Tobacco Cessation at CHI St. Alexius Health Bismarck

Development & Impact of a Tobacco Treatment Program 2012 – 2020

Photo from chistalexiushealth.org

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About this Report

Since 2012, the North Dakota Department of Health (NDDoH) Tobacco Prevention and Control Program (TPCP) has awarded grant funding to aid tobacco cessation efforts in health systems via the NDQuits Cessation (NDQC) Grant Program. This program was previously known as Million Hearts® "S" (Smoking Cessation) Grant. Professional Data Analysts (PDA) has evaluated this program since 2014.

The focus of this program is to advance tobacco treatment efforts in North Dakota's health care systems and to support Comprehensive Tobacco Prevention and Control State Plan goals of promoting quitting among adults and youth.

One health system, CHI St. Alexius Health in Bismarck, has been a grant recipient since 2012 and has established a strong Tobacco Treatment Program (TTP). An in-depth, exemplar case study into CHI St. Alexius Health's progress with the NDQC Grant Program was conducted to document their extensive history with the grant and to help identify successes to date.

Goals of this report

- Document the activities of one, exemplar NDQC grantee - CHI St. Alexius Health
- Analyze the reach and impact of CHI St. Alexius Health's TTP
- Assess sustainability successes and opportunities
- Identify future opportunities, particularly for expanded cessation coverage with Medicaid

Methods

The overall approach to this case study is a modified timeline mapping method. This involves a retrospective examination of the NDQC Program for one grantee, where their documentation is reviewed to ensure the resulting timeline and analysis is credible and accurate. Materials from July 2012 – March 2020 were reviewed and included in this review. Full details about methods are in Appendix A.

Initialisms

AAR: Ask – Advise – Refer

CDC: Centers for Disease Control and Prevention

CMS: Centers for Medicare and Medicaid Services

CHI: CHI St. Alexius Health, formerly known as St. Alexius Medical Center

CTTS: Certified Tobacco Treatment Specialists

EHR: Electronic Health Record

ENDS: Electronic Nicotine Delivery System

EVALI: E-cigarette or Vaping Product Use-Associated Lung Injury

FY: Fiscal Year

IT: Information Technology

NCTTP: National Certificate of Tobacco Treatment Practice

NDDoH: North Dakota Department of Health

NDC: Nicotine Dependence Conference

NDQC: NDQuits Cessation Grant Program

NRT: Nicotine Replacement Therapy

PDA: Professional Data Analysts

SAMSHA: Substance Abuse and Mental Health Services Administration

TPCP: Tobacco Prevention and Control Program

TTP: Tobacco Treatment Program

TTS: Tobacco Treatment Specialists

US: United States

Report Summary

Introduction (p.4)

The NDDoH started funding health systems to do tobacco cessation work in 2012 under the NDQC Grant. This grant was inspired by the Million Hearts® initiative, which focused on cardiovascular health through preventive measures like smoking cessation. CHI St. Alexius Health in Bismarck was one of the first NDQC grantees, building on smoking cessation work that was already going in their organization.

Timeline (p.7)

The extensive history of CHI St. Alexius Health's work with the NDQC Grant is described in three eras:

2012-2014: Starting the NDQC Program. In this era, CHI successfully launched their TTP.

2015-2017: CHI achieved many TTP expansions while facing electronic health record (EHR) changes and organization contractions.

2018-2020: With an established TTP, CHI increased its focus on education and outreach while responding to two nation-wide public health crises.

Four significant factors emerged as contributing to their success: considering and treating tobacco use as a chronic disease, having a dedicated TTP team with a strong leader, forging strong collaborations, and being persistent and adaptable to organizational changes.

Program Approach (p.14)

The **collaborative approach** taken by CHI St. Alexius Health's TTP team is covered in further detail on page 14, highlighting their grantee partnerships and community engagement activities.

Reach & Impact (p.15)

In the past five years, the CHI St. Alexius Health TTP team has counseled over 7,500 patients. In FY19 alone, four Tobacco Treatment Specialists (TTS) counseled 1,500 patients, provided quit kits and bridge nicotine replacement therapy (NRT) to nearly 550 patients, and referred at least 40 patients to NDQuits, the North Dakota quitline. CHI is one of the larger grantees by patient volumes. Together in FY19, the 17 NDQC grantees counseled over 13,000 patients in eight frontier counties, two additional rural counties, five micropolitan counties, and all four metropolitan counties. As generalizable outcomes data are not available, impact is relayed through provider testimonies and patient success stories on page 16.

Sustainability (p.17)

Sustainability of the CHI St. Alexius Health TTP was assessed in nine domains. While some aspects of this grantee's TTP are quite strong, such as maximizing billing opportunities and having passionate, trained staff, opportunities exist to further enhance sustainability, most notably through engaging higher-level leadership.

Future Opportunities (p.18)

One area of future opportunity is the potential reimbursement of cessation services by Medicaid, as outlined in the North Dakota 6|18 Initiative. CHI St. Alexius Health provided commentary of the value they provide and how reimbursement would benefit their program. This commentary is put into the context of smoking rates and health care costs for Medicaid enrollees.

The NDDoH and Tobacco Cessation

North Dakota was one of the first states in the United States to develop a statewide plan, a strategic document to guide tobacco control activities in the state. The framing of and alignment with national guidance and specific state-level strategy is essential for program success and sustainability.

The Comprehensive Tobacco Prevention and Control State Plan (State Plan) is evaluated each biennium and reported to the North Dakota Legislature. The State Plan outlines specific objectives and strategies to accomplish four goals. Under the cessation goal, "Promoting quitting among adults and youth", one objective from the 2019-2021 State Plan is to **"Increase the number of health care settings that use the systems approach for tobacco dependence treatment"** as recommended in the United States (US) Public Health Service *Treating Tobacco Use and Dependence, Clinical Practice Guideline-2008 Update*. A listing of the ten major recommendations can be found in the box to the right.

The strategies to meet this State Plan objective align with the Clinical Practice Guidance and include engaging with health care systems to implement and deliver the Ask-Advise-Refer (AAR) intervention:

Ask patients about tobacco use,
Advise them to quit,
Refer them to evidence-based cessation services like NDQuits.

Additional activities in the State Plan that involve cessation and health systems include implementing protocols to assess all patients at each visit for tobacco use, promote and maintain tobacco treatment protocols, promote cessation education events, and determine reportable variables from the EHR.

US DEPARTMENT OF HEALTH AND HUMAN SERVICES 2008 CLINICAL PRACTICE GUIDELINE RECOMMENDATIONS

1. Tobacco use is a chronic disease that requires repeated intervention and multiple attempts to quit.

2. It is essential that clinicians identify and document tobacco use status and treat every tobacco user.

3. Tobacco dependence treatments are effective across a broad range of populations.

4. Brief tobacco dependence treatment is effective.

5. Individual, group, and telephone counseling are effective, and their effectiveness increases with treatment intensity.

6. Seven first-line medications (5 nicotine and 2 non-nicotine) increase long-term smoking abstinence rates. Combinations of certain medications should be considered.

