

medical sciences

MEDICAID

Federal maximums set

In an attempt to put a stop to spiraling medical costs, Secretary of Health, Education and Welfare Robert H. Finch on July 1 established a new regulation limiting fees paid to physicians, dentists and other individual providers of medical services under Medicaid.

New Mexico recently suspended its Medicaid program because it ran out of money (SN 5/24, p. 497). The Senate Finance Committee is investigating abuses in both Medicaid and Medicare programs.

Medicaid is the Federal-state program that helps the needy of all ages with medical expenses. The HEW regulation will limit payments to doctors participating in state Medicaid programs to those received in January 1969 unless payments are below the 75th percentile of customary charges. It will remain in effect until July 1, 1970. If payments in a community have ranged from \$5 to \$10, \$7.50 is the highest amount that can be paid.

LEPROSY

Thalidomide helps severe cases

The drug that was banned because of its crippling effect on babies when taken as a tranquilizer and sleeping pill by pregnant women is being studied for its use in Hansen's disease, or leprosy.

Thalidomide has been tried on 22 leprosy patients in the Public Health Service Hospital at Carville, La., on an experimental basis with the permission of the U.S. Food and Drug Administration. Dr. Carl D. Enna, chief of the clinical branch of the Carville hospital, says the primary action is to halt or prevent acute reactions such as fever and skin lesions. Scientists in the hospital are starting a five-year study.

While officials of Chemie Grunenthal, the company that first marketed thalidomide, have been on trial in Alsdorf, Germany, the drug itself has been getting new trials, first in Israel. Hundreds of leprosy patients also have been helped in Venezuela, Brazil and Thailand. The Carville study is reported in the hospital's official magazine, *The STAR*.

EDEMA

New diuretic can be lifesaving

In edema, an abnormal amount of fluid accumulates in the body tissues. The resultant swelling varies from the puffy ankles of pregnant women to the serious edema of congestive heart failure.

A number of efficient diuretics are available that increase the output of urine, thus bringing about a decrease in fluid accumulation. But ethacrynic acid, or Edecrin, which has become obtainable in the United States for general use, also stimulates excretion of sodium and chloride, and to a lesser extent, potassium.

The drug is useful for the control of edema in congestive heart failure, for persons with chronic kidney insufficiency and for children with congenital heart disease or the nephrotic syndrome.

The June 23 issue of the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* reports an initial assessment of

the drug by the AMA Council on Drugs without endorsement, in spite of the indication that it may be lifesaving in persons with resistant edema.

MALARIA

Drug can affect bone marrow

Malaria continues to be a problem, even when new drugs are found to combat it.

Pyrimethamine, whose trade name is Daraprim, has been used increasingly against resistant malaria in South Vietnam caused by the organism *Plasmodium falciparum*.

But the drug can cause a type of anemia accompanied by abnormally large blood cells in the bone marrow. With or without anemia, this condition, called megaloblastosis, impairs a person's metabolism of an essential B-type vitamin called folic acid.

The dangers of this bone marrow condition may be expected in many patients treated for falciparum malaria, the June 12 *NEW ENGLAND JOURNAL OF MEDICINE* says. Lower drug doses and the use of folic acid are advised by Drs. Samuel Waxman and Victor Herbert of Mount Sinai Hospital in New York City, who reported their study in the same issue.

Since 1960, when cases of falciparum malaria were found to be resistant to chloroquine therapy—a treatment that after World War II had been hailed as a revolutionary cure—scientists have been looking for something to take the drug's place. Pyrimethamine with quinine has been more effective than either drug when used alone.

CANCER

Powerful betatron in Boston

About 80 cancer patients a day can now be treated in Boston by radiation from a \$450,000 betatron that is almost twice as powerful as any other in the U.S. The American Cancer Society gave \$500,000 for the installation and use of the 42-million-electron-volt unit. It is being used at the Boston University School of Medicine where a regional medical program for an interdisciplinary attack on cancer has been started.

SURGERY

Swedish researchers using lasers

Five researchers from Uppsala University and the Swedish Defense Research Institute are trying to perfect a method of microsurgery with the aid of laser beams. They hope that abnormalities in nerves and other intricate parts of the body can be corrected without disturbing other close-lying tissues.

The group told a conference on applied physics and biophysics in Stockholm that they already have performed operations on mice, frogs and pigeons.

Although the heat of the laser beam acts as a knife, there are other problems. Often an acoustic-mechanical shock is caused and cells explode.

The researchers hope to apply the method in the labyrinth of the human ear, which if damaged, can cause complete deafness.