

# A new primary care rostering and capitation system in Norway: Lessons for Canada?

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## Abstract

PROVIDING EVERY PATIENT with a personal primary care physician or, from the physician's perspective, establishing a stable roster or list of patients is currently being actively debated in Canada. Norway's system of primary care medicine, similar to Canada's, faces many of the same problems. In 1992 a trial rostering system with blended funding (capitation, fee-for-service and user fees) was established in 4 Norwegian municipalities. After 3 years of close monitoring, the results of system evaluations have attracted strong interest. This article reports on the benefits and problems encountered with the new rostering system in Norway. If Canada is moving in the same direction, some of the lessons learned may be helpful.

## Résumé

FOURNIR À CHAQUE PATIENT un médecin personnel de premier recours ou, du point de vue du médecin, établir une liste stable de patients : ces 2 questions font actuellement l'objet de débats animés au Canada. Le système de soins médicaux primaires de la Norvège, qui ressemble à celui du Canada, connaît beaucoup de problèmes semblables. En 1992, on a établi à l'essai, dans 4 municipalités norvégiennes, un système de listes comportant du financement mixte (capitation, rémunération à l'acte et frais d'utilisation). Après 3 années de suivi étroit, les résultats des évaluations du système ont suscité beaucoup d'intérêt. Cet article décrit les avantages offerts par le nouveau système de listes en Norvège et les problèmes qui en découlent. Si le Canada évolue dans cette direction, certaines des leçons apprises pourront être utiles.

**T**he viability of the organization and payment structure of the Canadian primary health care system is increasingly being questioned.<sup>1-5</sup> In a recent report, the chairs of the family medicine departments in Ontario argued that the present system is not meeting the goals of accessibility and universality adequately.<sup>6</sup> Although affordable to individual users, the system places heavy burdens on provincial budgets. There is an urgent need to rationalize the number, distribution and mix of physicians, but lack of control and accountability in an open-ended system makes planning difficult. As one solution, the department chairs recommended that patients be registered with a practice, that a system of blended funding be implemented and that fiscal responsibility for coordinating care and balance among preventive, curative and palliative services be assigned to a local authority.

To achieve an optimum level of quality, cost-effectiveness and equity in the health care system, it is now agreed for the most part that the family physician must play a central role. The recommendations from the 1994 World Health Organization/World Organization of Family Physicians (WHO/WONCA) conference held in London, Ont., included having the family physician as exclusive first contact, implementing a referral system (gate-keeping) and forming a contractual identification of the patient-doctor relationship.<sup>7</sup>

In contrast to several European countries (Denmark, the UK and The Netherlands), which have used rostering systems for many years, Norway's more



## Education

## Éducation

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open-ended system had not included rostering until 1992, when a trial rostering system with blended funding (capitation, fee-for-service and user fees) was instituted in 4 Norwegian municipalities, involving a total of about 250 000 inhabitants. Monitoring and recent evaluations of the trial system have resulted in a number of observations of strong interest to Norway. These observations may be of interest to other countries with similar open-ended systems, such as Canada.

## What is primary care rostering?

Primary care rostering, also known as “client registration,” “client selection” and, in Norway, the “patient list system,” is a process by which consumers register with a chosen primary health care provider or a group of providers. Implying a defined relationship of mutual responsibilities and commitments between the consumer and the provider, it is seen as a tool that providers can use to manage their practice, maintain comprehensive client health records, provide better continuity of care, and generally coordinate health care, health promotion and illness prevention activities. For a general practitioner, rostering is also said to avoid duplication of services, create efficient referrals, constrain self-referral and double-doctoring, promote continuity of care (which improves efficiency and outcomes and strengthens the doctor–patient relationship) and address the problem of physician distribution.<sup>4</sup>

Rosterings is also seen as the potential basis for funding of primary health care services.<sup>8</sup> Payments to physicians can be through a fixed salary, fee for service, capitation (based on the number of individuals on the roster and often weighted according to the age and sex of the individuals) or incentive funding (as used in the UK for such practices as immunization and screening). A blended system, which incorporates elements of all these payment methods, is commonly discussed together with rostering systems.