7. The combination of counseling and medication is more effective than either one alone.

8. Clinicians should ensure access to and promote quitline use.

9. Clinicians should use motivational interviewing techniques to increase likelihood of future quit attempts.

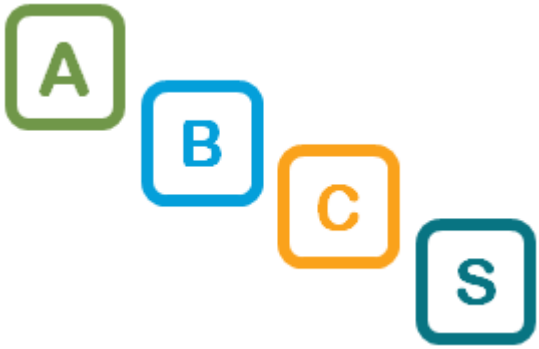
10. Insurers should ensure that all insurance plans include the counseling and medications discussed here as covered benefits.

Development of Cessation Programming in Health Systems: The North Dakota Million Hearts® 'S' Program

In 2011, the Centers for Disease Control and Prevention (CDC) partnered with the Centers for Medicare & Medicaid Services (CMS) to launch the Million Hearts® initiative. The initiative's goal was to prevent one million heart attacks and strokes in the US over five years by focusing on the ABCS of heart health (below).

ABCS of Heart Health

Aspirin use when appropriate,
Blood pressure control,
Cholesterol management, and
Smoking cessation.



To achieve the goal, Million Hearts® solicited regional, state, and local partners to increase focus on the ABCS, fostering clinical innovations (including billing reform), expanding the use of health information technology, expanding community initiatives to support healthier behaviors, and identifying and sharing successes. By 2012, over 12,000 individuals and organizations had championed Million Hearts®, including federal agencies, physicians, nurses, pharmacists, private insurers, community health workers, employers, health advocacy groups, and community organizations.

In 2012, inspired by the Million Hearts® initiative, the NDDoH created the NDQuits Cessation (NDQC) Grant Program, coining the North Dakota Million Hearts® 'S' Program.

This program was focused on the advancement of tobacco treatment efforts in health care systems. Systems were asked to start Tobacco Treatment Programs (TTP), primarily in the inpatient setting, and later expanding to outpatient settings. As part of the TTP, systems were asked to train and certify staff as Tobacco Treatment Specialists (TTS), implement and follow an ask-advise-refer (AAR) process, to make changes to their EHR for easier reporting and referrals to NDQuits, and to track outcomes data. Later, an education component was added. In the first year of the NDQC Grant, there were four grantees - CHI St. Alexius Health Bismarck, Sanford Health Bismarck, Sanford Medical Center Fargo, and First District Health Unit.

CHI St. Alexius Health Bismarck

HISTORY

CHI St. Alexius Health Bismarck was founded in 1885 by Benedictine Sisters. It was the first hospital in the Dakota Territory and eventually became known as St. Alexius Medical Center. In 2014, St. Alexius Medical Center joined Catholic Health Initiatives (CHI), a non-profit, Roman Catholic faith-based care system and was renamed CHI St. Alexius Health. In 2016, several North Dakota CHI health care facilities joined to form a regional health care network, including CHI St. Alexius Health Bismarck. CHI St. Alexius Health is sponsored by the Benedictine Sisters of Annunciation Monastery in Bismarck and abides by the Ethical and Religious Directives for Catholic Health Care Services as promulgated by the United States Conference of Catholic Bishops. In 2019, CHI merged with Dignity Health to form CommonSpirit Health. The regional system serves residents of central and western North Dakota, northern South Dakota, and eastern Montana.

ABOUT

CHI St. Alexius Health Bismarck is a 286-bed acute care medical center providing tertiary care inpatient services and a wide range of primary and specialty outpatient services. The site also offers home health and hospice services, durable medical equipment, and a fitness and human performance center. Throughout this report, references to CHI St. Alexius will indicate the CHI St. Alexius Health Bismarck facility.

"Smoking and tobacco use cause so many health issues for our patients and community, and we knew we needed to do something about it." – *Rajean Backman, "The Journey Newsletter," 2018*

The beginning of the NDQC Program at CHI St. Alexius Health

Rajean Backman, RRT, AE-C, TTS

Backman is a Respiratory Therapist Care Manager and Tobacco Treatment Specialist at CHI St. Alexius Health. She initiated the Tobacco Treatment Program at CHI in 2012 and has worked diligently to continue and expand the program today. Photo from chistalexiushealth.org.

In 2010, CHI St. Alexius Health Bismarck partnered with the University of Mary to conduct a Community Health Needs Assessment to address strategies for the future health needs of the counties served by St. Alexius Medical Center. The report identified six prevalent disease groups, including cardiovascular disease, Alzheimer's disease, cancer, respiratory disease, diabetes, and obesity.

Smoking and tobacco use was called out as a major risk factor for at least four of these conditions. While tobacco cessation was not directly addressed as one of the health initiatives following the needs assessment, it was on the radar. CHI started offering the American Lung Association's Freedom From Smoking® classes, and in 2011, CHI became a smoke-free facility.

Working together, Andrea (Lennick) Smetana, Rajean Backman, and Angie (Anderson) Basaraba launched the NDQC work at CHI St. Alexius Health by applying for and being awarded NDQC Grant funding at the start of the fiscal year (FY) 2013.

The Keys to CHI St. Alexius Health's NDQC Success

CHI St. Alexius Health has been developing a successful Tobacco Treatment Program (TTP) since 2012. Through all of the expansions, challenges, progress gained, and setbacks encountered, there are four aspects of CHI St. Alexius Health's program that set them up for success. Each aspect is introduced below and then detailed in other sections of the report.

Chronic disease point-of-view

CHI St. Alexius Health's approach is that they **consider tobacco use a chronic disease and treat it as such.** This means they provide tobacco cessation counseling for **all hospital inpatients that report using tobacco or nicotine**, regardless of the patient's readiness to quit. Backman explains their approach saying, "*We don't ask people if they want their diabetes treated or their heart failure, or their hypertension, or whatever. It's a chronic disease, and when you're here, you manage it.*"

Dedicated TTP team with a strong leader

Championing the program for CHI St. Alexius Health is a **core team of four individuals with a passionate leader**. This team provides tobacco cessation counseling services, provider education, pursues EHR revisions, gathers data, works on program expansions, develops a rapport with providers, reviews and revises protocols, organizes an annual two-day conference, and keeps the program running. This **team goes above and beyond** for their patients, and their program is stronger for that commitment.

Strong collaborations

The CHI St. Alexius Health TTP team has **built strong collaborations with the NDDoH and the other grantees**. The collaboration between CHI and the NDDoH was strong from the beginning – the NDDoH knew they needed to partner with health systems, but at the time there was no template to follow. The NDDoH let CHI figure out what was going to work for them, and CHI kept open lines of communication with the NDDoH when they needed help or had problems. **Together, the two organizations built a solid foundation** for tobacco cessation work in the hospital.

Persistence & Adaptability

Throughout the duration of CHI St. Alexius Health's work through the NDQC Grant, the **team's persistence in not only pursuing and achieving grant deliverables** but also **adapting to changing contexts for their work** is readily apparent. CHI's work plans and quarterly progress reports showcase their commitment to achieving deliverables and streamlining their work. Their progress also demonstrates how they can adapt, re-focus and continue their work, and work together or with different partners when facing contextual barriers (EHR change, e-referrals, and nicotine replacement therapy (NRT) standing orders). This persistence and adaptability is another key to their success.

