

1. State the Purpose

In 2018 American Indians/Alaska Natives (AI/AN) had the highest hepatitis C (Hep C) related death rate among all race/ethnic groups. Screening for Hep C leads to the appropriate evaluation and treatment of individuals chronically infected with the Hep C virus and prevents the progression of liver disease to cirrhosis, hepatocellular carcinoma, and the associated morbidity and mortality.

At the time of this QI Study initiation, standard Hep C screening guidelines targeted only pregnant patients, those with liver disease, and patients born between 1946-1964 (baby boomers) for a single lifetime screening. TCC suspected that this strict criteria was failing to identify many of our Hep C+ patients.

TCC's Hep C prevalence and age distribution was unknown previous to this QI study. By expanding our Hep C screening practice we hope: (1) to identify more Hep C+ patients at an earlier age, (2) direct these patients into curative treatment, and (3) reduce the risk of related morbidity and mortality. We therefore made two changes in the screening policy. First, start screening at age 20. And second, repeat screening every 10 years.

Timely screening, diagnosis, and treatment creates a further opportunity to reduce the risk of disease transmission. Research indicates that for every Hep C+ person who uses injectable drugs, another 20 people will become infected w/in the first 3 years of initial infection.

Sources- National Institutes of Health and the National Institute On Drug Abuse

2. Set the Goal

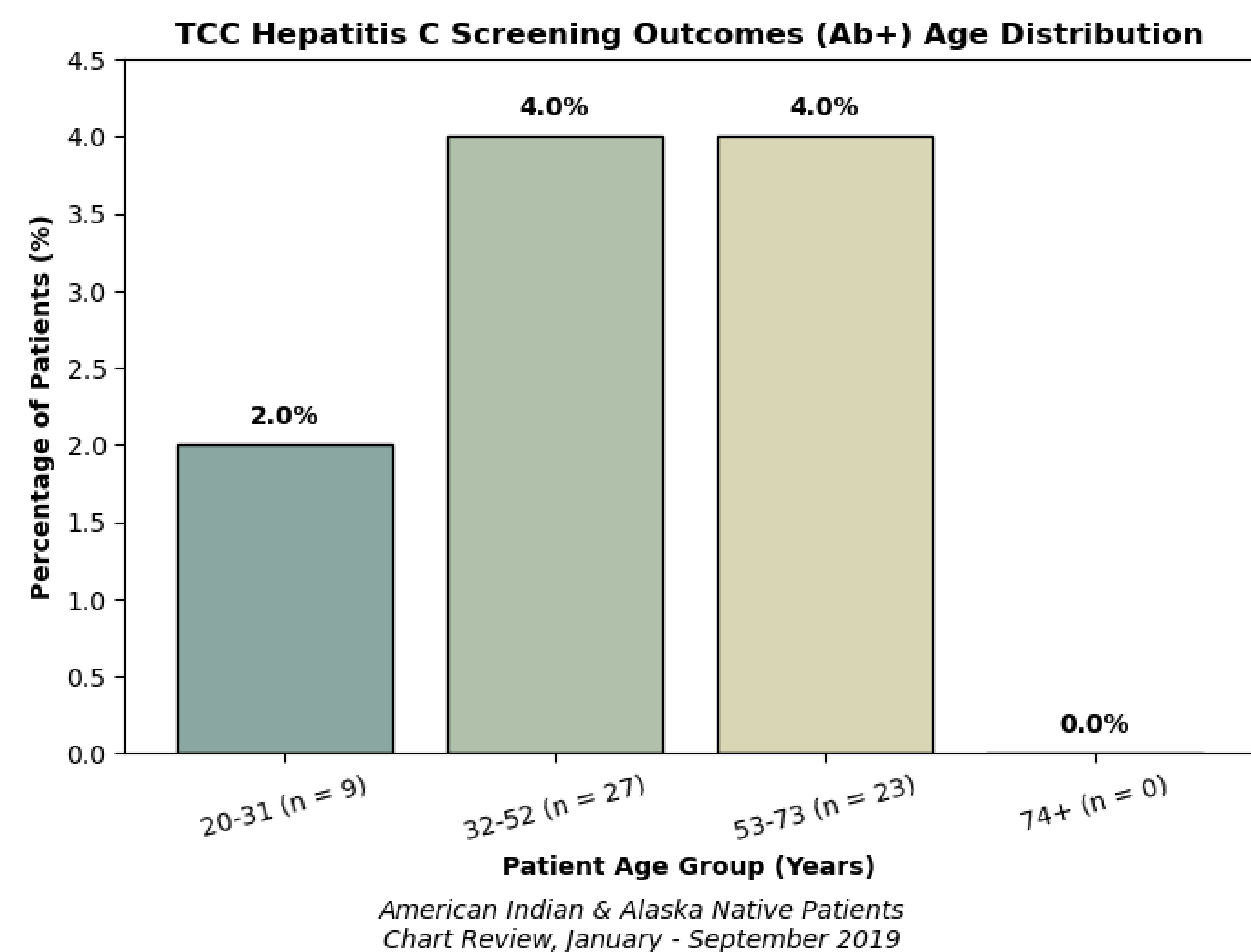
Primary goal: Establish our baseline Hep C screening performance per the new criteria set by TCC medical leadership (screening to start at age 20, and to be repeated every 10 years).
Secondary goal: initiate an accelerated Hep C screening program (targeting patients age 20+, and repeating every 10 years) with the goal of 5% increase in the number of patients up-to-date every year, until reaching 95%. TCC's Accelerated Hep C Screening effort began in 1st Q 2019.

