Background

In 2020, the National Association of Rural Health Clinics established the NARHC Research and Education Foundation. One of the objectives of the Foundation is to create an RHC data warehouse that will make RHC information readily available to the public – free of charge. This information could be made available to individuals, stakeholder organizations, academic institutions, government agencies and independent researchers.

For over a decade, the National Association of Rural Health Clinics has partnered with both the National Center for Rural Health Works (NCRHW) and the National Center for the Analysis of Healthcare Data (NCAHD) on various types of research and analytical support. More recently, in support of other work being conducted on behalf of the REF board, we were contracted to update the previous data research to better understand trends in the RHC programs that occurred from 2020 to the end of 2022 beyond what is currently available through the Center for Medicare and Medicaid’s (CMS) Quality, Certification, and Oversight Reports (QCOR) system.

Current QCOR data is limited because it groups together several different situations under the category of “terminated provider.” The new research would analyze this data to determine the number of RHCs in the 3-year period that:

1. Truly closed;
2. Converted to a different facility type, or
3. Are still operating as RHCs but just underwent a CMS Certification Number (CCN) change.

In addition to this research, we were contracted to generate several graphic illustrations of the research for use by NARHC staff, their membership, and the public.

Methodology

As delineated in the March proposal, NCAHD staff conducted a thorough review of the national QCOR to assess and categorize the changes over a 3-year period of time to help determine the status of the national rural health clinic landscape. The Center for Medicare and Medicaid’s (CMS) Point of Service (POS) file and the Quality, Certification, and Oversight Reports (QCOR) actively collect data on rural health clinic’s changes in status: 1) new, 2) closures, and 3) ownership changes and classifies these within the federal standardized program codes. However, the data collected with both the CMS POS file and QCOR do not explain why a RHC may receive a merged or closed/termination program code. Further research into the closed/merged program termination code utilized by the CMS POS file and QCOR shows that a RHC may receive the code for the following reasons: change of address, facility name change, a change in healthcare delivery model (Fee for service, FQHC, or independent and provider-

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1 For more information about the NCRHW and the NCAHD, please visit our websites (www.ncahd.org and www.ruralhealthworks.org)
based), or facility closure or merger. Therefore, the following methodology was established to
determine the number of closed RHCs and provider status changes.

Due to recent updated standardization of their processing and an increase in federal
funding, QCOR was found to be more current and therefore NCAHD staff downloaded the data
on 4/10/2023 for the research. The data was downloaded for each year (2020, 2021, and 2022).
Five states were found without data thus indicating that they didn’t have any RHCs during this
period, including: Alaska, Connecticut, Delaware, District of Columbia, New Jersey, and Rhode
Island. Additionally, the U.S. Unincorporated territory of Puerto Rico, does not have any
reported RHCs.

Once this master data set was collected, it was divided by state to perform state-based
trend analysis and to validate the data on the state level. Thoroughness to quality and detail of
each scenario was achieved through various methods but primarily by online research with
follow-up phone conversation for verification of the status of the facility. The “terminated
providers” list was then further subdivided into the following, more descriptive categories:

1-“Closed” status describes a location that no longer has anything relevant to health
practicing at that location.

2-“No Longer Participating” (NLP) status describes a situation where a clinical entity still
exists in the same location or area but is no longer tracked within the QCOR data and is no
longer registered as an RHC.

3-“CCN Status Change”, or just “CCN Change”, describes an RHC entity that is found at
the same or similar location with the same name that has a QCOR closure date that aligns with
an original participation date for another RHC entity with the same name and location.

Important note: Throughout our research, we sought assistance from the NARHC staff
for clarification on borderline situations.

Once the data was cleaned and NCAHD staff was able to determine the status of all
registered RHCs, the data was collated into a single master file once again to perform national
trend analysis. This consisted of tracking and comparing the attributed statuses for each RHC
each year. Our final step was to create a spreadsheet of the results, from which the maps/analysis
were to be derived. After viewing the final analysis, the NARHC staff requested summary charts
and a national summary spreadsheet that would allow a viewer to find the exact state, year,
attributed status, and RHC type. (See Figure 1 below)
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**Figure 1 - National Rural Health Clinics Trend Analysis (2020 - 2023)**
Additionally, the NARHC staff requested additional charts to demonstrate the impact of the RHC status changes over time upon both types of RHCs: (see charts below)

- National Overall RHC Overall Impact (Figure 2)
- National Impact Upon Free-Standing RHCs (Figure 3)
- National Impact Upon Provider-Based RHCs (Figure 4)
- National Impact Upon New RHC Openings (Figure 5)
- National Impact Upon RHC Closures (Figure 6)
- National Impact Upon RHCs No Longer Participating (Figure 7)

*Figure 2 - National RHC Overall Impact*
Figure 3 - National Impact upon Free-Standing RHCs

Figure 4 - National Impact upon Provider-Based RHCs
Figure 5 - National Impact of RHC New Openings

Figure 6 - National Impact of RHCs Closures
Based in part from our previous research, the current charts, national summaries, and discussions with the NARHC staff, we determined that maps would be an attractive way to share the research results. Additional analysis was performed on the trend analysis to determine percent change by state rather than just the changes to the total number caused by the status changes, expansions (new) and closures. Please see the maps/analysis below:

- National Distribution of Rural Health Clinics (Map 1)
- Current Rural Health Clinics State Aggregates (Map 2)
- Impact of Rural Health Clinics Status Change by State (Map 3)
- New Rural Health Clinics Openings (Map 4)
- Rural Health Clinics Closures (Map 5)
- Rural Health Clinics No Longer Practicing as a Rural Health Clinic (Map 6)
Map 1 - National Distribution of Rural Health Clinics (2023)
Map 3 – Impact of Rural Health Clinics Status Change by State (2020-2022)
Map 4 – New Rural Health Clinics Openings (2020-2022)
Map 5 – New Rural Health Clinics Closures (2020-2022)
Limitations

Since the Rural Health Clinic QCOR data is frequently updated, the data currently available may not reflect the data that this analysis was based upon which was collected on 4/10/2023. The research conducted to determine why a RHC received a closed or merged status code enabled a more accurate assessment of the landscape of the national Rural Health Clinics program. Therefore, it is the intention of the NARHC-REF to consider updating this research regularly in the future.