Starting the NDQC Program at CHI St. Alexius Health, 2012–2014

Starting with a solid foundation

When the NDQC Grant was awarded to CHI St. Alexius Health in 2012 (along with three other grantees), Freedom From Smoking® classes were already being offered and two staff had attended TTS training, but there was no formal tobacco counseling protocol in the hospital. The main focus of the NDQC Grant for CHI St. Alexius Health was to **develop an inpatient tobacco cessation program;** a secondary focus was to implement parts of the TTP to other areas of the health care system.

Building the Program

When asked about launching the TTP, Ms. Backman recalls,

"I've met with everybody from the medical director to every physician group, every nursing group. I've had a conversation with I think just about everybody that is in this building."

In the first years of the grant, the CHI TTP team, led by Ms. Backman, started building a program from the ground up. Using the Mayo Clinic Nicotine Dependency Model as a guide, they:

- ✓ Developed and implemented inpatient tobacco use assessment and cessation counseling guidelines, taking a chronic disease approach to see all patients
- ✓ Created an NRT voucher system and implemented NRT standing orders
- ✓ Started billing for services
- ✓ Worked with Information Technology (IT) to create an EHR report for identifying tobacco users needing counseling
- ✓ Presented the protocols and received approval from the Medical Executive Committee, the Nursing Leadership Counsel, Health Information Management, the Pharmacy and Therapeutics Committee, the Clinical Integration Network, and the outpatient family practice physicians
- ✓ Increased the number of staff with TTS training from two to six
- ✓ Started counseling outpatients, when requested
- ✓ Started offering the BABY & ME – Tobacco Free Program to support cessation with pregnant and postpartum women

During this time, the TTP team was approached by the CHI St. Alexius Health Quality department to **help implement the Joint Commission Tobacco Measure Set for behavioral health patients**. The TTP team established a collaboration with the behavioral health unit, ultimately meeting the Joint Commission's requirements.

In the fall of 2014, St. Alexius Medical Center joined with Catholic Health Initiatives (CHI) to become CHI St. Alexius Health, signaling larger organizational changes to come, including being recognized as an Accountable Care Organization for Medicare services.

Expanding CHI St. Alexius Health's TTP Amid Setbacks, 2015–2017

Expanding TTP: Challenges

Despite early success establishing and growing a TTP, the next years brought organizational challenges.

EHR Conversion

In fall 2015, the EHR was converted from McKesson to EPIC. This impacted the team's processes, (i.e., report identifying newly admitted patients reporting tobacco use needed to be rebuilt), patient care (i.e., NRT standing orders did not transfer so TTS needed physician sign-off to order NRT for each patient), and grant reporting (i.e., NDQC data reports were not transferred). The effects of this change were prolonged due to new organizational processes where IT requests were triaged using a system-wide prioritized ticketing system.

E-Referrals

Prior to the EHR change, CHI St. Alexius was exploring bidirectional electronic referrals (e-referrals) with the NDQuits quitline vendor. After much discussion, CHI St. Alexius Health leadership decided e-referrals posed too great a risk to patient privacy and decided not to pursue. Instead, CHI St. Alexius Health first added a checkbox to the EHR that would generate an NDQuits fax referral form that could be printed and faxed, and later set up automatically generated e-faxes.

Organizational Contraction

The last major change was an organizational contraction, including budget cuts, layoffs, and a hiring freeze implemented in 2016. This freeze meant the TTP team could not grow and when members of the team left, they could not be replaced. Eventually, this led to a staffing shortage where TTP members were having to prioritize patient care and tobacco cessation counseling for admitted patients over conducting follow-up calls with patients that had been discharged.

Expanding TTP: Introducing Quit Kits

In 2016, the TTP team introduced Quit Kits, personalized packets with tools to support patients in their quit journey. The kits included: stress balls, pen and paper to write goals, hard candies and gum, "tough enough to quit" cessation bracelets, and prayer coins for mediation. These tools were given to patients to encourage them to use the quit strategies discussed during cessation counseling.

Ms. Backman described how Quit Kits fit into their treatment protocols in an interview in CHI's "The Journey Newsletter" (2018): *"We initially meet with patients to provide cessation counseling services. We find out what will make their cessation journeys successful, and we provide them with customized 'Quit Kits' filled with all sorts of items tailored to their specific needs. From there we enroll them into NDQuits, and we also follow-up with them on the dates they ask us to."*

Expanding CHI St. Alexius Health's TTP Amid Setbacks, 2015–2017

Expanding TTP: Building internal rapport and collaborations

Even with these organizational setbacks, the CHI TTP team continued to expand their program. Once the inpatient protocols were in place and outpatient referrals were set-up, Ms. Backman led the TTP team in establishing collaborations with CHI specialty areas, including: cardiology, pulmonology (through the Heart and Lung Clinic), endocrinology (specifically patients with diabetes), behavioral health, and the surgery center.

"We have had a lot of success gaining clinician buy-in when we approach one provider at a time. Sometimes it's a brief encounter in the hallway, sometimes it is a discussion when asking for nicotine replacement therapy for a particular patient, and sometimes we send e-mails with literature attached highlighting the evidence that supports our cause."

– Rajean Backman, NDQC FY20 Progress Report, Jan 2020

As the TTP grew, Ms. Backman reflected on how more and more providers started trusting their cessation counseling and becoming interested in tobacco cessation. She recalls,
"When we first started doing this, you'd walk into a room, and if a nurse came in, they were irritated. 'Oh, she's here to talk about smoking,' roll their eyes and kind of point towards the door. And then you found more that they were wanting to hang out in that room to see what you had to say and realizing that this just wasn't telling people that they had to quit."

Expanding TTP: Building external collaborations & sharing successes

In addition to internal collaborations, the TTP team also started collaborations with the CHI Mandan Clinic and Mid Dakota Clinic. CHI Mandan first began referring patients to CHI Bismarck for services, but eventually, CHI Bismarck staffed TTS outpatient services at the CHI Mandan Clinic. Mid Dakota also collaborated with CHI St. Alexius, implementing an e-referral for their patients who use tobacco to receive outpatient counseling at CHI.

This was also when CHI ramped up their education and outreach efforts. Most notably, they started the Nicotine Dependence Conference (NDC) in Bismarck, ND. This conference has grown to be a two-day annual event co-sponsored by three grantees. The event is highly attended, offers continuing education credits, and is well received by attendees as motivating and applicable to their work.

In 2016, the CHI St. Alexius Respiratory Therapy Managers were invited to meet with the NDDoH and CDC representatives to discuss the health systems changes and TTP workflows implemented with NDQC Grant funding. The CDC found their experiences and feedback very valuable. In 2017, CHI St. Alexius Health was invited to attend the North Dakota Quarterly Partners Meeting, providing valuable insight regarding tobacco cessation in health care systems.

Tobacco Cessation at CHI St. Alexius Health During Public Health Crises, 2018–2020

Refining the Tobacco Treatment Program

In the last few years, CHI St. Alexius Health has continued to refine its program and make changes to their EHR (e.g., adding the advisory statement to after visit summaries, adding SmartPhrases to help with documentation, adding electronic nicotine delivery systems (ENDS) screening questions). They continue to explore re-establishing their standing orders for counseling (approved) and NRT (still in progress) and exploring new collaborations (emergency department and occupational health).

