the elbow after falling from his skateboard. Is there a fracture or dislocation?

The answers to all of these questions and numerous similar problems are usually obtained in the Radiology (X-ray) Department, a behind the scenes job that is a vital supportive service used throughout The Children's Hospital. Remarkable advances in the accuracy of medical diagnosis have been made over the past two decades, many of which have been in the field of radiological imaging. Abnormalities of the skull, heart, lungs, gastrointestinal tract, skeletal system and genito-urinary tract are being correctly diagnosed by X-ray study, providing enormous assistance to our pediatric clinicians.

How much can an X-ray film tell about an injury or an illness? Sometimes, very little . . . to an untrained eye. That is why radiologists are so important.

These doctors are extensively trained to interpret images produced by X-ray equipment. Training to become a radiologist is long and difficult. A candidate must be thoroughly educated as a general physician; he must then develop a working knowledge of radiobiology, physics, mathematics, engineering and the wide range of medical specialties from anatomy and physiology to orthopedics and cardiology. Our Radiology Department enjoys an outstanding reputation locally, statewide and nationally. The department is under the full-time direction of a physician, who, in addition to having all the necessary training in radiology, is fully trained in pediatrics, and is one of only a handful of physicians certified by the American Board of Radiology and the American Board of Pediatrics. Thus, the diseases and anomalies (abnormalities) which are unique to the infant and child are fully understood and thoroughly evaluated.

All technical and professional personnel in the Radiology Department receive additional training in Pediatrics when they begin work at Children's, and they continue to receive in-service educational programs which help them maintain and improve their skills. The special medical and emotional needs of children are constantly emphasized. A friendly and cordial atmosphere is maintained so that a visit to X-ray is most apt to be a pleasant one, rather than frightening or intimidating.

Plans are being formulated and funds are being sought to add all of the newer diagnostic imaging modalities to The Children's Hospital Radiology Department, including computerized tomography, ultrasound and nuclear medicine.

Respiratory Therapy

Charles H. Lockhart, M.D.
Respiratory Therapy Medical Director
The Children's Hospital, Denver
Associate Clinical Professor of Anesthesiology
University of Colorado Medical Center

At three in the morning a child arrives at the emergency room, his breathing labored, his pulse accelerated. His barking cough leads to a diagnosis of croup. A highly trained and skilled respiratory therapist responds with a breathing treatment with racemic epinephrine, and in a few minutes the child, his exhausting battle for air now over, sleeps quietly in his mother's arms.

Respiratory therapy is a specialty area within the broad field of medicine which has developed at a rapid pace. From the "oxygen orderly" who sets up oxygen tents and prepared "nasal forks", who moved cylinders and was responsible for traction equipment, respiratory therapy has progressed to its present day sophistication. Under medical direction, therapists play a vital role in assessment, development and implementation of support plans for the child with major respiratory disease

Pediatric respiratory therapists encounter pulmonary disorders seen only in infants and children. Hyaline membrane disease and meconium aspiration pneumonia, for example, are seen only in the newborn infant. Congenital malformations related to the respiratory tract such as tracheo-esophageal fistula, certain cardiac defects, and diaphragmatic hernia are also encountered only in the infant and young child. Because of anatomic and physiologic differences, infections such as epiglottitis and laryngo-tracheobronchitis which cause only minor discomfort to the adult, may be life-threatening to the child. Particular knowledge and expertise is necessary to deal competently with these conditions.

At The Children's Hospital, the Respiratory Therapy Department staff consists of 37 members with backgrounds, training and experience providing that knowledge and expertise. Our staff provides for life support management, pulmonary and airway treatments, cardio-respiratory resuscitation and respiratory equipment maintenance to assist the physician with diagnosis and treatment 24 hours a day. Last year, the staff provided mechanical ventilatory support for more than 500 infants and children, administered over 52,000 special treatments and assisted with the transport of 797 patients coming from hospitals in several surrounding states.

The department also maintains a pulmonary function laboratory providing for screening of patients with pulmonary disease. Portable bedside spirometry, a process measuring the breathing capacity of the lungs, is also done.

A newborn coordinator for our Respiratory Therapy Department is active in the Outreach Education Program, assisting with the training of personnel in other community hospitals in the diagnosis and treatment of the sick newborn. A pediatric coordinator in the Pediatric Intensive Care Unit also ensures that optimal levels of respiratory support are maintained with respect to the needs of the older child, who may be, for example, the victim of Reyes Syndrome, recovering from open heart surgery or suffering from an acute asthma attack.

Children's respiratory therapists are dedicated to providing our patients with the finest respiratory care available in the Rocky Mountain region.

Social Service Department

Bewildered young parents frightened by the myriad of problems confronting them with a sick newborn child . . .

