Does setting up out of hours primary care cooperatives outside a hospital reduce demand for emergency care?

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Objective: To investigate whether the reorganisation of out of hours primary care, from practice rotas to GP cooperatives, changed utilisation of primary and hospital emergency care.

Methods: During a four week period before and a four week period after the reorganisation of out of hours primary care in a region in the south of the Netherlands all patient contacts with general practitioners and hospital accident and emergency (A&E) departments were analysed.

Results: A 10% increase was found in patient contacts with out of hours primary care, and a 9% decrease in patient contacts with out of hours emergency care. The number of self referrals at the A&E department was reduced by about 4%.

Conclusions: The reorganisation of out of hours primary care has led to a shift in patient contacts from emergency care to primary care.

The organisation of out of hours primary care in the Netherlands has changed substantially during the past decade. Formerly, general practitioners (GPs) provided out of hours care to their patients in small groups of GPs (six to eight GPs), using a rota system. In recent years, large GP cooperatives have been set up following British and Danish examples. Generally, 40 to 120 GPs participate in these services, providing care for populations ranging from 80 000 to 300 000. Currently, GP cooperatives in the Netherlands cover over 90% of the population.

There has been debate on how the establishment of these cooperatives influences utilisation of emergency care services by patients with non-urgent health problems—that is, problems that are not life threatening and do not require immediate care. In the Dutch healthcare system the GP acts as a gatekeeper to secondary care. As a rule, patients need a GP’s referral to use hospital services. However, to attend an emergency department a referral is recommended but not strictly required. Research shows that over 40% of all patients attending the emergency department present with non-urgent problems that can be managed in general practice. Non-urgent patients have been recognised to be one of the main contributors to the problem of overcrowding at the emergency department.

In the Netherlands most cooperatives are situated separately from the local hospital’s emergency department. Based on patient interviews, Coleman et al suggested that alternative facilities have little effect on the use of emergency services by patients with non-urgent problems. However, no data are available to support this assumption. In an earlier study we have shown that GPs working at a cooperative within the A&E department handle comparatively more patients as compared with their colleagues in a cooperative separate from the A&E department. In addition, this integrated organisation reduced the number of self referrals at the A&E department. Still, it remains unclear to what extent cooperatives separate from the A&E department have an effect on emergency services utilisation. The organisation and positioning of GP cooperatives has mainly been the result of local preferences.

The objective of this study is to gain insight into the impact of GP cooperatives on the use of hospital emergency services and primary care during out of hours.

METHODS

This study was conducted in the south of the Netherlands in the province of Limburg, a region with about 400 000 inhabitants, of whom about 70% live in rural areas. The area’s size is about 840 km², with roughly 190 houses per square kilometre. In this region, 173 GPs are registered. Until September 2001, out of hours primary care was organised in 24 small practice rotas. At that point in time, out of hours care was reorganised and three large GP cooperatives were created. All cooperatives are located near, but function fully independently of, the only three hospital’s emergency departments. The public was informed about the out of hours care reorganisation by posters at their own GP’s practice and by the GPs’ answering services.

Out of hours are defined as between 5 pm and 8 am on working days and from 5 pm Friday to 8 am Monday.

During a four week period in May and June 2001 (before the reorganisation) and during the same period in 2002 (after the reorganisation) we investigated all patient contacts with out of hours primary and emergency care. During the first assessment period there were two bank holidays; during the second period there was one bank holiday. To improve comparability between these two periods, we excluded all patient contacts from 8 am to 5 pm on one of the two bank holidays during the first assessment period. In the 2001 study period, GPs in this region were asked to register all patient contacts from 8 am to 5 pm on one of the two bank holidays during the first assessment period. In the 2001 study period, GPs in this region were asked to register all patient contacts when they were on call. With respect to patient contacts with emergency care, contacts between 8 am and 5 pm were excluded.

In the registration period in 2002 we extracted the data from the GP cooperatives’ computer system. Data from the emergency departments were extracted from the hospitals’ computer systems.

Eighty three per cent (143 of 173) of all GPs participated during the first assessment period. To estimate total number of patient contacts with out of hours primary care during this period, a correction factor was applied to all absolute numbers; absolute numbers were divided by the number of participating GPs and multiplied by the total number of GPs working in that area.
DISCUSSION

Although the total demand for out of hours care has increased, we observed a decreased demand for emergency care after the reorganisation of primary care out of hours care in the study region. It seems likely that the reduction of the utilisation of emergency care has mainly been caused by a reduction in self referred patients with non-urgent problems. As a consequence, more patients are being managed by the GPs, because of increased overall demand and the shift of these out of hours services, quality of care, and satisfaction with these services of patients and care providers.

In conclusion, the reorganisation of out of hours primary care into GP cooperatives has reduced utilisation of emergency care and increased utilisation of primary care.

REFERENCE