

National Jewish Health

Community Health Needs Assessment 2016

&

Implementation Strategy 2016-2019

June 2016

(Revised April 2017)

Summary

National Jewish Health is a nonprofit specialty care hospital providing research, education and patient care. It is the only medical and research center in the United States entirely devoted to respiratory, allergic and immune system diseases. National Jewish Health serves primarily patients from the seven county Denver metro area.

In keeping with requirements from the Patient Protection and Affordable Care Act regarding nonprofit hospitals, National Jewish Health has conducted an annual community health needs assessment and then adopted an implementation strategy to meet the community health needs identified in the assessment. This needs assessment also serves to satisfy certain requirements of tax reporting, pursuant to provisions of the Patient Protection & Affordable Care Act of 2010

In pursuing an understanding of and assessment of community needs, National Jewish Health assembled a team from within the institution to participate in and conduct the community health needs assessment. The team consulted published public health sources, sought input from a broad cross section of National Jewish Health medical staff, and analyzed results from an online survey and community task force convened by its clinical care partner, Saint Joseph Hospital.

The National Jewish Health team used information gathered during the community health needs assessment, and examined how those needs matched the hospital's specialty expertise. The summary of these findings is contained in the 2016 Health Needs Assessment. The implementation plan describes how actions will be taken to address those identified areas. From the survey, the organization defined its focus on community health efforts to include:

- Respiratory disease, especially asthma and chronic obstructive pulmonary disease
- Tobacco use
- Obesity
- Barriers to Health Care

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Introduction

Overview of Community Health Needs Assessment

The Patient Protection and Affordable Care Act requires non-profit hospitals to perform a community health needs assessment, and to adopt an implementation strategy to meet the outstanding community health needs identified in the assessment as a condition of maintaining the institution's federal tax exemption. The requirement became effective March 24, 2012. This document serves as the community health needs assessment for National Jewish Health, a non-profit, academic medical center with headquarters in Denver, Colorado.

Description of National Jewish Health

National Jewish Health is a specialty care hospital providing research, education and patient care. It is the only medical and research center in the United States entirely devoted to respiratory, allergic and immune system diseases, including asthma, tuberculosis, COPD, severe allergies, cancer, lupus and other autoimmune diseases. Programs are in place to meet the needs of children and adults.

Founded in 1899, this nonprofit and nonsectarian institution is dedicated to enhancing prevention, treatment and cures through research; to developing and providing innovative clinical programs for treating patients regardless of age, religion, race or ability to pay; and to training the next generation of caregivers.

Patient Care

In fiscal year 2015, National Jewish Health provided charity care services costing \$1.07 million, and over \$29 million more in uncompensated cost of care of Medicaid and Medicare patients.

Unlike many institutions, National Jewish Health places no restrictions on Medicaid patients; they receive the first available appointment with specialists, not the first available Medicaid appointment.

With 25 practice locations across Colorado, National Jewish Health serves patients throughout the state. As a tertiary care center, patients are referred to National Jewish Health from around the nation, many with conditions so difficult and baffling that they could not be successfully treated anywhere else.

Research

National Jewish Health faculty and staff conduct extensive basic, translational and clinical research that serves both the local and national communities that suffer from a wide variety of respiratory, immune and related diseases. The vast majority of the approximately \$50 million in annual grant revenue comes from the federal government, especially the National Institutes of Health.

Education

Educating patients and healthcare professionals is a central element our mission. We educate patients how better to take care of themselves, prevent and manage disease through classes, symposiums, and in the day-to-day operations of our clinics. Our faculty lead training for medical students, residents and post-graduate fellows. The Professional education department organizes seminars, webinars, and hands-on workshops around the country to help health care professionals better take care of their patients.

Communities Served by National Jewish Health

As a specialty hospital, National Jewish Health serves a community defined both by geography and by disease. The primary community served is within the city of Denver and surrounding communities and was determined primarily by reviewing data on where patients came from and what types of illnesses have been treated.