A six-year-old girl facing her first year of school after weeks of hospital care for severe burns . . .

The nine-month-old baby with a bulky leg cast, a victim of parental abuse . . .

Grief-stricken parents of a ten-year-old boy dying of injuries suffered in an automobile accident . . .

The discouraged and depressed twelve-year-old boy preparing for still another surgery for a congenital spinal defect . . .

The frustrated mother of a hearing-impaired toddler asking for help in coping with her child's unmanageable behavior . . .

These are only six examples of the over 300 children and families that The Children's Hospital social workers assist each month. The Social Service Department is comprised of fifteen professional social workers who are incorporated into the medical teams of both inpatient and outpatient services. Our social workers are trained to understand the internal world of the young pediatric patient, as well as the world surrounding the child — his family, his school and peers, the broader community and the hospital staff. Their expertise and their role of a child advocate, aid the other medical professionals at Children's in securing the best, most realistic health plan for the child.

Our social workers are available to families whose children are admitted to the hospital or who are involved with the Newborn Center, the Child Development Unit, the Family Care Center, the Audiology and Speech Pathology Department, various rehabilitation clinics, the Burn and Oncology Centers, Outpatient Department, Intensive Care Unit and the Emergency Room. In all of these services the social worker provides consultation, instruction and research.

In addition to the provision of medical social work, Children's Social Service Department administers two innovative programs, which address the complicated issues of child protection and intervention with the families of child abuse victims. The Child Advocacy Team, comprised of physicians, nurses and social workers in a variety of specialty areas, makes a concerted, thoughtful team effort to evaluate and therapeutically intervene on behalf of the abused or neglected child to secure the best possible follow-up care. The team evaluates an average of 18 children per month, upon referral of hospital staff and private pediatricians. On behalf of the hospital and the attending physicians one of our social workers will ensure that a child continues to get the medical care he or she needs.

No aspect of family distress has been so consistently avoided as has the sexual abuse of children. Even professionals have usually preferred to believe that incest and similar problems rarely occurred. With the spotlight of public concern being focused on this painful problem, the Family Crisis Intervention Program, funded by several private foundations in 1977, became operational at Children's in May 1978. In the thirteen months of its operation, our clinical team has treated 90 families upon referral from county departments of social service, the courts and private physicians.

Primary treatment for incestuous behavior is family therapy, involving every member of the affected family. This treatment is based upon the belief that working with the family as one unit provides a better possibility for a family to become a more functional, self-maintaining family.

Other important aspects of the Family Crisis Intervention treatment program are: its emphasis on research; the development of educational information for training professionals, paraprofessionals and foster parents to work with sexually abusive families; and the development of informational materials and seminars for teachers, nurses and counselors in public school systems.

Our Social Service Department is open Monday through Friday, 8 a.m. to 4:30 p.m. Questions will be answered or referrals taken by calling 861-6683. In case of an emergency after regular business hours, a Children's social worker may be reached through the hospital's switchboard at 861-8888.

Therapeutic Recreation

Ruth M. Wimmer M.T.R.S.
Director of Therapeutic Recreation
The Children's Hospital, Denver

For the young medical patient, hospitalization can mean a disruptive, even traumatic interruption in the process of normal growth and development. For the young psychiatric patient this process has already been interrupted prior to hospitalization. The Therapeutic Recreation Department's purpose is to facilitate and enhance the child's emotional, social, physical and cognitive growth and development during hospitalization. The medium used by the therapeutic recreation specialist is play or recreational activity — the most expressive and familiar means by which children can cope with and learn from their environment.

