

2014 NATIONAL PHYSICIAN SURVEY

Backgrounder

(December 2, 2014) The National Physician Survey (NPS) is a major ongoing research project that gathers the opinions of physicians, medical residents and students from across Canada. It is the largest census survey of its kind and is an important barometer of the country's present and future doctors on a wide range of health care issues.

- Since 2004, the College of Family Physicians of Canada (CFPC), Canadian Medical Association (CMA) and Royal College of Physicians and Surgeons of Canada (Royal College) have worked collaboratively to manage this important research.
- The 2014 survey builds on the previous surveys with a focus on use of information technology by physicians of Canada. This year, over 10,000 licensed physicians from across the country completed the online electronic survey.
- The 2014 NPS information includes national and provincial data from physicians in all medical disciplines across Canada.

ADOPTION OF ELECTRONIC RECORDS

The survey results indicated much progress in the adoption of electronic records. One in five physicians reported using only paper charts to enter and retrieve clinical patient notes, down from 38% in 2010. Almost half now report using a combination of paper and electronic charts and 29% use exclusively electronic records. Family physicians (FPs) were more likely to have gone completely electronic (42%) compared to 17% of other specialists, however diagnostic radiology (51%) exceeded the FP rate of adoption as did anatomical pathology at 45%. Not surprisingly, the largest age cohort with paper charts were 65 years or older with over a third (36%) not using any kind of electronic record (see figure 1). Over a third of physicians in NL, NB and QC still use purely paper based systems. Exclusively electronic systems were most prevalent in AB at 40% followed by SK, BC, and ON all at 35%.

Figure 1: Method of capturing information about patients by age of physician



DU CANADA







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- Those that used a purely paper based system to record and retrieve clinical notes were asked their reasons for not adopting electronic records. The most frequently indicated reason was that electronic records were not available to them (e.g. decision of the hospital or physician group) at 51%. QC was most likely to report this kind of restriction at 73% of doctors (with paper systems) followed by MB at 68%. Over a quarter (26%) of Canadian physicians felt electronic records were too time consuming, encompassing such things as time to convert paper records, the time to enter and retrieve new information, etc. Almost a quarter (23%) were deterred by the costs and 19% planned to retire soon. About 15% indicated each of the following barriers: no suitable product for their practice, lack of training and concern about reliability.
- A third of those physicians with only paper systems plan to adopt electronic records within the next two years. Most likely were the younger age groups with 44% of those less than 35 and 41% for those 35-44 years old. Physicians in QC were mostly likely among the jurisdictions to implement electronic records in the next years at 42%. Planned uses for electronic records typically exceeded the usage of those who already have them. For example, 79% planned to use them to know all the medications taken by a patient whereas only 58% of physicians who are using electronic records now use electronic records for this function. The only exception was 35% planned to use electronic records for clinical decision support tools compared to 45% of practising physicians with electronic records now who actually do use them for this.









 For those physicians who are already using electronic records in their practice, 38% have had them for more than six years. A quarter (26%) has had them for two years or less.
Diagnostic radiologists have had electronic records the longest with 69% reporting using them for more than six years; only one in five ophthalmologists had used them that long.

ACCESS TO ELECTRONIC RECORDS

- The majority of physicians who used electronic records were able to access them at their office/community clinic/community health centre (64%) or hospital (62%). A significant proportion (37%) reported they could access records outside of a health care setting (e.g., from home). This is a substantial increase from 2010 when only 13% said they could access records from locations other than office/clinic, hospital or nursing home. More than three quarters (77%) said they could access the same electronic records from the different settings and an additional 16% said they could do so from some of the locations. Only 7% said they couldn't access from multiple locations, an improvement over the 18% reporting in 2010 that none of their settings were connected.
- Adopting electronic records does not guarantee easy, reliable access to patient records in all circumstances, all the time. Physicians were asked about some of the challenges they had accessing information. The most common barrier was technical glitches/reliability (52% of respondents) followed by compatibility with other systems (46%) and firewalls/security issues (26%). Many complained that multiple layers of passwords, different passwords required at each location or in every department of the same location slowed them down. Otolaryngologists were the least likely to report technical glitches at 31% compared to 70% of medical oncologists.

