National Environmental Scan: Comprehensive Survey of the Aboriginal Health Human Resource Landscape

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Human Resource Landscape

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Under the *Canadian Constitution Act*, 1982, the term Aboriginal Peoples refers to First Nations, Inuit and Métis people living in Canada. However, common use of the term is not always inclusive of all three distinct people and much of the available research only focuses on particular segments of the Aboriginal population. NAHO makes every effort to ensure the term is used appropriately.

NATIONAL ENVIRONMENTAL SCAN: Comprehensive Survey of the Aboriginal Health Human Resource Landscape

July 2007

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NATIONAL ENVIRONMENTAL SCAN: Comprehensive Survey of the Aboriginal Health Human Resource Landscape

THE ABORIGINAL HEALTH HUMAN RESOURCE INITIATIVE

Announced in 2004 by Health Canada, the Aboriginal Health Human Resource Initiative (AHHRI) is a five year, \$100 million strategy with the intent to meet the unique health service needs of Canada's Aboriginal people. There is a need to increase the number of Aboriginal people taking up careers in the health care field, to improve the recruitment and retention of health care workers in Canadian Aboriginal communities, and to adapt health care educational programs to be more culturally responsive to the needs of Canada's Aboriginal communities. Under the strategy, Health Canada is working with Aboriginal, federal, provincial, territorial and health professional associations as well as educational institutions to develop and implement change.

The National Aboriginal Health Organization (NAHO) has embarked upon a multi-phase initiative as part of the AHHRI to develop a comprehensive framework on Aboriginal health human resources. With support from the Canadian Institute for Health Information (CIHI) and Health Canada's First Nations and Inuit Health Branch (FNIHB), NAHO plans to conduct a national environmental scan of the Aboriginal Health Human resource landscape. Reliable data is needed on the number of trained Aboriginal and non-Aboriginal health care providers serving Aboriginal clients and communities. To this end, a better understanding is needed of the role played by professional associations, recruitment organizations, educational institutions, and other Aboriginal organizations with respect to Aboriginal health human resources.

The comprehensive collaborative framework on Aboriginal health human resources will identify elements and sources for a health human resource minimum data set and will identify core components that facilitate efforts towards greater First Nations, Inuit and Métis participation in health careers. Under the initiative, NAHO plans to gather and maintain information about First Nation, Inuit, and Métis health professionals and health care workers. This information will contribute to the planning of policies and programs that will increase the recruitment, retention, and training of Aboriginal people in health careers. It will eventually allow for the tracking of changes and the evaluation of policies and programs.

Before a broader national environmental scan is undertaken it is necessary to understand the role different organizations can play in meeting the objectives of the AHHRI initiative and to gauge their interest in participating in further activities. To lay the groundwork for the national environmental scan, NAHO has conducted two preliminary surveys to identify key players in the Aboriginal human health resource landscape. It is important to get an understanding of:

- 1. What organizations collected and manage health human resource data.
- 2. What is the nature of the data.
- 3. How is the data managed.
- 4. Who has access to the data.

5. What organizations, associations, and/or institutions are willing to collaborate with NAHO to develop a minimum data set about First Nation, Inuit, and Métis health professionals and health care workers?

The first survey was completed in early 2007 and served as the basis for a more detailed survey that was conducted between April and June 2007. This report summarizes the findings of the second NAHO survey.

METHODOLOGY

In order to collect baseline information for the AHHRI national scan, NAHO has conducted two surveys to identify what organizations and institutions are collecting and managing information about Aboriginal human health resources and to identify the nature of the information being collected. In addition, it has been important to identify those organizations and institutions that are willing to partner with NAHO in the planned comprehensive National Environmental Scan and to understand the criteria and standards that will guide the collaborations. These details include issues related to privacy standards and practical matters related to computers and operating system compatibility and the software programs being used.

The preliminary NAHO survey was distributed to about 40 respondents in November 2006. Responses were returned to NAHO by mail and fax through till January 2007. A summary analysis of the survey was completed in late January 2007. This modest survey served to identify the range of information that is likely available and relevant to the planning of the second more comprehensive survey, which in turn, will guide the development and participation of the comprehensive Nation Environmental Scan. In other words, this smaller survey served to facilitate the planning and development of the second survey which will guide the development and implementation of the environmental scan.

The results of the first survey guided the choice of questions included in the second survey as well as certain methodological choices on how the second survey would be conducted. Closed-ended questions were favoured in the second survey to facilitate completion of the questionnaire and the compilation of the final results. For the first survey, respondents often added additional comments or answers to the closed-ended questions. As a result, for the second survey the list of possible answers for the closed-ended questions was expanded in order to be more inclusive. The effort was to anticipate all possible options and choices. Certain open-ended text questions of the first survey returned fairly consistent answers, so for the second, the questions were modified to be closed-ended, listing possible answers for the respondents. It is believed that it is easier for respondents to scroll down a list of possible answers and to select those that apply than to write or type in their responses in a blank space. The idea was to encourage a higher response rate.

One of the main methodological choices made by NAHO was to publish the second survey on the Internet and to send potential respondents an email invitation that included an Internet link to the survey's on-line location. Upon completion, respondents simply had to press a SUBMIT button and the results were added to a database provided by a host server. The choice of the Internet-based survey made it easier to present the long list of options that some closed-ended

questions required. It eliminated the intimidation of a long paper survey and provided an automated data compilation process that eliminated data entry errors.

The on-line survey was created using a software package called Infopoll Designer which is available free as a download from Infopoll Inc. Surveys designed with the software can be printed as hardcopy or published on the Internet through a hosting service offered by Infopoll. NAHO subscribed to the hosting services for the months of April, May, and June 2007. As noted, the Infopoll service collects and stores the data submitted by respondents and creates a survey database that is available for download. The survey results are available for live monitoring in the form of an Internet accessible report and statistical analysis. In addition, subscribers to the service are able to design customized cross-tabulation reports.

The results from the first survey were recorded and analyzed using Microsoft Excel software. To maintain consistency, and to ensure NAHO retained a copy of the second survey's results after its Infopoll subscription expired, the results of the second survey have been downloaded and converted into an Excel spreadsheet. This data has been cleaned and recoded in places to allow easier analysis using the Excel software.

