

## Preventing hospital visits through telemedicine

In the United Kingdom, where 17 million people – more than a quarter of the population – are living with chronic conditions, a new telemedicine programme shows how medical care provided by general practitioners and nurses for such patients can be complemented with “supported self-care”. Kathryn Senior reports.

The benefits of a telephone support programme operating in Birmingham are obvious to Beryl Keating, who has been enrolled now for two years. Keating has had asthma and lung problems since she was 14; she now has chronic obstructive pulmonary disease. “My care manager has been such a great help. I now feel much more confident about phoning the doctor for test results, or to make an appointment, or to say if something is wrong,” says Keating.

Keating speaks highly of her care manager at Birmingham OwnHealth, a telephone support programme that has been running since 2006 and that was established and funded by the NHS Birmingham East and North, the local primary care trust. It advises patients like Keating with diabetes and chronic obstructive pulmonary disease, as well as those with coronary heart disease and heart failure.

Since she started using the telephone support programme, Keating says she no longer feels she is ‘troubling the doctor’. In July 2009, Keating developed a chest infection. “I had two lots of antibiotics but felt no better – it

was [my care manager] who told me to go back to the doctor to explain that I was still feeling poorly. I hadn’t been to him for three weeks and when he saw me, he realized I was in very bad shape. I went into hospital briefly but then came home with different antibiotics that are now doing the trick,” says Keating, who also benefited from a referral to a chiropodist arranged by her care manager. “I know I need to look after my feet because I am diabetic.”

“Rather than seeing themselves as a victim of their illness, we empower them to take positive steps to live with their condition.”

Tarsem Sidhu

In the United Kingdom, complementing medical care provided by general practitioners (GP) and nurses with “supported self-care” fits with current

government policy on managing chronic conditions. “Birmingham OwnHealth is a long-term approach to supporting people as they actively manage their own chronic conditions, motivating and coaching them so they remain stable for as long as possible,” says John Procter, head of Pfizer Health Solutions, a business division of the pharmaceutical giant and one of the three partners. The other partner is NHS Direct, the National Health Service (NHS) telemedicine service in England.

While NHS Direct, a 24-hour telephone helpline for medical advice set up in 1999, is for everyone and is often used in emergencies, Birmingham OwnHealth enrolls people with chronic conditions and they stay in regular contact with their care managers over months and years.

Birmingham OwnHealth was developed from a pilot scheme in the London borough of Haringey, run by the Department of Health (health ministry) in England. The pilot was based on similar schemes Pfizer developed in the United States of America with health insurers, health maintenance organizations and disease management providers, explains Procter.

In 2006, the NHS Birmingham East and North primary care trust contracted Pfizer Health Solutions for an undisclosed sum to develop and provide a telephone-based care management service for such patients, and Pfizer Health Solutions, in turn, contracted NHS Direct to provide nurses known as “care managers” to run the service, according to an evaluation by Pfizer Health Solutions of the service’s first year. Most patients are aged over 60, but the ages of users ranges from 18 to 90.

Around 50 care managers currently work at Birmingham OwnHealth and, according to an evaluation by Pfizer Health Solutions of its second year, more than 1209 patients had been enrolled for longer than 12 months by July 2008 “indicating the provision of a service that people with long-term conditions value and want to actively engage with”. The evaluation also found that nearly three-quarters of patients found that by using the service, they felt more confident about looking after themselves.

“Patients, who are ‘suggested’ by GPs and other health professionals within the primary care trust, are sent



WHO/Kathryn Senior

Beryl Keating

an invitation and then we spend about an hour on the phone, enrolling them,” explains Chris Harris, one of the care managers.

During initial and subsequent conversations, which are timed to be about once a month, the care manager encourages ‘members’ – a term used in preference to ‘patients’ to emphasize their empowerment – to take more control of their own health, to make sure they attend regular checks and appointments, lose weight, exercise, stop smoking, eat more healthily and look after themselves better. “The scheme does require a complete change in perspective for the member – rather than seeing themselves as a victim of their illness, we empower them to take positive steps to live with their condition. Many start off in the programme being quite resistant to this – there is a pervading sense that help can only come from outside, from their GP or nurse, and not from them,” says care manager Tarsem Sidhu. “People change over time and it is a source of great satisfaction to be part of this change,” she says.

Among the findings of the second evaluation, 67% of service users were exercising regularly at the end of the second year, compared with 39% when they were initially assessed.

Those involved in Birmingham OwnHealth hope it will eventually be expanded into a national scheme, covering the whole country like NHS Direct. “There is certainly no logistical reason why there can’t be 36 call centres for long-term illness support, just as there are 36 nationwide NHS Direct Call Centres,” says Pam Bradbury, Regional Director of Nursing for NHS Direct. On 9 July this year, a similar venture was established with Nottingham City primary care.

In line with NHS guidelines on patient confidentiality and data protection, OwnHealth says patient confidentiality in these services is assured. Users consent to share information with the care managers when they enrol. Moreover, Pfizer Health Solutions, which operates independently of the medicines business, does not have



Birmingham OwnHealth care manager on a call.

access to data which identifies individual patients. However, information on trends in the medical outcomes of the patients enrolled in Birmingham OwnHealth have been used to evaluate the programme and published.

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*John Grayland*

Citing findings from an evaluation of the programme by the University of Birmingham, which is due to be published this year, John Grayland, Birmingham OwnHealth Programme Manager says: “We know that we took quite a bold step in commissioning the Birmingham OwnHealth scheme and it is gratifying that the evidence shows we are reducing hospital admissions. As a rule of thumb, for every five members that we sign up, one hospital admission is prevented each year.”

The issue of cost is a thorny one, but it is also one of the drivers of the programme. “My job title is a com-

missioner, but much of my job is also decommissioning, which is more difficult,” Grayland explains, referring to the satisfaction he gets from allocating money for new projects and seeing them through, while at the same time having the difficult task of cutting other services and having to explain to staff why they are no longer needed. He gives the example of schemes such as health care in the community involving home visits as compared with telemedicine services, which can reach many more patients for less money. Bradbury agrees, saying that she expects NHS cutbacks to squeeze budgets even tighter in the next few years. Even if Birmingham OwnHealth produces evidence to show that the scheme is cost effective and good for patients, she says it will not automatically lead to new funding.

Birmingham OwnHealth has already expanded to cover additional health conditions and plans to add more next year. “We are also testing home-based remote monitoring equipment with different language options – Hindi, Urdu and Punjabi – [these are] invaluable because of our high populations of ethnic minorities,” says Grayland. “We would also like to see the service extend to carers – there is so little support for carers in our society and their own health does suffer in the long term,” he notes. ■