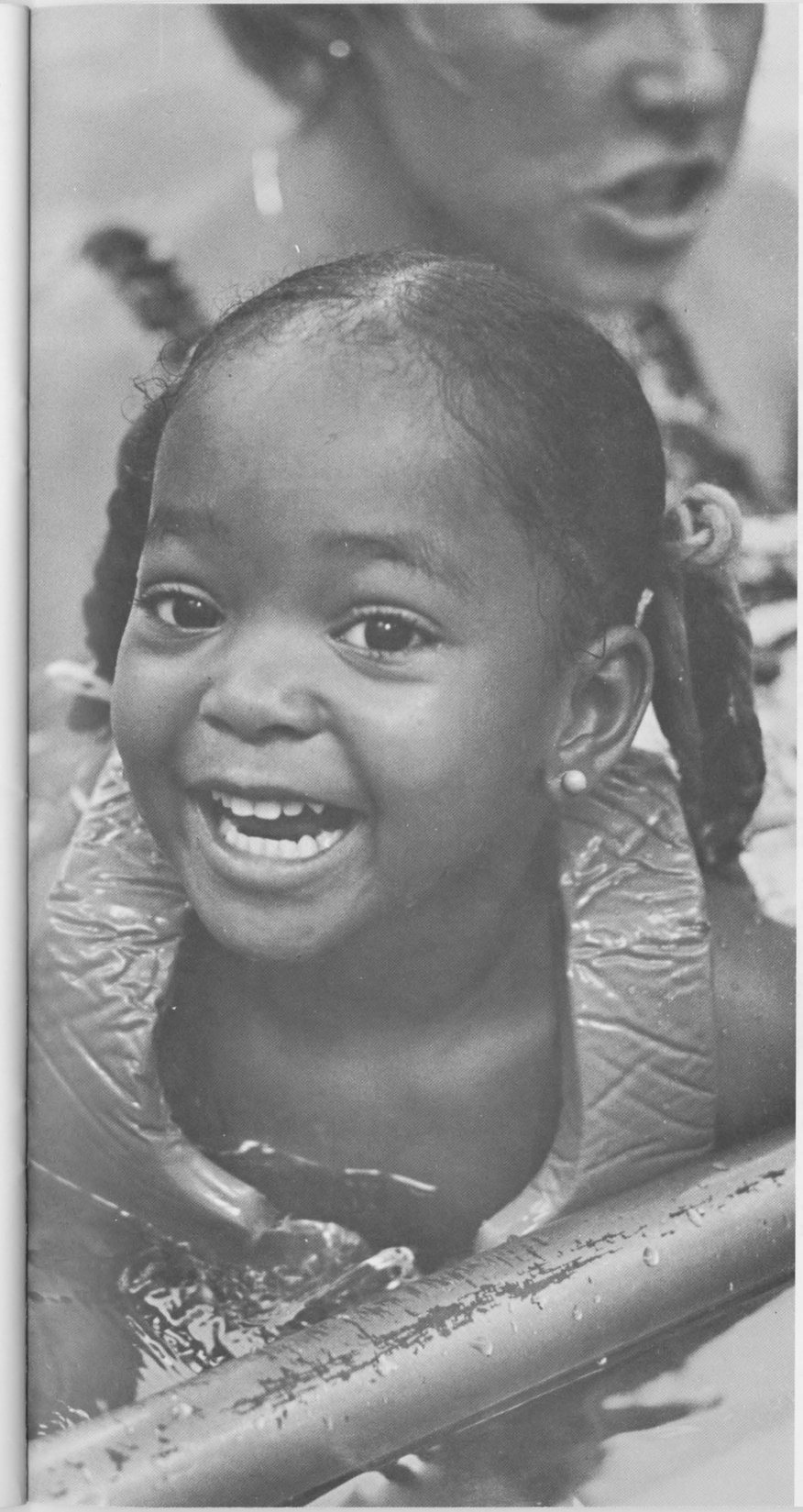
Through goal-oriented play or activity a therapeutic recreational specialist, working with medical patients, can provide information about medical procedures; assist patients in identifying and expressing feelings about hospitalization; facilitate socialization; and help the patients use their leisure time constructively. Our specialists working with psychiatric patients use play to help them learn and practice behaviors which are alternative to the destructive behaviors in their lives. In addition to behavior changes, these youngsters also learn to select and direct their play to meet their own needs.

Therapeutic Recreation is available to medical and psychiatric inpatients, 18 months and older, at no additional charge. Group programming is provided Monday through Friday for preschool and school age medical patients; adolescent medical patients; and psychiatric inpatients. Patients use several activity areas throughout the hospital. Individual activities are scheduled for patients who are unable to participate in group sessions.

Some examples of programming by our Therapeutic Recreational Department include: **Pre-Admission Program** — This program prepares children for hospitalization by replacing fears and fantasies with information and experience. Patients and their families receive a tour of and orientation to the places, people and procedures the children will encounter when admitted for surgery.

Nutrition Education Projects — These projects promote good nutrition, facilitate socialization, introduce new or unusual foods and develop basic cooking skills.
Field Trips — Psychiatric patients go out into the community to learn to use community resources effectively and to practice appropriate behavior in public.
Zoo Program — Volunteers and selected animals from the Denver Zoo visit Children's and provide an educational program for children and adults alike.
Heart Cath Puppet Show — Teaches medical procedures to preschool and school age patients admitted for first heart catheterization.
Rap Sessions — Adolescent medical patients meet to discuss their feelings and share their experiences related to hospitalization, illness and/or disability.

Therapeutic Recreation programs like these promote the patients' normal growth and development during hospitalization, while creating an environment which is uniquely Children's.