Primary Service Area

The main National Jewish Health campus is located in central Denver at 1400 Jackson St. As a nationally recognized specialty care center for respiratory, immune and related diseases, National Jewish Health serves both a local and national community. The seven-county (Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas and Jefferson) Denver metro area is home to 3.1 million people. More than 70 percent of patients served are from Denver and surrounding communities and will be the focus of this report. Patients come to National Jewish Health from regional and national referral sources.

Demographic Characteristics

According to the Colorado Health Institute's County Health Profiles, median household income is \$61,324 for Colorado. In the Denver metro area, median household income ranges from \$54,872 in Denver County to \$107,250 in Douglas County.

According to the Colorado Department of Public Health & Environment, 12 percent of the Colorado population lives below the poverty line. The Colorado Health Foundation, in its 2016 *Colorado Health Report Card*, estimates that 20.1 percent of Colorado children and 17.7 percent of adolescents live in families with incomes below the poverty level.

According to the Colorado Health Institute's (CHI) County Health Profiles, the percent of the population that is uninsured is 15.5 percent for Colorado overall; in the Denver metro area, the percent uninsured ranges from 4.52 percent for Douglas County to 13.96 percent for Denver County.

According to the Colorado Health Institute, 22.8 percent of Coloradans are covered by Medicaid. In the Denver metro area, the Medicaid population ranges from 5 percent for Douglas County to 29.5 percent for Denver County.

According to the Colorado State Demographer, the population of Colorado is projected to grow 7 percent between 2016 and 2020. Like the rest of the country, Colorado is seeing the effects of the aging of the Baby Boomers. The largest percentage growth in the state's population between 2016 and 2020 will occur in the 65+ age group, which will increase by 20 percent.

The population of these areas consists primarily of whites, Hispanics/Latinos and Black/African Americans. Asians comprise the fourth largest race/ethnicity group.

Community Health Needs Assessment

Methods Used to Conduct Community Health Needs Assessment

National Jewish Health assembled a team from within the institution to conduct the community health needs assessment. The team reviewed the Proposed Rules for the Community Health Needs Assessments for Charitable Hospitals and organized the review to create this summary.

Published Information and Data

The group sought key information about the community demographics and health needs from various governmental and non-governmental sources, including:

- The Colorado Department of Public Health and Environment -- *Regional Health Profiles; Obesity and Overweight Among Colorado Adults*
- The Colorado Governor's Office -- *The State of Health, April 2013*
- Colorado Health Institute -- *County Health Profiles; FAQ on New Childhood Obesity Data, April 2013; Obesity Treatment, A New Strategy to Address a Growing Problem*
- Colorado Health Foundation – *2016 Colorado Health Report Card*
- American Lung Association – *Strategic Plan to Address COPD in Colorado, Recommendation from the COPD Coalition, 2007*
- Colorado COPD Coalition and American Lung Association – *2007 COPD Surveillance Report*
- Colorado Central Cancer Registry – *Statistic by Age for Cancer of the Lung and Bronchus*
- County Health Rankings & Roadmaps (A joint project of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute) -- *Estimate of adult smoking by county; estimate of obesity for children and adults*

Community Input

National Jewish Health has a joint operating agreement with Saint Joseph Hospital for clinical care at both institutions. As part of the community health needs assessment, National Jewish Health reviewed findings from an online community survey and a Community Health Advisory Task Force session conducted by Saint Joseph Hospital.

The Online Key Informant Survey (OKIS) was designed to capture the voices, thoughts, and healthcare experiences of community stakeholders serving vulnerable populations in the hospital's service area. The survey also helped Saint Joseph Hospital establish a partnership list which will be used to assist the hospital in addressing its top community health needs. Participants for the OKIS were identified by Saint Joseph Hospital and Denver Public Health, resulting in 300 individuals representing 35 community organizations that work to improve the health and social needs of Denver residents, including low-income, minority, and medically underserved populations. The survey had a 23.3% response rate.

