

"Slicing and Dicing" a Way to Colorectal Cancer Screening Data

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Through funding from the CDC Colorectal Cancer Control Program, Quality Health Associates of North Dakota (QHA) has implemented ScreeND to reduce disparities in colorectal cancer screening rates for rural, frontier and Native American populations in North Dakota by working with primary care clinics to implement evidence-based interventions.

An electronic health record can be a valuable, reliable source to routinely track colorectal cancer screening rates for rural health clinics when the proper tools are utilized to extract the appropriate data. Towner County Medical Center developed a method to use a tool available in their Epic electronic health

record, SlicerDicer, to extract ScreeND data for North Dakota's CDC funded colorectal cancer control program. This method has been replicated in several other clinics serving rural patients to calculate colorectal cancer screening rates and identify patients who are in need of screening.

Data collection to track progress in improving colorectal cancer screening rates is a challenge for many clinics but even more so for small, rural clinics where staff wear many hats and resources are limited. This challenge includes effectively leveraging electronic health records to improve population health management as well as collecting and reporting colorectal cancer screening program measures.

Towner County Medical Center is a clinic located in Cando serving a county population of 2,162 in rural North Dakota. This clinic's patients aged 50-74 is 756. Staff at Towner County Medical Center discovered a way to capitalize on a feature that already existed within their Epic electronic health record to collect data for reporting. Epic is the system used by 4 of the 15 clinics participating in ScreeND, and 4 additional clinics will be shifting to Epic within the next six months. The ability to use data within the electronic health record is key to successfully extracting, reviewing, validating and submitting colorectal cancer screening data.



Efficiently and effectively identifying patients due for colorectal cancer screening is essential to implementing the evidence-based intervention of patient reminders. The most precise way to accomplish this is using the electronic health record.

To address the need for data tracking and submission, Carolyn Tufte, ScreeND team lead at Towner County Medical Center, used an existing Epic tool to extract ScreeND data. This tool, SlicerDicer, is an Epicbased, self-service cohort query tool that allows users quick views into patient populations. Data in SlicerDicer are current through the prior day. Carolyn developed a method using this tool to effectively extract data from Epic's Health Maintenance module to identify care gaps including patients needing CRC screening.

"We are so grateful to Carolyn for the time she took to create the instructional video on how to extract data from Epic's Slicer/Dicer tool. Epic IT personnel have a lot on their plates, and sometimes that delays turn around on requests. The Slicer/Dicer tool has afforded us the ability to quickly extract the data we need to be able to not only use for colorectal cancer screenings, but other care gap items as well. It's definitely been a time saver!" Barb Sapa, CliniCare, Cavalier, ND

While early in the ScreeND program, Towner County Medical Center began tracking and submitting monthly CRC-related data since January 2021. Using this data on a monthly basis helps inform the progress and outcomes of the activities involved with implementing evidence-based interventions. Recognizing this success, Quality Health Associates of North Dakota facilitated the sharing of this best practice with other Epic users participating in ScreeND. Carolyn provided a webinar on how to use SlicerDicer to extract data. This webinar was recorded and remains available for ScreeND clinics. In addition,

Carolyn provided one-on-one coaching with another facility on using this method.

"The time I was able to spend with Carolyn to learn how to capture and report the clinic's CRC data was the only reason we were able to report our data soon after implementing Epic this past summer. She was able to share the information in a handson approach in collaboration with ScreeND that was easy to understand and implement." Monica Paczkowski, Laboratory Director, UND Center for Family Medicine, Bismarck, ND.

Towner County Medical Center was the first ScreeND clinic to track and submit data on a monthly basis starting in January 2021. Monthly data is not required, but clinics are encouraged to frequently review their data and provide feedback to their ScreeND team. As a result of Towner County Medical Center's efforts to share this best practice, four clinics are now using their Epic electronic health record to collect, monitor and report ScreeND data. One clinic who recently adapted using SlicerDicer was able to identify a substantial number of patients who were not receiving timely screening. This revelation prompted the clinic to update their ScreeND Action Plan to include the implementation of the patient reminder evidence-based practice.

Using existing electronic health record tools to track and collect CRC screening data is possible. Having clinics share how to use these tools enables small rural clinics to successfully monitor their progress with implementing evidence-based interventions. This information remains available on the ScreeND.org website and one-on-one demonstrations with clinics by Towner County Medical Center. As new clinics participate in ScreeND, this opportunity will remain.