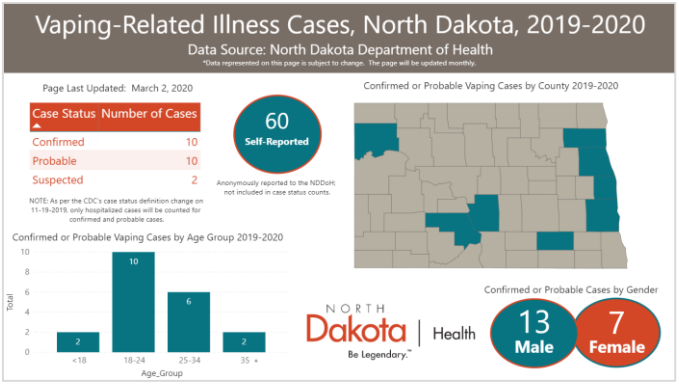
Their focus on continued learning was intensified in the last couple of years:

- Co-sponsoring the annual Nicotine Dependence Conference with Sanford and Mid Dakota Clinic
- Participating in community events like the Family Fun Day with the Bismarck Larks
- Speaking at colleges, attending the TPCP Quarterly Partners Meetings
- Authoring and providing interviews for newspapers, newsletters, and magazines

ENDS epidemic and vaping-related lung injury investigation (EVALI)

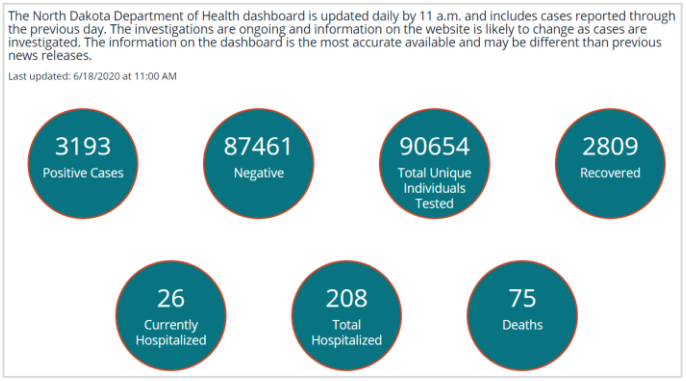
In 2017, JUUL was introduced as a new electronic nicotine device system (ENDS). With ENDS use rates on the rise, especially in youth and young adults, CHI St. Alexius Health implemented ENDS screening questions in their EHR, participating in a system-wide CHI national initiative. The NDDoH released a position statement in 2018 saying ENDS were not considered cessation devices. Later in 2018, the US Surgeon General announced the growing rate of ENDS use by youth and young adults was an epidemic that needed to be addressed.

In 2019, the vaping epidemic turned deadly when a national outbreak of e-cigarette, or vaping, caused product use-associated lung injury (EVALI). Patients with EVALI tended to be younger, otherwise healthy individuals that presented with severe, sometimes fatal lung infections. Both CHI St. Alexius Health and the NDDoH responded by quickly submitting data to the CDC and highlighting the dangers of ENDS products in public communications.



Screenshot from https://www.health.nd.gov/vaping; Accessed June 18, 2020

Novel Coronavirus (COVID-19) Cases



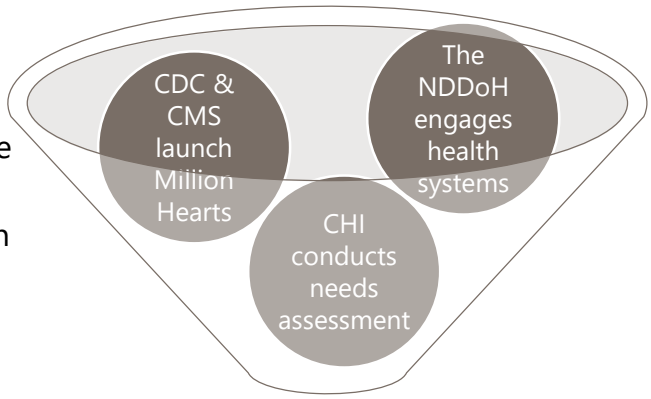
Screenshot from https://www.health.nd.gov/diseases-conditions/coronavirus; Accessed June 18, 2020

In March 2020, the novel coronavirus (COVID-19), an infectious disease that primarily affects the lungs, spread across the nation. In North Dakota, businesses and schools closed to help stop the spread of the disease. CHI St. Alexius Health TTP responded to this public health crisis by modifying their workflow to wait for COVID-19 test results before counseling. As a result of the pandemic, there were more inpatients needing counseling and fewer outpatients.

CHI St. Alexius Timeline in Context

The contextual internal and external factors were right for CHI St. Alexius Health (CHI) to partner with the NDDoH on NDQC. The timeline below shows how the CHI TTP evolved alongside the NDQC Program more generally. Key events below are designated as **successes** and **challenges.**

2009 – 2011
Internal and external factors align for more focused tobacco cessation work within North Dakota health care systems.



2012-2014
The NDDoH launches the NDQC Grant Program & CHI becomes one of the four first grantees.

NDQuits Cessation Grant Program begins

The NDDoH makes progress on the TPCP plan; meanwhile **JUUL is introduced**, starting the vaping epidemic.

2015-2017
Both the NDDoH and CHI experience NDQC Program growth amid budget cuts.

In 2017, the North Dakota **legislature cuts TPCP funding**; NDDoH assumes administration of all tobacco prevention and control efforts in North Dakota.

2018-2020
The NDDoH and CHI respond to the escalating vaping epidemic.

The NDDoH releases **position statement on ENDS**, indicating vaping is not a cessation tool; the **NDQC Grant Program expands** to include 17 grantees.

The **vaping epidemic escalates**; the NDDoH contributes data to the national vaping-related lung injury investigation (EVALI); **COVID-19 emerges** as public health crisis.

CHI launches their Tobacco Treatment Program (TTP) by creating inpatient treatment protocols, training TTS, and establishing NRT and billing practices.

CHI undergoes system-wide changes including converting their EHR to EPIC, forming a regional care system, and implementing a hiring freeze. Meanwhile, the **TTP expands tobacco cessation counseling** to hospital specialty departments and outpatients, **starts collaborations** with CHI Mandan Clinic and Mid Dakota Clinic, and **sponsors the 1st Nicotine Dependence Conference**. This conference becomes a successful annual event in partnership with other NDQC grantees.

CHI refines and makes improvements to their TTP by making EHR changes, adding ENDS screening questions, getting standing orders for counseling, and contributing data to EVALI.

COVID-19 disrupts typical patient care.

CHI St. Alexius TTP Detailed Timeline

Over the course of their NDQC Grant participation, CHI St. Alexius Health has had many successes, forging the way in developing inpatient and billing protocols, establishing rapport with other clinical areas, and creating a culture of continued learning. They have also had set-backs and put effort into ideas that did not materialize. The detailed timeline below provides some specific examples of these activities.