Based on this analysis, eight health needs were identified as community needs needing further explorations:

Eliminating Barriers to Care

Obesity

Respiratory Disease

Dental Health

Diabetes

Mental Health

Substance Abuse

Tobacco Use

Prioritization of Health Needs of the Community

The National Jewish Health team used information gathered during the community health needs assessment, its own knowledge of the institution, and information gathered from staff throughout National Jewish Health, including grant administrators, individual researchers, professional education, community outreach and finance staff to identify greatest community health needs that National Jewish Health can effectively address.

National Jewish Health determined that it should focus its community health efforts on:

- Respiratory disease, especially asthma and chronic obstructive pulmonary disease (COPD)
- Tobacco use and cessation
- Obesity
- Eliminating Barriers to Care

Health Needs Not Being Addressed

In order to effectively address the needs identified, National Jewish Health is focusing on the needs outlined above. The Community Health Needs Assessment identified the importance of partnerships and collaborations to build to meet the health and medical needs of the community. National Jewish Health does not have the capacity or resources to meet all needs of all community members, given its focused mission and model of providing specialized services to patients with allergic, respiratory or immunologic disease. Strategic partnerships with other health care providers such as Saint Joseph Hospital in Denver and Mount Sinai Hospital in New York, educational affiliations with partners such as the University of Colorado and Denver Health, and partnerships with schools and community based organizations allow National Jewish Health to create a network of resources they can leverage to meet the health and social needs of a wider community of patients and their families.

Respiratory disease

Asthma represents the most common diagnosis among our patients, accounting for about 14,000 patient encounters each year.

According to the most recent data available, 8.7 percent of Coloradans, or 348,956 adults and children, are currently living with asthma. Boys, non-Hispanic black children, children from poor families and children in fair or poor health are more likely to have ever been diagnosed with asthma or still have asthma. Nationally, asthma prevalence increased from 7.3 percent in 2001 to 8.4 percent in 2010 and is now at its highest level ever.

“Uncontrolled asthma results in a reduced quality of life for the individual and a major economic burden for society,” according to a 2015 National Institutes of Health study. Research further concluded that obesity and exposure to tobacco smoke lead to increased asthma symptoms.

In 2009, the Colorado Chapter of the American Lung Association, in its Colorado Asthma Plan, identified several areas of focus to address asthma in Colorado.

- Colorado’s Eastern plains, which lack providers who are certified asthma educators
- School settings, to reduce the percentage of children with asthma who miss school
- African-American children, who experience a higher prevalence of asthma
- African-American adults, who have a mortality rate from asthma double that of Caucasians and Hispanics
- Low-income adults

Chronic Obstructive Pulmonary Disease (COPD) represents the second most common diagnosis at National Jewish Health, accounting for about 6,500 patient encounters each year.

COPD is the third leading cause of death in the United States. COPD prevalence is highest among older people, people who smoke or have smoked in the past, and in rural and frontier counties (six or fewer people per square mile). Age-adjusted COPD mortality rates are decreasing among men and increasing among women. In Colorado and the U.S. overall, COPD mortality is highest among Caucasians.

Colorado has one of the highest rates of death from COPD in the nation, according to the 2007 Colorado Chronic Obstructive Pulmonary Disease (COPD) Surveillance Report, published by the Colorado COPD Coalition and the American Lung Association of Colorado. In 2003, Colorado ranked 7th with an age-adjusted rate of 53.7 COPD deaths per 100,000 people. Since 1998, COPD has claimed the lives of more than 1,700 Coloradans each year. That doesn't take into account the number of hospitalizations each year due to COPD, which are estimated at 4,000-6,000 annually, resulting in over \$70 million in annual charges.

