Acquiring remote access to non-registry hospitals' EMR by the New Hampshire State Cancer Registry

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Background

- The New Hampshire State Cancer Registry (NHSCR), does not require facilities accessioning 105 reportable cancer cases or fewer per year to have an in-house cancer registry ("non-registry" hospitals), but they are required to identify all cancer cases, submit rapid case reports, and allow NHSCR access to the medical record in order to complete the abstracts. In NH, 11 of 25 hospitals are non-registry.
- The primary contacts for NHSCR staff are the Directors of Health Information Management (HIM) at non-registry hospitals.
- Historically, NHSCR staff traveled to non-registry hospitals to perform site visits and collect data. This was done by contacting the HIM Director and requesting a time and space for record review and case abstraction. Duration of site visits depended on case load, but would last anywhere between one-eight days, one to three times per year.
- Data collection is usually 12-18 months from diagnosis to allow for other sources to report the initial case because usually cases merge with registry hospitals.
- In 2015, the NHSCR had remote access to only one non-registry hospital and performed site visits to the remaining ten non-registry hospitals. While non-registry hospitals transitioned to EMR, NHSCR staff were allowed to conduct integrated review of paper and electronic records on-site.
- Budget cuts limited NHSCR's ability to conduct visits to non-registry hospitals across NH. In response to these limitations, NHSCR began requesting remote access to non-registry hospitals as they established an EMR.

Purpose

- Acquire remote access to non-registry hospitals' EMR by the NHSCR in response to limited resources; to save on costs of travel and staff time; and obtain complete, timely & quality data.

Methods

- Initial request for remote access was made to the Director of Health Information Management (HIM), who passed the request to Information Technology (IT).
- A letter explaining the terms of agreement and importance of remote access was forwarded to IT if the HIM Director declined a request or if IT needed further information regarding this request.
- Acquiring remote access always required NHSCR staff to fill out confidentiality agreement paperwork. NHSCR offered to restrict remote access to named staff, with the guarantee that remote work would only be conducted from the NHSCR secure office in Lebanon, NH.
- Once remote access had been granted, HIM or IT relayed credentials to NHSCR staff, who accessed non-registry hospital EMR at the secure NHSCR office.

Results

Table 1. Year remote access acquired

Hospital	Travel (distance and time) mi	hrs	Number of site visits 2015	2018	Projected 2019
1	85.5	2.1	8	8	4*
2	89.5	1.8	3	0	0
3	133.0	2.6	1	0	0
4	145.0	3.9	8	8	0**
5	177.0	3.4	5	0	0
6	203.0	3.7	3	0	0
7	237.0	4.6	0	0	0
8	245.0	4.9	1	0	0
9	8.3	0.4	6	6	6
10	49.2	1.3	7	7	7
11	52.5	1.0	7	7	7
Total			49	36	24

* Remote access available for half year which cut site visits in half

** Remote access granted, but credentials pending

No remote access

Table 2. Year remote access acquired

Hospital	Year
1	2018*
2	2017
3	2016
4	2019**
5	2017
6	2017
7	2015
8	2017
9	n/a
10	n/a
11	n/a

Figure 1. Miles traveled in 2015 by hospital

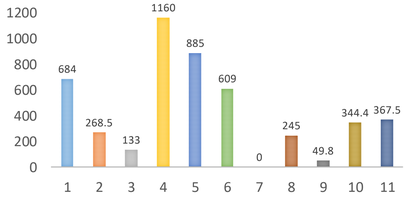


Figure 2. Hours traveled in 2015 by hospital

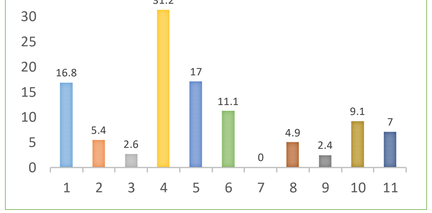


Figure 3. Total miles traveled by year

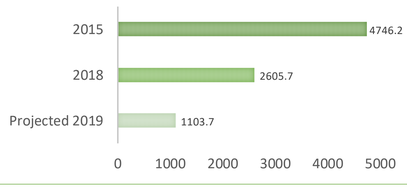
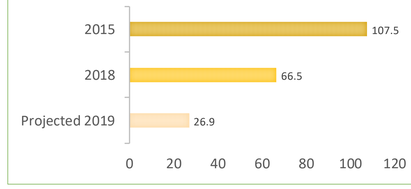


Figure 4. Total hours spent traveling by year



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- For some facilities, the process of acquiring remote access was done within a matter of days.
- Weeks to months of follow-up with HIM and IT was sometimes required, due to NHSCR being at the bottom of their priority list.
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- Obtaining remote access reduced the number of site visits done per year. There were 49 site visits performed at 10 hospitals in 2015. Remote access reduced this number to 36 site visits at 5 non-registry hospitals (Table 1).
- The NHSCR successfully acquired remote access to the EMRs of seven non-registry hospitals by 2018, and is in the process of acquiring remote access to others (Table 2).
- In 2015, the NHSCR had remote access to one non-registry hospital. NHSCR staff drove 107.5 hours and 4746.2 miles to abstract cases at 10 non-registry hospitals (Figure 1, Figure 2).
- Five additional non-registry hospitals granted remote access to the NHSCR by 2018. Time spent traveling to the remaining five non-registry hospitals dropped by 61.9% (66.5 hours) and total miles traveled dropped by 55% (2605.7 miles) (Figure 3, Figure 4).

Limitations

- Assigned NHSCR staff member needs to learn the different EMR systems that are used at the non-registry hospitals.
- Remote access is only allowed from our NHSCR secure office. NHSCR staff working from home cannot assist in the data collection process.
- Remote access is granted to only one NHSCR staff. This can be a complication due to a high cumulative caseload being assigned to one NHSCR staff.
- NHSCR staff are still required to travel to non-registry hospitals to train hospital staff on reporting via Web Plus and completing Medical Disease Index reports.

Discussion

- Prior to the EMR, there were instances when paper charts would be missing. This is no longer an issue that NHSCR has to worry about since records are all kept electronically.
- NHSCR staff are able to examine cases more thoroughly due to fewer time constraints, resulting in higher quality data.
- Time that was previously spent traveling during lengthy trips is now spent abstracting or performing other central cancer registry tasks.