The Children's Nurse

Doris J. Biester, M.S.R.N.
Assistant Administrator and Director of Nursing
The Children's Hospital, Denver

Today's nurse is distinguished from her predecessors primarily by the fact that she must know more about and assume more responsibility for the care of patients in her charge. What is true for nursing in general is doubly true for pediatric nursing. The last few decades have witnessed unprecedented advancements both in our concern for the child as an individual and in our understanding of his special medical needs as a patient. The pediatric nurse holds a special position in the care of the sick child, in that he or she must, on the one hand, serve as an integral member of the hospital team whose responsibility is to provide medical care for the child, and, on the other hand, support the child and his family and serve as a link between the two during hospitalization, a difficult period for all involved.

As a member of the medical team, the Children's Nurse is responsible, more than anyone else, for total patient care. Our nurses, both male and female, are on duty 24 hours a day. They are the persons most readily accessible to the patient and his family. They constantly monitor the patient's status, and make on-the-spot decisions which any change in a patient's condition might require. They are responsible for keeping the physician fully informed of the patient's progress, and for carrying out the physician's orders completely and accurately.

In a relationship with the child, the Children's Nurse offers security, love and comfort in what is for the child a strange and sometimes frightening environment. In cases of long-term hospitalization, our nurses must act as surrogate parents to a child, at times when it is impossible for his parents to be at his side. With younger children, our nurses must stand as the child's advocate, so to speak, understanding and articulating those needs and fears which he is unable to express. Our nurses must assist the parents in understanding the nature of their child's illness and the ways in which the parents can best support their child. One of the most important changes in pediatric nursing in recent years has been the realization that the child is not just an individual, but a member of a family, and that both he and his family require emotional as well as medical attention.

Total patient care in today's nursing, as in so many other areas of service, means increasingly specialized care. Just as it is no longer possible for the doctor to be equally skilled in all branches of medicine, so it is no longer possible for the nurse to be equally knowledgeable in all areas of patient care. In pediatric nursing, where the nurse-patient ratio is much lower than in hospitals which treat adults, this need for specialization is even more intense.

The Children's Hospital serves the children of a 13-state region. Through referrals and our emergency air and ground transport systems, we see a large number of critically-ill patients that no other hospital in this region is equipped to handle. The wide variety of departments within the hospital to meet these patient needs requires an equally wide diversity of knowledge and skill among the nursing staff. A Children's nurse has knowledge of and skill in the use of the latest monitoring equipment in Intensive Care and Newborn; the ability to triage or quickly assess the child's condition in the Emergency Room; skill in operating procedures and in pre- and post-operative emotional support for the fearful and lonely child undergoing surgery; mastery of chemotherapy, primary care and the establishing and maintaining of strong one-on-one relations with children in Oncology, where patients are seen routinely on a repeat basis; skill in working with families in the Outpatient Clinic and the Family Care Center, instructing them on how to care for and maintain the health of their children at home; patience, understanding and a knowledge of psychology in helping the emotionally disturbed child in the Mental Health Inpatient Unit and the preadolescent and adolescent on the general pediatric unit who may be undergoing adjustments and facing problems not always related to his physical illness.

The most pressing concern among today's pediatric nursing professionals is how to improve the quality of patient care. Increased specialization obviously requires increased education, and The Children's Hospital provides for this. Through in-service education, new employees are oriented to the hospital and given supplementary, supervised, on-the-job training in their chosen and specialized areas which their formal education may not have provided. Our continuing education program is aimed at enhancing staff development. Through workshops, institutes and seminars and the utilization of educational resources both inside and outside the hospital, staff responsibility and promotion are greatly improved. Our hospital also provides educational opportunities for nurses throughout Colorado, as well as to eleven schools of nursing in the Colorado/Nebraska area.

Nursing audit is another activity designed to improve the quality of patient care. Through Nursing audit, criteria and standards of patient care are instituted, monitored and documented. All levels of nursing staff are involved in this process, and coordination with physicians and medical records insures improved communication throughout all stages of patient care. In addition, the criteria and standards are themselves subject to revision and updating as circumstances require.

The Children's Nurse is, indeed, a very special person. Highly trained in this specialized field of pediatric medicine, they represent humanity at its very best. Compassionate and understanding, with a kind word, a smile and a hug, the Children's Nurse makes our young patients feel right at home — away from home.

Other Care Providers

A multitude of other professionals and non-professionals provide services to every child at Children's Hospital. Some function behind the scenes and are never seen by the patient or his family. Others have frequent contact with both. Space does not permit a description of each and every department or service area, but all of their services are essential to our patients treatment and recovery.

They are: Administration, Admissions, Business Office, Cashier, Central Service, Chaplain, Communications Center, Data Processing, Employee Health Service, Engineering and Maintenance, Environmental Services, Financial Representatives, Food Service and Dietary Service, Fund Raising, Information Desk Attendants, Laundry, Library, Mailroom, Materials Management and Purchasing, Medical and General Photography, Medical Records, Personnel, Pharmacy, Professional Billing, Public Relations, Quality Assurance, Secretaries and Clerks, and Security.