While the true prevalence of COPD in the Colorado population is unknown, the American Lung Association estimates that between 140,000 and 190,000 Coloradans have COPD, based on national data. COPD, as measured by lung function testing, may be as high as 330,000 to 450,000 people, though many of those affected may be undiagnosed.

Tobacco Use

Tobacco use is the number one preventable cause of death in the United States accounting for approximately 480,000 deaths each year from a variety of diseases, including lung cancer and many other forms of cancer; heart disease; and respiratory diseases, including COPD and pneumonia.

Tobacco use contributes to many respiratory diseases, especially lung cancer and chronic obstructive pulmonary disease. Thus, tobacco addiction is an important contributor to the disease burden of our patients.

Colorado ranks 10th in the nation for adult tobacco use with 17.3 percent of adults who are current smokers, according to the Colorado Health Report Card. The state ranks 10th for the percent of adolescents who smoked cigarettes on one or more of the past 30 days (10.7 percent).

While smoking rates in the United States have dropped dramatically over the past 50 years, it remains persistently high among some groups. Smoking is more common among the LBGTO community, with 41 percent of LBGTO students reporting current smoking compared to 12 percent of heterosexual students. Nearly 30 percent of American Indians smoke tobacco. Research shows they have lower quit rates and are among the least successful in maintaining long-term abstinence.

Thirty-six percent of adults with any mental illness reported current use of tobacco in 2013 compared to 25 percent of adults with no mental illness. Smoking is also significantly more prevalent among poorer adults and those with less education.

In addition, a new challenge has been raised with the introduction of “e-cigarettes” which, though not tobacco products, are delivery systems for addictive nicotine. This area is one which requires additional focus and research and raises concerns particularly for middle and high school aged children.

Obesity

Obesity is a national epidemic, which contributes to worsening asthma, COPD and respiratory diseases in general.

In June 2013, the American Medical Association for the first time categorized obesity as a disease. Being overweight and/or obese increases the risks for several diseases including:

- Coronary heart disease
- Type 2 diabetes
- Cancers (endometrial, breast and colon)
- Hypertension (high blood pressure)
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Stroke
- Liver and gallbladder disease
- Sleep apnea and respiratory problems
- Osteoarthritis (a degeneration of cartilage and its underlying bone within a joint)
- Gynecological problems (abnormal menses, infertility)

There has been a dramatic increase in obesity in the United States in the past 20 years. Data from the Colorado Department of Public Health & Environment indicate 14.8 percent of Colorado children ages 2-14 and 56.4 percent of Colorado adults are obese. While Colorado is a relatively active and healthy state Coloradoans – both adults and children – clearly are growing fatter; the overall obesity rate has more than doubled in Colorado since 1995.

Barriers to Health Care

Approximately 10 percent of overall health may be attributed to the ability to access high quality, affordable and timely health care. Better access to care prevents disease, allows for early treatment when illness occurs and reduces the severity of future diseases.

Eliminating Barriers to Health Care in Denver



1 THE FACTS

- In 2015, 9.5% of Denver residents remain uninsured compared to 6.7% statewide
- 1 in 10 Coloradoans wanted to seek care in 2015 but didn't because of costs

2 WHY IT MATTERS

- INSURANCE** Health insurance coverage improves, but does not guarantee, access to care
- Cost is the main barrier to health insurance coverage and quality health care

3 WHAT WORKS

- Expand Medicaid and launch a health insurance exchange
- Improve health insurance literacy so the newly insured can access primary care
- Increase access to specialty care services for Medicaid and uninsured patients through referrals

4 BE PART OF THE SOLUTION

- Support active outreach and enrollment efforts to reach the remaining uninsured in Denver
- Encourage all health care providers, especially specialty care providers, to accept Medicaid patients

All are welcome!

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Current and Future National Jewish Health Programs to Address Community Health Needs

Implementation Plan

National Jewish Health faculty and staff address community health needs, especially at-risk and underserved populations, through patient care, research and education. The programs described below are programs that meet the education, research and patient care goals of the organization as well as being targeted to the identified community needs.