The survey achieved a 65 percent response rate: a total of 28 responses were received.² Data was collected between April 13 and June 21, 2007. This reflects one of the methodological challenges of this project — completion of the survey was initially quite slow with less than half completed during the first month after the survey was post. Follow-up correspondences were needed to encourage potential respondents to complete the survey. Because respondents of the first survey were asked to also respond to the second, this led to some confusion among the survey recipients. Some confused the two surveys and thought they had already responded when the request to participate in the second survey was distributed. This reduced the number of initial responses and compelled NAHO to renew its subscription to the Infopoll server and extend the survey deadline.

OVERVIEW OF THE NAHO SURVEY

The survey consisted of 31 questions organized into seven sections: Data Collection; Education Institutes; Privacy Policies and Procedures; Relationships and Data Sharing; Data Storage; Contact Information; and Final Comments. Except for the last question about final comments, all questions were closed-ended — respondents simply had to select the appropriate answer from a list. Except for the YES/NO/ DO NOT KNOW-type questions, the answers for the closed-ended questions are not mutually exclusive, so a respondent could select all that applied. For these questions, a field was provided where respondents could type in an answer if none of the listed answers where appropriate.

The complete survey results are provided in the Appendix of this report. Information that explicitly identifies the respondents has been omitted.

¹ Infopoll Inc. is a Dartmouth, Nova Scotia based company. URL: http://infopoll.com

² The first NAHO AHHRI survey completed in January 2007 received 14 responses.

SECTION 1: DATA COLLECTION

The first part of the survey was about data collection. The effort was to identify what types of information is collected and managed by what organizations. Specifically, interest was in information about health care professionals, health education programs, students, and health care institutions such as hospitals, and community health centres. Using the results of the first NAHO survey as a guide, the effort was to refine NAHO's understanding of the information that is being captured and to determine the extent of any related Aboriginal-specific data. Despite having more respondents to the questionnaire, the results of the second survey suggest that the more modest first NAHO survey had successfully identified many of the organizations and institutions that record data on First Nations, Inuit, and/or Métis health human resources. The second survey, however, further refined the nature of the information that is being collected.³

When asked to identify what information is generally collected, the survey results indicate that two-thirds of the respondents collect information on health care professionals and/or paraprofessionals and/or on health education programs. Seven of the 28 respondents (25 percent) either indicated they do not collect this type of information or they did not respond to the question. Among those who responded, almost 48 percent indicated they collect data on health care students. The focus of data collection activities is summarized in Table 1.

Table 1:		
Focus of Data Collection Activities		
	% of all	% of all
	cases	responses
Health care professionals or Paraprofessionals (physiotherapists, social workers, etc.)	50.0%	66.7%
Health education programs	50.0%	66.7%
Health care students	35.7%	47.6%
Health care providers/institutions (hospitals, community health centres, etc.)	32.1%	42.9%
Other information	17.9%	23.8%
Do not collect any of the above information	21.4%	n/a
No Response	3.6%	n/a
NOTE: Calculations in the column % of all responses does not included rescollect any of the above information or as No response.	sponses code as	Do not

Eighteen percent of the respondents indicated they collect different information than what was listed in the survey question. This ranged from information about Aboriginal post secondary institutions, health care students funded by a Post Secondary Student Support Program (PSSSP), and information about public health professionals. It is unclear whether those who stated they do not collect any of this type of information (24 percent of all cases) categorically do not collect any health human resource data or did not care to list what they do collect and manage under the option OTHER.

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³ NAHO's first AHHRI survey indicated 93 percent of the respondents collect data on health professionals and paraprofessionals, compared to the rate of 67 percent recorded among respondents to NAHO's second survey. This suggests that the first survey captured the main stakeholders in the Aboriginal health human resource landscape and that the second, despite its wider net, did not identify many more.

Table 2:				
Identification of First Nations, Inuit, and Métis in Collected Data Sets				
Record specific details about Aboriginal identity such as First	% of all	% of all		
Nations, Inuit, and/or Métis ancestry?	cases	responses		
Yes	46.4%	52.0%		
No	42.9%	48.0%		
Do not know	10.7%	n/a		
Identify professionals, paraprofessionals, and/or students	% of all	% of all		
with Aboriginal ancestry?	cases	responses		
Yes	50.0%	53.8%		
No	42.9%	46.2%		
Do not know	7.1%	n/a		
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know.				

When asked if specific information about Aboriginal ancestry was included in their data sets, 52 percent of respondents who offered an answer indicated that it was collected (see Table 2). Among those who collected information about health professionals, paraprofessionals, and/or students, 54 percent indicated they identify individuals with Aboriginal ancestry. When asked about the specific information their organization collects, 82 percent of the respondents indicated they collect basic contact information such as the person's name, address, phone number (see Appendix: Question 3). As well, where a person works, their education history or current enrolment, and such information as the professional or student's age and gender are commonly recorded (73 percent, 68 percent, and 64 percent respectively). Fifty-nine percent of the respondents indicate their organization records the credentials and licenses of health professionals and paraprofessionals. Information about language — mother tongue and second languages — is far less frequently recorded (36 percent). Twenty-three percent of the respondents to the question offered alternative categories: one respondent indicated they record personal resumes, a second noted that an individual's publications were recorded, a third indicated that they record a doctor's specialized post-graduate medical education and any professional development education. About 21 percent of the survey respondents indicated that they did not record any of this kind of information (see Appendix: question 3).

Relying upon an extensive listing of various health professions, survey respondents were asked to identify those that are collected by their organization or institution. Of all health personnel, information on registered nurses is the most commonly collected (40 percent of the cases that record this type of information) (see Table 3). Public health nurses and nurse practitioners equalled specialized physicians, health administrators and executives, and dieticians and nutritionists in terms of the number of organizations and institutions that record this type of information (35 percent of cases that responded). These professionals were followed by general practitioner, licensed practical nurses, dental hygienist, mental health workers and counsellors, social workers, and health researchers (30 percent of cases that responded). Health personnel specific to Aboriginal healing are less commonly collected: Aboriginal Elders and traditional healers were identified by 20 percent of the respondents and Aboriginal midwives were identified by 15 percent of the respondents. No organization or institution identified Aboriginal health ombudsmen.

