



**OFFICE OF THE
INFORMATION & PRIVACY
COMMISSIONER**

Prince Edward Island

HI-21-001

Re: Health PEI

**Maria MacDonald,
Adjudicator**

February 18, 2021

Summary: An individual discovered that their phone number in Health PEI records was changed to the cell phone number of their former partner. The individual notified Health PEI who advised that they would correct the phone number. The individual continued to encounter the incorrect phone number in their interactions with Health PEI, and each time, the individual advised Health PEI employees that it was the incorrect phone number. The individual feared that their former partner was orchestrating these changes for malicious purposes.

Health PEI looked into it, and is satisfied that the Complainant's former partner did not manipulate the phone number. Health PEI identified two causes to the changes to the phone number; one was an automatic change by one of the electronic systems that Health PEI does not consider an error, and the other was a technical error that Health PEI advises has been fixed.

The adjudicator accepted the results of Health PEI's investigation, that there was no unauthorized access to the individual's personal health information. The adjudicator recommends that, if they do not do so already, when Health PEI receives a change of address or phone number that they ask the individual if this change is for all members of the household. The adjudicator also recommends that Health PEI re-consider their practice of automatically changing the phone numbers of fellow members of the same household when they receive an update to a phone number.

Statute Considered: *Health Information Act, RSPEI 1988, c H-1.41*

Report Cited: Order HI-20-001, *Re: Physician*, 2020 CanLII 97900 (PE IPC),
Order HI-18-005, *Re: Health PEI*, 2018 CanLII 130517 (PE IPC)

I. BACKGROUND

- [1] An individual, who I will refer to as the “Complainant”, discovered that their phone number was changed in Health PEI records, to the cell phone number of their former partner. Health PEI advised the Complainant that they corrected it, but the Complainant continued to encounter the incorrect phone number in several interactions with Health PEI. The Complainant feared that their former partner, who is the subject of a protection order, had orchestrated these changes for malicious purposes.
- [2] The Complainant contacted Health PEI, who acknowledges that there have been changes to the Complainant’s phone number in their records. Health PEI investigated and advised the Complainant that the issues were technical issues. Health PEI offered to meet the Complainant to explain, and answer any questions directly. The Complainant was concerned that Health PEI had not conducted an adequate investigation, or provided a reasonable explanation to explain their experiences. The Complainant requested a review by the Office of the Information and Privacy Commissioner.
- [3] Former Commissioner Karen Rose delegated the authority to conduct an inquiry to me, including, if necessary, the power to issue an order.

II. INFORMATION AT ISSUE

- [4] Although it appears some of the interactions involved an address and phone number, the Complainant’s primary concern is the changes to their phone number.

III. ISSUES

[5] The issues in this review are:

- Has there been any unauthorized access to the Complainant's phone number? and,
- Has Health PEI taken reasonable steps to ensure that they have accurate, up-to-date, and complete personal health information under subsection 44(a) of the *Health Information Act*?

IV. ONUS OF PROOF

[6] The *Health Information Act* does not set out the onus of proof for matters related to collection, use or disclosure of personal health information. There is a mixed onus of proof with allegations of unauthorized disclosure of personal health information [see Order HI-20-001, 2020 CanLII 97900 (PE IPC)]. The same principles apply when reviewing a complaint of unauthorized access to personal health information. A complainant must show that the information is their personal health information, and that access occurred. If access has been shown, then the onus switches to the custodian, who must show that the access is authorized.

V. ANALYSIS

[7] I will begin with a brief discussion of whether the phone number is the Complainant's personal health information. Then I will summarize five of the Complainant's interactions with Health PEI, from the Complainant's perspective, and Health PEI's explanations based on their investigation. Lastly, I will look at the parties' positions and consider whether there has been unauthorized access, and whether Health PEI has followed the *Health Information Act*.