These programs represent areas of focus for the next three year period of focus for this report:

Need: Respiratory Diseases: National Jewish Health will meet the community need through a combination of research, community outreach and education.

Research

National Jewish Health will continue emphasis of the following research programs for the impact they can have on the local patients we serve, as well as national communities:

- **AsthmaNet** is a nationwide clinical research network created by the National Heart Lung and Blood Institute (NHLBI) in 2009. AsthmaNet develops and conducts multiple clinical trials that explore new approaches in treating asthma from childhood through adulthood. National Jewish Health is currently participating in several trials, including: understanding how microscopic organisms in various organs of the body can improve or worsen asthma; identifying new treatment approaches to recurrent, severe episodes of lower respiratory tract symptoms in young children with asthma; and why African Americans commonly have worse asthma that is less amenable to successful treatment.
- **COPDGene** is one of the largest studies ever to investigate the underlying genetic factors of Chronic Obstructive Pulmonary Disease or COPD. Funded through a \$35 million grant from the National Heart Lung and Blood Institute, the COPDGene study is looking for answers to why some smokers will develop COPD and others will not. Through the enrollment of over 10,000 individuals, the COPDGene Study aims to find inherited or genetic factors that make some people more likely than others to develop COPD. With the use of CT scans, COPDGene also seeks to better classify COPD and understand how the disease may differ from person to person.
- **Early detection of lung cancer.** Two separate trials, funded by pharmaceutical companies, are seeking to detect lung cancer earlier, when chances for successful treatment are much greater. The trials combine CT scans, which have shown promise, with biomarkers that seek to refine results

and improve their predictive value. Earlier detection of lung cancer is the most promising tool for increasing survival of patients with this disease, which kills more than 135,000 Americans every year.

- **Warfighters lung disease.** Researchers at National Jewish Health will seek to understand why warfighters deployed to Southwest Asia suffer increased rates of respiratory disease and test potential treatments thanks to \$11.5 million in grants from the U.S. Department of Defense. The grants take advantage of a unique cohort of 100 previously deployed veterans with lung disease and leverage the expertise at National Jewish Health in lung disease and repair.

Goal:

Continue to take leadership role in local and national research studies

Objectives/Metrics:

1. Maintain funding and personnel focus on the key studies described above.
2. Seek out additional funding sources and studies that will continue to move forward our understanding of key disease states and how to treat/cure those suffering.
3. Publish results of research to promote community and provider awareness.

Community Outreach

National Jewish Health will continue to provide and support key programs that help address the areas of tobacco cessation, asthma and lung related illnesses, and obesity and its complications.

- **Free lung-testing.** Lung testing can help detect lung disease that needs medical attention.
- **Lung Line** is a free information service for health care consumers provided by National Jewish Health and is staffed by registered nurses who have years of clinical experience. These nurses provide educational information on lung, allergic and immune diseases to health care consumers who call, email or contact National Jewish Health through our website or other websites. Since Lung Line began answering calls in 1983, the staff has provided answers to more than 1,000,000 callers.
- **The Miners Clinic of Colorado** provides nationally-recognized medical screening, diagnosis, treatment, pulmonary rehabilitation, education, counseling and prevention services through two free screening programs.
- **The Black Lung Clinic** has appointments year round at National Jewish Health in Denver. It also holds annual outreach clinics in partnership with local hospitals in Craig, Montrose, and Pueblo, Colorado as well as Page, Arizona.

Goal:

Continue funding and support for key outreach initiatives

Objectives/Metrics:

- 1) Continue operation of key clinics and outreach efforts
- 2) Increase number of patients reached in the next year. Assess each program for effectiveness and potential expansion. Seek funding to support targeted expansion.