Table 3:						
Most Common Health Profes	Most Common Health Professionals and Health Workers Recorded in Databases					
Health Professionals and Health	% of all	Health Professionals and Health	% of all			
Workers	responses	Workers	responses			
Registered nurse	40.0%	Addiction/ substance abuse worker	25.0%			
Dietician/ nutritionist	35.0%	Dentist	25.0%			
Health administrator/ executive/	35.0%	Community Health Representative	25.0%			
manager	33.0%	(CHR)	23.0%			
Nurse practitioner	35.0%	Home care worker	25.0%			
Physician: specialist	35.0%	Midwife	25.0%			
Public health nurse	35.0%	Pharmacist/ pharmacy technician	25.0%			
Dental hygienist	30.0%	Physician: emergency medicine	25.0%			
Health researcher	30.0%	Physiotherapist	25.0%			
Licensed practical nurse	30.0%	Registered psychiatric nurse	25.0%			
Mental health worker/ counsellor	30.0%	Respiratory therapist	25.0%			
Physician: general practitioner	30.0%	Speech pathologist/ speech therapist	25.0%			
Social worker	30.0%					

NOTE: The table offers an alphabetical listing of professionals, not an ordering in terms of importance. See Appendix: Question 2 for a complete list. Calculations in the column % of all responses do not included responses coded as *Do not collect this type of information*, *Do not know* or as *No response*.

The listing of health personnel recorded by the organizations and institutions participating in the survey provides NAHO with the means to better identify potential partners in the National Environmental Scan. The tracking of specific Aboriginal health human resources becomes easier when the survey results are cross-tabulated with those organizations that are willing to enter partnerships with an organization like NAHO, and those that gather specific information categories.

Information about health education is an important subject area that is collected by about two-thirds of the organizations and institutions surveyed by NAHO. Among those who gather information on health human resources, almost 86 percent indicated they record the name of education institutions (see Appendix: Question 4). Eighty-one percent record the health programs offered. Almost 43 percent indicated they record the names of Aboriginal-specific entry programs and 38 percent record aboriginal-specific bursaries and grants. Only 33 percent record what certificates or licenses are granted by the education institutes.

Overall, about half of the surveyed organizations and institutions record or track information about Aboriginal health human resources. This ranges from what professionals, paraprofessionals, and health workers are Aboriginal, to the extent health education institutions offer Aboriginal-specific health programs and support. Information about health personnel specific to Aboriginal healing is less commonly collected. No one organization collects information on the full range of health personnel (see Appendix: Question 2) so it will be necessary for NAHO to consider multiple partnerships if it wishes to track the number of trained health care providers who are Aboriginal or who are serving Aboriginal clients.

SECTION 2: EDUCATION INSTITUTIONS

In order to develop an understanding of Aboriginal health education programs, NAHO asked a number of questions that would inform on how these programs operate and if the institutions pay special attention to Aboriginal students. The section was explicitly directed towards educational institutions; all other organizations and institutions were requested to skip the section. As such, about 78 percent of all the respondents (22 of 28 cases) did not respond to these education-related questions (See Appendix: Questions, 7, 8, 9, 10, 11, and 12).

The survey questionnaire asked if the academic and vocational institutions offer courses that allow students to upgrade their academic credentials and study skills before entering formal education program or training course. For many Aboriginal students coming from rural and remote communities, these upgrade courses provide an opportunity to get comfortable with post-secondary environment and to improve their study skills in order to meet the challenges of education in the health care field. Only one-third of the respondents indicated such upgrade course were available. These institutions also reserve placement for Aboriginal students.

Sixty percent of the institutions indicated they record the number of First Nations, Métis, and Inuit who apply to their institution. Two-thirds of the institutions track the number of Aboriginal students enrolled for education and training. When asked if placements were reserved for Aboriginal students, 60 percent indicated that some positions were set aside. When asked if they record why students may interrupt their education and training before it is completed, only 40 percent indicated that they did. Even fewer institutions track the progress of their graduates. The survey asked whether the institutions recorded information about when a new graduate enters the workforce and where. Only 20 percent of the respondents indicated this type of information was recorded.

Because the response rate was fairly low for this section of the survey, the results cannot be viewed as a strong measure of how Canadian health education institutions manage information about Aboriginal students. It may be worthwhile to identify and examine in further detail what other institutions also reserve placement for Aboriginal students. NAHO's Ajunnginiq Centre has already conducted important work on this subject. Qaigitsi! is a database of health-related education and training opportunities relevant to Inuit that is available online and on CD-ROM. It includes information about health and health-related post-secondary school opportunities of that may be of interest to Inuit. The database lists, for example, training opportunities at northern and southern colleges and universities and special services that may be available for Aboriginal students. ⁴ The Ajunnginiq Centre also has produced a document entitled: What Sculpture is to Soapstone, Education is to the Soul: Building the Capacity of Inuit in the Health Field.⁵ It deals specifically with health-related education needs of Canada's Inuit. Using data on Arctic students who have enrolled and completed high school and post-secondary school, and by documenting the experiences of high school students, post-secondary students, and the experiences of education personnel, the gaps, barriers, and problems related to educational success have been identified. The document also makes recommendations that promote health careers.

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⁴ The Internet link to Qaigitsi is URL: http://www.naho.ca/qaigitsi/english/welcome.php

⁵ Ajunnginiq Centre (2004). What Sculpture is to Soapstone, Education is to the Soul: Building the Capacity of Inuit in the Health Field. URL: http://www.naho.ca/english/pdf/sculpture_to_soapstone.pdf

SECTION 3: PRIVACY POLICIES AND PROCEDURES

Privacy issues are a key concern with respect to the gathering and storage of personal information. For NAHO to consider any partnering relationship with other organizations and institutions, it is essential to respect the policies of the partnering organizations and to reciprocate the trust that comes with access to their data. Numerous privacy codes and guidelines have been established and it is necessary for NAHO to assess the range of policies adopted by those organizations and institutions that collect and manage health human resource data.

Over 88 percent of the respondents indicated their organization has an established privacy policy. Three respondents indicated their organization did not have any such policy. Two respondents indicated that they did not know the answer (see Appendix: Question 13). Among those with established policies, most indicated their policies have been developed specifically for the organization or institution (67 percent). These, however, may be based upon federal or provincial guidelines. For example, 24 percent of the respondents with privacy policies operate according to Federal privacy guidelines such as the Access to Information Act and Privacy Act (ATIP) and/or the Personal Information Protection and Electronic Documents Act (PIPEDA). Thirty-two percent indicate they operate according to provincial or territorial privacy guidelines. Sixteen percent provided additional comments about their privacy policies. One organization noted its policies are guided by both the Ontario Aboriginal Healing and Wellness Strategy (AHWS) and the policies of their First Nation. Another noted it was guided by the principles of Ownership, Control, Access, and Possession (OCAP). About 56 percent of those who have a privacy policy have a board, panel, or committee to manage privacy issues (see Table 4). Nine organizations (33 percent of all respondents) provided a contact name for privacy-related matters.

