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Impact of Delisting Chiropractic Services

Final Report

Ontario Chiropractic Association

September 2004

Audit.Tax.Consulting.Financial Advisory.

CHIROPRACTIC CHIROPRATIQUE Ontario

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Our mission is to help our clients and our people excel.

Our Client Service Standards

1. Determine, on each engagement, who our clients are and directly ascertain their expectations for our performance.

2. Analyze our clients' needs and professional service requirements.

3. Develop client service objectives that will enable us to fulfil our professional responsibilities, satisfy our clients' needs, and exceed their expectations. Prepare an appropriate client service plan to achieve these client service objectives.

4. Execute the client service plan in a manner that ensures commitments are met, potential problems anticipated, and surprises avoided.

5. Establish effective and creative communication, both internal and external, to enhance client perceptions of value and quality of our service.

6. Provide management with insights on the condition of their business and meaningful suggestions for improvement.

7. Continually broaden and strengthen our relationships with key management personnel to facilitate effective communication and foster client loyalty.

8. Ensure that any professional, technical, or client service problem is resolved promptly with timely consultation in an environment of mutual respect.

9. Obtain from the client, either formally or informally, a regular assessment of our performance.

10. Receive fees that reflect the value of services provided and responsibilities assumed and are considered fair and reasonable by our clients.

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1. Background

On May 18 2004, the provincial government of Ontario announced that, beginning this fall, Chiropractic services would be "de-listed" from the Ontario Health Insurance Plan. This action terminates more than 30 years of public funding for Chiropractic services in Ontario. The Ontario Finance Minister, Greg Sorbara, stated that the provincial government expects to realize savings that would add up to $200 million over two years.[1]

Although delisting appears to offer cost savings, there are far greater drawbacks that may impact the entire healthcare system in Ontario. The recent government announcement to de-list chiropractic services has potential implications on access to, cost of and quality of care for Ontario residents

2. Scope

This report is intended to provide a high-level analysis of the impact of the delisting of Chiropractic services scheduled to start in the fall of 2004. The focal point of the high-level analysis is as follows:

- Access - additional use and cost of physicians and emergency services
- Quality of Care
- Cost-effectiveness/Savings
- Ministry of Health and Long Term Care Transformation Agenda

3. Access

3.1 Approach

Access is perhaps the most important and sensitive issue facing the Canadian and Ontario health care system. The Ontario Government has made an election promise, tied to the re-introduction of healthcare premiums, that it would reduce wait times and improve access to the system, and specific healthcare services.

In assessing the potential impact of delisting, its impact on access is essential. This section of the report provides an analysis of the impact of delisting of chiropractic services on access, based on baseline information, lessons learned from the literature and other jurisdictions and a cost impact analysis.

Baseline Information

In assessing the current situation in Ontario, the following information was compiled to assist in the analysis:

- Approximately 10%[2] or 1.2 million[3] people in Ontario visit a chiropractor annually.
- The population of Ontario in 2003 was 12,238,400.[4]
- The average number of visits for a recipient of Chiropractic care is 10[5], amounting to 12,238,400 annual chiropractic visits in Ontario.
- In a recent statistically valid poll, 54% of Ontarians who have seen a Chiropractor in the previous year, indicated that the delisting of services would discourage them from continuing to seek/seeking care from a Chiropractor.[6]
- In the same poll, 89% of Ontarians indicated that they expected patients to seek care from a Family Physician or an emergency department if they stopped receiving Chiropractic care.[7]
- Ninety-five percent of Chiropractic visits are for Neuromusculoskeletal (NMS) disorders.[8]
- Patients seeking care for NMS disorders are likely to receive one-third the number of visits from Family Physicians and emergency departments, compared with Chiropractors.[9]
- The percentage of Ontarians reporting a regular Family Physician in 2003 is 90%.[10]
- The current OHIP payment for Family Physician / General Practitioner consultation is approximately $30[11]. The estimated cost for treating NMS is in the order of magnitude of 3.3 times the cost of medical fees[12], this would include the cost of services such as, prescription drugs, laboratory and diagnostic tests. Therefore, the adjusted cost per visit is estimated to be $99.[13]
- The average visit to an Emergency Room is estimated to cost approximately $125.[14] In addition to this cost is the adjusted cost per hospital consultation (estimated threshold at 60%). Therefore, the cost of an Emergency Room visit is estimated to be $143.[15]