Patient Representative Program

Fern J. Bechtel
Director of Volunteers and Patient Representatives
The Children's Hospital, Denver

Because today's hospitals are designed to efficiently and quickly save lives and cure disease, hospital personnel may not be free to deal with the emotional needs of patients and their families. The job of the patient representative is to be concerned with the patient's anxieties, to explain Hospital policies and procedures and to personalize and strengthen the relationship between the patient, the family and the hospital staff. The Patient Representative Program has become a critical link between The Children's Hospital and the patients and families we serve.

Four-year-old Sarah was hospitalized twelve days for extensive tests after doctors began to suspect some type of cancer. It was a very stressful two weeks for Sarah and her mother. Sarah's father could not leave his job in Scottsbluff, Nebraska. Each day a patient representative would check on Sarah's mother, and on the first day our volunteer arranged for lodging for her near the Hospital. Another patient representative did some shopping for her and pointed out a nearby laundry. At times, Sarah's mother did not understand what was happening to her daughter; and, at one point, she announced she was taking Sarah home.

According to the head nurse on Sarah's ward, Sarah's mother had grown tired of the uncertainty of waiting for test results, and of waiting to see the physician. A patient representative was able to act as a go-between for the mother and staff at this time, to bridge some of the communication gap. Sarah's mother saw the physician that afternoon and later that day learned from him that her daughter was suffering from a virus.

Two weeks after Sarah's discharge, the Patient Representative Office received a patient comment form from the mother, who lauded the staff. Under stressful conditions, many situations were perceived out of proportion by her, and she thanked nurses, lab technicians, doctors and all the hospital staff for the understanding she received. "The Patient Representatives — all of them — really cared. They helped me with some of the little things I just could not take time to worry about. Please thank them all."

All over the country hospitals are finding increased patient satisfaction after beginning their Patient Representative Program. The program significantly reduces the number of individuals a patient must contact with a complaint or request for service — it saves both patient and family a great deal of "leg work." Now a department exists for the referral of special situations for which no system or procedure had been established.

The services provided by the patient representative and the hospital's Department of Social Services can complement one another to offer individuals more comprehensive health care.

Our seventeen specially trained patient representatives offer staff members an awareness of a patient's perceptions of the hospital experience; and relate to the patient the role of each staff member caring for him or her, and, in so doing, upgrade the levels of communications taking place and lay the groundwork for an effective and even pleasant hospital experience.

Volunteers/Auxiliary

Ann Cavender
President
The Children's Hospital, Denver

The volunteers and auxiliary members of The Children's Hospital give the children two very important gifts — their time and their love.

They come from all over the city and neighboring areas; they are career women, mothers, grandmothers, fathers, grandfathers, and business men. They have one thing in common, they love children.

Their duties vary as much as their backgrounds. Holding and cuddling a frightened and lonely child; delivering in-house mail; serving coffee and tea to tired and worried parents and grandparents; running errands for staff; reading stories; playing games; singing songs for children in the playroom; and lending an ear to distraught parents.

Celebrate

In 1949, a group of Denver women formed The Children's Hospital Auxiliary. This year they marked their 30th anniversary and a rededication of the goals set at the founding meeting. The goals were to provide services that were too time-consuming for hospital personnel to administer in addition to their demanding role of providing health care. Volunteers and Auxilians differ only in that not all volunteers are members of the Auxiliary, although a person may be both.

The Auxiliary raises a tremendous amount of funds each year for equipment and special needs within the hospital, and they also manage the hospital's Gift Shop. This year, the Auxiliary contributed an outstanding gift of $350,000 to the Capital Campaign for the hospital's new addition. It is one of the largest auxiliary gifts ever given in Denver.

In addition to the volunteers who work in the hospital, guild members serve Children's from within their own communities. Presently, 406 guild members work on handicraft projects and local fundraising events to benefit the hospital. Guild members also act as a liaison between local community parents and the hospital providing information about care and services.

An appropriate motto for this special group of people would be, "It is more blessed to give than to receive." They are absolutely essential to Children's Hospital.

Continuing Medical Education

James Shira, M.D.
Director of Continuing Education
The Children's Hospital, Denver

"There shall be a program of continuing education for all staff members, designed to keep them informed of pertinent new developments in the diagnostic and therapeutic aspects of patient care and to refresh them in various aspects of their basic medical education."
Joint Commission on Hospital Accreditation
JCHA Manual for Hospitals

The Summer Clinics of 1949 were the beginning of an on-going effort on the part of The Children's Hospital staff to provide high quality pediatric educational opportunities for the health professionals of the Rocky Mountain region. This year, 1979, marks the thirtieth year of a formal Continuing Medical Education (CME) program at Children's.

