Canadian Health Care Leadership and Management Sector Definition Study

Results of Decision Theoretic Modeling Exercise and Recommendations

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For
The Canadian College of Health Service Executives in partnership with the Academy of Canadian Executive Nurses, Canadian Society of Physician Executives and Human Resources Skills Development Canada

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Executive Summary

During a teleconference on Monday, December 5th 2005 The Advisory Committee made the following decisions on the ***definition of health care leadership and management.***

Specific roles (see below) from within the following types of **workplaces will be included** in the definition of health care leadership and management:

1. Publicly funded health care delivery systems: acute care, primary care, chronic care, rehabilitation
2. Health promotion, health maintenance organizations
3. Health care services using a non-Western traditional medicine paradigm (further work will be required to focus this inclusion as the sector study is designed)
4. Academic institutions (senior position from each of the health related disciplines)
5. Associations, foundations or other non-governmental organizations (senior positions only)
6. Government sections and agencies responsible for health care (senior positions only)
7. Funding agencies (senior positions only)
8. Private, not-for-profit, health care delivery systems
9. Private for profit health care delivery systems (for the purposes of focusing the sector study this workplace type will be dropped from further planning)

The following **roles** within the workplaces outlined above will be the focus of the sector study of Canadian health care leadership and management:

a. Those who provide direct supervision to others who provide care
b. Those who provide clinical consulting to those providing direct care
c. Those who are program managers or department/division heads for units that provide direct care
d. Those who provide administrative, operations or process consulting to department/division heads for units that provide direct care
e. Those who provide direct supervision to those who provide services, resources, products, devices relied upon by direct care providers (i.e. IT, HR, cleaning)
f. Those who are program managers or department/division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning)
g. Those who provide administrative, operations or process consulting to department/division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning)
h. Those who work on the senior administrative team in institutions that provide direct care
i. Those who provide administrative, operations or process consulting to those who work on the senior administrative team in institutions that provide direct care

j. Those who chair the board at institutions that provide direct care (NOTE: the inclusion of this and the following 'board member' role in the sector study will be revisited as the study design takes shape)
k. Those who are board members for institutions that provide direct care (see NOTE above)
l. Those who provide strategic consulting to chairs, boards and senior management teams in institutions that provide direct care
m. Those who work at senior levels of government with responsibility for any aspect of health care
n. Those who advise government on health care matters
o. Those who work as senior staff in administrative or leadership roles for any agency, organization, association, foundation, non-governmental organization charged with studying or supporting any aspect of the health care system
p. Those who are certified health care managers (i.e. CCHSE)

Recognizing the important voice and contribution that each of the following brings to shaping the future of health care in Canada, sector study resource and attention limits will EXCLUDE the following from further planning. All those who:

i. provide direct care
ii. provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning)
iii. work for companies providing health related services, products and devices at the interface with direct health care providers
iv. work for companies providing health related services, products and devices at the interface with managers of direct health care providers
v. work for companies providing health related services, products and devices at the interface with senior leadership in health care institutions
vi. work at senior management levels for companies providing health related services, products and devices
vii. have any role in health product and supply organizations
viii. conduct basic research in any aspect of science relevant to health
ix. write or present critical appraisals of any aspect of science relevant to health
x. work for organizations that fund research on any aspect of science relevant to health
xi. conduct research on any aspect of the health care system
xii. write or present critical appraisals of any aspect of the health care system
xiii. who work for organizations that fund research on any aspect of the health care system
xiv. work for any level of government with responsibility for any aspect of health care
xv. are board or task force members for any agency or organization charged with studying or supporting any aspect of the health care system
xvi. are part of the ownership structure in a privately owned not-for-profit health care institution

xvii. are part of the ownership structure in a privately owned for-profit health care institution or organization
xviii. possess an academic degree in health management (i.e. MHSA)
xix. possess an academic degree in management (i.e. MBA)
xx. are certified members of any health care profession providing publicly insured services (i.e. medicine, nursing)
xxi. are certified health professionals directly providing health related services, products and devices (i.e. pharmacists)
xxii. are certified members of any health care profession providing services not publicly insured (i.e. dentistry, physiotherapy, counseling)
xxiii. are certified managers in some other area (i.e. P Eng.)

1 Purpose of this Research

Prior to undertaking a comprehensive study of health care leaders and managers in Canada, the portion of the health care sector focused on leadership and management must be clearly defined in order to determine parameters for undertaking the study. That sub-sector definition will identify the individuals and groups that will be sources for primary data collection, upon which further detailed planning for the sub-sector will be based. This will include identifying the human resource needs in health care leadership and management going forward and the competencies required for optimal performance in the leadership and management roles within the health care sector.

Within the larger project (see Context below), three previous attempts have been made to define the health care leadership and management sub-sector. The Advisory Committee considered the definitions described in the March 2005, May 2005 and June 2005 documents insufficiently precise. A different methodology was sought to determine the required definition. A contract was awarded to CurryCorp Inc at the end of September 2005 to design and conduct a sub-sector definition exercise using the Decision-Theoretic approach described here.