Personal health information

[8] The *Health Information Act* defines personal health information quite broadly. A phone number in the custody or control of a custodian, including Health PEI, which was collected for registering for a health care service, is part of that individual's personal health information.

1. Definitions

In this Act

...

(t) "personal health information" means identifying information about an individual in oral or recorded form that

...

(ii) relates to information about an individual that is collected for the purpose of registering the individual for the provision of health care, including a health number, medical record number and any other identifier assigned to an individual,

...

[9] Health PEI registers people for Health PEI services. They collect the person's name, provincial health care number, birth date, address, and phone number. Information collected for registering an individual for health care is attributed to that individual, and is that individual's personal health information.

[10] I accept that the phone number attributed to the Complainant in Health PEI's files is the personal health information of the Complainant.

Complainant's experience

First interaction – health card

[11] The Complainant received a new health card. In Prince Edward Island, in addition to a provincial health number, the health card includes the cardholder's full name, their date of birth and address. The address on the new health card was the new address of the

Complainant's former partner, which was not the address of the Complainant. The Complainant contacted Health PEI to correct their address. In that conversation, PEI Medicare advised the Complainant that their phone number was also changed to the new cell phone number of the Complainant's former partner. The Complainant provided their correct address and phone number to PEI Medicare, and PEI Medicare sent another health card with the correct address to the Complainant.

Second interaction – emergency room

- [12] When anyone registers at a hospital in PEI, the registration clerks read the demographic information on file, and ask the patient to confirm if it is accurate. About three months after the first interaction with PEI Medicare regarding the new health card, the Complainant went to an emergency room. When the registration clerk was confirming the demographic information, they read the cell phone number of the Complainant's former partner. The Complainant gave the registration clerk their correct phone number.

Third interaction – eye clinic

- [13] Over a year later, the Complainant attended at an eye clinic in a hospital, and there was no issue with the phone number. When the registration clerk was confirming the demographic information, they read the Complainant's correct phone number.

Fourth interaction – diagnostic testing

- [14] A little over a month later, the Complainant went to the hospital for diagnostic testing. When the registration clerk was confirming the demographic information, they read the cell phone number of the Complainant's former partner. The Complainant gave the registration clerk the correct phone number.

Fifth interaction – home services

[15] Around the same time as the fourth interaction, the Complainant began to receive some Home Care health services. Initially, the staff contacted the Complainant without issue, at the Complainant's correct phone number. However, a few weeks into the services, some of the employees advised the Complainant that they were having difficulty contacting the Complainant. The employees had been trying to contact the Complainant at the phone number of the Complainant's former partner. The Complainant gave the Home Care workers the correct phone number.

Health PEI's investigation

[16] The information set out below is a combination of information Health PEI discovered in their investigation when the Complainant first approached them, and particulars Health PEI provided to our office in the course of this review.

[17] Health PEI does not have a single electronic system across all of their services. Each electronic system collects and uses demographic information, such as provincial health numbers, addresses and phone numbers. The demographic information is collected and disclosed among some of Health PEI's electronic systems. One of the electronic systems is the Client Registry Database, which is designed to be the definitive source of demographic information. The data exchanges between the Client Registry Database and the other electronic systems at Health PEI vary. For example:

- some of the Health PEI electronic systems have real time access, and can both make updates and receive the most recent data,
- some get periodic automatic updates,
- some can only view information as needed, and
- some have no access to the Client Registry Database.

[18] The electronic systems used by Health PEI are equipped with the capacity to check who accessed the electronic system, what information was accessed, and if any changes were

made to personal health information. Former Commissioner Rose described this in one of the databases of Health PEI, the Clinical Information System (CIS) in Order HI-18-005, *Re: Health PEI*, 2018 CanLII 130517 (PE IPC), at paragraph 3. (In this paragraph, “users” are those who Health PEI has given access credentials, i.e. unique username and password).