Baseline Calculations

In analyzing the potential impact of delisting on access to services, the baseline information was used to create three scenarios. The estimates in the following table below describe the three scenarios.

Scenario A: reflects the full impact of patients substituting physician and emergency services care for chiropractic care, and assumes that of those patients discouraged from seeking chiropractic care (54%) all choose to substitute chiropractic care for physician and emergency services care

Scenario B: is the mid-point between Scenarios A and C, and reflects a moderate impact on access to, and use of, physician and emergency services

Scenario C: is the most conservative scenario, and assumes that only one-half of the patients discouraged from seeking chiropractic care (27%) substitute this care for physician and emergency services care

Description	Scenario A	Scenario B	Scenario C
Discouraged patients in Ontario	660,874	495,655	330,437
Shifted Annual Visits	6,608,736	4,956,552	3,304,368
Patients seeking care elsewhere	588,178	441,133	294,089
Potential total shifted annual visits	5,881,775	4,411,331	2,940,888

The table (above) illustrates the potential total annual number of visits that could be shifted from chiropractic care to physicians and emergency departments if between half and all patients discouraged from seeking chiropractic care substituted physician and emergency services visits between approximately 3,304,000 (Scenario C) and 6,608,000 (Scenario A) visits.

These estimates are further modified to take into account the fact that 89% of respondents indicated that the decision to delist chiropractic services will prompt people to instead seek care from physicians and emergency departments. Thus the potential number of annual visits to physicians and emergency departments ranges from approximately 2,941,000 (Scenario C) to 5,882,000 (Scenario A), once those who indicated that they would not seek alternative care from physicians and emergency departments (11%) is taken into account. This is reflected in the "Patients seeking care elsewhere" category in the table above.

Estimated frequency of visit

There is evidence to suggest that patients requiring care for NMS disorders see medical doctors and emergency services approximately one-third as frequently as they visit a Chiropractor[16], as displayed in the "Adjusted frequency of visits" category in the table below. The above quoted study conducted by Pran Manga suggests that one-third of the visits to Chiropractors will be substituted into the public health system. Dr. Manga further goes on to state that almost all patients with NMS conditions visit a medical doctor at least twice, and many patients have a recurrence of new episode of care within a year. This equates to approximately 3.3 visits per annum (that is, 1/3 of 10 visits). Of these visits, 2.0 visits per year have been apportioned to physicians, and the remaining 1.3 visits to emergency departments.[17] Again, the three scenarios have been used to reflect a more conservative estimate of the potential impact on access.

Description	Scenario A	Scenario B	Scenario C
Discouraged patients in Ontario	660,874	495,655	330,437
Shifted annual visits	6,608,736	4,956,552	3,304,368
Patients seeking care elsewhere	588,178	441,133	294,089
Total shifted annual visits	5,881,775	4,411,331	2,940,888
Adjusted frequency of visits	1,940,986	1,455,739	970,493
2.0 Family Physician/General Practitioner visits	1,176,355	882,266	588,178
1.3 Emergency Room visit	764,631	573,473	382,315

3.2 Results of the Analysis

Delisting chiropractic services is predicted to have a moderately negative impact on access to Family Physicians and a substantive negative impact on access to emergency services as follows:

Description	Scenario A	Scenario B	Scenario C
Predicted annual increase in visits to physicians	1,176,355	882,266	588,178
% increase in total physician visits	2.6%	2.0%	1.3%
Predicted annual increase in visits to emergency departments	764,631	573,473	382,315
% increase in total emergency department visits	14.2%	10.6%	7.1%