3. Identify the Gap

TCC's 2019 baseline: only 15% of our patients aged 20+ had been screened for Hep C within the past 10 years.
Chart review conducted for all Hep C Antibody positive (Ab+) screening results between the 1st Quarter - 3rd Quarter 2019. The Chart Review utilized 3 electronic health records. 59 patients were found to be Hep C Ab+. A result of Hep C Ab+ indicated the patient had one of the following: a history of infection that has cleared naturally, been treated and cured, or was actively infected. Reflex RNA testing on all Ab+ results determined if the infection was active and treatment was indicated (RNA+ requires treatment).

- Of the Hep C Ab+ patients
 - 31 of the patients were male, 28 were female.
 - Average age of Hep C Ab+ male patients: 50.1
 - Average age of Hep C Ab+ female patients: 42.9
 - 20 of the 59 Hep C Ab+ patients had been treated or were currently undergoing treatment.
 - 16 of the 59 Hep C Ab+ patients were newly identified Hep C infections. These patients were RNA+ which indicated they had active viral infection
 - 23 of the 59 Hep C+ patients had historical/previously known Hep C infection but had yet to start treatment.

Our suspicion that the CDC's former Hep C screening guideline was inadequate for our high-risk patient population was confirmed. The majority of our Hep C Ab+ patients were diagnosed under the traditional screening age and would not have been identified for decades without the accelerated program.