## The current primary care system in Norway

The Norwegian Municipal Health Act (1984) gives each of the 450 municipalities individual responsibility for primary health care services. One-third of family physicians work on a fixed salary; the remainder are self-employed, earning their income in the form of user fees from patients (35% of total income), fee-for-service payments from the national social insurance agency (25%) and a subsidy by a contract with the municipality that specifies the rights and obligations concerning payment, hours of work, equipment and personnel (40%).<sup>9</sup> Primary care physicians have no role in hospital care. Patients need referrals for the first visit to a specialist, an outpatient clinic or a hospital. Private practice and walk-in clinics are al-

most nonexistent, because patients have to pay the total cost themselves. In other respects family practice in Norway is very similar to that in Canada: patients choose their own doctor, and working style and equipment are based on a common understanding of the discipline.<sup>10</sup>

## Reasons for considering a new system

Limitations of the current system in Norway had become more visible throughout the 1980s. A report to the Norwegian Parliament proposed the establishment of a rostering system that was to be pilot tested in several communities.<sup>11</sup>

It was believed that a rostering system would provide better health care to patients with chronic illness and that such a system would be a better vehicle for health promotion and disease prevention than the current system. In addition, there had been large increases in billings by family physicians, and it was believed that a rostering system would result in more efficient use of resources.

## Testing the new system

### Objectives

The main objectives of the trial projects in Norway were (a) to determine how the establishment of personal physicians, based on a rostering system with blended physician payment, would affect users, their physicians and those who interact with physicians in certain well-defined geographic areas (municipalities),<sup>12</sup> (b) to clarify how existing payment schemes would have to be modified for the rostering system to function well, and (c) to gather enough information to determine whether a rostering system could be introduced universally in Norway.

The Norwegian Parliament also wanted to determine how a rostering system would affect other important health policy issues such as health services for disadvantaged patient groups, the roles of health promotion and disease prevention, assurance of treatment quality, and physician coverage in remote areas.<sup>13</sup>

### Main elements

- All people 12 years of age and older in the selected municipalities were asked to apply to become members of the roster (list) of 1 permanent physician. Children under 12 were to use the same physician as one of the parents. Those who already had a regular physician would generally remain on that physician's roster.<sup>12</sup>
- The right to choose one's own physician was identified as politically important and was established as a fundamental principle of the system.<sup>13,14</sup> Transferring to an-



other physician was possible once a year (or earlier if necessary or strongly desirable). The rostering process was administered by the local office of the National Health Insurance, which also kept track of new physicians and openings on existing rosters; in this way, patients did not contact physicians directly to be added to a roster.

- Each physician became personally responsible for providing the necessary health care to the patients on their list and for collaborating with other health care professionals and referring to specialists or hospitals as necessary.<sup>13</sup>
- Periodic health examinations (including illness prevention interventions) would take more prominence as part of the new system.
- The number of people per list (1480) was established on the basis of the number of patients of the average full-time general practitioner in Norway in 1992. The minimum list size possible was 500 patients. At the same time, the lists were not to be so large that good patient access to the physician could not be ensured. A physician could, after agreement with the municipality, "close" the list to new patients if the work load was felt to be too heavy. Valid reasons for closing a list included part-time work elsewhere, parental responsibility for children under 7 years of age and physician's age over 60.
- A new payment system was established on the basis of an annual capitation payment of 236 kroner (\$50) per person on the list, user fees and additional fees for service paid by the government. There was a somewhat higher capitation payment (Nkr 283 [\$60]) for each of the first 500 patients on the list, to cover fixed expenses. There were also higher payments for patients over 75 years of age (an additional Nkr 47 [\$10]), but no further differentiation by age group and sex. Specialists in family medicine were given an additional Nkr 75 (\$18) per patient. Physicians taking part in municipally organized on-call services beyond the contractually arranged hours were paid over and above their contract with the same fees as those used in the existing system.

Physicians charged fees for providing consultations. Patients paid part of these fees directly, and the National Health Insurance paid the remainder (the National Health Insurance paid part of the consultation fee and, generally, all fees related to laboratory tests and procedures.)

Each physician's overall income was scheduled to be 60%–70% capitation payments, 15%–20% user fees directly from patients and 15%–20% fee-for-service payments from the government. This would give an estimated average gross income of about \$100 000

after expenses, plus on-call payments of up to \$50 000.

- The municipal contracts included detailed clauses regarding office (and house-call) hours (usually 8 am to 4 pm weekdays plus evening hours 1 day per week), maximum waiting time for ordinary consultations, and locum arrangements during leaves and absences.

The physicians were to work at least 44 weeks per year but were responsible for arranging patient care for all 52 weeks. In case of a planned absence of 2 or more consecutive weeks, notice was given to the municipality. All family physicians participated in on-call services organized by the municipality.