Delisting chiropractic services is projected to increase the number of visits to Family Physicians from a minimum of more than 588,178 (Scenario C) visits to a maximum of 1,176,355 (Scenario A) visits annually, a moderate increase to the overall number of Family Physician visits of between 1.3% (Scenario C) and 2.6% (Scenario A). Furthermore, delisting chiropractic services is projected to increase the number of emergency room visits by between approximately 382,000 (Scenario C) and 765,000 (Scenario A). These projected visits represent an increase of between approximately 7% (Scenario C) and 14% (Scenario A) above the current 5.4 million Ontario hospital emergency room visits.[18] The potential impact on already crowded emergency departments could be significant across the hospital system, in general, and in specific hospitals, in particular.

Cost Calculations

- The adjusted cost of a Family Physician / General Practitioner visit is $99.[23]
- The adjusted visit to an Emergency Room visit is $143[24]; this estimated cost is significantly higher in teaching hospitals.
- The government fully funds medical services, and would absorb the full cost per episode of care of a Neuromusculoskeletal (NMS) visit to the Family Physician and emergency department.

Description	Scenario A	Scenario B	Scenario C
Discouraged patients in Ontario	660,874	495,655	330,437
Shifted Annual Visits	6,608,736	4,956,552	3,304,368
Patients seeking care elsewhere	588,178	441,133	294,089
Total Shifted Annual Visits	5,881,775	4,411,331	2,940,888
Adjusted frequency of visits	1,940,986	1,455,739	970,493
2.0 Family Physician/General Practitioner Visits	1,176,355	882,266	588,178
1.3 Emergency Room Visit	764,631	573,473	382,315
Cost of FP/GP Visits	$ 116,459,146	$ 87,344,359	$ 58,229,573
Cost of ER Visits	$ 109,342,198	$ 82,006,648	$ 54,671,099
Total Costs	**$ 225,801,344**	**$ 169,351,008**	**$ 112,900,672**

The financial impact of delisting chiropractic services is in the range of approximately $113 million (Scenario C) to $226 million (Scenario A). The impact on hospital emergency departments will add approximately 1% to hospital operating budgets. Moreover, additional costs not factored into the cost calculations, due to the lack of verifiable/cited data include:

- Cost of admissions to hospital resulting from increased use of the Emergency Department
- Emergency Department fee-for-service after hours premium payment
- First time chiropractic patients are more likely to be discouraged from seeking Chiropractic care, and therefore more likely to seek care from physicians and Emergency Departments.

3.3 Implications

A 2003 OMA Strategic Council survey of over 2000 Ontario Doctors found that almost one out of six physicians is seriously considering moving their practice outside of Ontario.[19] This survey clearly showed that doctors are most concerned about the following:

- The negative impact of physician shortages (97%), and the associated workload demands
- General under-funding of the health care system (95%)
- Delays in treatment caused by waiting lists (90%), and their impact on patient care.[20]

A Statistics Canada, Access to Healthcare Services survey found that the top four barriers to receiving routine or ongoing care are as follows:

- Getting an appointment
- Waited too long for an appointment
- In-office wait to long
- Contacting a physician

Overall, most individuals reported waiting 3 months or less for specialized services.[21] Furthermore, the median waiting times for specialized services were 4.0 weeks for specialist visits, 4.3 weeks for non-emergency surgery, and 3.0 weeks for diagnostic tests.[22] It is evident that there are time costs; however, the primary effects of waiting for specialized care were worry, stress and anxiety, pain, and problems with activities of daily living.

Risks

While it may appear to moderately impact the provision of physician services, a risk exists that a 2% increase in the number of physician visits may further reduce access, and exacerbate an already 'volatile' situation resulting from existing physician shortages. The impact of additional demand for access to Family Physicians, in and of itself, may further impact the provision of emergency services, the default provider of care when physicians are not able to see patients. The more patients who choose to not seek physician care as an alternative to chiropractic care, the greater the number of patients who may end up in emergency departments seeking relief. In those instances where the patient does not have a Family Physician, it is quite likely that their use of emergency services may increase above the projected number of emergency department visits.

