HEALTH POLICY DEVELOPMENTS

Is Denmark prepared to meet future health care demands?

Martin Strandberg-Larsen, Mikkel Bernt Nielsen, Allan Krasnik and Karsten Vrangbæk

Summary: One consequence of the decentralised nature of the Danish health care system, characterised by a high degree of patient satisfaction and expenditure control, has been the somewhat uneven level of access to health care resources across the country. A series of interventions to gradually strengthen coordination and centralised control of the system have been introduced in recent decades, culminating in major structural reform being implemented from January 2007. This article presents a brief analysis of this reform process, its policy goals, key elements and potential to prepare the system to meet future health care challenges.

Keywords: Health care reform, administration, decentralisation, recentralisation, health care financing, Denmark.

Introduction
The predominantly tax-based Danish health care system has traditionally been highly decentralised politically, financially and operationally; public regional and local authorities are responsible for the provision and delivery of health care services. The system has also been characterised by strict expenditure controls and a high level of patient satisfaction. One consequence of decentralisation however, has been the somewhat uneven access to health care resources across the country. Danish politicians have, until now, given more weight to the importance of local self governance (and its potential to achieve innovation) than geographical equity. This has led to differences in waiting times, the availability of medical technologies and rates of specific diagnostic and curative activities, such as systematic breast cancer screening or the use of expensive drugs for ovarian cancer.1

The demands for ever more comprehensive primary care services, in addition to highly specialised secondary health care services, have not always been helped by the fragmented structure within this decentralised system. It has been argued that this structure with three political/administrative levels has led to suboptimal decision-making and management. As a consequence, a series of interventions to gradually strengthen the coordination and centralised control of the system have been introduced during recent decades, culminating in a major reform of administrative structures that came into effect on 1 January 2007.

The reform measures radically change the administrative and geographical boundaries of the health care system. Simultaneously, a centralisation and decentralisation process has been initiated, where both the state and the municipalities obtain new responsibilities and tasks. One of the goals

night). This increased productivity is needed for not only work output, but also training. Only four countries have achieved compliance with the existing regulations, and it seems sensible for Ministers to consider a delay in further implementation.

REFERENCES

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of the reform process is to ensure equal standards of care throughout the country by increasing the power of state bodies in planning and quality management. Another goal is to improve the structural conditions needed for primary care services that better meet needs, with an emphasis on preventive services and health promotion, in addition to the provision of high quality specialist secondary health care services. This article presents a brief analysis of this reform process, policy goals, key elements, and potential to prepare the system to meet future health care challenges.

**Changing structure**

The health system has been characterised by path dependent and incremental changes since major administrative reforms created the decentralised (county-based) system in the early 1970s. As a result of the growing debate on the structure of the public sector, the government appointed a Commission on Administrative Structure in October 2002. This Commission was charged with the task of assessing the “advantages and disadvantages of alternative models for the structure of the public sector and on this basis to make recommendations for changes that would remain sustainable for a number of years”.

In January 2004, this Commission concluded that reforms to public sector structures were required. This conclusion was partly based on the assessment that counties and municipalities were of insufficient size for proper task performance and also because the distribution of tasks in the public sector was inappropriate. The Commission presented six different alternative public sector models, describing their advantages and disadvantages but without making any recommendation.

After a public hearing, the central government proposed large scale structural reform that deviated somewhat from the models put forward by the Commission, particularly in regards to financing mechanisms and the number of regional units. The government proposal, which became the basis for the final political decision, maintained the three political/administrative levels but introduced new divisions of labour. The larger regions would retain responsibility for most treatment-related health tasks, while the municipalities would gain a greater role in terms of prevention, health promotion and rehabilitation. The agreement also included financing and resource allocation measures, with the regions losing the right to finance health expenditure via regional taxation, instead relying on a combination of state block grants, activity-based contributions as well as municipal co-financing (see section on key elements of new system).