USE OF ELECTRONIC RECORDS

 Using electronic records to enter or retrieve clinical patient notes on a desktop or laptop has increased hugely from 26% of physicians in 2007 having them to three quarters (75%).
AB, BC and ON were most likely to report using electronic records this way at close to 81% each and QC least likely at 59%. Cancer specialists had very high usage with 96% of radiation oncologists and 97% of medical oncologists.













Four out of five physicians (80%) used electronic tools to access lab/diagnostic test results on a desktop/laptop, up from 38% in 2010. Other popular electronic tools enabled physicians to determine what medications were being taken by a patient (58%) or provided receipt of hospital visit and discharge information (53%). Not far behind in terms of usage were ordering lab tests (48%), ordering diagnostic tests (47%), warnings for drug interactions and referrals to other physicians (45% and 43%). Currently the least usage was interfacing with a pharmacy/pharmacist at 20%. There were interesting differences in the rates of use between provinces. Around 60% of physicians in PEI, MB and AB used their electronic tools to order both lab and diagnostic tests compared to only a quarter (24%) of the physicians in QC that did so. Over three quarters of physicians (77%) in AB used electronic tools to see all the medications taken by a patient where just over a third of doctors in NL (35%) reported being able to do so. About 57% of physician in SK and AB could make a referral to other physicians via electronic tools on their laptop/desktop compared to only 15% of those in QC.









- Less than one in 10 of the doctors (8%) used electronic records on a tablet with no real difference in age except for 65+ category. Similarly with uses of electronic records on a smartphone (3.4% overall), there was little difference among those less than 65.
- The most popular use for electronic records on a tablet was accessing a clinical decision support tool (10% of respondents). This type of tool was also the most frequently cited for use on a smart phone (17%) followed by warnings for drug interactions at 14%.

BENEFITS OF ELECTRONIC RECORDS

- Almost 42% of respondents felt the implementation of electronic records increased or greatly increased productivity within their practice. Based on some of the comments physicians provided, electronic records provided such operational efficiencies as quicker access to information, better billing/scheduling and legibility of records. However, many physicians have not yet observed a change in productivity either for the better or worse (31%). SK (48%) and AB (46%) were most likely to report an increase in productivity compared to PEI at 30% and NB at 35%. See Figure 3. Diagnostic radiologists were most likely to cite improved productivity at 75%.
- More importantly though, almost two thirds (65%) of physicians who used electronic records reported better or much better quality of care since implementation, up from 56% just a year ago. BC (72%) and AB (71%) were most likely to say quality was better or much better whereas PEI (57%) and NS (59%) were the least likely. See Figure 3. The vast majority (85%) of diagnostic radiologists saw quality improvements followed by anatomical pathologists and critical care specialists at 72% each.













Physicians saw many benefits to using electronic records both the ones listed in the questionnaire and a plethora of "other" benefits they added. The most frequently indicated benefits were identifying lab results (74%) and the ability to access a patient's chart remotely (65%). Over half (52%) reported being alerted to critical lab values and a third to potential medication warnings. Ordering on-line formulary drugs and reminders for preventive care were seen as benefits by about a quarter of the respondents. About one in five physicians indicated reminders for care that meets clinical guidelines (19%) as well as identifying required lab tests (21%) as being two more advantages of electronic records. Facilitating communication with a patient was cited by 14% as a plus. There was some variability in responses by province. Those in ON were far more likely (73%) to say the electronic records helped them access a patient's chart remotely compared to 37% of physicians in NL. Potential medical error alerts were most often indicated by PEI doctors (46%) and least often by NL at 17%. A third of physicians in MB said ordering on-formulary drugs was a benefit but less than one in ten (7%) did in NL.









- One of every ten respondents to the question suggested additional benefits to electronic records that included operational efficiencies, better communication with colleagues and other health providers, accessing and reporting diagnostic images, etc.

SHARING ELECTRONIC INFORMATION

- Some physicians are required or asked to share anonymous information from electronic records with other organizations for the purposes of research (10%), care improvement (8%) and chronic disease surveillance (10% for FPs, 2% for other specialists). A large majority of physicians (81%) did not share any electronic records with other organizations. For both research purposes and care improvement, MB was the most likely to share (13% and 12% respectively) and PE the least at 0% for each. For the sharing of data for chronic disease surveillance there was a large among of variability among the provinces. SK topped the list at 19% sharing with other organizations for this purpose compared to only 1.2% of those physicians in QC.
- Family physicians were more likely than other specialists to share with public health agencies (22% vs 11%) and electronic record vendors (13% vs 2%). Also, 28% of FPs provided data to the Canadian Primary Care Sentinel Surveillance Network. The other specialists were more likely than FPs to share with research projects (59% vs 37%), hospital departments (47% vs 20%) and university departments (28% vs 15%).