Offsetting Factors

- Some patients may choose to see a Chiropractor less often.
- Some patients may seek care from alternative medicine sources e.g., acupuncture.
- Some patients may stop seeking care altogether.

4. Quality

4.1 Approach

Defining and measuring quality in healthcare is challenging. There are some key indicators that can be used to measure quality of care that are aligned with several dimensions of chiropractic quality measures, including:

- Effectiveness of care
- Appropriateness of care
- Availability of providers
- Access
- Patient satisfaction
- Continuity of care

Delisting chiropractic services from OHIP has the potential to impact quality of care in each of the above dimensions.

4.2 Results of the Analysis

Several dimensions of quality were evaluated in the study and are expanded upon below:

Effectiveness of Care: *The effective and appropriate use of resources, leading to cost-efficient care*

The literature suggests that properly managed chiropractic care can yield outcomes, in terms of surgical requirements and patient satisfaction, that are equal to those of non-chiropractic care, at a substantially lower cost per patient, and do so as or more safely.[25]

95% of chiropractic practice in Ontario involves the management of patients with NMS disorders and injuries;[26] NMS disorders and injuries rank first in prevalence of chronic health problems, first as a cause of long-term disability, and are the second most costly health problems in economic burden of illness studies. Chiropractic users, however, tend to have substantially lower total health care costs.[27]

In comparing outcomes of chiropractic versus medical care in work-related low back pain, it has been shown that chiropractic care results in fewer compensation days, claim payments averaging 40% less than medical care, and fewer patients progressing to chronic status.

Appropriateness of Care: *The provision of care at the right time in the right place, by the right caregiver.*

Given that services must be provided to patients, consideration must be given to determining which of the alternative caregivers who have been educated and trained to provide the services can provide them most appropriately and cost-effectively, having regard also to quality of care, safety of treatments, and patient preferences.

Chiropractic services rarely result in additional collateral costs while physician services often include the use of prescription drugs, laboratory and radiological tests, referrals to specialists, and hospital in-patient care, thus adding substantially to the cost of physician billing for services.

Availability of Care Providers: *Finding an appropriate caregiver at the precise time a patient needs his or her services.*

Delisting chiropractic services does not equate to delisting the treatment of NMS conditions and injuries; treatment for these problems can still occur and still be covered by OHIP, if provided by physicians.

Chiropractic care has been found to be a substitution for medical care, rather than an add-on[28]. The proposed cost-savings from delisting chiropractic services are artificial; the costs will be shifted to other areas of the system as patients switch to physician service, or delay seeking treatment until the problem is compounded, thus incurring more cost to the system.

A shortage of Family Physicians in Ontario has resulted in increased waiting times for services; the shift of chiropractic patients to medicine will compound the problem. This shortage cannot be ameliorated quickly.

Increased emergency room visits could occur as a result of delays in seeking treatment, delays due to limited access to treatment (i.e., wait lists for physicians), and/or lack of a Family Physician.

Access: *The wait time to receive service*

The proposed cost-savings from delisting chiropractic services are dependent on patients continuing to utilize chiropractors at the current rate, versus switching to physicians for their care; this is unlikely to occur, given the increase in out-of-pocket expense to the patient.

Delisting chiropractic services would reduce access and affordability for low income patients (who use a disproportionately large share of healthcare resources) and seniors (who typically consume more than ¾ of all healthcare resources).
In 2003 Statistics Canada reported that 14.4% (approx. 1.6 million) of the population in Ontario were considered to be low income.[29]

Patient Satisfaction: *The extent to which a patient is satisfied with the care received*

Studies, patient satisfaction surveys, and opinion polls have demonstrated that chiropractic patients are more satisfied with their care than patients of Family Physicians.[30,31] Furthermore, studies also show that almost all users of chiropractic services found their treatment to be effective, and that their expectations were met.[32]

In contrast to medical treatment of musculoskeletal problems by primary care physicians, a chiropractic encounter often includes more time listening to patients' concerns, extensive hands-on evaluation, clear and concrete explanations that make sense to patients, hands-on treatment that is sometimes associated with an immediate improvement in symptoms, and repeated follow-up with the doctor.