2. Context Review

2.1 Study Partners and Progress to Date

Recognizing that Canadian health care leaders and managers have a significant role in ensuring access to safe, high quality care for Canadians, the principle professional associations took on the responsibility to devise a comprehensive strategy to identify and address the issues facing the sector. The initiative is a key step in identifying health human resource needs and issues associated with management and leadership to ensure there will be an adequate "pool" available to sustain the health care system in Canada.

The Canadian College of Health Service Executives (CCHSE) in partnership with the Academy of Canadian Executive Nurses (ACEN) and the Canadian Society of Physician Executives (CSPE) submitted a proposal to Human Resources Skills Development Canada (HRSDC) to begin the process of launching a "*Comprehensive Health Human Resources Study of Leaders and Managers in Canada*." This initiative received endorsement from the Advisory Committee on Health Delivery and Human Resources (ACHDHR) and funding for the project was approved by HRSDC in 2004.

A situational analysis of the sector was completed and meetings of key stakeholders from across Canada were held in March 2005, and June 2005 to review the results. A Task Force is established to develop a governance process and framework to undertake a study to address key issues associated with the leadership and management cohort. What

is lacking at this time is clarity on the dimensions of the leadership and management sub-sector in Canada that will define the cohort to be studied.

2.2 Alternative Sub-Sector Definition Methods

The Canadian health care leadership and management sub-sector could be defined by inclusion. This would be consistent with the model used by the Canadian Council on Health Services Accreditation and the US health care accrediting body, the Joint Commission on Accreditation of Health Organizations. Both organizations describe leadership standards to include three functions: governance, management and clinical or service leadership. By this definition, any individual in a governance, management or leadership role within a health service organization would be included. This definition would exclude individuals not working in health service organizations; i.e. those working for health professional associations, health related foundations and charities or government. It should be noted that, based on the brief literature review conducted for this study, the vast preponderance of the published literature in health care leadership and management is consistent with this definition.

Some leading theorists, such as H. Mintzberg, would advocate an even more inclusive definition. Writing in 1999[1], he said, "Leadership, for the Japanese, is a *style* of managing; in America, it *is* managing. If we are going to get even remotely global, shouldn't we start by opening our minds to the narrowness of our own conception of management?" This would be an argument for conflating the terms 'management' and leadership' and including all those individuals with responsibility for guiding any portion of the health care sector regardless of which type of organization employs them.

It would also be possible to define the health care leadership and management sub-sector from existing data collected by Statistics Canada. The Canadian Tourism Human Resources Council (CTHRC) employed this method. They were satisfied to use the classifications supplied by StatsCan for the tourism sector in Canada. These proved to be very inclusive for example; they included restaurant workers as 20% of restaurant use is by tourists.

The steps involved in applying the StatsCan process to define the health care leadership and management sub-sector would involve the following steps.

1. Pay for a special query of the Labour Force Survey data (http://www.statcan.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=3701&lang=en&db=IMDB&dbg=f&adm=8&dis=2).

   This is a mandatory telephone survey conducted on a sample of Canadians on a monthly basis.

   Parameters would have to be supplied for questions:
   - #114: "for whom did he/she work?"
   - #115: "what kind of business, industry or service was this?"

[1] Mitzberg, H. "Managing Quietly", *Leader to Leader*. Spring 1999

- #116: “what kind of work was he/she doing?”
- #117: “what were his/her most important activities or duties?”

2. Pay for special run on the Population Census data (most recent data from 1996; 20% sample of the population) with attention to codes for occupation, industry and place of work. At that time, 17,840 Canadians listed themselves as health care managers. Parameters for occupation, industry and place of work would have to be supplied. Some existing documents available for purchase may be of assistance:
   - *Occupational Trends, 1961-1986,* Catalogue no. 93-151-XPB, (according to the 1971 Standard Occupational Classification)
   - *Industry Trends, 1951-1986,* Catalogue no. 93-152-XPB, (according to the 1970 Standard Industrial Classification)

3. Pay for a special run of the Canadian Occupational Projection System (COPS) data to identify labor market projections. (CTHRC has been less satisfied with these results).

The concern with all these methods is the vagueness or inattention or glossing over of potentially critical differences between different aspects of the wider health care sector, between management and leadership at different levels within organizations and between different types of health care organizations.

2.3 Decision-Theoretic Modeling

Decision-theoretic modeling is designed to focus quite precisely on each aspect of potential difference. The method supports explicit decision-making on each discernable aspect of the potential definition. The method discovers the independent, orthogonal features of the decision space and maps possible choices at each node.

Information to populate the decision space can come from interviews, from the published literature or from a defined group of experts. Decision-makers can themselves go directly to decision at each node, or can invite opinion on each node decision. Opinions can usefully be sought from content experts, stakeholders, incumbents, and the public at large. In this manner, decision-makers can generate additional information from defined groups on each point of the decision to be made. Ultimately, however, decision-makers have to make a decision at each node to come up with a unified definition, in this case of the Canadian health care leadership and management sub-sector.