TOOLS & ACCESS FOR PATIENTS

- Less than a quarter of physicians (23%) reported having a practice website, up a bit from the 18% reported in the 2010 National Physician Survey. Family physicians are somewhat more likely (26%) than other specialists (20%) to have a practice website. An additional 8% plan to have a practice website within the next 12 months. Again, regional differences were observed with 27% of physicians from ON having sites compared to one in ten doctors in NL.
- Even for physicians who have electronic records, not all can facilitate interactive access by their patients. Only 6% of the physicians had the ability for patients to book an appointment on line, view their health record (5%) or request a prescription (4%). Less than 2% of physicians with electronic records have enabled patients to add measurements (1.2%) or add text (1.7%) to their health records. However, these numbers are higher if the physician had a practice website of their own. Of this group, 12.5% offered patients the











ability to book appointments on line, 6.5% could view their health record and 5.9% could renew a prescription.

Almost three-quarters of FPs (72%) and over half of other specialists (53%) refer patients to websites. The youngest age group (less than 35 years old) was most likely to do this at 71% compared to 52% of those 65 or older. Both among FPs and other specialists, females physicians were more likely than male doctors to refer a patient to a website (72% vs 56%). See Figure 4. The specialty most likely to make a recommendation was rheumatology at 90% and not surprising, the least likely were anatomical pathologists at 13% since they do not usually have direct contact with patients.



Figure 4: Percentage of physicians who refer patients to websites

 The most common website referral was for patients to acquire information about a disease (88%). Also prevalent were referrals to sites that provide patient support (70%) followed closely by treatment information sites (69%) and lifestyle/disease prevention information (64%).









A large majority of physician respondents (83%) did not recommend any mobile applications (apps) to their patients but 17% did. Of this group, 70% recommended apps for self-management and guiding for a health condition. Recommended apps for health monitoring and tracking were also popular at 60% followed by 42% of respondents who recommended apps for health information/news. Endocrinologists were the most likely specialty to recommend apps to their patients (31%) followed by family physicians at 23%.

TELEHEALTH/TELEMEDICINE

- For the survey, telehealth was defined as the provision of health care services, education and information at a distance. Telemedicine was defined as the use of electronic communications and information technologies to provide clinical services to patients in other locations. One quarter of physicians reported using telehealth/telemedicine technologies in their practice. While not completely comparable, 13% reported in the National Physician Survey a decade ago, that they used telemedicine/webcasting/teleconferencing in their practice.
- Among those who used telehealth/telemedicine technologies in 2014, most reported using it live rather than storing and forwarding images or information later. Among the various functions, using these technologies "live" for training/education or using it to consult with other physicians or other health care providers were the two most often cited amongst "live" uses at 44% and 45% of respondents. The next most prevalent uses for live telehealth/telemedicine technologies were consulting with the patient for diagnostic purposes (30%) followed by follow-up with the patient (29%). There were, however, differences in responses depending on where the physician worked. NL lead the country in usage of telemedicine for consulting with other providers (56%) while 42% of MB physicians used telemedicine to consult with patients for the purposes of diagnosis. Using the technology for training/education was most prevalent in SK at 72% of respondents and least utilized in ON with 35%.
- Using telehealth/telemedicine by storing and forwarding information and images to another site for evaluation was less popular with 13% doing so for provider consultations and 11% for imaging/laboratory information and 11% for training/education.









Figure 5: Percentage of physicians using "live" telemedicine/telehealth technologies (subset of those who use telemedicine)



OTHER ELECTRONIC TOOLS AND SOCIAL MEDIA

Physicians themselves use apps in their medical practice at a greater rate than they recommend them to patients. Half the respondents said they used them and their three favourites were: Epocrates (32%), UpToDate (32%) and Medscape (17%). Epocrates was the most popular in QC (43%) and UpToDate most used in NB (54%). Critical care specialists were the biggest users at 65%, diagnostic radiologists and anatomical pathologists the least at 21% and 20%.