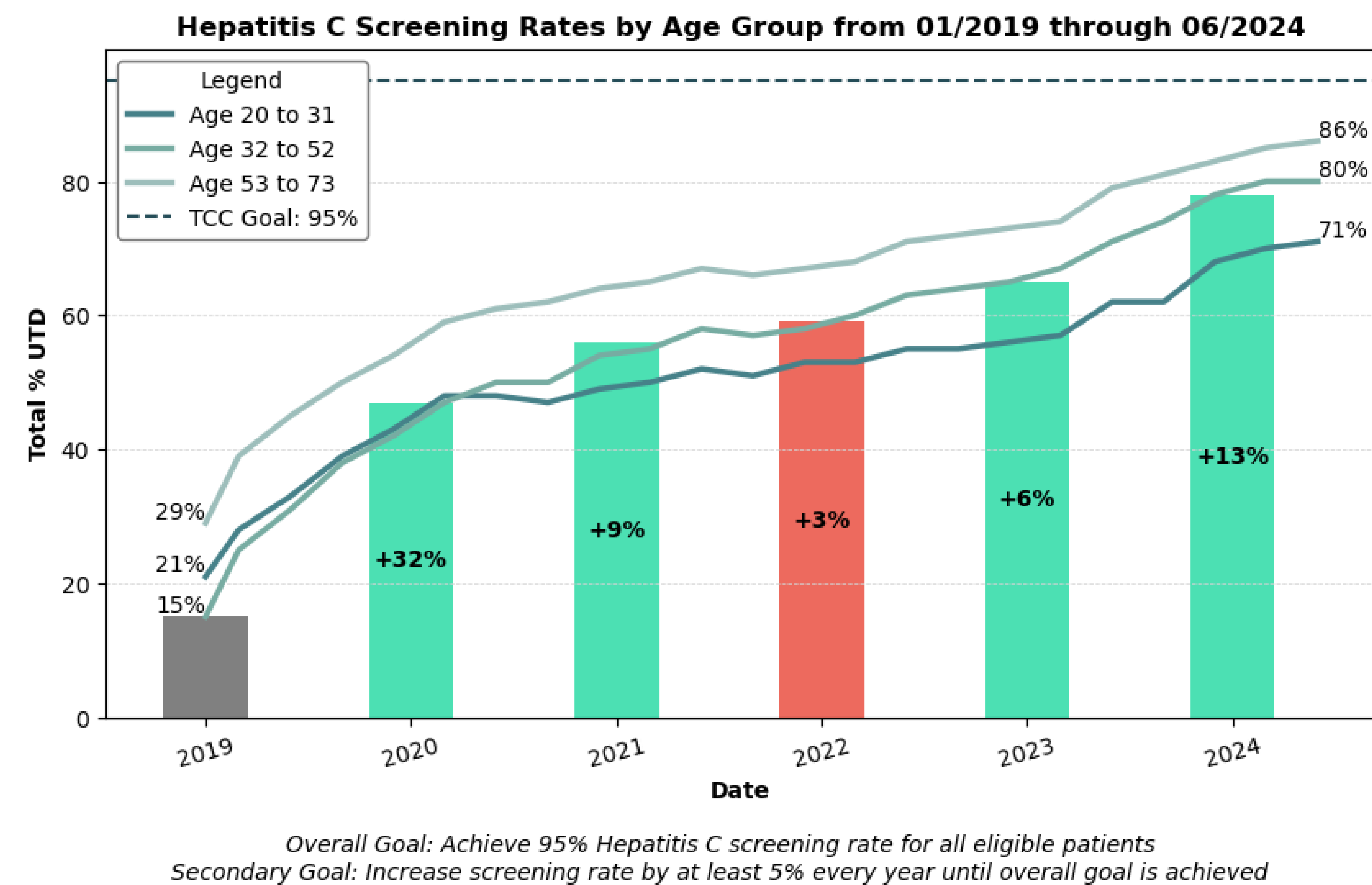
4. Corrective Action(s)

- 2019 Lessons Learned & Actions:
- Continue to apply our accelerated Hep C screening criteria and encourage screening during clinical encounters.
 - TCC integrated the criteria into our electronic health record (Athena), which prompted the testing of patients who were due for screening.
 - TCC Leadership was asked to dedicate resources to create a Hep C Registry.
 - Children born to pregnant mothers with Hep C infection were not flagged in our electronic health record for being at risk.
 - We discussed and determined that Hep C should not be a standing lab order, as patient education and permission is needed, and providers should be aware of all lab orders entered under their name.
 - TCC created patient education materials and put them in every exam room and on social media platforms.
 - Hep C was added to our sexually transmitted infections (STI) screening panel.
 - Due to limited resources, the reporting of TCC's Hep C Screening effort was paused during the COVID-19 pandemic (1st Q 2020 – 3rd Q 2022).

- 4th Q 2022 Actions:
- Health Services Leadership recommended the workgroup return focus to the Hep C+ screening and analysis.
 - Family practice staff were reminded of the QI Study and encouraged to continue screening patients for Hep C.
 - Provider education: Hep C+ should be listed on the patient's Athena problem list along with a documented plan of care (30% of our Ab+ patient charts lacked this information).
 - TCC Pediatrics were asked to flag the charts of children born to mothers with Hep C infection.
 - On 12/2022, a second chart review was completed for patients identified as Hep C Ab+ between 1/2020-11/2022.