Education

National Jewish Health faculty and staff provide a wide variety of free educational programs for both consumers and health professionals, which improve care and patient health. Below are some examples:

Patient Education

- **Classes.** National Jewish Health conducts 23 free patient-education classes each week for patients, family and community members. Topics include “What Makes Asthma Worse?” “Living with Chronic Lung Disease” and “On the Go with Oxygen.”
- **Support groups.** National Jewish Health hosts, organizes and leads several community support groups for people suffering various health issues including Diabetes, chronic obstructive pulmonary disease, interstitial lung disease and insomnia.
- **Health content.** National Jewish Health prides itself on providing a robust library of health content, authored exclusively by experts at National Jewish Health, both in print and online. These range from more than 200 MedFacts, TestFacts and understanding booklets to dozens of instructional videos on topics such as inhaler technique and “What is COPD?”
- **Morgridge Academy.** National Jewish Health operates a free, K-8 school for 90 chronically ill children on the main campus in Denver. The school addresses medical and social issues among the predominantly low-income and minority students, then creates a learning environment that allows children to fully participate in academic studies and catch up on lost ground due to absences caused by asthma and other chronic diseases. It is the only school of its kind, on a medical campus, in the nation. The Colorado Department of Education provides about one-third of the costs, and National Jewish Health funds the remaining two-thirds.
- **Denver TB Course.** For more than 50 years National Jewish Health has hosted the Denver TB Course twice every year. The course provides a broad overview of active and latent TB, including its epidemiology, transmission, pathogenesis, diagnosis, treatment and management. This course provides information to health care providers who will be responsible for the management and care of patients with tuberculosis.

Professional Education

- **Academic training.** National Jewish Health provides an active training program for medical students, interns, residents and post-graduate fellows in allergy, immunology, environmental and occupational health sciences, pulmonology, pediatrics and more.
- **Allied Health Conference.** For more than 20 years National Jewish Health Department of Nursing has hosted an annual conference for nurses, physician assistants and other allied health professionals to educate them about recent advances in care for patients with the respiratory, allergic and related diseases we treat.
- **Asthma and COPD Toolkit initiatives.** Since 2007, National Jewish Health faculty and staff have conducted a series of educational initiatives aimed at increasing health care providers' ability to assess and manage asthma and COPD.
- **Professional Education Seminars.** The Office of Professional Education regularly develops multi-city series of educational seminars at which our expert physicians educate health professionals on current topics concerning the diseases we treat, ranging from the safety and efficacy of inhaled corticosteroids in asthma, emerging medications in asthma, and current best practices in care of patients with interstitial lung disease. Online continuing medical education courses are also available on asthma, COPD, cystic fibrosis, obesity, lung cancer and other areas of expertise.

Goal:

Continue funding and support for key educational initiatives

Objectives/Metrics:

- 1) Improve access to educational programs for health care professionals and patients to improve respiratory care in the community.
- 2) Assess success by measuring numbers of programs and numbers of professionals and patients participating. Seek funding to support targeted expansion.

Tobacco Use and Cessation

National Jewish Health will meet the community need in tobacco cessation by providing Quitline programs for states, employee benefit plans and providers.

Tobacco cessation. National Jewish Health currently operates free, tobacco-cessation quitlines for 16 states, including Massachusetts, Pennsylvania, Ohio, Michigan and Colorado. National Jewish Health has also developed tobacco-cessation protocols for the especially impacted population of American Indians and LGBT communities.

Goal:

Continue operation of tobacco cessation programs, expanding into more states and offering unique services for especially impacted communities.

Objectives/Metrics:

- 1) Use behavior based interviewing and coaching techniques to improve the success rates of smoking cessation.
- 2) Expand on-line referrals to help more people access Quitlines.
- 3) Assess efforts, outcomes and need for existing programs and potential expansions for vulnerable populations. Seek funding to support targeted expansion.

Obesity

Sustainable Best Practices in Obesity: A Primary Care Initiative. Funded by a \$3.5 million grant from Colorado Health Foundation, this program offers professional education to sustainably improve clinical weight management practices at Metro Care Providers Network and Salud, both of which serve primarily low-income underserved populations.