Table 4: Nature of Privacy Policies		
Tractic of 111 racy 1 offices	% of all	% of all
Privacy policy	cases	responses
Board, panel, or committee managed privacy-related issues	46.4%	56.5%
Operates under a policy developed specifically for the organization	67.9%	76.0%
Operates according to Federal privacy guidelines (ATIP and/or PIPEDA)	21.4%	24.0%
Operates according to Provincial privacy guidelines	28.6%	32.0%
Does not apply, Do not know, or No response	17.9%	n/a
NOTE: Calculations in the column % of all responses do not included respon apply, Do not know or No response.	ses coded as D	oes not

It is apparent from the responses and additional comments submitted by the survey participants that privacy policies are common but they tend to be organization or institution-specific. These, however, may be based, in part, upon provincial, territorial, and national legislation and guidelines or upon the principle of OCAP. About 18 percent of the survey respondents indicated they either did not have a privacy policy, did not know about the policy, or they did not respond to the questions — likely because a privacy policy was not in place.

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⁶ In Ontario, the Personal Health Information Protection Act requires the Ontario Information and Privacy Commissioner to review certain organizations' data protection policies, procedures, and practices every three years.

SECTION 4: RELATIONSHIPS AND DATA SHARING

An important component of NAHO's planned National Environmental Scan is to enter partnerships with other organizations and institutions that collect and manage Aboriginal health human resource information. As such, it is important to identify those organizations that have, in the past, entered relationships or partnerships with other organizations that collect health human resource information and to determine if they share the information that they have amassed.

Among respondents who could offer an answer, 91 percent indicated they have been a partner in health human resources research. Almost 61 percent indicated they have undertaken this type of research in the past (see Table 5). Seventy-six percent of respondents indicated they have had relationships with other organizations that have collected health human resources information. In other words, they have received data collected by another organization. Just over half, however, stated they have entered relationships where they share the information they have collected with another organizations. It should be noted that almost 18 percent of al respondents indicated that they did not know the answer to this question.

Table 5:		
Health Human Resource Research		
	% of all	% of all
Research activities	cases	responses
Been a partner in any health human resources research	75.0%	91.3%
Undertaken health human resources research	50.0%	60.9%
Does not apply, Do not know, or No response	17.9%	n/a
	% of all	% of all
Data sharing	cases	responses
Have relationships with organizations that collect health human resources information	67.9%	76.0%
Do not know	10.7%	n/a
Share collected health human resources information with other organizations	42.9%	52.2%
Do not know	17.9%	n/a
Use of consent forms when collecting or sharing information about health professionals, paraprofessionals, or students	46.4%	52.0%
Do not know	10.7%	n/a
NOTE: Calculations in the column % of all responses do not included respon apply, Do not know or No response.	ses coded as D	oes not

When asked about the use of consent forms when collecting or sharing information about health professionals, paraprofessionals, and students, 52 percent of the respondents confirmed their use. In terms of organizations with established privacy policies, almost 85 percent seek or require the use of consent forms when collecting or sharing this type of data. Over half of these organizations and institutions (54 percent) also have boards, panels, or committees to manage their privacy-related issues.

The survey indicates that partnerships on health human resource research are common though they are more likely to be in terms of being the recipient of data rather than in terms of being the provider of the data to another organization. Only about half the organizations and institutions indicated they share their information with others.

SECTION 5: DATA STORAGE

The on-line survey included a number of technical questions related to how the organizations and institutions managed their data collections. The survey inquired about the computer platform or hardware used to store electronic data, the operating system and software being used, and if the computers had Internet access. NAHO's intent is to get a sense of what data standards and formats are required in order to effectively partner with the other organizations and institutions for the National Environmental Scan on Aboriginal health human resources. In general terms, the use of PC computers is common as well as commercially available software to manage the databases.

The survey results for this section of the questionnaire, however, are a little uneven, suggesting that some respondents may not have been the best candidates to answer these types of questions. For example, the number of respondents who selected the answer: DOES NOT APPLY, COMPUTERS ARE NOT USED; NO DATA IS COLLECTED varied between questions. For some questions, up to 21 percent of the respondents indicated their organizations do not collect health human resources data or use computers. Similarly, almost 36 percent of all survey respondents selected the answer DO NOT KNOW or simply did not answer the question about how the information stored in their databases is accessed (see Appendix: Question 26).

The majority of organizations and institutions who responded to the computer-related questions use PC computers (87 percent). Almost 90 percent stated they use the Windows XP operating system which is a PC-based software program. Larger mainframe computers are used by about 30 percent of the organizations. A very small percentage of respondents indicated they use Mac computers (9 percent). Almost eighteen percent of all respondents, however, stated they did not know what type of computer was in use (computer platform) or know what operating system the organization or institution used on their computers (see Appendix: Questions 21 and 23). The first NAHO AHHRI survey also encountered this problem. To overcome this concern, the second survey relied on an extensive list of computer types and operating systems using the closed-ended formats in expectation of soliciting a higher response rate. Unfortunately, this did not successfully reduce the ambiguity of the survey results.

Almost 85 percent of the respondents stated their organization or institution maintains private electronic databases. The use of hard copies for their records also is very common — 77 percent of the respondents indicated they keep paper copies of their information (see Appendix: Question 20). Knowing the software applications used by the various organizations and institutions to manage their data collections is important for any planned data collection or data sharing partnership (see Table 6). The survey indicates Microsoft products are commonly used: almost 43 percent of the respondents who offered an answer indicated their organization uses Microsoft

Excel and about 38 percent use Microsoft Access. About 14 percent stated they use the program SPSS (Statistical Package for the Social Sciences). Almost 24 percent of the organizations and institutions indicated they use customized software to manage their data. This remains a large unknown with respect to possible data sharing relationships.

Thirty-eight percent of the respondents provided alternate answers under the option OTHER: Microsoft Word was cited in three comments; IMIS (Integrated Membership Information System, a web-based, not-for-profit business software system) was cited in two comments; Oracle relational database was cited once; and two comments stated that information about software could not be disclosed (see Appendix: Question 24). Microsoft and Windows-based products are the predominant software used by the survey participants.