Every time a user accesses, adds, or amends personal health information in the CIS, a new record is created, detailing who accessed the personal health information (by their username), when the personal health information was accessed (date, time), to whom the personal health information belongs (name and Provincial Health Number of the patient), and what personal health information was added. This is sometimes called a digital footprint, an audit trail, or an electronic log book.

[19] With the exception of the electronic system used by the eye clinic, which does not collect or disclose demographic information to the Client Registry Database, Health PEI confirms that they checked (audited) changes to the Complainant’s demographic information in their electronic information systems. Health PEI states:

Auditing

We confirm that auditing of changes to demographics is available in all the systems that were involved in or impacted by this incident. The level of detail included in the audit reports on each system varies, depending on the system design and available information. Our investigation included reviews of audits from CR, Clinical Information System ("CIS"), Integrated Services Management ("ISM", used by Home Care) and Radiography Information System ("RIS", used by Diagnostic Imaging).

First instance – health card

[20] The first change to the phone number occurred when the Complainant’s former partner updated their own address and phone number at PEI Medicare, which administers health cards. PEI Medicare sent the information of the Complainant’s former partner to the Client Registry Database.

[21] The Client Registry Database (CR) links individuals in the same households. Health PEI states:

The system that holds demographic information, known as the Client Registry ("CR"), organizes residents of PEI into households. A change or update to one member of a household's demographic information changes all other members' information. . .

[22] If there is a change to demographic information of one member of the household, the Client Registry Database automatically triggers the same change to the demographic information of the other linked members of the household. Although it was inaccurate, the update of the address and phone number of the Complainant's former partner triggered the Client Registry Database to change the Complainant's address and phone number. The Client Registry Database sent the incorrect address and phone number to other Health PEI electronic systems, including back to PEI Medicare. PEI Medicare sent a health card to the Complainant, with incorrect address information.

[23] Health PEI does not believe that this was a malicious attempt of the Complainant's former partner to interfere with the Complainant's personal health information or health care. Health PEI believes that this interaction was associated with how the Client Registry Database links phone numbers and addresses in 'households'.

[24] Health PEI advises that when the Complainant phoned PEI Medicare, that they corrected the Complainant's phone number in the PEI Medicare system, and the Client Registry Database, and that the correction was distributed to other Health PEI electronic systems. Health PEI states:

June 12, 2018

- Complainant contacted Medicare Office to notify them of error.
- Complainant's demographic information corrected in CR.
- Automated updates with correct information sent to other electronic information systems in Health PEI.

Second instance – emergency room

- [25] Health PEI advises in the first interaction, that they corrected the Complainant's phone number in the Client Registry Database, and that they sent the corrected information to other Health PEI electronic systems. However, the Complainant's phone number was not corrected in the Clinical Information System, which is one of the Health PEI electronic systems in hospitals.
- [26] The Complainant went to the emergency department, and in the ordinary process of checking that Health PEI has accurate information, the registration clerk read the incorrect phone number to the Complainant. Health PEI audit records show that the registration clerk confirmed the wrong phone number in the Clinical Information System (the CIS), but corrected it again shortly after. The confirmation of the wrong number, and the correction to the correct phone number, were changed in the Client Registry Database (the CR). Health PEI states:

. . . The audit reports we consulted showed that the CIS sent two update demographics messages to the CR in rapid succession during this registration process on [date of the Complainant's visit to the emergency department]. Based on the findings of the investigation, we concluded that the incorrect demographic information was in the Complainant's chart on the CIS as a result of the initial change made at Medicare, as discussed above. The ED registration clerk most likely initially indicated to the system that this information was correct, perhaps as a matter of rushing through the process and clicking on the confirmation button before the Complainant had finished answering. In any case, the audits also show that the demographic information was then immediately corrected in the CIS, which sent a second update message to the CR one minute later.