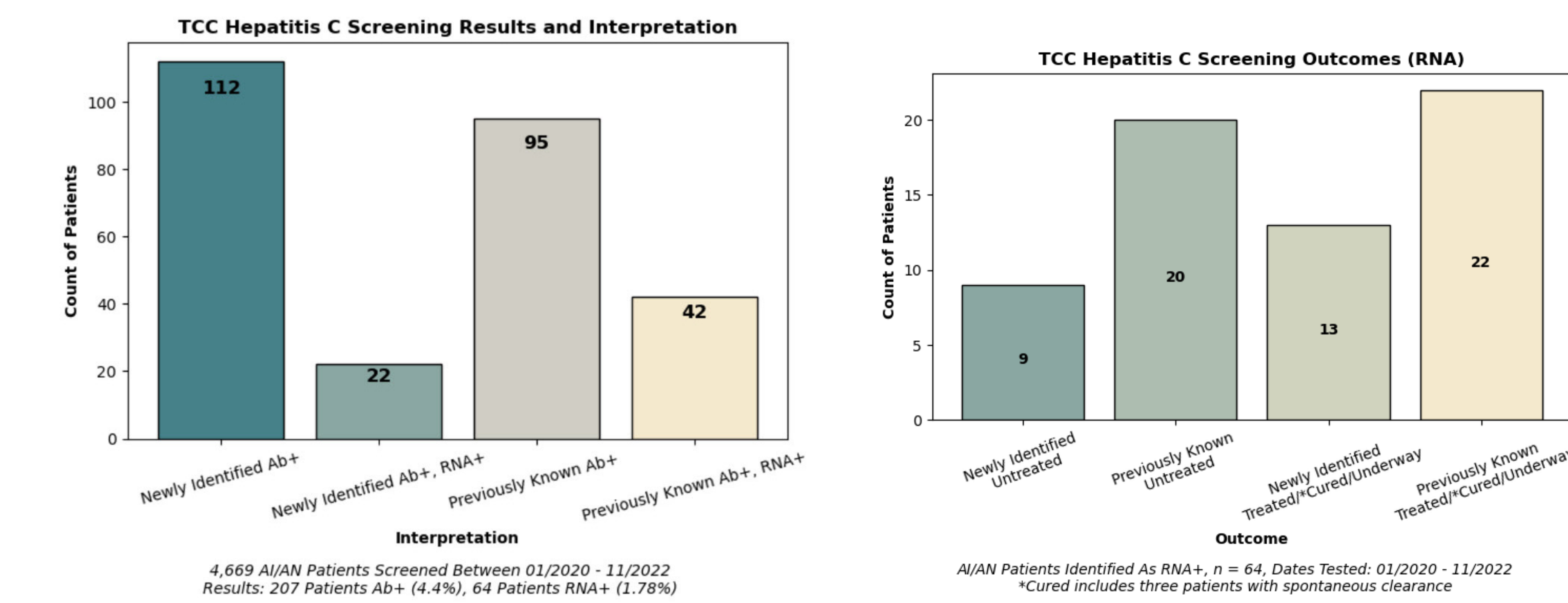
New Tertiary Goal: 100% of newly identified Hep C+ patients are to be offered curative treatment within 30 days of diagnosis.

5. Remeasure



- 2022 Chart Review Outcome:**
- Four RNA+ patients were mistakenly informed that they did not have Hep C. Each provider involved was notified of the error and instructed to follow-up with the affected patients. These errors occurred because the external laboratory returned results to TCC labeled as 'normal' for RNA+ patients. Despite requests for change, the external laboratory has declined to alter their labeling process, citing that it is 'normal' for individuals with Hep C to be RNA+. In response, TCC conducted provider education, emphasizing that all Hep C lab results must be opened and thoroughly reviewed to confirm whether the patient is RNA+ or not.

- Sixteen patients tested positive for Hepatitis C after previously receiving negative results, underscoring the importance of repeat testing over once-in-a-lifetime screening.
- Newly identified RNA+ patients spanned various age groups. A single lifetime screen at a younger age can easily fail to identify new infections at an older age.
- The primary & secondary goals of the study were met and the center has proven sustainability for this QI Study. As the overall goal for 95% of TCC patients to be UTD on Hep C screening has yet to be reached, quarterly progress will continue to be monitored.



6. Communications

Since 2019, the findings of this QI Study have been communicated biannually to the TCC Health Board (governing body), TCC Cancer Care Work Group, and the Alaska Native Medical Center's Liver Department.

TCC's Senior Medical Policy Analyst conducted the chart review portions of the QI Study and is responsible for internal provider education.

On 1/23/2024, TCC virtually presented at the State of Liver Disease In Alaska Native People Conference, and recommended that all Alaska Tribal Health Organizations adopt a similarly aggressive Hep C screening protocol for their high-risk patients.

About Tanana Chiefs Conference

Tanana Chiefs Conference provides health services to over 16,000 American Indian and Alaska Native people in interior Alaska. Our service region is just slightly smaller than the state of Texas and includes rural and urban communities. In 2023, TCC completed over 17,000 primary care visits. Correspondence should be addressed to jennifer.prewitt@tananachiefs.org