Health Service Organization and Primary Care Network Programs

3.10

BACKGROUND

The Ministry of Health and Long-Term Care's Alternative Payment Programs Branch is responsible for the administration and funding of the Health Service Organization (HSO) Program and the Primary Care Network (PCN) Program. Both programs are funded under the authority of the *Health Insurance Act*.

Primary health care is usually defined as the care provided at the first point of contact between a patient and the health care system. This care can be provided by family physicians, nurse practitioners and others.

The HSO Program was established in 1973. Each HSO comprises physicians who have agreed to provide a defined set of primary health care services to patients enrolled as members of that HSO. As of March 2000, 58 physician-sponsored and 5 non-profit HSOs were providing primary health care services to approximately 310,000 enrolled individuals.

In 1999, the Ministry introduced PCNs as a new model for providing primary health care services. The May 2000 *Ontario Budget* stated that the government's goal is "to have 80% of eligible family doctors practising in PCNs over the next four years."

Each PCN comprises a group of physicians who provide defined primary health care services to enrolled patients. At the time of our audit, pilot PCNs were being tested at seven sites throughout Ontario. The PCN Program is intended to provide easier access to primary health care services and better coordination of health care information as well as to help reduce waste and duplication in the health care system.

During the 1999/2000 fiscal year, the Ministry, through its Health Insurance Program, provided transfer payments totalling approximately $75 million to HSOs and $11 million to PCNs.

AUDIT OBJECTIVES AND SCOPE

The objectives of our audit were to assess whether:

- the Health Service Organization Program was managed with due regard for economy;

- satisfactory procedures were in place to measure and report on the effectiveness of the Health Service Organization Program; and
- the Ministry had adequate procedures in place to ensure that the Primary Care Network Program was being established with due regard for economy, efficiency and effectiveness.

Our audit was performed in accordance with the standards for assurance engagements, encompassing value for money and compliance, established by the Canadian Institute of Chartered Accountants and accordingly included such tests and other procedures as we considered necessary in the circumstances. Prior to the commencement of our audit, we identified the audit criteria that would be used to address our audit objectives. These were reviewed and agreed to by senior ministry management.

In conducting our audit, we reviewed and analyzed program policies and procedures, interviewed ministry staff and outside experts in the field of primary health care, reviewed relevant literature and researched the delivery of primary health care in other jurisdictions. We also reviewed the work performed by the Ministry's Internal Audit Service. However, because the Service had not issued any recent reports on the programs, we were unable to reduce our audit work. Our audit was substantially completed in April 2000.

OVERALL AUDIT CONCLUSIONS

The Ministry had not fully implemented the recommendations from our 1994 audit of the Health Service Organization (HSO) Program. Accordingly, many of our major concerns for this current audit were similar to those we noted in 1994.

In order to ensure that the HSO Program is managed economically and is effective in meeting its objectives, the Ministry needed to:

- periodically verify HSO patient rosters to ensure HSOs are not being overpaid. The only time that roster verification was undertaken, approximately 8,000 of the 18,000 patients selected for verification were determined to be ineligible;
- ensure that HSOs comply with roster and fee-for-service billing limits and, where applicable, recover any overpayments; and
- complete its study comparing HSO health care utilization and costs with fee-for-service practices.

With respect to the Group Health Association (Association), the Ministry had not conducted a formal assessment to determine whether it was obtaining value for money for the more than $20 million in annual funding it provided to the Association.

We concluded that in order to ensure that the new Primary Care Network (PCN) Program is established with due regard for economy, efficiency and effectiveness, the Ministry needs to:

- ensure that, in line with the planned expansion of the Program, it carefully assesses the interim report on the evaluation of the PCN pilot projects and the results of the study comparing HSO utilization and costs with fee-for-service practices;

- review options for adjusting capitation (per person) funding rates to ensure that funding provided to PCNs fairly reflects the levels and various types of service being provided;
- assess the effect that different primary care funding models have on the appropriateness of physician referrals of patients to specialists;
- ensure that the maximum number of patients each physician is allowed to enrol is reasonable and that rosters are periodically verified;
- develop performance measures and standards to monitor and evaluate the cost-effectiveness of PCNs; and
- develop a health performance information system that meets the needs of both the Ministry and PCNs.

