

## Improving the management of chronic disease

The NHS is trying out a new system of caring for people with chronic disease, designed to prevent hospital admission. Professor **Robert Kane** evaluated an American version of the system

Richard Smith *BMJ*

"In effect, we're practising 19th century medicine in the 21st century," said Robert Kane, professor in long term care and ageing at the University of Minnesota, with emotion, even anger, when I spoke to him recently. "Most health care is concerned with patients with chronic disease, particularly as they age, and yet we still have a system built around individual care events, like office visits and hospital admissions. The epidemiology is out of synch with the system. We need chronic disease management."

Why hasn't the system changed? "In the United States," answers Kane, "health care is 15% of the economy. There are too many vested interests. Doctors are conservative and their teachers are even more conservative. Then there's no consumer demand for change."

Kane's interest in improving systems of care began when he did some research in nursing homes in the 1970s, when he was working at the University of Utah. One of his colleagues, the professor of family medicine at the university, was unhappy that his discipline wasn't taken more seriously. Kane recommended that he do some research among residents of nursing homes, a group with lots of health problems.

"He said no, so I did it." Professor Kane introduced a simple system of team care, nurse practitioners, and problem oriented records. A randomised controlled trial showed considerable reductions in rates of hospitalisation in those looked after in the new system compared with traditional care.

The next step was to try to find incentives for the staff running nursing homes to provide better care. While working at the Rand Corporation in Los Angeles, he devised a system of incentives that resulted in improvements across eight dimensions of care. "Then I spent 10 years trying to find a

state that would implement the system, but I failed—even though two thirds of nursing home care is funded by Medicaid."

Kane has recently been in London to describe his evaluation of the Evercare programme for improving services to frail elderly people. The system was developed by United Healthcare, one of the largest managed care companies in the United States.



Professor Robert Kane: "Geriatrics is really the intersection of chronic disease management and gerontology"

Evercare has been used for long stay patients in nursing homes. Those in the programme are allocated a nurse practitioner, who sees them regularly, providing more than the usual episodic care. The nurse practitioner monitors the patients but also liaises regularly with patients' families and their primary care doctors.

Doctors are paid to spend more time with families and to attend case conferences. If patients become sick then the

programme pays for an "intensive service day" in the hope that the patient can be kept out of hospital. In short, the care of the patient is intensively managed.

The evaluation, which was funded by the US government, compared some 450 people in the programme with 410 people in the same nursing homes and 430 in control nursing homes. The result was a halving in rates of admission to hospital and attendances at emergency departments.

Patients were not dramatically more satisfied, but their families were. There was no reduction in the amount of physician care, but because of the reduction in admissions to hospital and attendances at emergency departments, overall net savings of \$90 000 (£53 800; €78 000) a year were achieved for each nurse practitioner employed.

the best providers. In the United States—but probably not here—for those patients with complex problems it might be specialists. But the trouble is that they are interested in organs not whole people, and 65% of those over 65 have more than one chronic disease."

Nine primary care trusts in Britain are going to try out these ideas. Each trust will choose its target population, or populations, with chronic illnesses to address. So far, none of the primary care trusts has chosen nursing home residents.

"People in charge of the NHS are much more flexible than the people in Washington," says Lois Quam, chief executive of Ovations, the part of United Healthcare that runs the Evercare programme and is helping to introduce it in Britain. "People in charge of the NHS have more authority and flexibility than the people in Washington. Here in Britain people can focus more on achieving better results not just regulation."

Kane approves of extending Evercare to younger people. "Geriatrics," he said, "is really the intersection of chronic disease management and gerontology. It's not strictly about age any more. My colleagues in geriatrics get upset when I say that. But it's true."

"Mind you, nursing homes are a good place to start with any programme. Residents have many health problems. There's a tendency to think of people in nursing homes as 'end stage,' but they are a population where small increments of care can pay great dividends in terms of both medical care utilisation and quality of life."

"We've developed quality of life measures and used them in many homes. Some residents and homes have much higher quality of life than others. Good programmes of care can make a big difference quickly." □

Competing interest: The BMJ Publishing Group, of which Richard Smith is the chief executive, has worked with United Healthcare in the United States to improve the flow of evidence based information to healthcare workers and patients. RS is paid a fixed salary and does not benefit financially from the arrangement. Robert Kane conducted the Evercare evaluation under a contract with the Centers for Medicare and Medicaid Services; he is not an employee of Evercare.