

Who should have the final say when clinical decisions have significant health economic consequences?

## Costly treatment – equal treatment?

In this issue of the Journal of the Norwegian Medical Association, Ezat and colleagues address a difficult issue, namely the differences between counties in the use of advanced, costly treatment methods, as exemplified by Parkinson's disease (1). The topic is a demanding one, in that the authors discuss possible differences between 19 counties with regard to a treatment that was initiated in only 52 patients per year on average in the period in question. It is therefore difficult to interpret possible differences between the counties, and the authors acknowledge this. However, still they conclude that in their opinion there were clear geographical differences in use.

The relevance of this discussion extends far beyond the discipline in question. Who should ultimately be responsible for therapeutic decisions that entail the use of advanced, costly technology: the patient, who is aware of the disease in his/her own body, the doctor, who is the expert, or the authorities, who must pay for it? The health services struggle to find the correct balance where various interests intersect.

Ezat and colleagues are concerned with the need for patients to receive equal treatment options, and that the patient's preferences should, in principle, be the deciding factor for the choice of treatment method. Since the authors point to significant differences between some counties in the choice of treatment method, they are also worried about whether patients receive the same information before they make their choice. This consideration is especially relevant for counties that, in practical terms, do not use one of the two forms of treatment.

One of the study's most interesting findings is that, while Finnmark has the lowest use of these advanced health services, Troms has by far the highest – despite the fact that the same department serves the population of both counties. The use of levodopa pump therapy in particular is highest in Troms. It would be strange if the differences between these two counties were due to different information given to patients, as the same neurologists serve both counties. The differences may quite simply be attributable to geographical differences in access to advanced specialist healthcare services, and this is an interesting health policy issue. A similar difference may be found in the distribution of percutaneous coronary intervention (PCI) treatment for acute myocardial infarction in the counties of Northern Norway (2). This type of unequal distribution therefore applies to several specialties.

Levodopa pump treatment was not provided to any patients from Nordland county in the study period, only to one patient from Sør-Trøndelag county and to very few from Møre og Romsdal county (1). On the other hand, Møre og Romsdal, Nordland and Nord-Trøndelag counties had the highest number of patients treated with deep brain stimulation. All three of these counties are located close to the surgical centre in Trondheim. Rogaland and Sogn og Fjordane counties in Western Norway had very low use of this type of brain surgery, which is no longer performed in Western Norway. Proximity to the service may thus appear to have a bearing. However, Ezat and colleagues refute this perception, since Oslo and Sør-Trøndelag counties, which are host counties for the two departments that undertake deep brain stimulation, do not have particularly high figures. Perhaps «the statistics of small numbers» invite such different interpretations. This type of uncertainty exists in several areas when distribution of vari-

ous health-policy benefits is under discussion. It is wise to accept the limitations of «facts» that often form the basis for strong opinions.

Geographical proximity to treatment options may have a bearing on the informal information that flows to the patient regarding treatment availability, and on the establishment of collaborative relations between healthcare personnel, relevant for referral practice. However, this may be less important in the age of globalization, when many patients obtain information from the internet. In other contexts, geographical proximity to treatment options, or at least proximity with regard to time, may be decisive for the usefulness of the intervention, as in the case of thrombectomy for ischaemic stroke (3).

When comparing costly treatment options the cost aspect is relevant, and cost versus benefit in particular. Ezat and colleagues refer to an analysis by Valldorriola and colleagues, which shows that deep brain stimulation requires significantly fewer health resources and is a more affordable treatment option than infusion pump therapy (4). These authors found a yearly cost of around EUR 17 000 for deep brain stimulation and around EUR 46 000 for infusion pump therapy. Ezat and colleagues do not believe that this has a bearing on choice of treatment in Norway, since reimbursement is given for both types of therapy. This interpretation is controversial, in that many clinicians will presumably prefer the cheaper treatment under conditions that are otherwise similar, despite the fact that the treatment is funded from the public purse. This approach must be set against the viewpoint that the patient's preferences should constitute the overriding factor.

The health policy debate on the distribution of costly healthcare options rightly attracts great interest. It is essential that the clinical premises for such discussions are as accurate as possible, which may be difficult to achieve in a country with few patients and thereby difficult challenges in terms of statistical calculations. In their study, Ezat and colleagues contribute important input to the discussion.

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### References

1. Ezat B, Pihlstrøm L, Aasly J et al. Bruk av avansert behandling ved Parkinsons sykdom i Norge. *Tidsskr Nor Legeforen* 2017; 137: 619–23.
2. Haug B, Hovland A, Trovik T et al. Hjerteinfarkt og PCI – et likeverdig tilbud i Helse Nord? Rapport fra prosjektgruppe presentert under Luftambulanse-dagene 31.1.2017.
3. Frønsdal KB, Skår Å, Stoinska-Schneider A et al. Mekanisk trombektomi ved akutt hjerneinfarkt. Rapport fra Folkehelseinstituttet 2016. Oslo: Folkehelseinstituttet, 2016.
4. Valldorriola F, Puig-Junoy J, Puig-Péiró R. Cost analysis of the treatments for patients with advanced Parkinson's disease: SCOPE study. *J Med Econ* 2013; 16: 191–201.