DETAILED AUDIT OBSERVATIONS

HEALTH SERVICE ORGANIZATIONS

Under the terms of a standard agreement with the Ministry, health service organizations (HSOs) agree to provide defined primary health care services to the patients enrolled (rostered) with them. Patients rostered with an HSO must be eligible for Ontario health insurance (OHIP) and must agree that they will normally use that HSO as their source of primary health care services.

The HSO Program's stated objectives include:

- developing a coordinated system of health care delivery that is accessible, efficient and economical and makes the most appropriate use of health care resources;
- enhancing the health status of the population through health maintenance and illness prevention measures; and
- creating an environment that is supportive of physicians and other health care personnel.

HSOs receive monthly payments from the Ministry based on the number of patients on their rosters. These payments are calculated using per-person (capitation) rates that are based on the age and sex of patients on a roster. These payments do not vary with the volume of services provided. In addition to their capitation payments, HSO physicians are paid by OHIP on a fee-for-service basis for services provided to non-rostered patients.

ROSTER VERIFICATION AND NEGATION

ROSTER VERIFICATION

Because payments to HSOs are based on the number of enrolled patients as reported by each HSO, accurate patient rosters are essential for ensuring HSOs are not overpaid. There is a risk that patients who no longer use a particular HSO could be kept on the HSO's roster because the Ministry will continue to pay for those patients as long as they are rostered. In our 1994 audit, we noted that HSO rosters were not being properly verified. At that time, the Ministry

indicated that it would conduct audits of HSO rosters and confirm with patients their continued membership in HSOs.

However, in our current audit, we continued to have concerns about the inadequate verification of patient rosters. Patients enrolling or terminating their enrolment with an HSO are required to sign and date a form. While the information on the forms is submitted electronically to the Ministry, the forms are kept at the HSO. In that regard, the Ministry conducts signature audits to verify, on a sample basis, whether HSOs had obtained signed and dated forms for all of their rostered patients and whether the information submitted to the Ministry was correct. Between 1995 and 1998, ministry staff completed signature audits of 23 HSOs. However, no signature audits have been completed since August 1998.

We found that, for the signature audits that had been completed, required procedures were not always followed and corrective action was not always taken. For example, in one audit approximately 50% of the enrolment forms examined at an HSO were either not signed or not dated. The Ministry had not followed up to ensure that the HSO had subsequently obtained properly completed forms from its patients.

In addition, the standard agreement between the Ministry and the HSOs allows the Ministry to require an HSO to annually verify up to 5% of its roster to determine whether the patients are entitled to remain on an HSO's roster. Based on the results, the Ministry may request additional verification.

Roster verification has been undertaken only once. The Ministry selected approximately 5% of the patients from each HSO's March 1997 roster for verification by the HSO. The Ministry selected patients at high risk of being ineligible to belong to the HSO they were enrolled with, for example, patients who may have died or who likely no longer resided in the HSO's geographical area.

We found that ministry staff had not compiled or analyzed the results of the roster verification nor prepared any formal reports for ministry senior management. We summarized the results and noted that:

- 44% or about 8,000 of the 18,000 patients selected for verification had to be removed from HSO rosters; and
- 16 HSOs had to remove 60% or more of the patients that they had verified. Of these, four HSOs had to remove more than 80% of their sample.

Ministry funding to these HSOs was reduced to reflect these roster changes.

Based on the Ministry's risk criteria, some HSO rosters had more than 5% of their patients in the high-risk group. Yet only the initial 5% were verified. Also, HSOs that had to remove a high percentage of their patients from their rosters were not requested to perform additional verifications.

NEGATION

If a rostered patient obtains health care services outside the HSO that the HSO was expected to provide, a deduction (negation) is made from a subsequent payment to the HSO. Currently, the amount of the negation is 50% of the actual amount paid by OHIP for the services that were obtained outside the HSO by a rostered patient.

However, negation does not provide a financial incentive for an HSO to remove a patient from its roster unless the amount of negation is greater than the payment the HSO received for that patient. In addition, negation does not apply when services that an HSO was funded to provide are obtained from physicians who do not bill OHIP, for example, physicians employed by community health centres. Also, negation will not be effective if the patient has left Ontario or has died but has not been removed from OHIP's Registered Persons Database.

