

# Kansas Uses Innovative Programs To Prevent Hospitalization

by Patricia T. Schloesser, MD

At the turn of the century, a Kansas journalist, William Allen White, became nationally known for his editorial "What's the Matter with Kansas?" His theme was that "when anything is going to happen in this country, it happens first in Kansas."

Although Kansas has had many "firsts" this century in public health and mental health programming, home care ventilator dependent persons have not yet become reality. Kansas does have, however, a number of innovative out-of-hospital programs designed to prevent hospitalization in the first place or when necessary, to decrease the length of stay. This preventive approach offers a more normal life experience for the handicapped and their families and is cost effective as well. Some profiles of programs follow.

## Cystic fibrosis program

In 1966 the Kansas legislature appropriated funds to the Department of Health and Environment to develop services for all cystic fibrosis children in the state. Since the appropriation was small, the department designed an out-patient program which lessened the need for hospitalization. Funds were earmarked for the provision of

home inhalation equipment and medications at no cost to the families. Centralized purchasing resulted in considerable savings. Diagnostic and case management clinics were established in Wichita and Kansas City. A survey of parents three years after this program was begun, indicated that fewer hospitalizations were necessary and the family morale had been greatly improved. Currently, there are 239 active patients on the registry with 30 over 21 years of age. Most CF children are progressing in school with their peer group and are becoming self-sufficient in early adulthood. In recent years, the Crippled and Chronically Ill Children's Program has paid for hospitalization for cystic fibrosis patients whose families are financially eligible. Third-party reimbursement has also strengthened the financial base of the program in recent years. In one urban area, cystic fibrosis patients are being discharged from the hospital on intravenous therapy at home. This has decreased the average hospital stay from four weeks to one.

## Chronic obstructive pulmonary disease (COPD)

The Kansas Lung Association

in cooperation with physicians in urban and rural areas is encouraging home based programs in which patients are taught 13 respiratory skills through individual or group instruction using a self-study manual. A decreased need for hospitalization is anticipated.

## Diabetes-outpatient management of the young diabetic patient

The Kansas Medicaid program has had some positive experiences with the outpatient management of severe diabetic children. One of their patients is a 14-year old girl who had been in a Wichita hospital for a total of eight months in a 12-month period including 32 days in intensive care, at a total cost to the agency of \$59,000. Medicaid authorized the purchase of an expensive piece of equipment, an insulin pump, along with a glucometer for monitoring her blood sugar, so that she could be discharged home. The child has remained home for 18 months with no hospitalizations. The Medicaid agency has now authorized the purchase of additional insulin pumps for two other teenagers with equally good results. Dr.

Richard Guthrie, Director of the Kansas Regional Diabetic Center in Wichita, reports that there are 64 persons currently on the insulin pump at home managed by this center. He projects that the total cost of the patient workup and equipment and supplies for the first year would be about \$8,000 compared to an average of \$30,000 per year for repeated hospitalizations. With 64 patients a year, the difference between home cost and hospital cost is \$1,300,000. If we project this figure nationally, such a program could save \$50 million per year.

### **Prevention of prematurity programs**

The cost of premature care can best be illustrated by a case

history as follows. M.H. was born prematurely and weighed slightly over two pounds. His mother was 17 years old and had dropped out of the 10th grade with the pregnancy. She had received late and inadequate prenatal care. The infant was transferred to the intensive care unit at a Level 3 hospital in Kansas City by ambulance for management of the prematurity and associated respiratory problems. He remained in care for 24 days and was returned to a Level 2 hospital in his home community for 14 days of convalescent care. The cost of this hospital care was \$50,000. This infant is developing normally and special education costs have been avoided by the excellent perinatal network program established by the Maternal

and Child Health Block Program. If the family had resided in a community with the special Maternity and Infant Care Program for teenagers (there are 10 such programs across the state), this mother would have received improved prenatal care and the WIC supplemental food program with the likelihood of preventing the birth of a premature infant. Since the cost of this preventive health service for mother and infants averages \$2,000, a cost savings for this patient would be \$48,000.

In summary, I would echo William Allen White and say, "There's nothing the matter with Kansas" as Kansas responds with practical approaches for home based programs to meet the needs of families. ●