	CHI St. Alexius Health Successes **New activity**	**CHI St. Alexius Health Work In-progress & Challenges** **New challenge/barrier**
2012	• **Inpatient protocols developed following Mayo model** • **Continued Freedom from Smoking® classes** • Met with physicians, introduced them to program	• Working to develop a system to provide NRT • Working on follow-up plan: possibly using technology to call patients three times after discharge
2013	• **EHR report created** • **NRT voucher process with pharmacy created** • **Developed patient handouts** • **TTS counsel first patient** • Refined inpatient protocol	• Working with informatics team to develop detailed tobacco cessation documentation • Working on patient education handouts • Working on setting up billing system
2014	• **Started counseling outpatients as requested** • **Started to bill for services** • **Started BABY & ME – Tobacco Free Program** • Created report to identify tobacco users	• Working on ability for TTS to order NRT through EHR standing orders
2015	• **Expands to hospital specialty areas** • Collaborated with CHI Mandan Clinic and Mid Dakota Clinic	• **EHR system converted to EPIC, reports and documentation need to be re-created** • **NRT standing orders did not transfer, TTS unable to order without physician contact** • Working through how to collect follow-up data (limited staff capacity)
2016	• **Started the Nicotine Dependence Conference (NDC)** • **Added NDQuits referral form to EHR** • Started exploring e-referrals	• **Hiring freeze begins** • Working with IT to rebuild reports, data collection still manual
2017	• **Added new questions to EHR tobacco history section locally and throughout CHI National** • **Added e-fax referrals from EHR to NDQuits** • Hosted 2nd annual NDC	• **Unsuccessful implementation of the EHR e-referral into NDQuits** • Difficult to make changes in EPIC • Working on expanding to Occupational Health
2018	• **Added advisory statement as part of the after visit summary in EHR** • **ENDS screening added to EHR** • Hosted 3rd annual NDC with Sanford	• **Change in priority funding for follow-up calls** • Working on billing for carbon monoxide tests and cotinine tests, which screen for tobacco abstinence
2019	• **Helped sponsor local TTS training** • Hosted 4th annual NDC with Sanford	• Working on protocol for Emergency Department • Working to receive referrals from CHI Mandan Clinic (Lung cancer pre-screen) • Working to re-implement standing orders for inpatient counseling and NRT
2020	• **Presented at United Tribes Technical College** • Hosted 5th annual NDC with Sanford and Mid Dakota Clinic	• **COVID-19 emerges as public health crisis and disrupts patient care**

CHI St. Alexius's Collaborative Approach

CHI St. Alexius Health's collaborative approach and culture of continued learning have contributed to successes with the implementation and expansion of a TTP over the past eight years. Specifically, CHI St. Alexius Health has seen working with other health systems and other NDQC grantees as a great asset to their work. Throughout the duration of the NDQC Grant, CHI St. Alexius Health has found creative and engaging ways of educating their community and spreading awareness about the importance of tobacco cessation.

"If you're hoarders of information, things don't grow. And that doesn't help anyone. You have to share what works and you have to share what doesn't work." – *Rajean Backman, Interview with PDA, April 3, 2020*

Grantee Partnerships

One significant collaboration with other NDQC grantees is hosting the annual Nicotine Dependence Conference. CHI founded the conference in 2016. Since then, they have engaged other grantees in planning, hosting, and offering continuing education credits for the conference, helping to set the tone for shared learning across health systems. CHI St. Alexius Health has also been open and enthusiastic about exchanging information and best practices with other health systems.

Photo: Rajean Backman (CHI St. Alexius Health); Teresa Kershaw (Sanford Bismarck); Therese Shumaker (Mayo); Missy Lutman, Traci Hutslar, and Angie Basaraba (CHI St. Alexius Health). Photo provided by Kara Backer, NDDoH TPCP.

Community Engagement

CHI St. Alexius Health has engaged and educated the public through the following activities:

- **Broader community-wide events:** Innovative events, like the Family Fun Day with the Bismarck Larks (pictured right), Summer Fun and Safety Day, and participating in the North Dakota Safety Conference help increase awareness about the harms of smoking and vaping.

Photo: On June 23, 2019, CHI St. Alexius Health sponsored a Family Fun Day with the Bismarck Larks baseball team, including a "knocking tobacco out of the park" activity station. Photo from Bismarck Larks baseball page.

- **Education for the general public and CHI employees:** Offering Freedom from Smoking® classes to the general public and staff at CHI St. Alexius Health, especially at the beginning of the grant, solidified CHI's TTP role and commitment to tobacco cessation. CHI TTS also author content and contribute interviews to many newspaper, magazine, and newsletter articles each year.

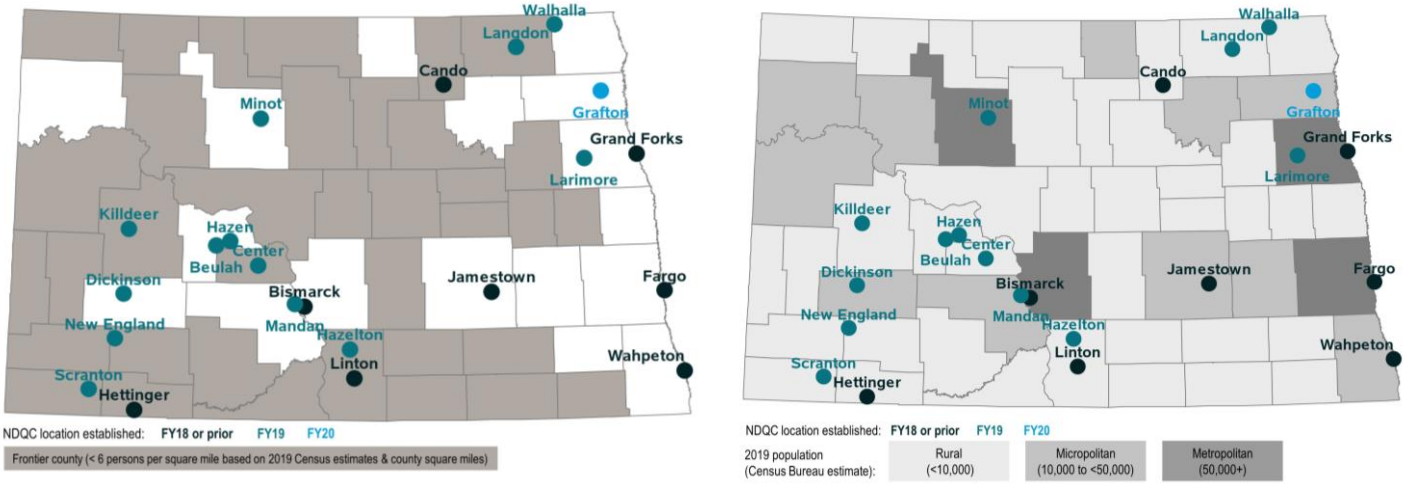
- **Training the next generation of tobacco cessation specialists:** Allowing respiratory therapy students to do rotations or shadow at CHI St. Alexius Health, having staff teach at local colleges, and sponsoring local TTS training courses contribute to the culture of continued learning through real-world experiences for those entering the field.

CHI St. Alexius Health Reach in Context

NDQC Reach

In FY20, the NDQC Program has 17 grantees providing face-to-face visits in 22 cities across the state and telehealth visits in many more. **NDQC grantees are providing tobacco cessation counseling in eight frontier counties.** When looking at county population designation, NDQC is reaching 10 rural counties, five micropolitan counties, and all four metropolitan counties. Established grantees tend to be larger health systems serving more major metropolitan areas with newer grantees serving more rural areas.