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Recommendation

To help ensure that payments to health service organizations (HSOs) are made only for patients actually receiving their primary care from the HSO, the Ministry should:

- **implement regular verification procedures for HSO rosters; and**
- **where practical, apply negation for primary care services provided to rostered patients by alternatively funded physicians.**

Ministry Response

The Ministry plans to implement a comprehensive system of roster verification that will be compatible with the new Primary Care Network (PCN) system and will enable verification to take place on a more regular basis. The Ministry is also analyzing current signature audit policies and procedures for HSOs for the development of the overall verification system process. Both of these actions will aid in ensuring that payments to HSOs are made only for eligible patients.

Where feasible, negations for primary care services provided to HSO rostered patients by alternatively funded physicians will be implemented.

ROSTER AND BILLING LIMITS

The HSO Program underwent a period of rapid growth in the late 1980s. However, in 1991, the Ministry stopped the Program's expansion due to concerns about its cost-effectiveness. In 1993, the Ministry and the Ontario Medical Association agreed to limit HSO rosters to 2,500 patients per full-time-equivalent HSO physician. While fee-for-service billings for non-rostered patients were limited to $50,000 per annum for an individual HSO physician, the overall limit for each HSO was capped at $30,000 per full-time-equivalent physician in the HSO group.

In our 1994 audit of the HSO Program, we recommended that the Ministry establish procedures to ensure that HSOs comply with agreed-upon limits. The Ministry responded that procedures were under development and would be implemented shortly.

We compared HSO roster and fee-for-service billing limits to information maintained by the Ministry for the 1997/98 and 1998/99 fiscal years and found that several HSOs had exceeded their limits. Based on this information, ministry staff subsequently estimated that overpayments for the 1997/98 and 1998/99 fiscal years totalled approximately $200,000 for exceeding fee-for-service billing limits and $133,000 for exceeding roster limits.

Recommendation

To ensure that health service organizations (HSOs) are paid in accordance with agreed-upon roster sizes and fee-for-service billing limits, the Ministry should monitor HSO compliance with those limits.

Ministry Response

Fee-for-service billing limit recoveries for the two previous years will commence in the fall of 2000.

Roster limit recoveries have previously been difficult to implement due to the retroactive nature of the last HSO agreement and the grandparenting of HSOs from the previous contract period. Generally, exceeding roster limits has not been a serious problem as HSOs that exceed their limit normally reduce their roster quickly through attrition. However, the Ministry will ensure that roster limits are complied with in the future.

INSTITUTIONAL SUBSTITUTION PROGRAM GRANTS

In 1993, the Ministry introduced Institutional Substitution Program (ISP) grants for HSOs to provide rostered patients with additional health care services not covered by capitation payments, such as nutritional and mental health counselling. In the 1999/2000 fiscal year, the Ministry provided ISP grants totalling approximately $8 million to fund services provided by nurses, dietitians and social workers.

In 1997, ministry staff evaluated the programs and related services funded through ISP grants and concluded that ISP grants were generally meeting their objectives. However, they also identified grants totalling $500,000 that should be cancelled or reduced, but these grants continued to be paid.

In 1999, the Ministry commenced another review of ISP grants. The results of this review were to be compared to the results from 1997. Recipients that were chronically not meeting their grant proposal targets, providing inappropriate services or serving an extremely small proportion of rostered patients were to have their grants reduced or cancelled. At the time of our audit, this review was still ongoing.

We also noted that, while the Ministry has permitted HSO physicians who join primary care networks (PCNs) to keep their ISP grants, other physicians in PCNs have not been provided with any similar compensation. This may create inequities in services and potentially complicates the evaluation or comparison of primary care networks.

Recommendation

To help ensure that value for money is received from Institutional Substitution Program grants, the Ministry should:

- **examine the appropriateness of the grants; and**

- **review the grants being provided and, where necessary, make appropriate adjustments.**

Ministry Response

The Ministry plans to conduct a formal review of all Institutional Substitution Program grants and make appropriate adjustments where warranted. The Ministry will allocate resources to ensure that a thorough review takes place. The 1999 review lacked sufficient data to enable the development of appropriate recommendations.