- Most family physicians (85%) participate in chronic disease management (CDM) as part of their practice but over half of other specialists (57%) do so as well. A large majority of FPs (82%) use electronic records as a tool to manage a patient's chronic condition as do 68% of other specialists. FPs from AB and ON were the most likely to at close to 90% whereas less than half of family doctors from NL used them for CDM. The use of websites to manage conditions was not quite as prevalent among family physicians at 36% as it was among other specialists at 45%. However, family physicians were more likely to use online chronic disease management forms or programs (31%) compared to other specialists at 14%. Provincially, SK stood out in this category with 63% reporting usage of on-line forms compared to 15% of physicians in QC.
- The survey defined electronic health records (EHR) as a compilation of core data from multiple sources and may be comprised of many different e-records from different providers in different jurisdictions. About half of the physicians (51%) rated access as excellent or satisfactory, 23% rated it unsatisfactory and a quarter said that electronic health records were not available in their jurisdiction.
- The survey results indicate that there has been no huge adoption of social media for professional use although many physicians do engage in social media for personal use. Social networks such as Facebook and Linkedin are used in their personal lives by 40% of physicians overall and 72% of those under the age of 35. Next most popular is media sharing such as YouTube and Flickr which is used by 23% of all respondents and 33% of those under the age of 35. One in ten use microblogging sites such as Twitter and 9% participate in blogs or forums for personal use.
- On the professional side of social media, less than one in ten (9%) used social networks and only 5% use media sharing. Use of such things as Twitter, blogging and forums were less than 5%. There were no notable differences in use of social media among those physicians under the age of 65.
- For those who engaged in social media professionally, the most popular uses were receiving information (55%), sharing information (33%) and accessing CME/CPD (55%).









WORKLOAD AND PRACTICE SET UP

- Physician continue to work long hours. They average 49 hours per week excluding the time they spend being on call after hours. There has, however, been a gradual decrease from 51 hours per week (excluding time spent on-call) in 2004 to 49 hours per week in this latest 2014 survey. Of particular interest is the gap in workload hours between male and female physicians from 7 hours in 2004 to less than 4 hours per week a decade later. With the exception of the oldest age group (65+) who tended to work fewer hours, there were no marked differences among the age groups in average total hours or hours spent on direct patient care. Also there was much less dispersion among the jurisdictional results than in the past. NL and MB recorded the highest total hours per week (excluding on-call time) at 51 hours/week and QC the lowest 47 hours/week. This means the difference between the highest and lowest values was 4 hours per week compared to almost a 7 hour spread in 2010.
- Almost a third of physicians (67%) have on-call duties which are defined as time outside of regularly scheduled activity during which the physician is available to patients. Family physicians are less likely to provide on-call services at 60% than other specialists at 73%. At 96%, almost all critical care specialists have on-call duties. There were no significant differences among the age groups with the exception of 65+ where fewer physicians had on-call duties (45%). For those who do call, both FPs and other specialists average over 100 hours each month. Interestingly, those over 65 who still do call averaged the largest number of hours at 122 per month. Surgeons, especially cardiovascular/thoracic surgeons and neurosurgeons who reported 211 and 171 hours per month. Not all hours spent on-call involves actually providing direct patient care. FPs averaged 26 hours per month compared to 42 hours per month for other specialists.
- Over half (54%) of FPs identified a private office/clinic as their main work setting. The remaining specialties were more likely to be in and Academic Health Science Centre (33%) followed by private office/clinic (24%) and community hospital (19%).









- Solo practice continues to be less and less prevalent among practising physicians. Less than one in five (18%) indicated their practice was organized this way compared to 25% in 2013 and 32% in 2004. Almost half (46%) of FP said they were in community based group practices and 19% said they worked in an interprofessional practice that included physicians and other health professionals. Other specialists were quite likely to indicate they had a hospital based practice (62%) but 20% were still in solo practice. Only 8% of physicians in NL were in solo practice. Surgical specialties such as plastic surgery (56%), otolaryngology (43%), ophthalmology (43%) are most likely to still be working in a solo practice setting.
- Physicians were asked if they were compensated for emails with their patients and with other physicians. Only 3% were compensated with patients by the medical services plan of their jurisdiction and 2% via an alternative payment plan. 89% knew they were not paid for emails but 5% were unsure. Figures were slightly higher for emails to colleagues with 7% being compensated by their medical services plan and 3% by an alternative payment arrangement. Again, a large majority (81%) received no recompense but 8% were not sure if they were paid or not.