Table 6: Summary of Database Software Applications Identified			
	% of all	% of all	
Software program	cases	responses	
Microsoft Excel	32.1%	42.9%	
Microsoft Access	28.6%	38.1%	
Custom software	17.9%	23.8%	
SPSS	10.7%	14.3%	
Other (please specify):	28.6%	38.1%	
Does not apply	7.1%	n/a	
Do not know	17.9%	n/a	
NOTE: Categories are not mutually exclusive. Calculations in the column % of all responses do not included responses coded as <i>Does not apply</i> , <i>Do not know</i> or <i>No response</i> .			

The survey included a specific question about Internet access (see Appendix: Question 22). Over 28 percent of all respondents did not answer the question: they indicated either they did not know the answer; the question did not apply because they do not collect data, or they simply did not respond to the question. Among those who did respond, 70 percent indicated that the computers that store data have Internet access. Twenty-five percent indicated that some computers have access. Only one respondent indicated that none of their data computers have access to the Internet.

When asked about access to the data, 25 percent indicated the data is not available so the question did not apply. An additional 14 percent stated they did not know the answer and another 21 percent did not answer the question. In total, almost 61 percent did not provide substantive answers to this question. Among those who did provide an answer, almost 73 percent indicated data was available by formal request. Published sources are also an important source of information about the data held on file. These included reports and fact sheets published on the Internet site (63.3 percent of responses) and information provided in annual reports (54.5 percent of responses). Searchable databases on the organization's Internet site was cited by about 27 percent of the respondents who offered an answer (see Appendix: Question 26).

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⁷ MS Access is a more sophisticated program that is packaged with the Microsoft Office suite of programs that also includes the MS Excel program. MS Access is a true relational database program. Data can easily be exchanged between the MS Excel and MS Access programs.

The survey asked respondents if their organization allows public access to the data they have collected and 15 percent responded that this was possible (see Appendix: Question 25). However, another question asked if their databases were searchable on the Internet and 27 percent responded that this was possible (see Appendix: Question 26). Curiously, a crosstabulation of the responses indicates that the same organizations did not respond consistently to these two questions. Of the four organizations that indicated they allow public access, only two indicated they allow Internet database searches. Similarly, when asked if the data is available by special arrangement only 23 percent indicated this was possible. However, when asked if the data was available by formal request, almost 73 percent indicated this was a valid option. A cross-tabulations reveals only half of those responding to the second question responded positively to the first. These anomalies highlight some of the problems with this section on data storage. The response rates were low for some questions, suggesting there was some confusion or misunderstanding with the questions or that someone else should have answered these types of questions.

In terms of data exchange, there is no real limitation with organizations that use different versions of Windows. The bottom line is that they all support the same application software. Equally so, Mac operating systems support the same Microsoft application software commonly found on PCs. The survey results suggest that software issues will not be a limiting factor when NAHO conducts the National Environmental Scan.

FINAL COMMENTS

The survey questionnaire provided an opportunity for respondents to offer comments, ask questions, and provide final instructions about their submission. Thirteen comments were submitted, constituting 46 percent of all responses. In order to ensure the confidentiality of respondents, the comments are not reproduced here. NAHO guaranteed all potential participants anonymity so it would be improper to reproduce the comments verbatim.

The majority of comments are about the data held by the various organizations and institutions. These comments clarify the extent or nature of their holdings or identify their limitations in terms of the subject of health human resources. One comment, for example, indicated the organization's data was limited to contacts used for their focus group activities and therefore was probably of limited use. Another commented that some data is available on the institution's web site and the rest is available by special arrangement and permission.

One association elaborated on its activities related to Aboriginal health curricula and the recruitment and retention of Aboriginal students in medical careers. It described plans to collect data on Aboriginal students in undergraduate faculties on an annual basis.

Some comments included references to alternate sources of information, additional contacts, and to their partnering organizations. Some elaborated further about their privacy policies and principles. One comment was a request for the purpose and results of the survey.

One Inuit organization commented that the questionnaire was not relevant to its data collection activities or its privacy principles and as such, the answers provided may not readily contribute to the area of health human resources. The organization also took exception to the survey's regular use of the word 'Aboriginal,' stating: "...there is a lack of Inuit-specific enquiries where wording such as "Aboriginal" fails to differentiate between such cultural groups and entities."

Overall, these comments will help guide NAHO's establishment of partnerships in health human resource research and the planned National Environmental Scan. The additional information will play an important role in identifying and negotiating future data collection and sharing partnerships.

ADDITIONAL INFORMATION

Besides requesting respondents to provide their name and contact information, a request was made to include the contact information for the organization or institution's privacy officer, if any, and the name of individuals who manage the data and who manage the computer systems. Learning from the first AHHRI survey, NAHO realized that those who were answering the survey may not be the best candidates to answer specific questions about privacy policies, how data is managed and what software is used, and general questions about the computer systems being used. It is hoped a contact list of these specialists will help NAHO when it embarks on partnership and collaboration discussions.

Out of the 28 surveys recorded by NAHO, nine provided contact information for privacy officers. Eight provided contact information for data management persons, and seven provided names of persons managing their computer systems.

CONCLUSIONS

The two main interests of the NAHO's National Environmental Scan are the Aboriginal and non-Aboriginal health professionals and paraprofessionals who serve Aboriginal clients and the health education programs that have Aboriginal students enrolled and/or offer Aboriginal-specific access programs. There is a need to know:

- 1. The number of Aboriginal health care professionals and paraprofessionals;
- 2. The number of non-Aboriginal health care providers serving First Nation, Inuit, and Métis clients;
- 3. The number of universities and community colleges that train health care professional and paraprofessional;
- 4. The number of institutions that offer formal and informal education for Aboriginal students; and
- 5. The number of Aboriginal students in various programs and their anticipated graduation dates.

To prepare for the AHHRI scan, NAHO conducted two surveys of potential partners and collaborators. The second survey built upon the first and achieved a higher response rate than the first. However, there has not been a corresponding increase in the number of identified organizations, associations, or institutions that meet the data collection needs of NAHO's anticipated National Environmental Scan. Nonetheless, the second survey refined NAHO's understanding of the kinds of data being collected, how it is being managed, the privacy issues surrounding access to health human resources data, and the access protocols that need to be met. This knowledge will contribute to the establishment of partnerships and collaborations needed for the national scan.