3.10 PERFORMANCE MEASUREMENT AND REPORTING

In 1991, ministry staff reviewed the HSO Program and recommended that a committee with HSO and ministry representation be established to develop measures for assessing the quality of HSO services and for examining existing information systems to ensure that they were providing effective and useful feedback on performance. The review also indicated that the Ministry should ensure that HSOs meet the requirements of an established quality assurance program and establish performance contracts with HSOs.

According to the Ministry's HSO program manual, HSOs are expected to regularly conduct routine medical and professional audits of the quality of care provided by their staff. We could find no evidence to indicate that the Ministry had ever determined whether HSOs have complied with the requirement regarding quality of care audits. In addition, no performance contracts had been established with HSOs.

In our 1994 audit report, we recommended that the Ministry investigate the feasibility of developing a system to measure and report on the effectiveness of the Program. The Ministry had commenced a study to compare health care utilization and costs in HSOs with fee-for-service practices. At the end of our current audit, this study, which the Ministry had originally anticipated would be completed by October 1995, was still unfinished. We understand that problems with data have reduced the scope of the study and delayed its completion.

Recommendation

The Ministry should complete its study comparing health care utilization and costs in health service organizations with fee-for-service practices and ensure that the results are considered in the implementation of the Primary Care Network Program.

Ministry Response

The Ministry has supplied data to the Centre for Health Economics and Policy Analysis (CHEPA) that meet the study's requirements for claims history. Ministry staff are currently working on rebuilding historical roster and rate tables to facilitate a final data transfer to CHEPA so that the study can be completed.

GROUP HEALTH ASSOCIATION

Since 1963, the Group Health Association (Association), which is unique in Ontario, has operated a community-based, ambulatory care facility that includes diagnostic services in Sault Ste. Marie. While the Association's funding is provided and administered by the HSO Program, the Association does not operate as an HSO.

The Ministry and the Association have negotiated a funding agreement whereby the Association receives $18.8 million annually for the first 39,000 patients on its roster and $375 for each additional patient up to a total of 44,000 patients. In the 1999/2000 fiscal year, the Association received $20.7 million, the maximum amount permitted under the agreement.

In delivering services, the Association contracts with an independent partnership of physicians who provide both primary and specialist medical services to its rostered patients. These physicians can also bill OHIP for services provided to patients who are not on the Association's roster.

FINANCIAL AND OPERATIONAL REPORTING

In 1994, the Ministry engaged a consultant to determine the reasons for the deficits incurred by the Association in the previous two years and to advise the Ministry on appropriate funding. The consultant's recommendations included funding the Association on a program basis and negotiating a new contract that contained commitments to improve productivity and utilization. These included establishing a minimum number of patients per full-time-equivalent family physician, collaborating on health system planning and developing outcome measures. The consultant also recommended that the Ministry review, at least annually, the Association's workload and its financial performance.

Currently, the Ministry does not have sufficient information to assess whether it is obtaining value for money for the more than $20 million in annual funding it provides to the Association. For example, it has not received detailed, annual operational planning or budget information, although, apparently, under the terms of its agreement with the Association, it could request these. Further, we understand that the Ministry has not reviewed the agreement between the Association and the independent partnership of physicians since 1984. Therefore, the Ministry has not been in a position to assess the reasonableness of the compensation paid to the independent partnership, which received approximately $7.5 million from the Association in the 1998/99 fiscal year.

The most recent contract with the Association was for five years, beginning on April 1,1995. Under this contract, the Association undertook to establish and achieve productivity and utilization improvement targets. During the first year it was to determine benchmarks for comparing productivity achievements throughout the remainder of the term of the agreement. Although the Association was to have annually reported to the Ministry on the achievement of its targets, we found no evidence that it had done so.

The Ministry did not request the Association's audited financial statements for the fiscal years 1993/94 to 1998/99 until November 1999. Moreover, since these annual statements were prepared on a consolidated basis, they did not provide detailed information on expenses by program. In addition, while the Association is also required to submit quarterly financial reports, it had not done so.