3. Study Methods

3.1 Development of the Decision-Space

The first step was to collect information to populate the decision space: what relevant sector definitions were presently available and what inclusion/ exclusion

decisions did they imply. This information was obtained by reviewing available sources for information on current sector definitions. Many of these were implicit and not formally set out as a set of inclusion/ exclusion decisions (for example, the list of invitees to the two stakeholder conferences already held in May and June 2005). Other sources reviewed are outlined in Appendix 1. This literature review yielded sufficient information to populate the decision space on what should/ could be included in a definition of the Canadian health care leadership and management sub-sector.

The second step was to organize the decision space into a series of orthogonal decisions each of which had to be clear enough to result in a 'yes, or no', "include or not" decision. This series of bi-polar choices collectively define the health care leadership and management sub-sector in Canada. The resulting set of decision nodes were collected in survey form.

The third step was to confirm, refine and augment that decision space depiction through consultation with the Advisory Committee. This occurred during a teleconference call on October 18th 2005. As a result, the survey draft was reformatted to consolidate sub-sectors.

3.2 Round One Survey of Experts

The resulting survey (see Appendix 2) was sent electronically to 93 experts identified by CCHSE. The expert list was developed by combining the key stakeholders invited to the two stakeholder meetings held in March and June 2005 with other experts subsequently identified. One day prior to the electronic circulation of the round one survey, an invitation letter and accompanying background information was sent electronically to each invited participant from the office of John Hylton, CCHSE President and CEO (see Appendix 2).

Of the total 93 identified experts, eleven proved to have incorrect addresses and two removed themselves from participation, resulting in a functional denominator of 80. A reminder was supplied electronically four days before the due date. Returns were received from 35 for a response rate of 44%. Round one results were compiled and circulated to the Advisory Committee on November 4th 2005.

3.3 Round Two Survey of Experts

The purpose of the second round survey was to develop consensus among participating experts by allowing them to see how other experts were deciding at each decision node. Presenting the survey the second time allowed each invited expert to modify their response to each decision either in relation to information from other experts or as a result of reviewing their own responses from the first round.

An electronic copy of the first round results was sent to all 79 potential participants (the original list of 93 less the 11 bad addresses, two initial withdrawals and

one subsequent withdrawal). This second survey included an indication on each question how the individual had responded on the first survey. Participants were then asked to either confirm their response from the 1st round, or to change it. The basic questions on the second survey were unchanged from the first round.

The 2nd round survey was made available electronically for the start of work on Monday, November 7th with a due date for returns a week later by close of business on Monday, November 14th. An electronic reminder was sent to all non-respondents on Thursday, November 10th and a second reminder on Sunday November 13th. The survey close date was also extended to Friday November 18th in order to maximize the number of usable returns.

Not all experts returned both round one and round two surveys. For those without Round Two results, their Round One data was entered into analysis. Not all experts responded to all questions. Those 'non-responses' are indicated by question in survey results (see Appendix 4).

These techniques resulted in returned surveys from 56 of the identified experts for a 71% response rate. This response is well within acceptable range to allow the pooled results to validly represent the total possible sample of 79 identified experts for whom valid addresses were available.

4. Research Timeline

1. September 30th: Teleconference with Advisory Committee to finalize approach and work plan.
2. October 3rd: Finalize work plan submitted
3. October 3rd – 14th Review literature; interviews with key informants; draft survey
4. Week of October 17th: Teleconference with Advisory Committee to finalize question set and survey participants.
5. October 24th Finalized survey content and participants definition
6. Week October 24th: First pass Delphi (electronic delivery and return)
7. November 4th Results from 1st pass Delphi (initial indication from participants on sector boundaries)
8. Week November 7th: Second pass Delphi (electronic delivery and return)
9. November 18th Results from 2nd pass Delphi ('second thoughts' indication from participants on sector boundaries)
10. Completion/submission of draft Discussion Paper –November 28th, 2005
11. Week December 5th Teleconference with Advisory Committee to accept/ reject/ modify sector boundary definitions emerging from survey process as outlined in the draft Discussion Paper.
12. Submission of revised/final discussion paper –December 16th, 2005

5. Decision Advice from Participating Experts

The distribution of responses to the second round survey can be followed in the Appendix 4. These results are also presented in the sections below.

Where 80% or more respondents had the same opinion on a decision node, the experts were considered to be in agreement on that issue. The experts are agreed on 20 of the 48 aspects presented for inclusion in the definition.

A direction for decision could be understood where 66% or more experts agreed on a question. On 17 aspects the preponderance of expert opinion points in a clearly perceivable direction.

However, experts are evenly divided on 11 aspects of the potential definition without clear weighting for or against inclusion.

5.1 Decisions with Clear Advice from Invited Experts

More than 80% of experts participating in this study reported that the definition of Canadian health care leaders and managers should include the following seven types of workplaces:

a. Publicly funded health care delivery systems: acute care, primary care, chronic care, rehabilitation (Question #1).
   55 yes 0 no 1 no response
b. Health promotion, health maintenance organizations (Question #2).
   55 yes 0 no 1 no response
c. Academic institutions (Question #3).
   50 yes 5 no 1 no response
   NOTE: This result is confused by the equivocation noted on related questions #25 through #29.
d. Associations, foundations or other non-governmental organizations (Question #5). 47 yes 8 no 1 no response
   NOTE: the clarity of this response is not sustained by responses to related questions #26 through #29
e. Government sections and agencies responsible for health care (Question #6).
   52 yes 3 no 1 no response
   NOTE: this support is confined to senior level personnel based on responses to related questions #33 and #34.
f. Private, not-for-profit, health care delivery systems (Question #9).
   54 yes 1 no 1 no response
g. Private for profit health care delivery systems (Question #10).
   50 yes 5 no 1 no response