The Aspen Conference on the Newborn, the first neonatal meeting held in the United States, was initiated in 1967; and this year's thirteenth annual meeting drew participants from thirty states. This fall features the fifth year and expanded version of the Annual Pediatric Burn Symposium sponsored by the Children's Burn Center. These two programs along with meetings offered by the Departments of Perinatology, Anesthesiology, Orthopaedics, Audiology and Speech Pathology, Cardiology and Cardiovascular and Thoracic Surgery, Physical and Occupational Therapies and Surgery serve as the core of the CME program.

This is a year of growth for education. Continuing Medical Education and Graduate Education have been consolidated into a single department, Health Education. Under the direction of James Shira, M.D., we hope to broaden the scope of the educational experience for the pediatric health team of the Rocky Mountain and Great Plains regions. September of 1979 marks the institution of an innovative program of continuous postgraduate pediatric education called **Controversies in the Practice of Pediatrics. Controversies,** sponsored by The Children's Hospital, the University of Colorado Health Sciences Center and the Colorado Chapter of the American Academy of Pediatrics, will offer a planned curriculum designed to achieve maximum participation on the part of the course registrants. The course is aimed at new advances in pediatric medicine and the incorporation of these advances into the office practice of the health care professional. The course will be offered in five sessions over a ten-month period, beginning in September, with the material for each session based, to some extent, on the current issue of **Pediatrics in Review**, the new journal of the pediatric recertification program of the American Academy of Pediatrics and the American Board of Pediatrics.

Education has reached a new era, a time to reevaluate directions and our effectiveness as educators and practitioners. It is the need of all health care providers to be current in their knowledge of advances in medicine and to be able to utilize that knowledge in their everyday practices if they are to have any impact on the level of health care delivered. We realize that obligation at Children's, and we intend to continue to make continuing education one of our highest priorities.

Teaching/Research

"The hope of the future, lies in the work of today." An age old cliche, but one that directly applies to child health care.

There are many keys to the future of child care; and knowledge, skill and experience are just a few. As a teaching institution, The Children's Hospital is affiliated with 11 higher education/ medical facilities in the Denver metropolitan area, Colorado and Nebraska. The majority of our full-time medical staff and many of our private physicians serve on the faculty of these institutions. For the past 11 years, Children's has been a partner with the University of Colorado Health Sciences Center in a combined Pediatric Residency Program. While some of the teaching of these bright and curious medical students and residents takes place in the classroom, much of their instruction takes place at the bedside, caring for our young patients.

Today, the young patients of our hospital benefit from this exchange of knowledge and ideas. Tomorrow, when these medical students and residents take their place in society as practicing physicians, other children will reap the benefits.

Research is another key to the future of child health care. Over just the past 100 years, medical research has lead us out of the dark ages — when children died of whooping cough, diptheria and tuberculosis, or where crippled for life from polio. Just think what this world would be like if someone hadn't asked the question, "Why?". Today's "miracle" drugs to treat chronic lung diseases, such as bronchitis and pneumonia, and "wonder" drugs to halt the growth of many types of malignant tumors would not be available if it weren't for research.

Children's Hospital is proud of the role our medical and lay professionals play in the advance of medical technology. Approximately 25 research projects each year are conducted at Children's under its auspices. A 17-member Medical Research Committee, headed by David Tubergen, M.D., reviews, processes and approves research projects proposed by our staff members. Ongoing research being done at Children's includes: oncology/hematology, immunology, metabolic disorders and diseases, neonatal diseases, respiratory deficiencies, burn treatment planning and infectious diseases. In 1978 a Children's research investigation discovered and described a new disease, labeled Toxic Shock Syndrome.

Our hospital also provides a focus for national research, which involves more than inquiry into the childhood disease conditions. For example, Children's, which established a regional Sudden Infant Death Syndrome (SIDS) Counseling and Information Center in 1976, is now involved in researching probable causes of the dreaded infant disease.

This important research is being conducted at our hospital with a two-year grant from the National Institutes of Health, National Institute of Child Health and Human Development.

Another key to the future of child health care lies in the improvement of its quality. The Center for Investigative Pediatrics was established at Children's in 1978 to promote high-quality research efforts to improve the care of pediatric patients. Inaugurally funded by a committed Denver family, the Center for Investigative Pediatrics is directed by a council composed of members of The Children's Hospital and University of Colorado Health Sciences Center scientific staffs, practicing pediatricians and people from the lay community. The center provides research support and assistance to investigators delving into current pediatric problems.

Although medical science and care have made great strides in the last 100 years, there is always more than can and should be taught, learned, investigated and improved. The child has his whole life before him, so teaching, learning and research, which cures or eliminates fatal or debilitating diseases of childhood, pay a great dividend. All of our efforts in teaching and research are dedicated to restoring joy and laughter to children by giving them long and healthy lives. The fact that adults also will benefit from these efforts is an added bonus.