- [27] The registration clerk at the emergency department confirmed the wrong number, which automatically changed the phone number in the Client Registry Database. The Client Registry Database did not receive the correction that occurred shortly after. Health PEI says that this was a technical error; only the mailing address was corrected, leaving the phone

number incorrect on the system. Health PEI advises that they corrected this technical error, stating:

As outlined above, the CR automatically sends out updates to various systems when demographic information is changed. In this instance, the first message from the QEH ED (where the incorrect information was marked as confirmed) resulted in the CR sending out the incorrect information again to ISM and other systems. The second message (correcting the demographic information) from the QEH ED also resulted in an automated update being sent out from the CR, however this second update was incomplete due to a technical error and only the address was updated in ISM. For this reason, the phone number remained incorrect in Home Care's system from [the date of the Complainant's emergency department visit] forward.

As a result of Health PEI's follow up on this complaint, Government's Information and Technology Shared Services ("ITSS") investigated the error that occurred during the transmission of the second automated update message from CR on [date of the Complainant's emergency department visit]. They have confirmed that the technical issue has been corrected and that the fix has been tested to ensure similar issues will not occur going forward.

Third Interaction – eye clinic

- [28] The Complainant had no issue with their phone number when registering at the eye clinic. Health PEI advises that the eye clinic is not associated with the Client Registry Database, and the Client Registry Database did not change the phone number in the eye clinic's system.

Fourth Interaction – Diagnostic Imaging

- [29] The Complainant's fourth interaction was when they were registering for an appointment at the Department of Diagnostic Imaging. Health PEI advises that the Radiography Information System (the RIS), used in the Department of Diagnostic Imaging, does not connect directly to the Client Registry Database, but obtains demographic information from the Clinical Information System. Health PEI advises:

. . . We reviewed audit reports from the RIS that showed all changes to the Complainant's demographic information and we can confirm that the incorrect

phone number was system generated. This is in line with the findings on all other systems, i.e. the errors were all related to automated updating processes in Health PEI systems and do not indicate that the Complainant's phone number was changed intentionally or with malicious intent.

- [30] Health PEI does not comment on these points, but it appears that the correction of the phone number in the Clinical Information System, at the third interaction at the emergency room was either not effective in the Clinical Information System, or not transferred to the Radiography Information System. As the Radiography Imaging System does not connect directly to the Client Registry Database, and illustrated below with respect to the fifth interaction, it also appears that the correction of the Complainant's phone number in the Radiography Information System was not transferred to the other electronic systems.

Fifth Interaction – Home Care

- [31] The fifth incident relates to Home Care services; employees were trying to contact the Complainant at the wrong phone number. Home Care services uses both paper records, and electronic records. They use an electronic system called Integrated Services Management (ISM). Health PEI describes the hybrid documentation as follows:

Charting in Home Care is a hybrid of electronic documentation using a system known as Integrated Services Management (ISM) and paper charts. The ISM system can only be accessed in the office and Home Care staff have a need to access information in the client's home during the delivery of services. For this reason, client information is frequently collected in paper format and transcribed into ISM upon return to the office and information is routinely printed from ISM and taken by Home Care staff to the client's home.

- [32] Health PEI further states:

. . . If staff were referring to a paper printout that had been printed while the correct number was in ISM (either before the error occurred or after it was corrected), they would have had the correct number to reach the Complainant. If staff consulted the electronic chart for the Complainant's number during the time that it was incorrect on ISM [month and year of the Complainant's visit to the emergency room – second interaction] to [month and year of the fourth

interaction with Diagnostic Imaging], they would have attempted to reach the Complainant at the incorrect number. A part of our investigation involved working with the Manager of Queens Home Care. She and her staff conducted a full review of the Complainant's Home Care chart, both electronic and paper, and ensured that only the correct phone number was recorded in the chart.

[33] This explanation does not align with the excerpt of audit results provided by Health PEI which show that the ISM had an incorrect phone number for the Complainant for about a year before the Complainant was referred to Home Care services. The Home Care workers would not have had access to the correct phone number from the ISM. When asked about this, Health PEI advises that the Home Care workers may have received the Complainant's correct phone number from the referral forms.