They also agreed that the health product and supply organizations sub-sector should NOT be included (Question #7). 6 yes 48 no 2 no response

More than 80% of experts participating in this study reported that the definition of Canadian health care leaders and managers should focus on the following seven roles and one credential:

Those who:

a. provide direct supervision to others who provide care (Question 14).
   53 yes 2 no 1 no response
b. are program managers or department/ division heads for units that provide direct care (Question 16).
   53 yes 2 no 1 no response
c. provide administrative, operations or process consulting to department/ division heads for units that provide direct care (Question 18).
   47 yes 8 no 1 no response
d. work on the senior administrative team in institutions that provide direct care (Question 20)
   52 yes 1 no 3 no response
e. works at senior levels of government with responsibility for any aspect of health care (Question 34).
   51 yes 4 no 1 no response
f. advise government on health care matters (Question 35).
   45 yes 8 no 3 no response
g. are certified health care managers (i.e. CCHSE) (Question 39). .
   51 yes 3 no 2 no response

The sector definition should NOT focus on the following five roles:

a. conduct basic research in any aspect of science relevant to health (Question 30). 2 yes 52 no 2 no response
b. work for organizations that fund research on any aspect of science relevant to health (Question 31). 8 yes 47 no 1 no response
c. write or present critical appraisals of any aspect of science relevant to health (Question 32). 9 yes 46 no 1 no response
d. work for companies providing health related services, products and devices at the interface with direct health care providers (Question 44).
   3 yes 51 no 2 no response
e. work for companies providing health related services, products and devices at the interface with mangers of direct health care providers (Question 45)
   6 yes 48 no 2 no response

5.2 Decisions with Direction Provided by a Majority of Invited Experts

More than 2/3 of consulted experts reported that the definition of Canadian health care leaders and managers should include funding agencies (Question 4):

44 yes 11 no 1 no response

More than 2/3 of consulted experts reported that the definition of Canadian health care leaders and managers should likely focus on the following nine roles and credentials:

Those who:

a. provide direct supervision to those who provide services, resources, products, devices relied upon by direct care providers (i.e. IT, HR, cleaning) (Question 15):
   43 yes 12 no 1 no response
b. are program managers or department/ division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning) (Question 17): 44 yes 10 no 2 no response
c. provide administrative, operations or process consulting to those who work on the senior administrative team in institutions that provide direct care. (Question 21):
   45 yes 10 no 1 no response
d. chair the board at institutions that provide direct care. (Question 23):
   37 yes 18 no 0 no response
e. provide strategic consulting to chairs, boards and senior management teams in institutions that provide direct care. (Question 24):
   38 yes 16 no 2 no response
f. are part of the ownership structure of in a privately owned not-for-profit health care institution or organization. (Question 47):
   41 yes 13 no 2 no response
g. are part of the ownership structure of in a privately owned for-profit health care institution or organization. (Question 48):
   39 yes 14 no 3 no response
h. possesses an academic degree in health management (i.e. MHSA). (Question 40):
   44 yes 10 no 2 no response
i. possess an academic degree in management (i.e. MBA). (Question 42):
   37 yes 16 no 3 no response

More than 2/3 of consulted experts reported that the sector definition <u>should NOT focus</u> on the following seven roles:

a. provide direct care (Question 11). 11 yes 43 no 2 no response
b. provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning). (Question 13):
   12 yes 43 no 1 no response
c. work for organizations that fund research on any aspect of the health care system. (Question 26):
   11 yes 43 no 2 no response
d. works for any level of government with responsibility for any aspect of health care. (Question 33):
   12 yes 43 no 1 no response
e. are certified members of any health care profession providing publicly insured services (i.e. medicine, nursing). (Question 36):

18 yes 37 no 1 no response

f. are certified health professionals directly providing health related services, products and devices (i.e. pharmacists). (Question 37):
   17 yes 38 no 1 no response
g. are certified members of any health care profession providing services not publicly insured (i.e. dentistry, physiotherapy, counselling). (Question 38):
   13 yes 42 no 1 no response

5.3 Decisions Where Invited Experts Are Equally Divided

Experts participating in this study were equally divided on whether the definition of Canadian health care leaders and managers *should OR should not* include health care services using a non-Western traditional medicine paradigm. (Question 8): 25 yes 27 no 4 no response

Experts participating in this study were equally divided on whether the definition of Canadian health care leaders and managers *should OR should not* focus on the following ten roles:

Those who:

a. provide clinical consulting to those providing direct care. (Question 12):
   33 yes 20 no 3 no response
b. provide administrative, operations or process consulting to department/ division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning). (Question 19):
   24 yes 24 no 8 no response
c. are board members for institutions that provide direct care. (Question 22):
   34 yes 21 no 1 no response
d. conduct research on any aspect of the health care system. (Question 25):
   21 yes 34 no 1 no response
e. write or present critical appraisals of any aspect of the health care system. (Question 27):
   19 yes 36 no 1 no response
f. work as staff for any agency or organization charged with studying or supporting any aspect of the health care system. (Question 28):
   10 yes 35 no 1 no response
g. are board or task force members for any agency or organization charged with studying or supporting any aspect of the health care system. (Question 29):
   20 yes 35 no 1 no response
h. are certified managers in some other area (i.e. P. Eng). (Question 41):
   24 yes 28 no 4 no response
i. work at senior management levels for companies providing health related services, products and devices. (Question 43):
   31 yes 23 no 2 no response
j. work for companies providing health related services, products and devices at the interface with senior leadership in health care institutions. (Question 46):

26 yes 28 no 2 no response

6. Recommendations for Defining the Sector

The results of this decision modeling exercise provide guidance from the consulted experts at each of the 48 decision nodes. However, the Advisory Committee has the ultimate authority to define the sector to be included in the study planned. Therefore, the Committee should review the advice presented at each point and formally make inclusion or exclusion decisions.

At some points the decisions are clearly marked by the experts, for example 96% agree that the private sector health care systems should be included (Questions 9 and 10). Experts are clear in their advice to include all supervisors, managers and senior administrators in any health care delivery organization and government. Furthermore all those with a CCHSE credential are to be included. The experts are consistent in their advice to exclude all service and supply vendors and all involved in basic science research or funding.

In other areas the experts appear to contradict themselves; for example, academic institutions received a lot of support for inclusion (Q3) but the academic roles (Q25 and Q27) were much less supported. Similarly, experts supported inclusion of associations, foundations and NGOs (Q5), but equivocated about including the roles undertaken by those same organizations (Qs 26, 28 and 29). These contradictions must be resolved by the Advisory Committee.

There were 17 decisions where the advice from expert respondents split with a 2/3 or better majority. These decisions, reviewed in section 5.2, indicated a tendency to include supervisory and management roles in support areas Q15, 17), consultants to senior administrators (Q21), board chairs (Q23) and their consultants (Q24) and private care owners (Qs 47, 48). Those with academic management degrees (Q40, 42) were also to be included. The preponderance of experts would exclude those providing care (Q11) or support service (Q13); research funders (Q26) or government (Q33). They would also exclude those with only health professional credentials (Qs 36, 37, 38).

In some areas the experts consulted in this study will be of no assistance to the Advisory Committee decision-makers because the experts were evenly split in their support for inclusion and exclusion. First among these evenly divided issues was whether to include health care services and sites using non-Western traditional medical paradigms (Q8). Clinical consultants (Q12), consultants to support departments (Q19), board members (Q22), researchers (Q25), critics (Q27), agency staff (Q28), board or task force members (Q29) have equal support and refusal for inclusion among the participating experts. Similarly, about half the experts would include senior managers from supply companies (Q43) and all those from supply companies that interface with senior leadership in health care institutions (Q46). There is also an even split on whether to include those with management certifications from other areas (i.e. P.Eng.) (Q41).

7. Advisory Committee Consultation

On Monday, December 5th 2005, the Advisory Committee held a teleconference to accept/ reject/ modify the sector boundary definitions emerging from the survey process as presented in this Discussion Paper.

The Committee reviewed all facets (workplaces and roles) from those most agreed upon by the 'experts' to those where the 'experts' were divided in their opinion. Decisions were made on inclusion/ exclusion as outlined in the Executive Summary.

8. Conclusions

A clear, operational definition of Canadian health care leadership and management was required in order to move to the next stage in designing the sector study. The research process reported on here had provided that definition. The sector study must focus on the following easily identified workplaces and roles:

Workplaces:

1. Publicly funded health care delivery systems: acute care, primary care, chronic care, rehabilitation
2. Health promotion, health maintenance organizations
3. Health care services using a non-Western traditional medicine paradigm (further work will be required to focus this inclusion as the sector study is designed).
4. Academic institutions (senior position from each of the health related disciplines)
5. Associations, foundations or other non-governmental organizations (senior positions only)
6. Funding agencies (senior positions only)
7. Government sections and agencies responsible for health care (senior positions only)
8. Private, not-for-profit, health care delivery systems
9. Private for profit health care delivery systems (for the purposes of focusing the sector study this workplace type will be dropped from further planning)

Roles:

a. Those who provide direct supervision to others who provide care
b. Those who provide clinical consulting to those providing direct care
c. Those who are program managers or department/division heads for units that provide direct care
d. Those who provide administrative, operations or process consulting to department/division heads for units that provide direct care

e. Those who provide direct supervision to those who provide services, resources, products, devices relied upon by direct care providers (i.e. IT, HR, cleaning)
f. Those who are program managers or department/division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning)
g. Those who provide administrative, operations or process consulting to department/division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning)
h. Those who work on the senior administrative team in institutions that provide direct care
i. Those who provide administrative, operations or process consulting to those who work on the senior administrative team in institutions that provide direct care
j. Those who chair the board at institutions that provide direct care (NOTE: the inclusion of this and the following 'board member' role in the sector study will be revisited as the study design takes shape)
k. Those who are board members for institutions that provide direct care (see NOTE above)
l. Those who provide strategic consulting to chairs, boards and senior management teams in institutions that provide direct care
m. Those who work at senior levels of government with responsibility for any aspect of health care
n. Those who advise government on health care matters
o. Those who work as senior staff in administrative or leadership roles for any agency, organization, association, foundation, non-governmental organization charged with studying or supporting any aspect of the health care system
p. Those who are certified health care managers (i.e. CCHSE)