- The patients were given all relevant information about the physician's practice, including alternative contacts during off-hours, leaves and other absences.
- Contacting a medical specialist without a referral from the permanent physician became more costly to the patient. A patient who contacted another general practitioner without an adequate reason had to pay a higher user fee in addition to the standard fee-for-service payment that would otherwise have been paid by the government (since a substantial part of the patient's payment would remain with the permanent physician, regardless of the number of consultations). This agreement was also seen as necessary for maintaining the close tie between patient and physician.

## Evaluation

The new rostering and capitation system was tested in 4 Norwegian municipalities, involving a total of about 250 000 people. A total of 150 physicians (106 men and 44 women) took part in the trial projects.

Coordinators were hired to plan, organize and follow up on the project in the 4 municipalities, and a national reference group was established to ensure that the projects were on track. This group included representatives from Norway's Ministry of Social Affairs, Ministry of Finance, the Norwegian Medical Association, the National Association of People with Disabilities and the Municipalities' Central Organization.<sup>12</sup>

A high priority was placed on evaluation, and the evaluation projects were coordinated by the national reference group. The evaluation projects were done by several groups of researchers in universities and other research institutions. Participating physicians were required to collect quality practice data for individual patients, including diagnosis, consultation time, patient age and sex and whether the patient was referred to a specialist or hospital. In addition to analyses of these data, the trial projects were evaluated primarily on the basis of results of surveys of affected patients and physicians.



## What they found

### *Stable lists*

The rostering system in Norway made it simpler for the participating physicians to administer and plan their practice activities and thus provide better continuity of care. Each person chose or was allotted a personal physician, who was contacted as needed. Most physicians did not accept patients listed with other physicians, except during organized locums, emergency illness or injury, or because of referral from another physician.<sup>15</sup>

During the first 3 years of the evaluation projects, the proportion of patients who wanted to change physicians was low, only 3%–4% per year.<sup>16</sup> The main reason for switching was because patients moved; rarely was it because of patient–physician conflicts.

A good patient–physician relationship became even more essential than before. If the relationship was not good, the rostering system was probably worse than the alternatives, forcing mechanisms for changing physicians to become routinized. This problem might be especially acute for patients with psychiatric disorders or patients with ill-defined illnesses that are difficult to diagnose and treat.

### *Collaboration*

Collaboration with hospitals and specialists and coordination of services relating to the individual patient became easier, since it was always clear which physician was responsible for each patient. Coordination with home nursing and nursing homes also improved during the trial period. Responsibilities for special groups, such as patients with psychiatric illnesses or those with mental or physical disability, were more clearly delineated, with coordination of services for these patients working much more smoothly than before.<sup>17</sup>

There were no changes in the referral rates to specialists (including referrals for radiology), but hospital admission rates decreased. The use of emergency departments and walk-in clinics also decreased and ranged from 5%–15% among the 4 municipalities.

Although it became easier to establish and maintain cooperation relating to specific patients, engaging the participating physicians in more general cooperative work with other parts of the health and social services seemed to be more difficult than before.

### *Physician incomes*

Although about 1480 patients were anticipated per list, some of the participating municipalities had poorer physi-

cian coverage than the Norwegian average, which brought the average list to 1650 patients. Also, the range became wider than expected: some physicians had as many as 2700 patients registered, whereas others had fewer than 1000. This meant that many physicians worked much more than the stipulated 38 hours per week, with correspondingly higher incomes. Conversely, those with shorter lists found that their income was lower than it had been with the old system.<sup>16</sup>

The reaction of the Norwegian Medical Association has been generally positive. They have recommended, however, that no physician have a list longer than 2000 patients. The association emphasized that differences between patient groups and between patients should not be accommodated by physicians' having differential capitation rates based on age and sex. Instead, it recommended that the fee schedule for individual consultations compensate physicians appropriately; otherwise, the system might lead to unfortunate stigmatization of certain age and patient groups.<sup>14</sup>

### *“Heavy lists”*

There has been much discussion on the issue of “heavy lists.” Patients with chronic illness, elderly patients, recent immigrants and women of child-bearing age need more attention than other patients, in terms of both the number of consultations and the length of each consultation. The evaluations indicated that the longer the physician's practice had been established, the “heavier” was the list.