3.10

OUTSIDE MEDICAL SERVICES AND ROSTER VERIFICATION

Under its agreement with the Association, the Ministry is entitled to monitor the extent to which the Association's rostered patients use outside medical services. However, unlike HSOs, payments made to the Association are not reduced when its rostered patients obtain services outside the Association that the Association is funded to provide. Consequently, the Association has no incentive to remove patients from its roster.

In 1998, the Association agreed to verify samples of its roster as at September 1, 1998 and July 1, 1999. The verifications were to be completed by March 1, 1999 and January 1, 2000, respectively. Although the Ministry agreed to provide a list of rostered members to be verified, at the time of our audit, it had not done so and the verifications of the Association's roster had not been completed.

In March 1999, the Health Services Restructuring Commission (HSRC) reported on the role and impact of the Association on local health services utilization. The HSRC noted that it had expected to find that the Association's rostered patients made little use of outside medical services, particularly the services of family physicians. However, it found that, in the 1995/96 fiscal year, the Association's rostered patients used over $6.1 million in physician services outside the Association. Of this amount, $4.6 million was for services provided by specialists and $1.5 million was for services provided by family physicians. The HSRC advised the Ministry that it should review the Association's programs and services, with particular emphasis on the use of medical resources outside of the Association by rostered patients.

The HSRC also concluded that a joint executive committee with representation from the Association and area hospitals should be created. The committee was to focus on joint planning to maximize integration and realign services where necessary to minimize duplication. The Ministry was advised to make future funding conditional on the Association's participation in the committee. At the time of our audit, we were advised that such a committee was being established.

Recommendation

To help ensure that it is receiving value for the funding it provides to the Group Health Association (Association), the Ministry should:

- **require the Association to provide it with sufficient information so the Ministry can assess whether the Association's programs and services were delivered efficiently and effectively;**
- **ensure that the accuracy of the Association's roster is verified periodically; and**
- **assess the reasonableness of the outside use of medical services by the Association's rostered patients and implement a process that enables the Ministry to reduce payments to the Association where warranted, as is currently done in the Health Service Organization Program.**

Ministry Response

The Ministry agrees with the recommendations and will work with the Group Health Association to develop an accountability framework to help set benchmarks, deliverables, indicators/measurement tools and performance targets by March 31, 2001. Preliminary discussions (verbal and written) have already taken place with the Association and requested financial and service information is being sent to the Ministry. The Ministry will also develop mechanisms to review roster accuracy. The Ministry will ensure that agreements with the Association enable the Ministry to recover funds where warranted.

PRIMARY CARE NETWORK PROGRAM

In November 1998, the Ministry received Management Board of Cabinet approval for the implementation and funding of five primary care pilot programs called primary care networks (PCNs).

PCNs are established through standard agreements with the Ministry. Participation is voluntary for both physicians and patients. A PCN is made up of a group of physicians who join together to provide a defined set of primary health care services. PCN physicians may maintain their own offices and provide primary health care to their rostered patients. However, those patients have access to other physicians in the PCN when their own physician is unavailable. Physicians in a PCN are linked by a software network that allows them access to the medical histories of rostered patients in the absence of a patient's primary physician. Patients also have 24-hour telephone access to medical advice and to medical care after hours and on holidays and weekends.

To establish a PCN, participating physicians must enrol 40% to 60% of their patients within six to twelve months. Rostered patients must reside within a defined geographical area, be eligible for OHIP, and agree not to enrol with another physician for six weeks and not to change their enrolment more than twice a year.

PCNs can choose to be compensated for the services their physicians provide either on a capitation basis, where physicians receive monthly payments for each of their rostered patients, or through reformed fee-for-service, where payments are only made if services are actually provided. Reformed fee-for-service uses the number of enrolled patients to establish an annual maximum billing limit.

PCNs also receive funding from the Ministry for enrolment costs and telephone health advisory services. They are also entitled to financial assistance to acquire the information technology they require to establish their provider network. In its new four-year agreement with the Ontario Medical Association, effective April 1, 2000, the Ministry agreed to contribute funding for the acquisition of information systems. The May 2000 *Ontario Budget* announced $150 million for new information systems to support the transition to primary care networks.