Recognizing the important voice and contribution that each of the following brings to shaping the future of health care in Canada, sector study resource and attention limits will EXCLUDE the following from further planning. All those who:

i. provide direct care
ii. provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning)
iii. work for companies providing health related services, products and devices at the interface with direct health care providers
iv. work for companies providing health related services, products and devices at the interface with managers of direct health care providers
v. work for companies providing health related services, products and devices at the interface with senior leadership in health care institutions
vi. work at senior management levels for companies providing health related services, products and devices

vii. have any role in health product and supply organizations
viii. conduct basic research in any aspect of science relevant to health
ix. write or present critical appraisals of any aspect of science relevant to health
x. work for organizations that fund research on any aspect of science relevant to health
xi. conduct research on any aspect of the health care system
xii. write or present critical appraisals of any aspect of the health care system
xiii. who work for organizations that fund research on any aspect of the health care system
xiv. work for any level of government with responsibility for any aspect of health care
xv. are board or task force members for any agency or organization charged with studying or supporting any aspect of the health care system
xvi. are part of the ownership structure in a privately owned not-for-profit health care institution
xvii. are part of the ownership structure in a privately owned for-profit health care institution or organization
xviii. possess an academic degree in health management (i.e. MHSA)
xix. possess an academic degree in management (i.e. MBA)
xx. are certified members of any health care profession providing publicly insured services (i.e. medicine, nursing)
xxi. are certified health professionals directly providing health related services, products and devices (i.e. pharmacists)
xxii. are certified members of any health care profession providing services not publicly insured (i.e. dentistry, physiotherapy, counseling)
xxiii. are certified managers in some other area (i.e. P Eng.)

Appendix 1: Literature Reviewed to Insure Adequate Coverage of Decision Aspects for Decision Theoretic Modeling of the Canadian Health Care Leadership and Management Sub-Sector

1. American College of Health Executives *Management Innovations XXI* 2005 http://www.ache.org/PUBS/Research/poster.pdf Accessed 051006

2. American College of Health Executives *Top Issues Confronting Hospitals 2004* http://www.ache.org/PUBS/research/ceoissues.cfm Accessed 051006

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Appendix 2: Introductory Letter Sent to Identified Experts

Dear Colleague:

RE: Survey to Define Health Leaders & Managers in Canada

Recognizing that health care leaders and managers are responsible for ensuring access to safe, high quality care, and that a comprehensive strategy is required to address the issues and concerns facing the sector, the Canadian College of Health Service Executives (CCHSE), in partnership with the Canadian Academy of Executive Nurses (ACEN) and the Canadian Society of Physician Executives (CSPE), is investigating the feasibility of undertaking an in-depth study of health leaders and managers in Canada.

However, little information or data currently exists on how to define the sector. For example, reports estimate the number of healthcare leaders/managers to be anywhere from 20,000 to 90,000. Our initiative has resulted in defining, in general terms, that a health care leader/manager is *an individual who creates vision and goals, and mobilizes and manages resources to produce a service, change or product consistent with the vision and goals.* However, it is critical to identify much more precisely who should be included as part of the leadership cohort before the focus and scope of a sector study is determined.

To achieve this objective, a survey has been designed and will be distributed to key stakeholders, including yourself, who are considered to have knowledge and expertise about the sector. You will receive the survey on October 25th with a request to complete and return the questionnaire by November 1st. On November 17th, you will then receive the same survey a second time (showing everyone else's response to the first survey) with a request to return the completed questionnaire by November 24th. This will allow you an opportunity, should you wise to do so, to consider altering your original responses the second time round.

Would you please complete and return the surveys as quickly as possible when they arrive. Your opinion and input with regard to which groups you think should be included in the sector is critical to the process of proceeding with a study of health leaders and managers in Canada.

Attached for your information is a Briefing Note, which describes the purpose of the initiative in more detail. If you have any questions or would like additional information on the survey or the proposed study, do not hesitate to contact either myself or Annette Hewitt at CCHSE.

Your assistance and support in this endeavor is greatly appreciated.

Yours Sincerely,

Dr. John H. Hylton, FCCHSE
President & CEO

Appendix 3: Expert Survey

Canadian College of Health Service Executives (CCHSE), Canadian Association of Canadian Executive Nurses (ACEN) and the Canadian Society of Physician Executives (CSPE) have combined to conduct an in-depth HHR study of the health care sector with an initial focus on collecting data and information on Canada's health leaders and managers. The purpose of the study is to ensure there are a sufficient number of health care leaders/managers, with the right skills, in the right place to sustain and improve Canada's health care system. The study is funded by Human Resources & Services Development Canada (HRSDC).

Prior to beginning the HHR study a necessary first step is to develop consensus recommendations for defining the study population: who are Canada's health leaders and managers? This is a difficult question and one with significant cost and complexity implications for the HHR study to be undertaken.

