areas of benefit, and clinic needs. High-level process maps and iterative plan-do-study-act cycles guided implementation and testing of delegated assignments. The RDs reviewed and addressed areas for adaptation weekly. Communication through Epic electronic medical records system, secure email, and a HIPAA-compliant clinic tracking document ensured that all tasks were completed.

**Results:** One RD (RD1) was tasked with all aspects of screening, including clinic visits, health metrics, and nutrition-related labs. The second RD (RD2) interpreted and communicated nutrition-related lab results. All patient correspondence included RD1 and RD2 to mitigate overlap in response. RD1 provided support for pediatric patients transitioning into the adult clinic because they also worked with the UVAHS pediatric CF care team. RD1 managed all inpatient CF care, with RD2 providing coverage during instances of absence. Between January 2018 and August 2020, 868 patient encounters involved a visit with the CF RD (45%). In September 2020, the UVAHS adult CF team acquired a second dietitian; through March 2022, 435 patient encounters involved a visit with the CF RD (53%).

**Conclusions:** Having multiple health care providers in the same discipline can be difficult to navigate in the workplace and ultimately compromise patient care, but streamlining workflow through delegation of roles and responsibilities can have an opposite, beneficial effect. UVAHS RDs leveraged the skills and areas of practice of each RD to increase patient nutrition visits and prevent redundancy and uncompleted care tasks. RD application of QI methodology provided a focused approach to achieving sustainable processes, which increases the potential impact of multiple CF RDs on CF health outcomes and provides the foundation for other CF care teams to implement similar workflow practices.

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### 109 The Cystic Fibrosis Learning Network: A mixed-methods analysis of program goals, features, and impact

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**Background:** There is evidence that participation in a learning health network can improve health outcomes in diverse populations, but little is known about the perceived value of the Cystic Fibrosis Learning Network (CFLN), the complexity of implementing the network in diverse contexts, or the value of the network beyond the value of the broader Cystic Fibrosis Foundation care center network. Our research objectives were to assess the degree to which CFLN participants are aware of and agree on CFLN program theory, including goals and critical features; the impact of the CFLN on core process measures; and the need to tailor the CFLN to contextually diverse CF care programs.

**Methods:** We conducted a mixed-methods evaluation. We interviewed 24 CFLN members: leaders and sponsors (n = 5), program staff (n = 3), patient and family partners (PFPs) (n = 6), physician leaders (n = 6), and quality improvement (QI) leaders (n = 4). We collected survey responses from 103 CFLN members (30 physicians, 26 program coordinators and QI leaders, 43 PFPs, 4 other members) and 25 team members of CF programs not engaged in the CFLN (15 physicians, 10 program coordinators and QI leaders). CFLN and non-CFLN sites were matched based on size and program type. We used thematic analysis to analyize interview responses and descriptive statistics to summarize and compare survey responses from CFLN and matched non-CFLN respondents.

**Results:** Interview respondents identified the primary goal of the CFLN as improving outcomes for people with CF. Secondary goals included training in QI methodology, participating in a learning community, engaging all stakeholders (including PFPs) in changing care practices, and spreading learnings to the extended CF care center network. The most essential features of the CFLN were project management, the data and technology infrastructure, a common QI method, and belonging to a learning community. The most important accomplishments were improved outcomes, coproduction with PFPs, creation of a learning community, and structuring of work using QI methods. CFLN survey respondents were more likely than the matched sample to report a workplace culture that is supportive of improvement; make connections with people from other CF programs working on similar QI projects; have data that are available, accessible, and used; and engage PFPs in QI work. PFPs at CFLN programs were significantly more likely to participate in QI, to be onboarded, to receive training, and to receive payment for QI work. Sustainability and efficiency, spread outside of the CFLN, and communication about future directions of the network presented improvement opportunities.

**Conclusions:** We found that the CFLN is associated with notable differences in PFP engagement, use of data to support improvement, and formation of a community of practice that supports connections with others engaged in QI. Additional work is needed to develop strategies to spread best practices to the broader care center network, ensure that participation in a focused network is sustainable, and compare the impact of the CFLN on outcomes with those of similar non-CFLN care centers.

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### 110 Inadequacy of targeted hearing screening for children with cystic fibrosis

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**Background:** People with cystic fibrosis (PwCF) are at greater risk of sensorineural hearing loss (SNHL), presumably from exposure to potentially ototoxic medications such as aminoglycosides and macrolides. We sought to determine the percentage of PwCF who underwent audiologic testing when there was concern about hearing loss and risk factors associated with development of SNHL.

**Methods:** A retrospective study of PwCF was performed to determine rate of hearing evaluation and risk factors for SNHL. Audiometric results, medication history, and hospitalization history were recorded. Descriptive statistics were calculated to compare the measures of those with SNHL with measures of those without SNHL. SNHL was defined as a hearing threshold of more than 25 dB HL at one or more frequencies from 0.25 kHz to 18 kHz.

**Results:** Three hundred thirty PwCF were evaluated at a single children’s hospital from January 2014 through December 2019. Audiometric testing was documented in 112 patients. Two patients were excluded from the data analysis because they had an alternative diagnosis known to cause hearing loss. Those who underwent aminoglycoside therapy (p < 0.001) or a hospitalization for CF-related condition (p < 0.001) were more likely to have undergone hearing testing, although 146 of 218 (67%) patients who did not undergo hearing testing had a history of aminoglycoside exposure, and 110 (50.4%) who were hospitalized for a CF-related condition did not undergo hearing testing. There was no statistically significant difference in those who underwent audiologic testing based on age, CF mutation, gender, or ethnicity. Mean age of first audiologic test was 8 ± 5. Thirteen of 110 PwCF (11.8%) were diagnosed with SNHL at one or more frequencies. On average, PwCF with hearing loss had higher hearing thresholds at all measured frequencies than those without hearing loss. This difference was most noticeable at extended high frequencies (≥14 kHz). Five PwCF (38.5%) had hearing loss between 8 kHz and 250 kHz without evidence of loss at extended high frequencies. When evaluating for risk factors, there was no statistically significant difference between those with and without SNHL based on age, aminoglycoside exposure, hospitalization, CF mutation, gender, or ethnicity.

**Conclusions:** This study indicates that a risk-based approach to hearing testing may overlook many PwCF at risk of developing SNHL. These results underscore the need for a standardized protocol to evaluate the prevalence of SNHL in all children with CF. Greater awareness and regular hearing evaluations incorporating traditional and extended high-frequency audiometry should be a part of the standard of care for these patients.