# 2022 NPCR ALASKA SUCCESS STORY

Alaska Cancer Registry; David K. O'Brien, PhD, GISP

From Paper to Electronic: A Multi-Year Journey Down the Path of Successful Small Hospital Reporting

# National Program of Cancer Registries SUCCESSSTORY

#### **SUMMARY**

In the early days of the Alaska Cancer Registry (ACR) since it started collecting data in 1996, small Alaska hospitals would mail or fax their cancer cases on paper forms, which would then be abstracted by ACR registrars. This all changed in October 2000 when ACR made a leap in technology and installed NPCR's Abstract Plus software at these small hospitals and trained their staff in its use. ACR further upgraded its reporting technology for small hospitals in 2007 and installed NPCR's Web Plus, which was better suited for Alaska's remote hospital locations and their high staff turnover. ACR has been using Web Plus ever since and, with some adjustments over the years in its use, has had much success in cancer case reporting from these small hospitals.

### **CHALLENGES & SOLUTIONS**

Small hospital cancer reporting was a challenge for ACR when it first started collecting cancer data in 1996. Many of these facilities are over 700 miles from Anchorage and not accessible by road. These facilities would send in their cancer data on paper forms either by fax or mail. ACR registrars would then abstract them manually. This process took up a lot of registrar time.

NPCR's Abstract Plus software seemed to be the perfect solution for Alaska's small hospitals, and so the software was implemented in October 2000. The ACR Data Analyst would travel around the state (usually by air), install the software on the user's computer, and train the user on the software operation. But this type of electronic reporting had its own challenges.

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Eventually, Microsoft Windows operating systems started adding administrative privileges so the ACR Data Analyst couldn't install Abstract Plus without facility Information Technology (IT) staff assistance, which often wasn't available for several hours. Facility IT staff would periodically replace computers without knowing that the Abstract Plus software was installed. There would be frequent staff changes; new staff would often get new computers, and there was no record of where the database was located on the network. Sometimes there would be technical issues with the facility's Abstract Plus software or database but the ACR Data Analyst didn't have remote access to provide support.

After some research, ACR decided that NPCR's Web Plus software seemed a better fit for cancer reporting for these small, remote hospitals. There was no software to install at the facility, no database to maintain on their network, and all facility accounts with user IDs and passwords were administered by the ACR Data Analyst. The software was simple to use, new hospital staff could be easily trained over the phone, and there were no data diskettes to mail. ACR implemented Web Plus in 2007.

Over the years, some of the small hospitals became large hospitals with CTRs. These facilities wanted to continue to use Web Plus instead of commercially available software. ACR set up a comprehensive data entry grid for the large hospitals that would accommodate all data items required by NPCR.

ACR required new small-hospital registrars to send in supporting documentation via the Web Plus Uploader feature until their abstracting ability improved.

But data quality was not generally improving for most of the abstractors, and it became evident that the data quality of abstracts received from the small hospitals was low. The abstractors were either nurses or medical records staff without formal training in cancer registration. It was taking about as much time for an ACR registrar to correct each abstract as to manually enter it from scratch from the facility's supporting documentation. Therefore, in 2019 ACR decided to create a data entry grid for small hospitals that consisted of patient demographics and minimal tumor information.

#### **RESULTS**

ACR has found that the Web Plus abstracts entered by CTRs at large hospitals are generally of high quality. The incomplete abstracts entered by non-CTRs at small hospitals are exported from Web Plus and uploaded into ACR's version of Abstract Plus. They then are completed by ACR's registrars after reviewing the demographics and minimal tumor information, and the corresponding supporting documentation sent by the small hospital abstractors. Thus, the resulting abstracts from the small hospitals are now also of high quality.

The ACR Data Analyst is periodically contacted by Web Plus users for technical support, either with the software or with an abstract. This type of support is easily provided to the users since the software and database are located at ACR's offices in Anchorage.

#### **SUSTAINING SUCCESS**

This Success Story documents ACR's journey down the path of small-hospital reporting. It is a great example of how a registry can "work smarter, not harder" over a period of two decades in response to changes in technology while also being responsive to the skill levels of its cancer reporters. As a result, ACR's data quality is now relatively high for small hospital abstracts as well.

## **STORY QUOTE**

"As an ACR staff member for the last 24 years, I have seen great strides in cancer reporting technology. For small hospitals, the transition from paper to Abstract Plus to Web Plus and subsequent fine-tuning how we handle Web Plus data to accommodate reporter skill levels is a huge win for ACR." – David O'Brien, PhD, GISP, Data Analyst

#### REGISTRY CONTACT INFORMATION

907-269-0995 Alaska Cancer Registry Website