5. Cost-Effective/Savings

5.1 Results of the Analysis

The international literature suggests that Chiropractors can provide the same care for NMS related conditions at lower cost than Medical Doctors.[33] Specifically, the approximate cost of OHIP coverage for physician visits is $30, compared to $10 for Chiropractic visits.[34]

Cost-Effectiveness Supportive Studies

A recent American study examined cost, utilization and the effects of chiropractic services on Medicare costs. The study compared program payments and service utilization for Medicare beneficiaries who visited chiropractors and those who visited other types of physicians.

The results indicated that chiropractic care could reduce Medicare costs. Medicare beneficiaries who had chiropractic care had an average Medicare payment of $4,426 for all Medicare services.[35] Those who had other types of care had an average of $8,103 Medicare payment for all Medicare services. The per claim average payment was also lower with chiropractic patients having an average of $133 per claim and individuals who did not have chiropractic care had an average of $210 per claim.[36]

A workers' compensation study compared chiropractic care to, medical care back injury claims and concluded that for the total data set, cost for care was significantly more for medical claims and compensation costs were 10-fold less for chiropractic claims. It also found that chiropractic patients return to work ten times sooner after an injury. Total costs per case for the ICD-9 code for lumbar disc were found to be $8,175 for total medical care versus $1,065 for chiropractic care.[37]

A 1999 study published in the American Journal of Managed Care retrospectively evaluated the cost of health care for back and neck pain (using ICD-9 codes) for members of a health maintenance organization who sought chiropractic care in 1994-1995. In addition, differences between the groups in surgical rate, the use of diagnostic imaging and patient satisfaction were compared. The cost of healthcare for back and neck pain was substantially lower for chiropractic patients ($539 versus $774). The authors concluded that properly managed chiropractic care can yield outcomes, in terms of surgical requirements and patient satisfaction, that are equal to those of non-chiropractic care at a substantially lower cost per patient.[38]

6. MOHLTC Transformational Agenda

6.1 Approach

The Ontario Government has committed to:

- Improve healthcare efficiency by aggressively coordinating and integrating services
- Increase government and provider accountability
- Manage healthcare costs as one of the first steps to transforming the healthcare system.[39]

Transformation seeks to:

- Ensure that the contributions of the many interdependent services and programs are viewed as one system
- Redesign the continuum of care around the core business of primary health care
- Assist people to live longer lives in good health
- Reduce the increased morbidity and mortality that is associated with unnecessary waits for key services
- Ensure that the health system lives within its means.[40]

Enablers include:

- Provide the public with timely, reliable, and standardized wait time information for key clinical services
- Revamp the funding, incentive, and accountability systems
- Systems planning
- Making more effective use of information technology
- Promote greater 'product' and process standardization
- The use of evidence-based reviews and recommendations as standard practice
- A health human resource strategy that assures and makes available the appropriate level of human skill and experience to the needs of the population where it is most required.[41]

Transforming Healthcare in Ontario[42]

Transforming the healthcare system has been the stated intention of the Ontario Government, as reflected in the following statements:

"Our vision is of a system where all providers speak to one another in the same language, where there are no longer impenetrable and artificial walls between stakeholders and services: a system driven by the needs of patients, not providers. Our vision is to build a true system – one that's integrated and driven by one common cause – to deliver the highest quality outcomes for people."