"One of the goals of reform is to ensure equal standards of care across the country"

Figure 1: Post reform structure of the statutory health system in Denmark

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<th>State level</th>
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<td>Municipal Councils</td>
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* The Danish Regions and the National Association of Local Authorities are not part of the formal political and administrative system. They are interest groups for the municipalities and regions. They represent the decentralised authorities in discussions and negotiations between regional and municipal politicians, professional organisations and central government but cannot enter into legally binding agreements on behalf of their members.

Policy goals and principles behind reform

The main arguments in favour of reform were broadly related to a reduction in bureaucratic costs and taxation levels. The government further stated that the purpose of the reform was to maintain and develop a democratically governed public sector on a sound basis for continued development of the Danish welfare society. Therefore, the decentralised public sector needed to be designed in such a way that it could meet future requirements by creating sustainable structures with a clear responsibility to provide high quality welfare service to the population. Larger municipalities were expected to be able to provide more specialised and integrated solutions for welfare tasks, whilst maintaining local democratic accountability.

The government also set out two underlying principles governing reform. The first was that funding should be linked to tasks. This meant that the authorities taking on new tasks would be compensated by those authorities relinquishing these activities. The parties behind the reform measures agreed that this should not result in higher taxes nor increased public expenditure.
The second linked principle was that while these structural measures, in general, should be neutral in terms of expenditure, this did not mean that there would be no costs involved in merging municipalities and creating new regions. These costs however, would very much depend on how the individual municipalities and regions planned the process. The municipalities had to bear these costs, which the government argued would ultimately be outweighed in the long run because of potential synergy effects and economies of scale.3,6

**Key elements of the new system**

**Organisation**

Structural measures within the reform have changed the political and administrative landscape by dramatically reducing the number of regional and local units and changing their division of responsibilities. The number of regional authorities have been reduced from fourteen counties to five regions (2.6-1.6 million inhabitants) and the number of municipalities from 271 to 98 (37% of the new municipalities have more than 50,000 inhabitants, 38% have 30,000-50,000, 18% 20,000-30,000 and 7% have less than 20,000). Both administrative levels are governed by directly elected politicians.2,6 (See Figure 1 for an organisational overview of the new administrative structure).

The purpose of establishing larger units within the health care sector is to improve the quality of patient care, as well as health promotion and preventive services, by creating opportunities for grouping treatments and services, thus exploiting the advantages of specialisation which ensures the best possible utilisation of resources.2,6

With reform, municipalities have gained overall responsibility for rehabilitation that is not provided during hospitalisation. Previously, this responsibility was shared with the counties. In addition, the municipalities now have primary responsibility for prevention and health promotion, with the goal of integrating these activities into other local responsibilities, i.e. day care, schools, centres for the elderly, etc. Treatment of alcohol and drug abuse, as well as specialist dental treatment for people with learning difficulties, are likewise now the responsibility of the municipalities.2,6

The chief responsibility of the regions is to run hospitals, including psychiatric and prenatal care centres. Environmental and regional development tasks have also been maintained at this level. Most other tasks have been moved to the state or municipality level.2,6 In order to ensure coordination between regional and local activities within the health care system, regions and municipalities will have to enter into binding partnerships within health coordination committees. Furthermore, they must make health agreements on procedures for the discharge of frail and elderly people from hospital, social services for people with mental disorders as well as preventive treatment and rehabilitation.2,6

"Co-financing may incentivise municipalities to invest in prevention"

The role of the central government is almost exclusively concentrated on regulating, supervising and financing. Following reform, the influence of the National Board of Health on hospital planning has been strengthened, with the intention of ensuring more equal provision of hospital treatment across the country.2,6

**Financing**

Until 2007, the Danish health care system was financed through progressive general income taxation at the national level supplemented by proportional income and property taxes at the regional level. National level tax revenue was distributed to the counties via block grants based on objective criteria and some activity-based financing for hospitals. The system was designed to support solidarity in financing and equity in coverage.7,8

With reform, several important financial changes have been implemented. The independent right to raise taxation at regional level was abolished. Health care activities are now financed largely through a national earmarked health tax (8% of income), redistributed in terms of block grants to regions and municipalities. The earmarking of health taxes is a new feature in Denmark and is intended to create greater transparency within this sector. However, it also reduces the potential for redistribution between health and other sectors.