In addition, PCN physicians are entitled to fee-for-service payments for services they provide to enrolled patients that are not included in the defined set of primary care services to be provided by the PCN as well as for services they provide to non-rostered patients.

Although the PCN Program is still in a pilot stage of development, the government has indicated that it is to be rapidly expanded in the near future. Specifically, the May 2000 *Ontario Budget* stated that the government's goal is "to have 80% of eligible family doctors practising in PCNs over the next four years." The importance of the primary health care system, in terms of both government expenditures and its significance for the quality of life for Ontarians, requires that any changes to its delivery be carefully considered. The Ministry's goal is to improve the delivery of primary health care without incurring higher expenditures for physician services. The discussion and recommendations below are intended to assist the Ministry in ensuring that the Primary Care Network Program is established with due regard for economy, efficiency and effectiveness.

IMPLEMENTING PRIMARY CARE NETWORKS

In November 1998, when it approved implementation and funding for the first five pilot PCNs, Management Board of Cabinet directed the Ministry to assess the effectiveness of the health care delivery provided by the pilot PCNs and report back on the results of that assessment prior to expanding the PCN Program.

In December 1999, the Ministry issued a request for proposal for the evaluation of the pilot sites, indicating that the final report would be due by March 30, 2003, with various interim reports required at earlier dates. At the time of our audit, the Ministry had selected consultants to undertake the evaluation. However, even if the timelines for the evaluation are met, it is possible that the planned expansion of the PCN Program will be substantially completed before the final results of the evaluation are known. Nevertheless, the interim reports of the pilot evaluation may provide some pertinent information, as would research into the experiences of other jurisdictions with similar programs.

An ongoing ministry-funded study comparing health care utilization and costs in HSOs and fee-for-service practices may also produce some useful information to guide the expansion of PCNs, although this study has been delayed because of problems with data.

Recommendation

To help ensure that the Primary Care Network (PCN) Program provides improved primary health care in a cost-effective manner, the Ministry should, in line with the planned expansion of the Program, carefully assess:

- **the interim reports on the evaluation of the PCN pilots;**
- **relevant experiences of other jurisdictions; and**
- **the results of the ministry-funded study comparing health care utilization and costs in health service organizations and fee-for-service practices.**

Ministry Response

Formal evaluation of the primary care reform pilot project will consist of a number of interim reports followed by a final report slated for delivery in March 2003. The goals of primary care reform that are to be addressed by the evaluation include improved primary care access, improved quality and

continuity of primary health care and increased patient satisfaction with and cost-effectiveness of health care services.

The Ministry is committed to continually reviewing the experiences of other jurisdictions to identify best practices that warrant consideration in Ontario. The Ministry is currently represented on the Federal/Provincial/Territorial Advisory Committee on Health Human Resources, which has reviewed relevant international literature, and will participate in national and international conferences to draw lessons on primary care reform from other jurisdictions.

A Centre for Health Economics and Policy Analysis study was commissioned by the Ministry to examine health care utilization and costs in health service organizations and fee-for-service practices. The Ministry will expedite this study and carefully analyze the results to determine if it has applicability to the Primary Care Network Program.

CAPITATION RATES

Under capitation funding, a physician is paid a fixed amount based on patient enrolment that does not vary with the volume of medical services provided to enrolled patients.

The Ministry has calculated capitation rates using the amounts historically paid by OHIP for the services PCNs are required to provide to their enrolled members. These rates have been adjusted to reflect the average usage of services by patient age and sex. However, these rates have not been adjusted for other factors that may affect the need for primary health care, such as patients' medical histories. Therefore, physicians with patients that have a greater-than-average need for primary health care services may be disadvantaged when compared to physicians whose patients have a lower-than-average need. Physicians that are part of a PCN are required to enrol patients regardless of their health status. However, if capitation rates are not adequate to compensate physicians for providing care for a greater-than-average number of high-care patients, physicians with such caseloads may be motivated to stay with, or return to, the current fee-for-service system.