The results of the second survey provide a means for NAHO to identify potential partners that meet specific criteria or data needs. For example, respondents who have stated they have engaged in collaborative data collection and sharing activities in the past, and who collect specific information about given health professionals such as general practitioners, Community Health Representatives, or dieticians, can easily be identified. The survey identifies who is collecting what and therefore identifies the data elements and sources for a health human resource minimum data set.

The survey process was effectively managed using an Internet-based system that allowed on-line completion of the questionnaire and facilitated the compilation of survey results. The resulting data has been downloaded from the Internet server and is now available for further manipulation using MS Excel software.

The survey indicates that information about health professionals, paraprofessionals, and health education programs is more commonly collected than information about health care students and health care institutions such as hospitals and community health centres. A comprehensive list of health care professionals and paraprofessionals has been assembled with a measure of what professions are commonly tracked. More specifically, information about registered nurses is the most often collected. Public health nurses and nurse practitioners equalled specialized physicians, health administrators and executives, and dieticians and nutritionists in terms of professionals whose information is being collected. Information about health personnel specializing in Aboriginal healing is less commonly collected.

Generally, personal information such as basic contact information is collected (82 percent of respondents) and to a lesser extent, information about an individual's location of work, education, and current education training (73 percent of respondents). Information about a professional, paraprofessional, or student's age and gender is also available (68 percent and 64 percent respectively). Even less common is the recording of professional licenses and credentials (59 percent of respondents). Aboriginal ancestry is recorded by about half of the organizations and institutions that responded (52 to 54 percent of all respondents to the survey).

Information about Aboriginal health human resources ranges from what professionals, paraprofessionals, and health care workers are Aboriginal, to the extent health education institutions offer Aboriginal-specific health programs and support. The survey results indicate single organization collects a full range of information about Aboriginal health personnel so it will be necessary for NAHO to consider multiple partnerships if it wishes to profile and track the

participation of Aboriginal professionals, paraprofessionals, health care workers, and students in Canada.

The survey had a limited response rate to questions related to health education institutions so the results cannot be viewed as a strong measure of how Canadian health education institutions manage information about Aboriginal students. Among those who responded, sixty percent indicated they record the number of First Nations, Métis, and Inuit who apply to their institution and two-thirds track the number enrolled for education and training. Sixty percent indicated that some placements were set aside for Aboriginal students. Few institutions track the progress of their graduates.

Rather than seek to collaborate with a large number of educational institutions, it may be more practical for NAHO to partner with national organizations and institutions that track information about Canada's medical faculties and health training institutions. In fact, for much of the information sought by NAHO for the National Environmental Scan, national organizations offer some of the best sources of information. Though local and regional organizations are likely to offer greater detail, the information they collect and manage may not be available in a consistent form across the country.

Privacy issues are a key concern with respect to the gathering and storage of personal information. Over 82 percent of all survey respondents indicated their organization or institution has an established privacy policy. Of these, 85 percent use consent forms to ensure they have permission to collect and store health human resource data and 54 percent employ committees or panels to evaluate privacy inquiries and to address privacy issues. For NAHO to consider any partnering relationship with other organizations and institutions, it is essential to respect the policies of the partnering organizations and to reciprocate the trust that comes with access to their data. Numerous privacy codes and guidelines have been established and it is necessary for NAHO to assess the range of policies adopted by those organizations and institutions that collect and manage health human resource data.

Over 90 percent of the respondents who could offer an answer indicated they have been a partner in health human resources research. Generally, the survey suggests partnerships are more likely to be in terms of an organization being the recipient of data rather than in terms of being the provider of data to another organization. Only about half the organizations and institutions indicated they share their information with others.

The practicalities of NAHO's planned National Environmental Scan are challenging. For example, multiple partners or a collaborator raises the likelihood that the same Aboriginal health personnel will be tracked across different databases. As such, a filtering process will be required to remove redundant records. In other cases, the same individual may appear in different data sets but different information from each source may be available. Accuracy will therefore be an important consideration. A mechanism may be needed to assure accuracy, one that allows an individual to access their personal data and provide corrections and updates.

In summary, the second survey confirms that NAHO has identified the organizations, associations, or institutions that meet the data collection needs of NAHO's anticipated National

Environmental Scan. The survey results indicate demographic data is readily available from a number of organizations and institutions. This information will help document the geographical distribution and development of Canada's Aboriginal health human resources but may not offer a clear picture of mobility and health human resource development unless the scan is a multi-year project. Equally so, profiles on more specific information about the workload of health personnel and about attrition in the workforce due to changing careers and relocation, etc. may be more difficult to develop. The availability of this information will become clear once NAHO enters discussions with individual organizations and institutions about partnering in the scan.

APPENDIX:

SUMMARY OF SURVEY RESULTS

SECTION 1: DATA COLLECTION

1 Door your organ	nization callect any of the following information?	% of all	% of all
1. Does your organ	1. Does your organization collect any of the following information?		responses
Health care professi	onals or Paraprofessionals (physiotherapists, social workers, etc.)	50.0%	66.7%
Health education pr	ograms	50.0%	66.7%
Health care students	3	35.7%	47.6%
Health care provide	rs/institutions (hospitals, community health centres, etc.)	32.1%	42.9%
Other information			
	Local, Municipal, regional & national participation		
Constitution	health care students funded by PSSSP		
Specified <i>Other</i> :	public health professionals		
	Aboriginal post secondary Institution		
Do not collect any o	Do not collect any of the above information 21.4%		
No Response 3.6% 1			n/a
NOTE: Calculations in the column % of all responses do not included responses coded as Do not collect any of the above information or a No response.		nation or as	