80% of all health care activities in the regions are financed through these block grants in addition to some activity-based payments (approximately 5%). The size of these block grants are calculated using a formula where expected need for health care in the population is a central component. This level of need is assessed by combining the distribution of age and socioeconomic status in the region. The purpose of activity-based payments is to encourage the regions to increase activity levels within hospitals.

The remaining funding comes from a combination of per capita and activity-based payment contributions by municipalities. Co-financing it is thought will incentivise municipalities to invest in prevention activities, as their activity-related contributions will primarily reflect the number of hospitalisations and outpatient treatments at hospitals, as well as the number of services from general practitioners. In this way, municipalities that are successful in reducing the need for hospitalisation will be rewarded.2,6

**Discussion**

One key argument for reform has been the cost of bureaucracy and the multiple tiers of taxation. However, it is not clear whether it will lead to any major reduction in administrative costs. Moreover, significant implementation costs are being incurred. With the continuation of three administrative/political levels, now with just two tiers where taxes are levied, the stage is set for a blame-game between the newly empowered state and the regions. Some observers question the sustainability of the new organisational structures and predict that the regional tier of administration will in turn be removed due to the separation of funding from the provision of services. This could lead to a new structure, with the state also responsible for the provision of hospital services.

Another key driver behind reform was the perceived need for larger catchments areas to support future specialisation and sustainable structural adjustments. Many observers have pointed to the ambiguous evidence on economies of scale and specialisation in health care, while several independent observers have pointed out that the former counties were already performing well in terms of controlling expenditure, increasing productivity and making gradual structural adjustments. Most observers agree that strengthening the role of the municipalities is beneficial; however, there is some fear that they lack sufficient competence to plan and implement their newly acquired responsi-
This is also not very likely due to the relatively limited municipal co-financing contributions. Since many municipalities are currently developing substitute services, one unintentional consequence of the new financial system could be that the total cost of municipal and regional health services will increase, especially in the short run.

Another important radical change in the financial arrangements is that the level of activity-based financing in hospital budgets will increase from 20% in 2006 to 50% in 2007. The government has actively sought to use activity-based financing to create incentives for increased activity when redistributing funds. So far, the relative limited use of activity-based financing seems to have led to increases in activity level at hospitals, but possibly also bias against some areas where activity levels are harder to measure and influence (for example, geriatrics or internal medicine).

The implementation of such large scale reform will not be without obstacles and a significant challenge still lies in ensuring a system that all groups of patients and their families can access and navigate easily. Careful ongoing evaluation of these reform measures, such as those by the Sundhedsreform network will be required (See Box).

However, if these challenges can be handled appropriately, the structural changes will likely make the Danish health care system better prepared to meet the future demands of modern health care. On the other hand, the changes in financing arrangements are not without their difficulties and the likelihood of unintentional consequences is present. With the new organisational structures in place, the logical next step would be to go deeper into the core of problems that have much consequences is present. With the new organisational structures in place, the logical next step would be to go deeper into the core of problems that have much

To date, no independent experts have spoken out in favour of the financing changes. Municipal co-financing for regional health services, for example, hospital admissions and consultations with general practitioners, have been based on two assumptions. First, that incentive structures will only be effective if use of regional health services can in fact be prevented. This is not likely for a large amount of hospital services. Second, that prevention or alternative services offered by the municipalities have to be less expensive than the municipalities’ contribution to the total costs of the given service otherwise provided by the region.

References