Capitation rates that accurately reflect the services required for a PCN physician's enrolled patients are a critical factor in the success of the PCN Program. Rates that are too low may discourage physicians from participating in the Program and rates that are too high could make PCNs unnecessarily expensive to fund. The Ministry has indicated that it intends to review capitation rates after the first eighteen months that PCNs have been in operation.

During our audit, we contacted experts in health services research and reviewed developments in other jurisdictions to determine the feasibility of adjusting capitation rates to more fully reflect the primary care health needs of patients. While all the available adjustment methods had limitations, there were several that warranted consideration by the Ministry. One of these was the Adjusted Clinical Group system being used by the Province of British Columbia in its Primary Care Demonstration Project.

Recommendation

To help ensure that funding of primary care networks is equitable, the Ministry should consider options, including those utilized by other jurisdictions, for adjusting capitation rates to equitably reflect the level of services being provided.

Ministry Response

The Ministry is examining additional means for adjusting the primary care reform capitation rate beyond age and gender. Studies are underway to examine the applicability in Ontario of the Adjusted Clinical Group Case-Mix Adjustment system. In addition, researchers at the Centre for Health Economics and Policy Analysis will be providing advice and recommendations on the potential to adjust current capitation rates using modifiers such as rural vs. urban practices and specific chronic disease indices. The Ministry is committed to examining means of further diversifying the form of funding to providers so that remuneration will consist of capitation, fee-for-service for encouraged services and additional bonus incentives for population health measures.

REFERRALS TO SPECIALISTS

Appropriately referring patients to specialists is important for achieving cost-effective health care. Unnecessary referrals increase health care costs and may reduce access to scarce resources, while failing to refer patients may result in poorer health outcomes and may increase health care costs in the long run.

Experience in one jurisdiction suggested that using capitation to fund primary health care generally resulted in higher referral rates to specialists. However, one of the medical experts we consulted suggested that the current fee-for-service system may act as an incentive for some physicians to refer high-care patients to specialists, thus developing a practice that serves patients with simple health care requirements.

The importance of the relationship between primary care physicians and specialists has been recognized by major Canadian medical organizations representing both family and specialty physicians. It is also important to know whether one method of funding primary health care carries a greater risk of inappropriate referrals than another method of funding. However, higher referral rates may not necessarily indicate the appropriateness of referrals. The Ministry and health care providers need to have adequate information about how well this relationship is working and how it can be improved.

Recommendation

To help ensure that the process for referring patients to specialists is cost effective, the Ministry should:

- **determine whether different methods of funding primary health care affect referrals to specialists; and**
- **develop methods for monitoring and improving the quality of the referral process.**

Ministry Response

The Ministry will undertake to measure the referral patterns of fee-for-service and primary care reform physicians in order to determine if different methods of funding primary health care affect referrals to specialists. The Ministry has asked the University of Toronto to provide advice and recommendations on the use of referral rates as a performance measure for primary care networks.

INTERDISCIPLINARY PRIMARY HEALTH CARE

Primary health care providers include physicians, nurse practitioners, midwives, dietitians and others. Primary health care is more cost effective if the most appropriate providers deliver care to patients. The most appropriate providers are those who can deliver the health care required for the least cost at a quality equal to or better than that of other providers.

For example, some studies in other jurisdictions have suggested that it may be more cost effective for nurse practitioners to provide many of the services traditionally provided by physicians. Physicians working in a team with nurse practitioners could deal with more complex cases and be available for consultation.

For PCNs to deliver high-quality care as cost effectively as possible, the Ministry needs to determine the combinations of primary health care providers that are most appropriate in various circumstances. These combinations are likely to vary somewhat with the characteristics of different patient rosters. If appropriate combinations are encouraged, both taxpayers and patients will benefit.

Recommendation

To help ensure that primary health networks deliver cost-effective primary health care, the Ministry should:

- **thoroughly evaluate the experiences of other jurisdictions to identify best practices that warrant consideration in Ontario; and**
- **provide guidance on the combinations of health care providers that are required to provide high-quality and cost-effective health care.**

Ministry Response

The Ministry will continue to evaluate the experiences of other jurisdictions to identify best practices that warrant consideration in Ontario. The Ministry now funds seven nurse practitioners working in the primary care reform pilots. Consultations with other provider groups and stakeholders will occur as the Ministry explores different combinations of health care providers that might be required to provide high-quality and cost-effective health care.