2. What health professionals and health workers are recorded in your	% of all	% of all
organization's database?	cases	responses
Registered nurse	28.6%	40.0%
Dietician/ nutritionist	25.0%	35.0%
Health administrator/ executive/ manager	25.0%	35.0%
Nurse practitioner	25.0%	35.0%
Physician: specialist	25.0%	35.0%
Public health nurse	25.0%	35.0%
Dental hygienist	21.4%	30.0%
Health researcher	21.4%	30.0%
Licensed practical nurse	21.4%	30.0%
Mental health worker/ counsellor	21.4%	30.0%
Physician: general practitioner	21.4%	30.0%
Social worker	21.4%	30.0%
Addiction/ substance abuse worker	17.9%	25.0%
Community Health Representative (CHR)	17.9%	25.0%
Dentist	17.9%	25.0%
Home care worker	17.9%	25.0%
Midwife	17.9%	25.0%
Pharmacist/ pharmacy technician	17.9%	25.0%
Physician: emergency medicine	17.9%	25.0%
Physiotherapist	17.9%	25.0%
Registered psychiatric nurse	17.9%	25.0%
Respiratory therapist	17.9%	25.0%
Speech pathologist/ speech therapist	17.9%	25.0%
Aboriginal Elder and traditional healer	14.3%	20.0%
Audiologist	14.3%	20.0%
Chiropractor	14.3%	20.0%
Occupational therapist	14.3%	20.0%
Optometrist	14.3%	20.0%
Psychologist	14.3%	20.0%
Wellness worker	14.3%	20.0%

continued

2. What health professionals and health workers are recorded in your			% of all
organization's database? (continued) cases			
Aboriginal midwife	e	10.7%	15.0%
Community outrea	ch worker	10.7%	15.0%
Dental therapist		10.7%	15.0%
Laboratory technic	ian	10.7%	15.0%
Medical interpreter	•	10.7%	15.0%
Medical transport		10.7%	15.0%
Patient navigator		3.6%	5.0%
Volunteer		3.6%	5.0%
Aboriginal health of	Aboriginal health ombudsman 0.0% 0.		
Other	ner 21.4% 30		30.0%
	public health inspector		
	epidemiologist		
Specified <i>Other</i> :	See Internet site for complete list		
specified Other.	Health law & policy		
	Medicare experts		
	post-MD trainees (residents)		
Do not collect this	type of information	25.0%	n/a
Do not know 3.6%		n/a	
No response 0.0%			n/a
NOTE: Calculations in or as <i>No response</i> .	the column % of all responses do not included responses coded as Do not collect	this type of information	n, Do not know

3. What specific health human resources information does your organization			% of all	
collect about profe	collect about professionals, paraprofessionals, and/or students?			
Contact information	n (name, address, phone number)	64.3%	81.8%	
Location of work/	employment	57.1%	72.7%	
Education history/o	current education program	53.6%	68.2%	
Personal information	on (date of birth, and gender)	50.0%	63.6%	
Professional Crede	ntials/Licenses	46.4%	59.1%	
Language informat	ion (mother tongue, second language)	28.6%	36.4%	
Location of previou	us employment	17.9%	22.7%	
Period of time between paraprofessional	Period of time between graduation and first employment as a professional/			
	Residence prior to attending educational training 7.1% 9.			
Other				
	personal resumes'			
	Scope of data collections varies by profession			
Specified Other	publications			
Specified <i>Other</i> :	Policy related information			
	Date & location of MD, specialty post-graduate medical education, c	ontinuing pro	ofessional	
development				
Do not know 0.0% n			n/a	
None of the above	None of the above 21.4%			
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know or None of the above.			-	

4. What specific h	ealth human resources information does your organization	% of all	% of all
collect about healt	th education programs?	cases	responses
Institution name		64.3%	85.7%
Health program(s)	offered	60.7%	81.0%
Aboriginal-specific	entry programs	32.1%	42.9%
Aboriginal-specific	bursaries/grants	28.6%	38.1%
Certifications/Lice	Certifications/Licenses granted 25.0% 33.3		
Alumni/Alumni ass	Alumni/Alumni associations 10.7% 14		
Other		7.1%	9.5%
Considered Others	Policy Related Information		
Specified <i>Other</i> :	Number of graduates		
None of the above	None of the above 17.9% n/		
Do not know 3.6%			n/a
No response 3.6%			n/a
NOTE: Calculations in the column % of all responses do not included responses coded as None of the above, Do not know or No response.			response.

5. Does your organization identify professionals, paraprofessionals, and/or students with Aboriginal ancestry?	% of all cases	% of all responses
Yes	50.0%	53.8%
No	42.9%	46.2%
Do not know	7.1%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know.		

6. Does your organization record specific details about Aboriginal identity such as	% of all	% of all
First Nations, Inuit, and/or Métis ancestry?	cases	responses
Yes	46.4%	52.0%
No	42.9%	48.0%
Do not know	10.7%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know.		

SECTION 2: EDUCATION INSTITUTIONS

7. Does your institution offer courses that allow students to upgrade their	% of all	% of all
academic credentials before entering an education program or training course?	cases	responses
Yes	7.1%	33.3%
No	14.3%	66.7%
Do not know	3.6%	n/a
No response	75.0%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know or No response.		

8. Does your institution reserve some enrolment or placement for Aboriginal	% of all	% of all
students?	cases	responses
Yes	10.7%	60.0%
No	7.1%	40.0%
Do not know	3.6%	n/a
No response	78.6%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know or No response.		

9. Does your institution record the number of First Nation, Métis, and Inuit who	% of all	% of all
apply to your institution?	cases	responses
Yes	10.7%	60.0%
No	7.1%	40.0%
Do not know	3.6%	n/a
No response	78.6%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know or No response.		

10. Does your institution record the number of first nations, Métis, and Inuit who are enrolled in your institution for education and training programs?	% of all	% of all
are enroned in your institution for education and training programs:	cases	responses
Yes	14.3%	66.7%
No	7.1%	33.3%
Do not know	0.0%	n/a
No response	78.6%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know or No response.		

11. Does your institution track when and where new graduates enter the	% of all	% of all
workforce?	cases	responses
Yes	3.6%	20.0%
No	14.3%	80.0%
Do not know	3.6%	n/a
No response	78.6%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know or No response.		

12. Does your institution record why students may interrupt their education or	% of all	% of all
training?	cases	responses
Yes	7.1%	40.0%
No	10.7%	60.0%
Do not know	3.6%	n/a
No response	78.6%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know or No response.		

SECTION 3: PRIVACY POLICIES AND PROCEDURES

13. Does your organization have an established privacy policy for the data you collect?	% of all cases	% of all responses
Yes	82.1%	88.5%
No	10.7%	11.5%
Do not know	7.1%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know or No response.		

14. What is the na	ature of your organization's privacy policy?	% of all	% of all
The value is the interest of your organizations privacy policy.		cases	responses
Operates under a p	oolicy developed specifically for the organization	67.9%	76.0%
Operates according	g to Federal privacy guidelines (ATIP and/or PIPEDA)	21.4%	24.0%
Operates according	g to Provincial privacy guidelines	28.6%	32.0%
Operates according to guidelines established by an umbrella organization, institute, or agency 7.1%		8.0%	
Adopted a policy developed by an unaffiliated organization, institute, or agency 7.1%		8.0%	
Other		14.3%	16.0%
	Use to be funded by AHWS and we were under NAN and used their	policies a lot.	
Smanified Other	Policy: Confidential Provisions		
Specified <i>Other</i> :	See Section 7 for further description.		
	OCAP		
Does not apply, no privacy policy in place 7.1%		8.0%	
Do not know 3.6%		n/a	
No response 7.1%		n/a	
NOTE: Calculations in the column % of all responses do not included responses coded as Do not know, Does not apply, or No response.		esponse.	