Two conferences in 2005 were held to approach this definition. Their results and a review of the literature were used to develop the population definition choice list presented below.

Instructions
Possible attributes of the target HHR study population ("Canada's health care leaders and managers") are presented below in the form of a series of bi-polar choices. Please indicate whether you think individuals with each attribute **should, or should not**, be included in the study population.

The following questionnaire is set up in MSWord. If you save this document to your hard drive, you can complete it at your leisure. Indicate your choices with a mouse click. Save your responses and then simply attach the completed document in a return note to me. If electronic completion and return is not possible, please print the questionnaire, complete it and fax it to me at the fax number below.

If you have any questions, please send me an email or telephone. Contact information is provided below. On behalf of the sponsoring organizations, thank you for your time and consideration of the issues.

Lynn Curry, Ph.D.
CurryCorp Inc.
17 Oakland Ave. Ottawa, Ontario K1S 2T1
T: (613) 232-6708 F: (613) 232-0038
E: Lynn@CurryCorp.net www.CurryCorp.net

Which of the following sub-sectors should be included in a study of Canadian health care leaders and managers?

1. Publicly funded health care delivery systems: acute care, primary care, chronic care, rehabilitation. ☐yes ☐no
2. Health promotion, health maintenance organizations. ☐yes ☐no
3. Academic institutions ☐yes ☐no
4. Funding agencies ☐yes ☐no
5. Associations , foundations or other non-governmental organizations. ☐yes ☐no
6. Government sections and agencies responsible for health care. ☐yes ☐no
7. Health product and supply organizations. ☐yes ☐no
8. Health care services using a non-Western traditional medicine paradigm. ☐yes ☐no
9. Private, not-for-profit, health care delivery systems. ☐yes ☐no
10. Private for profit health care delivery systems. ☐yes ☐no

The definition of Canada's health care leaders and managers must focus on which of the following roles?

People who:

11. provide direct care ☐yes ☐no
12. provide clinical consulting to those providing direct care. ☐yes ☐no
13. provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning). ☐yes ☐no

14. provide direct supervision to others who provide care. ☐yes ☐no

15. provide direct supervision to those who provide services, resources, products, devices relied upon by direct care providers (i.e. IT, HR, cleaning). ☐yes ☐no

16. are program managers or department/ division heads for units that provide direct care. ☐yes ☐no

17. are program managers or department/ division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning). ☐yes ☐no

18. provide administrative, operations or process consulting to department/ division heads for units that provide direct care. ☐yes ☐no

19. provide administrative, operations or process consulting to department/ division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning). ☐yes ☐no

20. work on the senior administrative team in institutions that provide direct care. ☐yes ☐no

21. provide administrative, operations or process consulting to those who work on the senior administrative team in institutions that provide direct care. ☐yes ☐no

22. are board members for institutions that provide direct care. ☐yes ☐no

23. chair the board at institutions that provide direct care. ☐yes ☐no

24. provide strategic consulting to chairs, boards and senior management teams in institutions that provide direct care. ☐yes ☐no

25. conduct research on any aspect of the health care system. ☐yes ☐no

26. work for organizations that fund research on any aspect of the health care system. ☐yes ☐no

27. write or present critical appraisals of any aspect of the health care system. ☐yes ☐no

28. work as staff for any agency or organization charged with studying or supporting any aspect of the health care system. ☐yes ☐no

29. are board or task force members for any agency or organization charged with studying or supporting any aspect of the health care system. ☐yes ☐no

30. conduct basic research in **any aspect of science** relevant to health. ☐yes ☐no

31. work for organizations that fund research on any aspect of science relevant to health. ☐yes ☐no

32. write or present critical appraisals of any aspect of science relevant to health. ☐yes ☐no

33. works for any level of government with responsibility for any aspect of health care. ☐yes ☐no

34. works at senior levels of government with responsibility for any aspect of health care. ☐yes ☐no

35. advise government on health care matters. ☐yes ☐no

36. are certified members of any health care profession providing publicly insured services (i.e. medicine, nursing). ☐yes ☐no

37. are certified health professionals directly providing health related services, products and devices (i.e. pharmacists). ☐yes ☐no

38. are certified members of any health care profession providing services not publicly insured (i.e. dentistry, physiotherapy, counselling). ☐yes ☐no

39. are certified health care managers (i.e. CCHSE). ☐yes ☐no

40. possesses an academic degree in health management (i.e. MHSA). ☐yes ☐no

41. are certified managers in some other area (i.e. P. Eng). ☐yes ☐no

42. possess an academic degree in management (i.e. MBA). ☐yes ☐no

43. work at senior management levels for companies providing health related services, products and devices. ☐yes ☐no

44. work for companies providing health related services, products and devices at the interface with direct health care providers. ☐yes ☐no

45. work for companies providing health related services, products and devices at the interface with mangers of direct health care providers. ☐yes ☐no

46. work for companies providing health related services, products and devices at the interface with senior leadership in health care institutions. ☐yes ☐no

47. are part of the ownership structure of in a **privately owned not-for-profit** health care institution or organization. ☐yes ☐no

48. are part of the ownership structure of in a **privately owned for-profit** health care institution or organization. ☐yes ☐no

Thank you for completing the survey.
Please save your electronic file and return it now
so that you don't have to think about it again:
Please send to:
Lynn@CurryCorp.net

Appendix 4: Decision Results from Invited Experts

Which of the following sub-sectors should be included in a study of Canadian health care leaders and managers?