ROSTER LIMITS AND VERIFICATION

Under current agreements between the Ministry and PCNs, roster limits apply only to PCNs that are funded on a capitation basis. There are no roster limits for PCNs that select reformed fee-for-service as their method of payment. At the time of our audit, with some exceptions, PCNs paid by capitation were allowed to roster a maximum number of 2,200 patients for each full-time PCN physician.

The four-year agreement between the Ministry and the Ontario Medical Association, which was effective April 1, 2000, states that "pending an evaluation to the contrary, no limit shall be set on roster sizes in future primary care network (PCN) contracts, provided that the physician to whom the patient is rostered personally and directly provides the majority of primary care medical services to the patient."

Roster limits may help ensure that patients have reasonable access to their primary care health providers and that providers have the time necessary to provide patients with high-quality care. A reasonable maximum roster size depends on a number of factors, including the number and type of primary care health providers and the health care needs of the rostered patients.

Some health care experts have suggested that the health needs of rostered patients could be measured using an index that rates the complexity of the care required for each patient. The index could then be used to establish roster sizes for individual PCN physicians.

In establishing roster limits, other factors should also be considered, such as the extent to which providers serve non-members and ease of administration. Although we found no formal research studies dealing with roster limits, health services experts we consulted indicated that such research would be practical.

As we explained earlier in this report in connection with HSOs, because PCNs are generally funded based on the number of patients on their rosters, the Ministry will also need to ensure that PCN rosters are accurate. However, while the agreements permit the Ministry to request that PCNs verify up to 5% of their enrolled members, there is no provision for additional verification.

Recommendation

To help ensure that roster limits are reasonable, the Ministry should research best practices in other jurisdictions and establish a sound basis for setting Primary Care Network (PCN) roster limits.

The Ministry should also ensure that an effective verification process is implemented for PCN patient rosters.

Ministry Response

The agreement between the Ministry and the Ontario Medical Association (OMA) indicates that, subject to an evaluation to the contrary, there are to be no roster limits in the rollout of primary care networks across the province. The Ministry will endeavour to revisit the means by which roster limits are arrived at in other jurisdictions and implement measures appropriate to Ontario's reform where possible following discussions with the OMA.

The Ministry will annually verify 5% of physicians' rosters. Based on the results of the evaluation, the 5% roster verification may be revised in subsequent agreements with primary care networks.

PERFORMANCE MEASUREMENT AND REPORTING

In its December 1999 report, *Primary Health Care Strategy,* the Health Services Restructuring Commission recommended that primary care group practices, as part of their accountability to their patients and the Ministry, submit regular report cards addressing client care, human resources management and financial responsibility.

As mentioned earlier in this report, the Ministry intends to evaluate the PCNs. However, it also needs to establish ongoing performance measures that cover the major aspects of care. These include health outcomes, patient access to health care services and patient satisfaction.

However, there is a risk that inadequately designed performance measures may lead to undesirable actions. For example, if a patient's prior health status is not properly taken into account when assessing performance, physicians may be less willing to care for sicker patients because such patients may negatively impact on the assessment of their performance.

Performance measurement and reporting requires valid and reliable information. Information that is not collected uniformly or is incorrect or incomplete cannot be used to make meaningful comparisons. The Ministry currently relies on its OHIP billing system to collect information about the services provided to patients by PCN physicians who record, but do not bill for, their services on the system. However, the Ministry has no means of ensuring that the information it receives is accurate or complete. Further, the system was not designed to capture health performance information or information about services provided by other health care professionals, such as nurse practitioners.

Recommendation

To enable it to assess the quality of care provided by primary care networks (PCNs), the Ministry, in collaboration with primary health care providers, should develop:

- **appropriate performance measures and standards; and**

- **a health performance information system that meets the needs of the Ministry and PCNs.**

Ministry Response

Work to develop performance measurements is already underway with the University of Toronto. The research objective is to develop a framework for assessing performance in primary care.

The Ministry will undertake to examine the feasibility of a health performance information system that could draw for its development on the performance measures and standards identified in the University of Toronto's report and other research projects.