[A Health PEI facility] would also have their own paper chart with up to date contact information for [the Complainant] as it appears that this is where [the Complainant] had the majority of [their] Health Care services. This correct information was likely supplied on the referral forms as well which could explain the [type of -health care provider] (who also would have his/her own paper chart) contacting at the correct phone number to set up the referral and then getting the incorrect number later via ISM.

Discussion And Findings

[34] The two issues are:

- Has there been any unauthorized access to the Complainant's personal health information? and,
- Has Health PEI taken reasonable steps to ensure that they have accurate, up-to-date, and complete personal health information under subsection 44(a) of the *Health Information Act*?

Access

[35] Health PEI acknowledges that the Complainant's phone number was changed. The audits of the Complainant's electronic records revealed the changes coincide with the automatic update by the Client Registry Database, and the Complainant's other interactions as set out

above. Each of the employees accessed the Complainant's electronic file in the course of their duties. Although a registration clerk at the emergency room made a mistake by confirming the wrong phone number, which they believed that they corrected, their access was still within their duties.

[36] Health PEI's investigation does not show any unexplained or suspicious accesses to the Complainant's personal health information. Based on the capacity of the audit functions of the electronic systems, I am persuaded that if anyone was deliberately changing the Complainant's phone number in Health PEI records, that Health PEI would have detected it. I accept Health PEI's investigation results, that there has not been any unauthorized access to the Complainant's personal health information through Health PEI's electronic systems.

[37] Health PEI further explains that having someone's phone number would not permit them to have access to any other personal health information. Health PEI wrote to the Complainant:

. . . Additionally, you expressed concerns that someone else may have access to your personal health information. To be clear and address the issue of access to your information, a person would have to provide proof of authorization and identification prior to having your personal health information released to them. Having the same contact information does not provide authorization to access the information of another individual.

[38] For a few weeks, employees from Home Care Services were trying to contact the Complainant at the wrong phone number. Health PEI advises that Home Care Services has a detailed policy regarding privacy and confidentiality that directs that, if a voice message is left for someone, that it be brief and not include any personal health information. I have no evidence that anyone disclosed the Complainant's personal health information.

[39] I am satisfied that there was no unauthorized access to the Complainant's personal health information.

Reasonable steps to ensure accurate personal health information

[40] Despite the finding that there has been no access to the Complainant's personal health information, the fact remains that their phone number was changed to an inaccurate phone number. One of the objectives throughout the *Health Information Act* is to require custodians to take reasonable measures to ensure that the personal health information is accurate, including subsection 44(a) of the *Health Information Act* which states:

44. Obligations of custodian

Before using or disclosing personal health information, a custodian shall take reasonable steps

- (a) to ensure that the personal health information is accurate, up-to-date and complete; and
- (b) . . .

[41] Health PEI reviews and confirms demographic information every time anyone registers for a health service. I am satisfied that this is a best practice to ensure that Health PEI has accurate information. Individuals have the opportunity to correct their demographic information when renewing their card, which expires after five years, or any time in between. I am satisfied that these are reasonable steps to ensure that personal health information is accurate, up-to-date and complete pursuant to subsection 44(a) of the *Health Information Act*.

[42] Health PEI acknowledges that, through an automatic change, and a technical error, Health PEI changed the Complainant's phone number in their records to an inaccurate number. They fixed the technical error, which is a reasonable measure to ensure that Health PEI has accurate personal health information.

[43] I have no concerns about registration information being used and distributed within Health PEI. With the exception noted below regarding the automatic household changes, I am satisfied that Health PEI has taken reasonable steps to ensure that they have accurate, up-to-date, and complete personal health information.