"Our government has three priorities that we will be measured against:

1. Reducing wait times for important procedures, for example cardiac care, cancer care, and hip and knee replacement
2. Improving access to Family Physicians and other members of the primary health care team
3. Making Ontarians healthier – a priority that will be measured by the rates of physical activity, smoking, and obesity"

"Our government will move decisively on primary care renewal by acting on our commitment to create family health teams that will provide comprehensive family health services, around the clock. This approach will allow physicians to work as part of a team with other health providers, rather than in isolation of sole practice. Physicians, nurse practitioners, and other members of the team will benefit by working together in a positive working environment, sharing and benefiting from the complementary knowledge and skills of their colleagues. Patients will benefit, too, by having improved access to a range of family health providers that will care for them when they are ill and help them stay healthy in the first place."

6.2 Results of the Analysis

Linking Chiropractic Services to Transformation

The OCA has promoted practice models of care delivery, in which chiropractic services are integrated with services offered by other primary health care practitioners, using a systematic approach to provide comprehensive health services to Ontarians.

Public funding for chiropractic services will support the Ministry's commitment to:

- Fund complementary community-based services needed to prevent the unnecessary use of hospital services
  - Chiropractic care has been found to be a substitution for medical care, rather than an add-on. Some or all of the proposed cost-savings from delisting chiropractic services are likely to be shifted to other areas of the system as patients switch to physician service, or delay seeking treatment until the problem is compounded, thus incurring more cost to the system due to the use of emergency services.

- Improve access to Family Physicians and other members of the primary health care team, by avoiding off-loading of patients from chiropractors to already scarce and over-burdened physicians
  - A shortage of Family Physicians in Ontario has resulted in increased waiting times for services; the shift of chiropractic patients to physicians will compound the growing problem of access to physician and emergency services.

- Ensure that the health system lives within its means, by avoiding the higher costs associated with the substitution of higher priced physician services and higher use/incidence of hospital services
  - Chiropractic services rarely result in additional collateral costs while physician services often include the use of prescription drugs, laboratory and radiological tests, referrals to specialists, and hospital inpatient care, thus adding substantially to the cost of physician billing for services.

7. Conclusions

The impact of delisting chiropractic services on the healthcare system in Ontario is expected to be considerable, as evidenced in this analysis. It is expected to result in:

- reduced access and longer wait times resulting from off-loading of patients from chiropractors to already scarce and over-burdened physicians;
- higher costs resulting from the substitution of higher priced physician services and higher use/incidence of hospital services; and
- a directional shift away from the governments transformation and integration agenda, as chiropractors are further marginalized from the healthcare delivery system.

It is anticipated that delisting will reduce the number of visits to chiropractors; furthermore, it is projected that a significant proportion of these visits will shift to physicians who are ill equipped to meet this additional demand. The economic impact of delisting on practicing chiropractors is expected to lead to a reduced number of patients, reduced visits per patient, reduced revenue and reduced numbers of chiropractors.

A summary of the key impacts, in relation to the governments priorities, is presented below:

7.1 Access

Key Government Priorities

- Patients use chiropractic services as a direct substitution for comparable medical care. This reduces demand for services from scarce health human resources, that is, primarily physicians
- Delisting chiropractic services could increase the number of visits to family physicians by between 588,000 and 1,170,000 visits per annum, an increase of 1.3% to 2.6%
- Delisting chiropractic services could increase the number of visits to emergency departments by between 382,000 and 754,000 visits, representing an additional 7% - 14% increase in total number of visits
- The cost impact of delisting will, at best, be approximately $12million, and, at worst, be $125 million

Alignment with Government Priorities

- Chiropractic care enhances access to the healthcare system because it offers an alternative to the comparable medical care provided by scarce physician resources, and reduces the likelihood of patients using difficult-to-access and costly emergency and other hospital services.

7.2 Quality

Key Government Priorities

- Chiropractic care has been demonstrated to be an effective clinical treatment in the management of lower back pain, a chronic condition affecting up to three-quarters of the population at some point in their lives, particularly in later years of life.

