Facilities and Equipment for the Care of Pediatric Patients in a Community Hospital

ABSTRACT. Most children requiring hospitalization are admitted to community hospitals that vary significantly in their pediatric resources. The intent of this statement is to provide guidelines for furnishing and equipping a pediatric area in a community hospital.

Of the 3 million children hospitalized in the United States each year, approximately 15% are admitted to children’s hospitals or large pediatric units in municipal or regional medical centers. The remaining 85%, or 2.5 million children, receive their care in community hospitals that are more accessible and convenient for their families and physicians but quite varied in their equipment, staffing, diagnostic resources, and treatment capabilities for pediatric patients. Some smaller hospitals may have no permanently designated pediatric beds and few, if any, staff dedicated exclusively to the management of children. In these smaller facilities, pediatric care is frequently prescribed by primary care pediatricians or family physicians and provided by nurses and other health professionals with a wide range of pediatric training, skills, and experience.

As the number of hospitalized children and average length of stay have decreased, hospitals have been compelled to reassess their commitment to the maintenance of pediatric inpatient units. Some have elected to discontinue their pediatric programs; others have modified or reduced their pediatric activities in an effort to remain competitive while continuing to meet patient and community needs. The purpose of this statement is to provide guidelines for equipping a pediatric area in a community hospital, recognizing the fiscal and functional constraints on such a facility.

THE FACILITY

Regardless of size, hospitals that care for infants and children must provide inpatient areas that are safe, furnished appropriately, equipped properly, staffed adequately, and supported reliably by 24-hour radiology and laboratory services. The following is a list of basic facility needs for the care of children from birth to 18 years old:

• Single- or double-occupancy rooms that comply with guidelines for prevention of nosocomial infections and that are large enough to accommodate parents, who may choose to stay with their children
• Location of beds to allow for observation and supervision of patients by nursing staff
• Covered electrical outlets, appropriate window locks and door latches, padding of all sharp edges, and nonslip, easily maintained floor coverings
• Air, oxygen, suction equipment, and electrical outlets at each bed, with access to the hospital emergency power system
• Age-appropriate furniture
• Cribs equipped with safe overhead restraints and beds with covers on mechanical or electrical controls
• Area set aside for play, entertainment, education, and other child life activities
• Treatment room for patient assessment and procedures

Facility design and decor are not addressed in this statement. Information about a child-friendly, developmentally appropriate environment in the hospital may be obtained from the Association for the Care of Children’s Health and the Institute for Family Centered Care (see “Resources”).

EQUIPMENT

The minimum essential medical equipment for pediatric inpatients is included in the following list. Much of this equipment may be used in the care of adults as well.

• Resuscitation cart containing readily accessible, easily identifiable, necessary weight- or length-appropriate emergency drugs and resuscitation equipment with easily readable lists of pediatric drug dosages
• Defibrillator designed for pediatric use with paddles for infants and children and easily readable chart indicating joule dosages
• Scales and stadiometer for infants and older children
• Thermometers and blood pressure measuring device with a complete selection of cuffs appropriate for the full spectrum of pediatric patients
• Cardiorespiratory monitors
• Pulse oximeters
• Papoose board for immobilization of infants and toddlers
• Backboard for cardiopulmonary resuscitation
• Portable lamps for emergency bedside procedures

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

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• Motor-driven nebulizers and electric suction machines if no suction wall units are available
• Twenty-four hour access to an electrocardiograph machine
• Intravenous, phlebotomy, and lumbar puncture trays appropriate for children
• Wheelchairs, crutches, slings, and splints for all pediatric age groups

SUPPORT SERVICES
Basic diagnostic facilities that should be available on a 24-hour basis include the following:
• Routine x-ray imaging for thoracic, abdominal, skull, and orthopedic studies; computed tomography is desirable
• Clinical laboratories providing hematology, blood chemistry, and blood gas studies from small volume blood samples, and basic microbiology and blood banking services available with prompt response times; the ability to perform toxicologic and drug levels is desirable
• Pharmacy services providing age- and size-appropriate drug administration and dosing
• Access to references for drug interaction and drug dosing
• Availability of the following services on an as-needed basis: child life; social work; and respiratory, physical, occupational, and speech therapies

STAFFING
Personnel requirements for a pediatric inpatient unit in a community hospital have been addressed in the policy statement, Staffing Patterns for Patient Care and Support Personnel in a General Pediatric Unit, by the American Academy of Pediatrics. In that statement, it is recommended that all health care personnel assigned to care for hospitalized children be familiar with the unique and changing physical and psychosocial needs of children and that the nurses and physicians be trained in pediatric life-support techniques. All should know the locations of carts and equipment for cardiopulmonary resuscitation.

REFERRAL NETWORKS
Community hospitals and physicians that care for children must have well-established referral networks for timely consultation by pediatric specialists and subspecialists and, when necessary, for transfer of patients to a pediatric center that offers more advanced levels of care. This includes access to an air and ground transport system that is responsive and equipped and staffed appropriately to care for children of all ages. Detailed guidelines for air and ground transport of infants and children have been published by the American Academy of Pediatrics.

ADMISSION AND TRANSFER CRITERIA
Because community hospitals vary significantly in their resources for providing pediatric care, there is no single set of criteria for admission and transfer of pediatric patients that has universal applicability. Each institution must assess its own capabilities and limitations in light of its mission, and then formulate guidelines. Once guidelines for transfer of patients have been established, those for admission become less difficult to define. This is a challenging process that requires input from all members of the health care team including hospital administration. The goal is to ensure optimum care for each patient in the facility that is most appropriate for the patient’s medical and psychosocial needs.

RESOURCES
• Association for the Care of Children’s Health, 19 Mantua Rd, Mount Royal, NJ 08061
• Institute for Family Centered Care, 7900 Wisconsin Ave, Suite 405, Bethesda, MD 20814

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REFERENCES
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