NDQC locations overlaid on frontier counties (left) and county population designations (right)



NDQC grantees include hospitals, clinics, and specialty care centers (college campus health clinics, addiction treatment facilities, Federally Qualified Health Centers, and cancer centers), meeting the activity goals outlined in the TPCP State Plan regarding NDQC grantee diversity.

In FY19 alone, NDQC grantees' 101 Tobacco Treatment Specialists **provided cessation counseling to over 13,000 patients.**

NDQC Reach within CHI St. Alexius Health Bismarck

The TTP at CHI has continually expanded the patient populations it serves. In 2013, the Tobacco Treatment Protocols were established for hospital inpatients. From there, the TTS team expanded to counseling outpatients, other hospital areas, the CHI Mandan Clinic, the Mid Dakota Clinic, and, in FY19, started developing protocols with the Emergency Department.

Priority populations reached by CHI TTP:

- Pregnant women
- Psychiatry & Behavioral Health
- Patients with diabetes
- Cardiology
- Pulmonology

In the last five years, the CHI TTP has counseled almost 7,500 patients with only four TTS.

In FY19, CHI TTS counseled 1,490 patients, provided quit kits and bridge NRT to 546 patients, and referred 41 patients to NDQuits.

NDQC Impact at CHI St. Alexius Health

Due to staffing shortages, quantitative data related to quit outcomes is not available. Instead, impact is highlighted through provider testimonials regarding importance of the program and a number of case studies showing how CHI St. Alexius Health's tailored, patient-centered approach to tobacco cessation has made improvements in patient lives.

"It's more than just telling people that they should quit. It's quality of life, it's longevity of life... I think it's giving every person that opportunity to have that lifestyle change." – Rajean Backman, Interview with PDA, April 3, 2020

Provider Testimonials

"Tobacco usage is rampant in North Dakota, is difficult to discontinue, and a significant risk for coronary artery disease as well as other serious pathologies. ...The services that these individuals supply should not be underestimated." -Nicholas Mahr, MD, Letter of support, 2017

"Having these professionals available to speak with patients in our clinic has been extremely helpful and often successful in smoking cessation. Our ability to treat patients is often hindered by smoking. Guidance from this group is immeasurable to the patient as well as ourselves." -Debra Fueller, FNPc, Letter of support, 2017

Patient Success Stories

Providing cessation counseling to all tobacco users following a chronic disease approach:

"A 74-year-old male was admitted to the hospital for chest pain. He has a history of smoking a pipe daily for 59 years. He "had tried everything" to quit smoking. During his overnight hospitalization he had a heart catherization and had 1 stent placed. When he was approached about tobacco cessation, he was dressed and ready to be discharged. He was definitely in the 'precontemplative' stage of change. His wife and daughter were at his bedside. Nine days later, this patient called the TTS and stated he has not smoked since he was discharged from the hospital but is having some pretty intense cravings and was calling for help. We have had weekly phone contact for three weeks now and he has not smoked for 23 days (which is the longest he has ever been abstinent). The moral of this story is: if we only counsel those that are already motivated to quit, this gentleman would still be smoking."

Going above and beyond to coordinate cessation resources:

"A 75-year-old male was using one can of smokeless tobacco per week. He tried the herbal chew from our quit kits while in the hospital and really liked it. We called the gas station in his hometown and asked if they would special order the herbal chew and they were happy to help us. One-month post hospitalization, the patient states that he is still using the herbal chew saying, 'I think I love you for showing me this.'"

Creating individualized treatment plans:

"A 31-year-old female outpatient was counseled. She routinely smoked up to two packs of cigarettes per day. She had a rolling machine and bought bags of tobacco. She was trying to reduce the number of cigarettes she was smoking. She did not want to use a nicotine patch or gum (used in the past and didn't like either of them) and was afraid she would chew the nicotine lozenges. We reviewed the other cessation pharmacotherapy; she had never seen the nicotine inhaler before. She used a pharmacy voucher for 42 nicotine cartridges and mouthpiece. She called on the way home and stated she would be giving her rolling machine to a friend that day. She has been tobacco free since 9/10/19."

Helping patients through times of crisis:

"A 19-year-old male was admitted to the hospital for e-cigarette or vaping product use-associated lung injury (EVALI). He was vaping with CBD cartridges he bought "on the streets." There were multiple hours spent counseling this patient (by both the TTS staff and the hospitalist). No nicotine replacement therapy was used. The TTS staff made a follow-up phone call two weeks after hospital discharge. The patient states that he has not vaped/smoked/JUULed since discharge. This patient is a college hockey player and notices that his breathing is getting much better and feels that he is able to skate more aggressively, and his endurance is much better."

Assessing Sustainability of CHI St. Alexius Health's TTP

The goals of establishing a TTP under the NDQC Grant Program are to become part of the hospital's standard operations, to be self-sustaining, and to expand current cessation efforts within the health care system or target priority patient populations. To assess CHI St. Alexius Health TTP's sustainability strengths and opportunities, the following areas were reviewed using a modified Substance Abuse and Mental Health Services Administration (SAMHSA) sustainability checklist. See Appendix B for the full checklist.

Sustainability Assessment

Sustainability Conclusions

CHI Strengths:

★ Highly-focused attention to development and maintenance of protocols processes and building these into the EHR (twice);
★ Maximizing billing to support program costs and to enhance sustainability;
★ A passion for tobacco cessation and raw determination to see the effort succeed that leads to engagement and education of hospital and health system colleagues; and
★ Learning from and sharing with the other NDQC grantees, as well as creating opportunities for others to learn.

CHI Opportunities:

→ Consider how aligning tobacco cessation work with other policies and/or framing work in terms of overall organizational mission/vision can make a robust business case for tobacco cessation;
→ Formalize relationships with existing champions to strengthen leadership engagement and buy-in; and
→ Obtain support to track measures and report them to maintain staff engagement and leadership support.

NDQC, CHI, & The 6|18 Initiative

The 6|18 Initiative: The NDDoH and the North Dakota Department of Human Services Medicaid Office are collaborating on the CDC-funded 6|18 Initiative to reduce tobacco use. The future goal of the 6|18 Initiative is for certified tobacco treatment specialists (CTTS) or TTS, who have the National Certificate of Tobacco Treatment Practice (NCTTP), to be recognized as Designated Providers for Medicaid. This will enable CTTS or NCTTP to be reimbursed by Medicaid for outpatient counseling. Currently, there are at least 45 CTTS/NCTTP providers within the NDQC Grant Program.

Almost **40% of North Dakotans with Medicaid coverage smoke cigarettes** (39.1%). This is **more than double** the rate of smoking in North Dakota overall (19.1%).

Better Care, Together

Counseling is linked to successful tobacco cessation. There is a strong dose-response relationship between time spent in face-to-face counseling and quitting tobacco. A brief chart review found CTTS at CHI St. Alexius Health Bismarck spent an average of 55 minutes providing cessation counseling per outpatient.

Physician:
"*Data demonstrates that patients are more likely to quit with proper counseling and pharmacotherapy. [The TTS] allow me to work more efficiently and assess more patients on a daily basis who may also need cessation counseling.*"

CTTS:
"*I think it's a great opportunity, too. I mean I think that the providers that can bill for it and be reimbursed, I don't think they have the time to do what we're doing.*"

Saving Money-Saving Lives

Annual health care costs in North Dakota directly caused by smoking are $326 million. Almost 20% of those costs - $57 million – are paid by Medicaid.[1]

A study in Massachusetts found that every $1 in program costs was associated with $3.12 (range $3.00 to $3.25) in medical savings, for a $2.12 (range $2.00 to $2.25) return on investment to the Medicaid Program for every dollar spent.[2] These savings were realized within one year of the benefits being used.