Alignment with Government Priorities

- Chiropractic care is effective because practitioners are highly specialized and focused on specific chronic musculoskeletal conditions; few physicians focus on a comparable range of musculoskeletal conditions

7.3 Cost-Effective/Savings

Key Government Priorities

- Chiropractic care has been demonstrated to be cost-effective for lower back disorder; numerous studies have estimated that chiropractic services are between one-quarter to one-half of the costs for comparable medical services

Alignment with Government Priorities

- Chiropractic care provides a cost-effective alternative to comparable medical care. Maintaining funding for chiropractic services is estimated to have a positive economic impact on healthcare costs

7.4 MOHLTC - Transformation Agenda

Key Government Priorities

- Chiropractic services are not integrated into the multi-disciplinary care setting necessary to transform the delivery of healthcare services

Alignment with Government Priorities

- Collaboration and integrating chiropractic services into multi-disciplinary teams and Primary Care Renewal will bring the benefits of chiropractic care – improved access, appropriate clinical care and cost-effective care, into the transformation of the healthcare system

Appendix A – End Notes

1. Ontario Finance Minister Greg Sorbara, Press Conference, May 18, 2004. "…the [Chiropractic service] cuts…would add up to more than $200 million in savings over the next two years …"
2. Millar, W. (1997) Use of alternative health care practitioners by Canadians, Canadian Journal of Public Health, Vol. 88(3), pp. 154-158. This study stated that in 1993-94 10% of the population in Ontario participated in consultations for Chiropractic services.
3. Ontario Chiropractic Association, 2004. Manga, P., Angus, D., Papadspoulous, C., et al. (1993) "The effectiveness and cost-effectiveness of chiropractic management of low-back pain". Statistics Canada. Health status of Canadians: Report of the 1991 General Social Survey, Ottawa, 1994.
4. Statistics Canada, 2004.
5. This figure is based on an average of:
   - Ontario Chiropractic Association, 2004. RAND Health. (2004) "Research highlights: Changing Views of Chiropractic … and a National Reappraisal of Nontraditional Health Care".. A patient seeking Chiropractic care for back pain averages 10 visits per year.
   - OCA Patient Management Program data of 8.6 OHIP visits per chiropractor per annum, and 9.0 total visits per patient per annum; and
   - Canadian Community Health Survey, Statistics Canada, 2000/01. Statistics Canada, Ottawa, 2004.– 12.4 visits per patient per annum in Ontario
6. POLLARA, #7804 Chiropractor's of Ontario: June 8, 2004. Question 4, 54% of respondents who have seen a Chiropractor in the previous year agreed that the Ontario government's decision to delist coverage of Chiropractic care from OHIP would discourage themselves or a family member from seeing a Chiropractor in the future.
7. Ibid. Question 7, 89% of respondents agreed that the Ontario government's decision to delist coverage of chiropractic c are from OHIP would prompt people suffering from back pain and other complaints to instead go to other health care providers like family doctors and hospital emergency rooms.
8. Manga, P., Angus, D. (1998) "Enhanced chiropractic coverage under OHIP as a means of reducing health care costs, attaining better health outcomes and achieving equitable access to health services".. Approximately 95% of Chiropractic practice in Ontario involves the management of patients with neuromusculoskeletal (NMS) disorders and injuries.
9. Manga, P. (2004) "The fiscal and health care effects of Ontario's policy of delisting chiropractic care". Dr. Manga states that a reasonable or good estimate is that Medical Doctors see patients only 1/3 as frequently as Chiropractors in Ontario for similar conditions. Dr. Manga further goes on to state that almost all patients with NMS conditions visit a medical doctor at least twice, and many patients have a recurrence of new episode of care within a year.
10. Statistics Canada, 2003. Access to Health Care Services in Canada, 2003. The percentage of the population of Ontario reporting a regular Family Physician in 2003 is 90.1%, Table 2 Percentage or population reporting a regular Family Physician in Canada, 2003.
11. Ontario Chiropractic Association, 2004. In a press release entitle the Implications of delisting of Chiropractic services, the OCA states that the approximate cost of a physician visit is $30. The actual OHIP cost is $28.50 per General Practitioner intermediate assessment as recorded in the Schedule of Benefits, Physician Services under The Health Insurance Act, 2003.
12. Manga, P. (2004) "The fiscal and health care effects of Ontario's policy of delisting chiropractic care". Prescription drugs, laboratory tests, referrals to specialists, and hospital in-patient care lead to a four or five fold increase in total health care costs of the physician's own billing for medical services. While not "a four or five" fold increase - figures that were generated from many