Help Us Celebrate The Child

During the current International Year of the Child, The Children's Hospital at Denver, Colorado, continues to provide quality long-term care for critically ill children in the Rocky Mountain Region.

Children's Hospital celebrates the child with medical knowledge and all the care it gives. And there has been a lot of celebrating since the hospital began treating children way back in 1897.

But each new bit of medical know-how and each new priceless procedure, even those that already have made some illnesses curable, show that we still have a long way to go to help ensure that every child seen at Children's will have a healthy life ahead.

The Children's Hospital continues because people care. This wonderful celebration of the child knows no boundaries, and Children's has never turned away a child because of a parent's financial inabilities.

We gratefully acknowledge all contributions because these gifts have helped us meet the ever increasing costs of hospitalization for our young patients.

General contributions, designated contributions, honor and memorial gifts and bequests are ways you can support our continuing efforts to ensure the finest possible services, facilities and the best medical care for all children in this region.

Help us to celebrate the child. Please send your tax-deductible check or your request for more information to The Children's Hospital, Development Office, Tammen Hall, 1056 East 19th Avenue, Denver, Colorado 80218.

Credits

Editor/Author:
Patricia S. Jensen, Public Relations, The Children's Hospital, Denver, Colorado

Historical Contributing Author:
Jo Ann Smith, Public Relations, The Children's Hospital, Denver, Colorado

Contributors:
Kyla T. Allis, Director of Public Relations, The Children's Hospital, Denver, Colorado

Susan Biesadecki, Public Relations, The Children's Hospital, Denver, Colorado

Departmental Chairmen and Directors, The Children's Hospital, Denver, Colorado

Graphic Consultation:
Nancy McPherson, Graphic Artist, The Children's Hospital, Denver, Colorado

Proofreader:
Helen L. Howard

Photography:
David Cupp, Denver, Colorado (renown author/photographer for National Geographic Magazine)

Celebrate Emblem:
Matrix Design Inc., Denver, Colorado

Publication Design and Production:
Matrix Design Inc., Denver, Colorado

Printing:
Tewell's Printing & Lithographing Company, Denver, Colorado

Celebrate

Our Credentials

The Children's Hospital, Denver, Colorado, is a voluntary, non-profit, 182-bed hospital, organized in 1897. The Children's Hospital functions under the general supervision of a volunteer board of directors and is supported neither by the City of Denver or the State of Colorado. It serves patients from all income levels of the community, the state and the Rocky Mountain region. The Children's Hospital, Denver, Colorado, is an equal opportunity employer.

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National Association of Children's Hospital and Related Institutions

Licensed By

State of Colorado
City of Denver

Accredited by

Joint Commission on Accreditation of Hospitals

Approved By

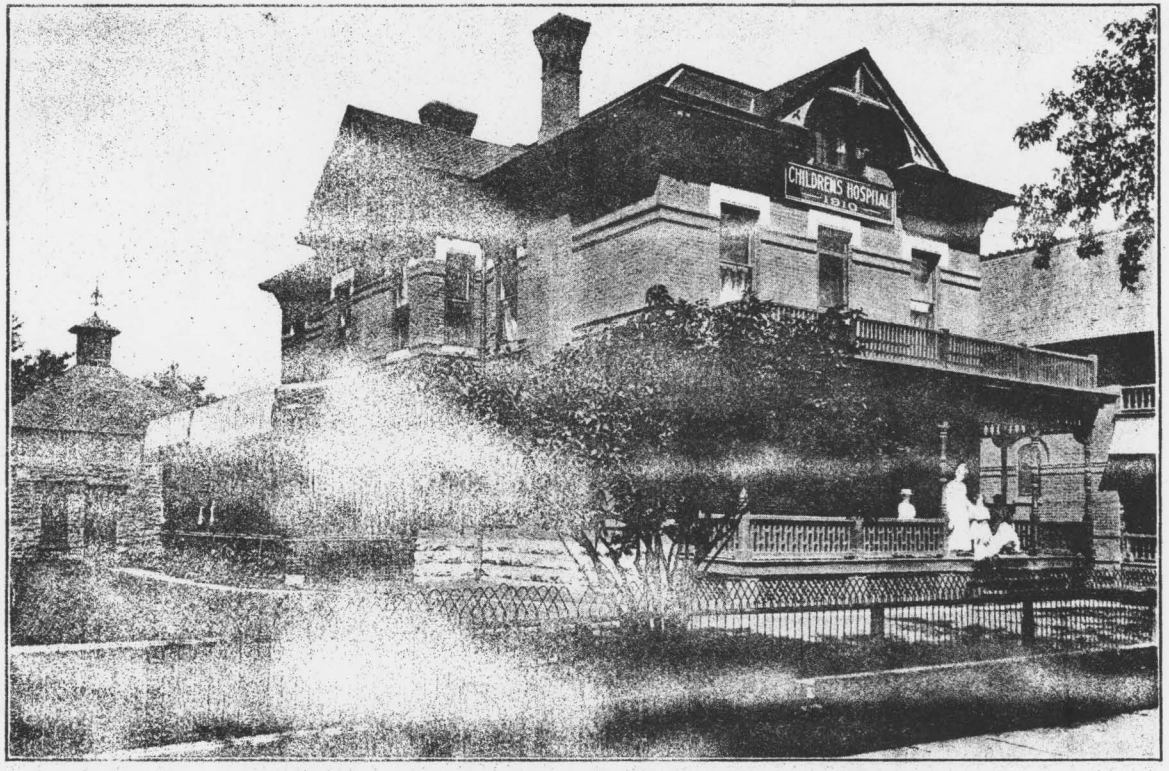
American Medical Association for Intern and Resident Training
American Medical Association Council on Medical Education for Continuing Education Program