	Short-term (≤ 3 years)	Long-term (5+ years)
Health impacts[3]	Circulation improves and breathing is easier; reduced risk of respiratory infections	Reduced risk of stroke, cancer, and coronary artery disease; longer life expectancy
Cost savings	Outpatient cessation treatment can lower health care costs within 18 months of quitting. Within three years, a former smoker's health care costs will be 10% less than if they kept smoking and expenditures for cessation programs in the range of $144 to $804 per smoker will be offset by those health care cost savings.[4]	Post-stroke care can cost an average of $4,850 each month, accumulating to over $58,000 in health care costs in the first year alone.[5] Health care costs in the first month after a diagnosis of lung cancer can average $37,000; cumulative costs in the first year can average $140,000.[6]

1 Tobacco Free Kids. (2020, March 9) "The Toll of Tobacco in North Dakota." https://www.tobaccofreekids.org/problem/toll-us/north_dakota
2 Richard, P., West, K., and Ku, L. (2012). The Return on Investment of a Medicaid Tobacco Cessation Program in Massachusetts. PLOS ONE.
3 CDC. (2020, April 28) "Benefits of Quitting." https://www.cdc.gov/tobacco/quit_smoking/how_to_quit/benefits/index.htm
4 ClearWay Minnesota℠. (2016, April 6) "Return on Investment for Tobacco Cessation."
5 Rajsic, S., Gothe, H., Borba, H. H., et al. (2019). Economic Burden of Stroke: A Systematic Review on Post-Stroke Care. *Eur J Health Econ, 20*(1): 107-134.
6 Dieguez, G., Ferro, C., and Pyenson, B. S. (2017). "A Multi-Year Look at the Cost Burden of Cancer Care." Milliman Research Report.

Conclusions & Recommendations

CHI St. Alexius Health has built a successful TTP

CHI St. Alexius Health started the NDQC Grant in 2012 and built their TTP from the ground up with the support of the NDDoH. Their history with the NDQC Grant is full of successes and challenges. Each time a barrier was encountered, the TTP team persisted in maintaining exceptional patient care, building rapport with clinicians, expanding the program when they could, and providing opportunities for education. TTP work seemed to happen in three eras:

2012-2014 Starting the NDQC Program at CHI St. Alexius Health	2015-2017 Expanding TTP Amid Setbacks	2018-2020 Tobacco Cessation During Public Health Crises
Major Success: Establishing their TTP **Challenge:** Doing it without leadership champion at the organization	**Major Success:** Founding the NDC **Challenge:** EHR change & organization contraction	**Major Success:** Increased focus on continued learning **Challenge:** Two major public health crises

When assessing factors contributing to CHI St. Alexius Health's TTP success, **four key components emerge:**

- Tobacco use is considered and treated as a chronic disease
- A passionate team of dedicated TTS with a strong champion push the program forward
- Strong collaborations with the NDDoH, other NDQC grantees, and their communities
- Persistence in achieving a successful program and adapting to changing contexts for their work

These components have contributed to large reach and a successful program built by the CHI TTP, but may not be the keys to success for all NDQC grantees. Varying organizational circumstances, TTP settings, and other factors may provide other keys to success within other grantees.

There are opportunities to increase sustainability of the TTP

There are many aspects to CHI St. Alexius Health's TTP that bode well for sustainability including the strong focus on training, the protocols and policies already in place, and the EHR modifications that have been made to accommodate TTP work. However, the CHI program lacks higher-level organizational support.

Recommendations: Strengthening engagement of existing, informal supporters could help the tobacco cessation team find new ways to align their work within the organization and its priorities, engage leadership, and obtain resources to support data collection, analysis, and dissemination. Additionally, the NDDoH should continue to pursue the 6|18 Initiative to aid in reimbursement of TTS services.

Appendices

Appendix A – Methods

Appendix B – Sustainability Methods and Checklist

Attachment – Full Timeline

Attached file name: NDQC_CHI_Full_Timeline_FINAL.xlsx

Appendix A: Methods

For this study, a modified timeline mapping methodology was used covering the time period July 2012 – March 2020. Timeline mapping is the process of chronologically arranging important events, activities, and other milestone markers, including program and external factors (i.e., social, economic, political, etc.). Doing this enables stakeholders to see relationships between the factors on the timeline.

Timeline mapping is meant to be facilitated in a face-to-face, interactive session with all stakeholder's present. As this was not geographically possible, we used a modified timeline mapping approach where information from this report was gathered from a comprehensive historical document review and a phone discussion with the NDDoH staff and CHI TTP staff. The historical document review consisted of examining and synthesizing information from past grant announcements, work plans, quarterly progress reports, and other documents into a timeline that called out success, challenges, and changes in activities over time. In total, over 100 documents were reviewed spanning the time frame July 2012 – March 2020.

When reviewing the documents, all documents were catalogued and sorted by type. Each document was reviewed, and information related to CHI accomplishments, barriers, works in progress, and collaborations were abstracted chronologically. An initial timeline was created. Internet searches supplemented the information found within documents.

Data Source	Key details
NDQC Grant Announcements	The annual call for funding highlights key aspects of the grant that the grantees should be working towards with grant funding. Data abstracted from these documents include the grant components and requested metrics for EHR data reporting.
NDQC Work Plans	These documents contained the proposals for NDQC funding submitted to the NDDoH each year. They often contained achievements from the prior year and plans for what they wanted to work on in the upcoming year.
NDQC Progress Reports	The frequency and length of these reports as well as the types of information, variety of questions asked, and level of detail requested changed over time. Program accomplishments, barriers, reach, patient success stories, and educational event summaries came from the progress reports.
Supplemental Materials	The NDDoH supplied a variety of supplemental materials including newspaper articles featuring interviews with CHI TTP staff, newsletters with articles authored by CHI TTP staff, photos, letters of support, and sample EHR screenshots. These pieces of information highlighted collaborations and education and outreach that were not otherwise highlighted.

From there, PDA facilitated a reflective conversation between the NDDoH cessation staff and CHI TTP staff on April 3, 2020. During this conversation, progress, themes, and opportunities to date were assessed and the timeline was reviewed for accuracy, completeness, and a discussion around event relationships. PDA posed specific questions to clarify gaps in the story and piece together the flow of important activities and accomplishments. Following the conversation, the conversation recording was transcribed, reviewed for accuracy, and used as another data source.

All information was then compiled, the timeline refined, and timeline narrative drafted.

Appendix B: Sustainability Checklist

There is no validated, tailored instrument for the NDDoH to use to assess sustainability for tobacco cessation systems change among grantees and to provide technical assistance based upon the results.

To assess the potential for a sustainability assessment to guide the NDDoH and its grantees, PDA modified a SAMHSA sustainability checklist and used it to explore strengths and opportunities for CHI. Unlike other checklists, this one included concepts like maximizing billing for services and engaging in community-wide conversations about tobacco cessation that the NDDoH and CHI St. Alexius Health identified as important elements of sustainability in their NDQC work.

The modified checklist included nine sustainability concepts, along with the reflections for each assessment criteria, are provided below.