15. Does your organization have a Board, Panel, or Committee that manages	% of all	% of all
privacy related issues?	cases	responses
Yes	46.4%	56.5%
No	35.7%	43.5%
Do not know	17.9%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know.		

SECTION 4: RELATIONSHIPS AND DATA SHARING

16. Does your organization have relationships with other organizations that collect	% of all	% of all
health human resources information?	cases	responses
Yes	67.9%	76.0%
No	21.4%	24.0%
Do not know	10.7%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know.		

17. Does your organization have relationships with other organizations with which	% of all	% of all
you share health human resources information?	cases	responses
Yes	42.9%	52.2%
No	39.3%	47.8%
Do not know	17.9%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know.		

18. Does your organization seek or require consent forms in order to collect or	% of all	% of all
share information about health professionals, paraprofessionals, or students?	cases	responses
Yes	46.4%	52.0%
No	42.9%	48.0%
Do not know	10.7%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know.		

19. Has your organization ever?		% of all
		responses
Undertaken any health human resources research?	50.0%	60.9%
Been a partner in any health human resources research?	75.0%	91.3%
Does not apply, no data collection activities are undertaken by the organization	3.6%	n/a
Do not know	14.3%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know.		

SECTION 5: DATA STORAGE

20. How is your d	ata storad?	% of all	% of all
20. 110W is your u	ata storca:	cases	responses
Private electronic database 78.6% 84		84.6%	
Hard copies (paper	r)	71.4%	76.9%
Database with limited or restricted access by select organizations institutes and/or		11.5%	
Online or publicly	accessible database	7.1%	7.7%
Other 14.3% 15.		15.4%	
	Membership allows the individual to view only their information, all other generic information		
Constitution	Collective knowledge		
Specified Other:	pecified <i>Other</i> : HHR data housed on a Unix (IBM AIX) platform, and Oracle is the relational database		base
	management system.		
	Electronic copies		
Does not apply, no data collection activities are undertaken by the organization 3.6%		n/a	
Do not know 3.6%		n/a	
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know, or Does not apply.			•

21. If data is store	ed electronically, what type of computer platform (hardware) do	% of all	% of all
you run?		cases	responses
PC		71.4%	87.0%
Mainframe		25.0%	30.4%
Mac		7.1%	8.7%
Other 7.1% 8.7		8.7%	
In-house server for our office network			
Specified Other.	Specified <i>Other</i> : Internal security & data program developed for our data base		
Does not apply, computers are not used; no data is collected 7.1% n/		n/a	
Do not know 7.1%		n/a	
No response 3.6% I		n/a	
NOTE: Calculations in the column % of all responses do not included responses coded as Does not apply, Do not know or No response.		esponse.	

22. Do the computer(s) have Internet access?		% of all
		responses
Yes computers that store data have access	50.0%	70.0%
Some computers that store data have Internet access	17.9%	25.0%
No. Computers that store data do not have access	3.6%	5.0%
Do not know	14.3%	n/a
Does not apply, computers are not used; no data is collected	10.7%	n/a
No response	3.6%	n/a
NOTE: Calculations in the column % of all responses do not included responses coded as Do not know, Does not	ot apply, or No r	esponse.

22 What is the or	popoting system (OS) of the computar(s)?	% of all	% of all
23. what is the of	perating system (OS) of the computer(s)?	cases	responses
Windows XP		60.7%	94.4%
Windows 2000 / 1	NT	17.9%	27.8%
Windows Vista		7.1%	11.1%
Mac OS 10		3.6%	5.6%
UNIX		3.6%	5.6%
Linux		0.0%	0.0%
Mac OS 7 / 8 / 9		0.0%	0.0%
Windows - versio	n unknown	0.0%	0.0%
Windows ME / 98	3 / 95	0.0%	0.0%
Other		3.6%	5.6%
Specified Other:	Classified for security reasons.		
Does not apply 10.7%		n/a	
Do not know		21.4%	n/a
NOTE: Calculations in	the column % of all responses do not include responses coded as Does no	ot apply, or Do not know.	

24 What is the se	ft-man word to more a worm are winting detalors?	% of all	% of all
24. What is the so	ftware used to manage your organizations database?	cases	responses
Microsoft Excel		32.1%	42.9%
Microsoft Access		28.6%	38.1%
Custom software		17.9%	23.8%
SPSS		10.7%	14.3%
UNIX - Oracle		3.6%	4.8%
Filemaker Pro		0.0%	0.0%
Foxpro		0.0%	0.0%
IBM DB2		0.0%	0.0%
Quattro Pro		0.0%	0.0%
Sybase SQL 0.0%		0.0%	
		38.1%	
	iMIS		
	classified		
	I can not disclose this information		
Specified Other:	IMIS		
	Oracle		
	Word		
	Microsoft Word		
	MS Word Documents, PDFs		
Does not apply		7.1%	n/a
Do not know 17.9%		n/a	
NOTE: Calculations in	the column % of all responses do not include responses coded as Does not apply.	, or Do not know.	

25. Is the data collected by your organization available to the public?	% of all	% of all
23. Is the data confected by your organization available to the public:	cases	responses
Yes	14.3%	15.4%
No	57.1%	61.5%
The data is only available by special arrangement	21.4%	23.1%
Do not know	7.1%	n/a
NOTE: Calculations in the column % of all responses do not include responses coded as Do not know.	•	•

26. If the data is available, how is it accessed?	% of all cases	% of all responses
Available by formal request only	28.6%	72.7%
Available through reports and fact sheets on the Internet site	25.0%	63.6%
Available through annual reports	21.4%	54.5%
Searchable database on Internet site	10.7%	27.3%
Data available at organization's library	3.6%	9.1%
Does not apply. Data is not available	25.0%	n/a
Do not know	14.3%	n/a
No response	21.4%	n/a
NOTE: Calculations in the column % of all responses do not included responses coded as Do not know, Does	not apply, or No r	esponse.