Affiliated With

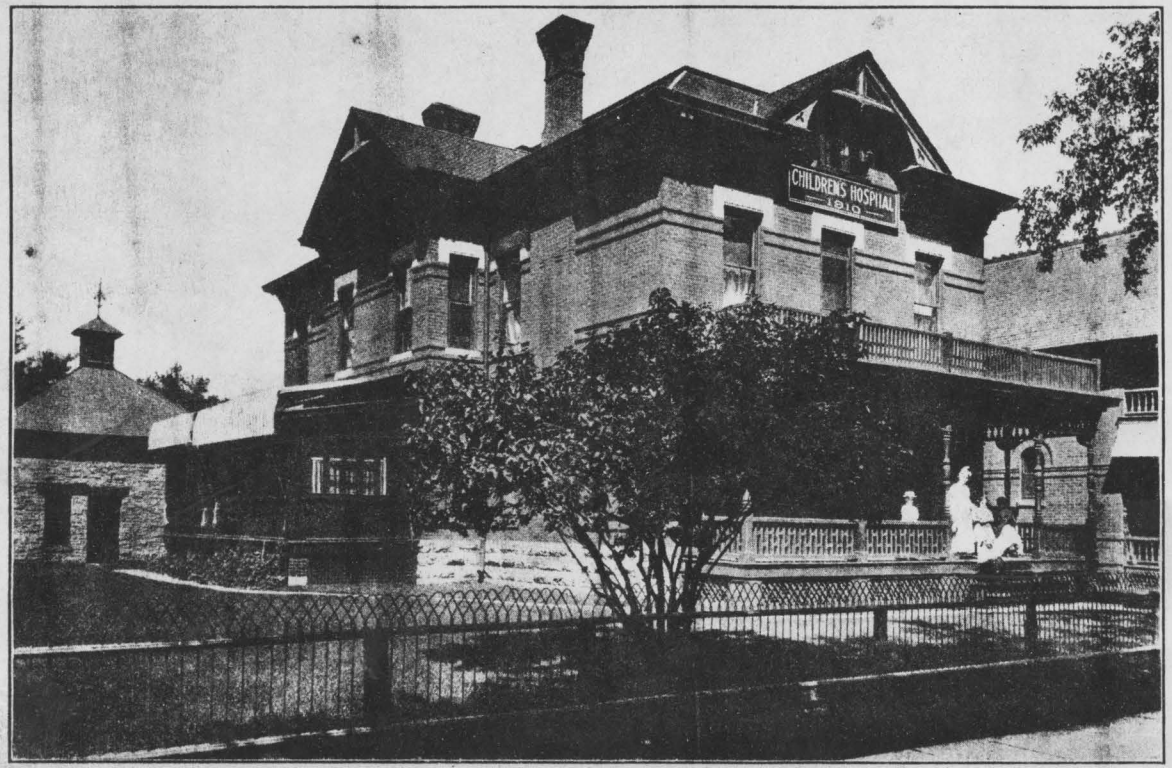
Arapahoe Community College, Denver
Community Colleges of Denver
Emily Griffith Opportunity School, Denver
Loretto Heights College, Denver
Metropolitan State College, Denver
Presbyterian Medical Center, Denver
Saint Luke's Hospital, Denver
Union College, Lincoln, Nebraska
University of Colorado Health Sciences Center, Denver
University of Northern Colorado, Greeley
West Nebraska General Hospital, Scottsbluff, Nebraska

Associated With

Boettcher School, Denver



VIEW OF THE HOSPITAL. 1909



GENERAL VIEW OF THE HOSPITAL. 1909