Legend:

☑ Already addressing this concept

? Not enough information from the document review to assess

Another look might yield new ideas or opportunities

Sustainability Concept and Assessment		Reflections
Environment – *What does the internal and external environment require of your program?*		
What internal and external policies drive the Tobacco Treatment Program (TTP) and reporting? Is your program responding?		Joint Commission measures drove the behavioral health collaboration. Are there other opportunities to coordinate work?
Is your program exploring new revenue streams to partially cover costs and/or demonstrate value?		Are there non fee-for-service payment opportunities that might also help to demonstrate value like Accountable Care Organizations?
Is your program taking advantage of opportunities to learn/share with others engaged in similar work?	☑	CHI has set the standard for learning and sharing for the NDQC Grant.
Strategy – *What gives the program direction?*		
How is the TTP integrated in your organization's mission and vision?	?	Integration between the tobacco policy and protocol and CHI's mission/vision is unclear.
Do you have a business case and/or business plan for the TTP efforts? Can you demonstrate reach or impact?		Business Plan from 2014 could be updated with help from champions from other departments who see the value of the TTP from other perspectives.
Billing		
Are you billing for all cessation counseling, pharmacotherapy, and all tests?	☑	Yes. The team has identified and taken advantage of many billing opportunities.
Technology		
Does the EHR include the 5 A's or AAR to facilitate integration into broader workflows?	☑	The 5 A's are integrated into the EHR, with assessments being enhanced regularly.
Are you using registry or other functions like email, text or EHR patient portals to track patients and provide additional follow-up?		The TTP team uses a registry to track patients needing a TTP visit. Other EHR tools may support follow-up.

Appendix B: Sustainability Checklist

Sustainability Concept and Assessment		Reflections
Leadership Practices, Culture, and Communication		
Do you have the TTP initiative team that is empowered to influence expansion of and maintenance of the TTP strategies and activities in your hospital or health system?		The team is highly-motivated and tenacious in its efforts to expand the TTP. It lacks higher-level support to empower it and pave the way for some efforts.
Do you have a provider champion that has devoted time to participate in the TTP efforts?		Informal provider champions who sent letters supporting the TTP staff positions could be recruited into a formal champion role.
Is (senior) leadership engaged and knowledgeable about the TTP work?		Multiple committees signed-off on the tobacco treatment protocol. Deeper engagement is needed.
Have leaders provided resources to allow changes to be sustained? (e.g., Staff time to make changes to day-to-day operations)		In-kind support for the work is staff time. Current resources are insufficient to realize all program objectives or sustain changes if NDQC funds are reduced.
Protocols and Process – *Are we capable?*		
Do your hospital's policies support addressing tobacco use through counseling and use of pharmacotherapy?	☑	An organization-wide tobacco policy and protocol has been created and is revised as the TTP efforts evolve.
Is tobacco/nicotine dependence assessed for every patient?	☑	Yes. The TTP team views tobacco use as a chronic disease and treats it as such. Patients opt-out of TTP counseling.
Are there clear processes in place for referring to TTP services and giving staff permission to treat?	☑	The TTP team established & re-established standing orders for counseling and NRT and pharmacotherapy administration.
Are cessation goals and next steps a part of treatment plans for providers and patients?	☑	Patient-specific referral and follow-up plans (incl. quit kits) are developed and documented in the EHR.
Are bidirectional (electronic) referrals to the quitline built into the EHR?	☑	E-fax referrals were established because of security concerns regarding e-referrals. Quitline follow-up is inconsistent.
Quality Improvement		
Do you have established metrics and benchmarks for cessation-related activities as well as a structure for collecting them and evaluating them regularly?		NDQC framework provides metrics and accountability. It is unclear if similar internal structures exist. Resources are needed to build automated reports.
Has information about improvements generated by TTP efforts been shared with stakeholders (incl. physicians and staff) and is there a communications plan?	?	It is unclear whether improvements in TTP efforts have been shared or if there is a communications plan. Data reporting challenges need to be addressed.
Is there a plan to reflect on progress so successes can be celebrated, and responses can be taken if measures slip?	?	It is unclear if there is a plan to reflect on progress.

Appendix B: Sustainability Checklist

Sustainability Concept and Assessment		Reflections
Structure – *Are roles and responsibilities clear? Are we organized so we can meet strategy?*		
Do job responsibilities for the TTP team include key tasks related to TTP?	☑	TTP counseling is a part of the job for all team members. Effort and roles vary.
Have job descriptions across the hospital been changed to describe the role of staff in TTP?	?	The tobacco policy defines roles for all staff. It is unclear if all job descriptions include TTP responsibilities.
Skills – *Are staff able to do the desired work?*		
Are members of the TTP team provided TTS training, refresher training, and billing training?	☑	Yes. Providing training and refresher training has been a key priority for the TTP team lead throughout the NDQC Grant.
Does staff education include education about cessation/nicotine-dependence counseling, treatment services provided by the TTP team, and how to engage the TTP team?		The team relies heavily on 1:1 educational interaction currently. Departmental trainings were tried and may be more effective with more organizational buy-in.

Original SAMHSA checklist:

- Primary and Behavioral Health Care Integration Sustainability Checklist from SAMHSA: https://integration.samhsa.gov/financing/Sustainability_Checklist_revised_2.pdf

Appendix B: Sustainability Checklist

In the search to find a tailored instrument for the NDDoH to use to assess sustainability for tobacco cessation systems change among grantees, PDA found several useful sustainability assessments that explore the topic from different vantage points and can spur thinking.

Other checklists to consider:

- Clinical Sustainability Assessment Tool from Washington University: https://sustaintool.org/csat/
- Sustainability Model and Guide from the National Health Service: https://webarchive.nationalarchives.gov.uk/20160805122935/http://www.nhsiq.nhs.uk/media/2757778/nhs_sustainability_model_-_february_2010_1_.pdf
- Checklist ideas from University of Wisconsin (UW) Center for Tobacco Research and Intervention (described below)

  The UW Center for Tobacco Research and Intervention Outreach Program (CTRI) shared their thoughts about important elements of sustainability to consider for hospital or clinic-based tobacco cessation systems change efforts.

  This University of Wisconsin CTRI has been working with health systems across Wisconsin for almost 20 years. Their work includes helping systems integrate the Wisconsin Tobacco Quit Line into their practice as a treatment extender.

  Their staff shared the following recommendations:

  * Tobacco treatment protocols, tools, EHR protocols and workflows, and staff roles are a part of new staff training.
  * Clinics or hospitals develop goals toward tobacco use screening and counseling performance measures and assign a tobacco champion to review and discuss clinic/hospital's progress on a biannual basis.
  * Ongoing, periodic performance feedback to clinicians and staff.
  * Tobacco treatment protocols as a standard of care, utilizing EHR functionality, designating a tobacco champion and staff roles to deliver interventions, reimbursement tied to meeting goals/performance measures and/or review of progress over time, training plans (periodic trainings, trainings for onboarding staff, etc.), internal toolkits and resources for staff.
  * Creation of a multidisciplinary team specifically to implement and sustain a tobacco treatment program. The team can assist with the development of tobacco treatment policies and procedures for that health system. They can also conduct systematic reviews of these policies and procedures to evaluate the health system strengths, challenges, as well as opportunities to improve quality of care and sustainability.