### *Stronger ties between patient and physician*

Some participating physicians commented that for the new system to work, there had to be a large enough number of physicians taking part. There was general agreement that the responsibility felt by the individual physician for “their patients” was stronger than in the traditional system. Correspondingly, the patients felt that they had more of a “right” to see “their personal physician.” Thus, physicians found themselves more tied to their practices, reducing opportunities for continuing medical education and professional development or for parental leave.<sup>18,19</sup> Most of the patient feedback was positive, especially with regard to being able to choose a personal physician.<sup>15</sup>

### *Female physicians*

The system was perceived as inflexible by a number of female physicians, who also felt they had less control over their work days than before. One study showed that under the rostering system, female physicians had a much



higher proportion of female patients (some as high as 70%–80%), with a higher work load than before.<sup>16</sup> There were indications that the principle of freedom to choose one's provider meant that female patients with special problems and expectations would select female physicians with a reputation for listening and "spending time" with patients.<sup>20</sup> It may be that there is a subgroup of female patients, regardless of their age, who would be likely to see their physicians much more frequently and need longer consultations than most. Another study, however, disputed that female physicians had "heavier" lists than male physicians.<sup>21</sup> The investigators found that although female physicians had a larger proportion of female patients 20–79 years old, they also had more children and teenagers who made a modest number of visits and, more important, fewer patients in the "heavy" age group (80 years or more) than did the male physicians.

It may prove difficult to quantify why the female physicians in some of the municipalities experienced a heavier workload and a more stressful practice after the establishment of the rostering system than before. Characteristics of female patients who specifically select female physicians, characteristics of the interplay between female physicians and female patients, and characteristics of the entire work situation (including home and children) for female physicians may not easily be accommodated in simple models, which consider only the number, age group and sex of patients.

### **Interns and residents**

In Norway all physicians spend 6 months as interns in general practice before they can get licensed. Although it is probably unrealistic to assign personal rosters to these interns or to family medicine residents, the relationship between supervisor and interns and residents will certainly need to be clarified. Whether the supervisor or the government is to pay their salaries is currently under debate. The residents have argued for the Danish "back-pack model," whereby interns and residents would receive a fixed salary from the government, with fee-for-service payments for seeing patients from the supervisor's list going to the supervisor. In return, the supervisor would spend time with the interns and residents on education and practical supervision. The lists of physicians who supervise interns and residents should then be the same as those of other physicians. This arrangement would likely be more conducive to active involvement in preventive medicine and health promotion, and would also make it easier for residents and interns to focus on the educational aspects of their residency training, rather than being forced to see as many patients as possible.<sup>22</sup>

### **Distribution of physicians**

Some concern has been raised as to the effect the new system might have outside the larger cities. It has been suggested that central control will have to be sufficient to prevent the system from creating even stronger incentives to work in the larger cities, leaving a medical "vacuum" in rural areas. Before the system is introduced nationally, it will most likely also be tested in a number of smaller, more remote municipalities. If the length and composition of the lists can be strictly controlled, the incentive to practise in large centres will likely be less.

### **Limitations of the trial projects**

The trial projects and evaluations were limited in scope, and it is premature to draw firm conclusions about the impact of the rostering system on quality of care, health status or health care costs. However, for municipalities with more than 50 000 residents, the way is clear for large-scale implementation. Although the system has come to stay, details relating to the composition of the rosters will have to be fine-tuned.<sup>23</sup>

### **Conclusions**

The objectives of the trial projects in Norway were largely fulfilled. For the most part, the new rostering and capitation system functioned well during the trial period.<sup>15</sup> Several of the problems identified were not specific to the rostering system, since they were also present in municipalities other than the 4 studied.

The main advantage of local system coordination is that family practice can be linked more directly to the health care needs of the local community. Local fiscal accountability has been a key feature of the Norwegian trials and has also been highlighted in recommendations for Ontario.<sup>6</sup>

How occupational health, school health and nursing-home care will be handled still needs to be worked out. Furthermore, the problem of increasing physician incentive to perform health promotion and illness prevention activities at the same level as curative tasks has not yet been satisfactorily resolved.

Tension exists between the desire for unlimited choice and the need for equitable access, service coordination and accountability.<sup>24,25</sup> The Ontario Medical Association has suggested that physicians be given the choice of payment plans.<sup>4</sup> In Norway, the emerging consensus is that, within a geographic area, all physicians must "opt in": a system in which some physicians are paid through a capitation and rostering system while the rest receive traditional, open-ended fee-for-service payments will be con-



fusing to the public and is likely to be the most expensive alternative for society.

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