[44] I question the practice of automatically changing the phone numbers of people who are linked into households. Health PEI does not consider this cause of the inaccurate information to be an error. They refer to it as an unintended outcome of the organization of patients into households. Health PEI advises that these automatic linkages are by design:

. . . This household organization is intentionally designed in this manner for efficiency and for purposes related to some health and social services processes, such as eligibility for certain programs and health card renewal processes.

[45] The Complainant is not concerned about the minor inconvenience of advising registration clerks of their correct phone number. They originally accepted Health PEI's explanation that there was a technical error. But it is difficult to understand why the Complainant's former partner changed the Complainant's phone number, across several databases, with one interaction, but the Complainant has not been able to correct their contact information over several interactions. The Complainant's fear is that the Complainant's former partner, or someone helping the Complainant's former partner, was accessing and changing their personal health information. The Complainant advises that they need to be sure that their former partner does not have any opportunity to learn about the Complainant's appointments or health information. In the circumstances, this is a reasonable concern. The Complainant remarks that there needs to be a mechanism to sever a household relationship, particularly for victims of domestic violence.

[46] The process to renew a health card includes the question of whether there has been any change to the household composition since the last renewal, i.e. a resident has moved into or out of the household. In this instance, the Complainant's former partner was not renewing their card, but was advising PEI Medicare of the change in their address and phone number. We do not have any information about whether individuals are asked if there is a change to the household composition as part of the process for advising Health PEI of a change in an address or phone number. Health PEI has not identified this as a potential cause of the changes to the Complainant's phone number.

- [47] If Health PEI does not already do this, I recommend that when residents advise Health PEI of a change in their address or phone number, that Health PEI asks them if there is a change to the household composition.
- [48] If a family/household moves or changes their phone number, some of the members of the household, even adults, may not be diligent in updating their address with Health PEI. Automatically changing demographic information of linked members of households may have been intended to ensure accurate information, but, as illustrated in the Complainant's experiences, the automated household linkage was one of the causes of the inaccuracy.
- [49] Although it has been updated and modified over the years, the Client Registry Database is approaching 20 years old. It is not universal, but quite common now, for members of a household to each have their own phone number instead of sharing one phone number. I question whether automatically changing the phone numbers, of adult members of the same household, achieves the purpose of ensuring that Health PEI has the accurate, up-to-date and complete information.
- [50] The electronic systems of Health PEI are complex and interrelated. I presume the objective of automatically changing phone numbers is another strategy intended to ensure that the personal health information is accurate, up-to-date and complete, pursuant to subsection 44(a) of the *Health Information Act*. I do not have any information about how effective it is in ensuring accurate information, and cannot assess whether it is a reasonable measure. I recommend that Health PEI re-consider whether the automatic changes to phone numbers is effective in ensuring personal health information is accurate, up-to-date, and complete. I make this recommendation particularly in light of the increasing proportion of residents who have their own phone number. This analysis may involve considering whether the practices of registration clerks checking accuracy at registration, and the option for individuals to contact PEI Medicare to update their information, are sufficient to ensure that Health PEI has accurate, up-to-date and complete information.

VI. RECOMMENDATIONS

- [51] In consideration of these findings, I make no order in this matter.
- [52] I recommend that, if they do not do so already, that when individuals update their phone number and address with PEI Medicare, that Health PEI asks whether this is an update to all members of the household.
- [53] I recommend that Health PEI re-consider whether automatically changing phone numbers of adult members of the same household is effective in ensuring accurate, up-to-date and complete personal health information.
- [54] The complaint directed Health PEI to a technical issue, which Health PEI was not previously aware of, and which Health PEI has fixed. This will ensure that other residents do not experience the same technical issue as the Complainant. I thank the Complainant for bringing this issue forward, and for Health PEI's responses to the identified technical error, to the Complainant, and to our office.

Signed: *Maria MacDonald*

Maria MacDonald
Adjudicator, Office of the Information and
Privacy Commissioner