1. Publicly funded health care delivery systems: acute care, primary care, chronic care, rehabilitation. 55 yes 0 no 1 no response

2. Health promotion, health maintenance organizations.
   55 yes 0 no 1 no response

3. Academic institutions 50 yes 5 no 1 no response

4. Funding agencies 44 yes 11 no 1 no response

5. Associations, foundations or other non-governmental organizations.
   47 yes 8 no 1 no response

6. Government sections and agencies responsible for health care.
   52 yes 3 no 1 no response

7. Health product and supply organizations. 6 yes 48 no 2 no response

8. Health care services using a non-Western traditional medicine paradigm.
   25 yes 27 no 4 no response

9. Private, not-for-profit, health care delivery systems.
   54 yes 1 no 1 no response

10. Private for profit health care delivery systems. 50 yes 5 no 1 no response

The definition of Canada's health care leaders and managers must focus on which of the following roles?

People who:

11. provide direct care 11 yes 43 no 2 no response

12. provide clinical consulting to those providing direct care.
33 yes 20 no 3 no response

13. provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning). 12 yes 43 no 1 no response

14. provide direct supervision to others who provide care.
53 yes 2 no 1 no response

15. provide direct supervision to those who provide services, resources, products, devices relied upon by direct care providers (i.e. IT, HR, cleaning).
43 yes 12 no 1 no response

16. are program managers or department/ division heads for units that provide direct care.
53 yes 2 no 1 no response

17. are program managers or department/ division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning). 44 yes 10 no 2 no response

18. provide administrative, operations or process consulting to department/ division heads for units that provide direct care. 47 yes 8 no 1 no response

19. provide administrative, operations or process consulting to department/ division heads for units that provide services, resources, products, devices relied upon by those providing direct care (i.e. IT, HR, cleaning).
24 yes 24 no 8 no response

20. work on the senior administrative team in institutions that provide direct care.
52 yes 1 no 3 no response

21. provide administrative, operations or process consulting to those who work on the senior administrative team in institutions that provide direct care.
45 yes 10 no 1 no response

22. are board members for institutions that provide direct care.

34 yes 21 no 1 no response

23. chair the board at institutions that provide direct care. 37 yes 18 no 0 no response

24. provide strategic consulting to chairs, boards and senior management teams in institutions that provide direct care. 38 yes 16 no 2 no response

25. conduct research on any aspect of the health care system.
21 yes 34 no 1 no response

26. work for organizations that fund research on any aspect of the health care system.
11 yes 43 no 2 no response

27. write or present critical appraisals of any aspect of the health care system.
19 yes 36 no 1 no response

28. work as staff for any agency or organization charged with studying or supporting any aspect of the health care system. 10 yes 35 no 1 no response

29. are board or task force members for any agency or organization charged with studying or supporting any aspect of the health care system.
20 yes 35 no 1 no response

30. conduct basic research in **any aspect of science** relevant to health.
2 yes 52 no 2 no response

31. work for organizations that fund research on any aspect of science relevant to health.
8 yes 47 no 1 no response

32. write or present critical appraisals of any aspect of science relevant to health.
9 yes 46 no 1 no response

33. works for any level of government with responsibility for any aspect of health care.
12 yes 43 no 1 no response

34. works at senior levels of government with responsibility for any aspect of health care.
51 yes 4 no 1 no response

35. advise government on health care matters. 45 yes 8 no 3 no response

36. are certified members of any health care profession providing publicly insured services (i.e. medicine, nursing). 18 yes 37 no 1 no response

37. are certified health professionals directly providing health related services, products and devices (i.e. pharmacists). 17 yes 38 no 1 no response

38. are certified members of any health care profession providing services not publicly insured (i.e. dentistry, physiotherapy, counselling).
13 yes 42 no 1 no response

39. are certified health care managers (i.e. CCHSE). 51 yes 3 no 2 no response

40. possesses an academic degree in health management (i.e. MHSA).
44 yes 10 no 2 no response

41. are certified managers in some other area (i.e. P. Eng).
24 yes 28 no 4 no response

42. possess an academic degree in management (i.e. MBA).
37 yes 16 no 3 no response

43. work at senior management levels for companies providing health related services, products and devices. 31 yes 23 no 2 no response

44. work for companies providing health related services, products and devices at the interface with direct health care providers. 3 yes 51 no 2 no response

45. work for companies providing health related services, products and devices at the interface with mangers of direct health care providers.
6 yes 48 no 2 no response

46. work for companies providing health related services, products and devices at the interface with senior leadership in health care institutions.
26 yes 28 no 2 no response

47. are part of the ownership structure of in a **privately owned not-for-profit** health care institution or organization. 41 yes 13 no 2 no response

48. are part of the ownership structure of in a privately owned for-profit health care institution or organization. 39 yes 14 no 3 no response