jurisdictions and mainly the USA - it is still a noteworthy 3.3 times the cost of medical fees. In order to reflect different practices in the health care industry in Canada we have included physician visits in the total health care costs, therefore, of this factor of 3.3, physician payment is 30%.

13. Taking into consideration the estimated OHIP fee of $30 for Family Physician consultation, and multiplying this by 3.3, this adjustment would account for the cost of services such as, prescription drugs, laboratory and diagnostic tests. Therefore, the adjusted cost estimate per visit is $99.
14. MOHLTC, Information and Finance Branch, Data blitz 2003. The median costs per emergency visit are as follows: large community centre $111.52, small community centre $105.27, teaching centre $159.16.
15. Taking into consideration the estimated $30 OHIP fee and the physician consultation, estimated to be at a threshold of 60%, resulting in a consultation fee of $18, the total ER visit adjusted cost is as follows, $18 (OHIP fee of $30 x 60%) + $125 (ER operational cost)= $143.
16. Manga, P. (2004) "The fiscal and health care effects of Ontario's policy of delisting chiropractic care". Pran states that a reasonable or good estimate is that Medical Doctors see patients only 1/3 as frequently as Chiropractors in Ontario for similar conditions. Pran further goes on to state that almost all patients with NMS conditions visit a medical doctor at least twice, and many patients have a recurrence of new episode of care within a year.
17. In light of the reduction in total number of visits from 10 to 3.3, and in light of the wait time to see Family Physicians it is anticipated that patients will need to visit ER's more than once per year. Given that patients are projected to visit medical doctors twice a year for NMS, the balance of visits (i.e., 1.3 visits) per year are projected to occur in ER's.
18. MOHLTC, Information and Finance Branch, Data blitz 2003. Fiscal Year 2002/2003 total inpatient and outpatient Emergency visits is 5,411,312 for the province of Ontario.
19. Ontario Medical Association. Strategic Council Survey, December 2003.
20. Ibid.
21. Statistics Canada, 2003. Access to Health Care Services in Canada, 2003. As stated in the key findings.
22. Ibid. As stated in the key findings.
23. Taking into consideration the estimated OHIP fee of $30 for Family Physician consultation, and multiplying this by 3.3, this adjustment would account for the cost of services such as, prescription drugs, laboratory and diagnostic tests. Therefore, the adjusted cost estimate per visit is $99.
24. Taking into consideration the estimated $30 OHIP fee and the physician consultation, estimated to be at a threshold of 60%, resulting in a consultation fee of $18, the total ER visit adjusted cost is as follows, $18 (OHIP fee of $30 x 60%) + $125 (ER operational cost)= $143.
25. Manga, P., Angus, D. (1998) "Enhanced chiropractic coverage under OHIP as a means of reducing health care costs, attaining better health outcomes and achieving equitable access to health services". There is an overwhelming body of evidence indicating that chiropractic management of low back pain is the most cost-effective, and that there would be highly significant cost savings if more management of low back pain was transferred to chiropractors.
26. Manga, P., Angus, D. (1998) "Enhanced chiropractic coverage under OHIP as a means of reducing health care costs, attaining better health outcomes and achieving equitable access to health services".. Approximately 95% of Chiropractic practice in Ontario involves the management of patients with neuromusculoskeletal (NMS) disorders and injuries.
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