Obesity in Asthma: Asthma disproportionately impacts obese individuals. Our studies have shown that obesity increases the odds of developing asthma by 50 percent. Unfortunately, the benefit of the main controller medication may be reduced by up to a half in f this population. National Jewish Health is supporting research efforts to better understand how to better treat this population.

Walk with a Doc: National Jewish Health will encourage physical fitness and health awareness with [a free monthly program called "Walk with a Doc."](#) At the walks, a National Jewish Health physician will lead a 10-minute discussion about an important health topic, then lead an easy 1-mile walk while answering participants' health questions.

Goal:

National Jewish will emphasize the importance of weight management and physical fitness in its research, patient care activities and community outreach efforts.

Objectives/Metrics:

- 1) Lower obesity rates in the community amongst the indigent population.
- 2) Evaluate opportunities to expand the reach of the Fitlogix program to broader populations. Seek additional funding for these efforts.
- 3) Begin a new program in cardiac wellness focused on nutrition, fitness and general health of patients in an effort to reduce the need for more advanced cardiac care. Measure patient participation levels and outcomes.

Barriers to Health Care

National Jewish Health will provide and support patient care programs focused on respiratory care. We will continue to schedule patients on a first come, first serve basis regardless of payor. We also will focus efforts on the following programs:

Comprehensive Respiratory Care Clinics

In partnership with Kaiser, National Jewish Health developed clinics dedicated to improving respiratory care of indigent patients. To meet the unique needs of the indigent population, National Jewish Health added additional resources to this program, including patient navigators, transportation assistance and dedicated practitioners. This clinic works in partnership with local primary care safety net clinics to ensure the smooth transition of patients from primary to specialty care. Physicians in the program also offer education to safety-net providers to ensure that patients are successfully treated in the optimal setting.

Telehealth

Many vulnerable patients live in areas with limited critical care expertise. National Jewish Health partners with hospitals throughout the country to provide critical care services electronically to ensure that geography is not a barrier to obtaining quality care.

Goal:

To improve respiratory care in vulnerable populations

Objectives/Metrics:

- 1) Measure patient and referring provider satisfaction;
- 2) Measure patient outcomes and cost of care to create effective, sustainable care for vulnerable populations.

Summary of Actions Taken Since Previous CHNA To Address Community Needs

Respiratory Disease

Research

National Jewish Health faculty advance scientific and medical knowledge about health and disease. They publish their findings in more than 300 peer-reviewed scientific journal articles per year. Recent highlights include:

Researchers demonstrated that tiotropium is an effective alternative to long-acting beta agonist medications, which have been associated with excess deaths among African Americans.

<https://www.nationaljewish.org/about/mediacenter/pressreleases/2015-news/asthma-add-on-therapies-compared-for-black-adults>

Researchers discovered that previous concerns about acetaminophen and asthma exacerbations is unfounded; Acetaminophen is safe and does not

cause additional exacerbations of asthma compared to ibuprofen for fever and mild pain relief.

<https://www.nationaljewish.org/about/mediacenter/pressreleases/2016-news/acetaminophen-safe-for-use-in-children-with-asthma>

Researchers launched a multi-center study to discover the best asthma therapy for African Americans, who suffer more urgent care visits, hospitalizations and deaths than other groups.

[https://www.nationaljewish.org/about/mediacenter/pressreleases/2014-news/study-seeks-better-asthma-therapy-for-african-americans-\(1\)](https://www.nationaljewish.org/about/mediacenter/pressreleases/2014-news/study-seeks-better-asthma-therapy-for-african-americans-(1))

Researchers reported better tools to diagnose COPD and identify millions of patients who would benefit from treatment. The study also countered the myth of the “healthy smoker,” adding to evidence against tobacco smoking.

<https://www.nationaljewish.org/about/mediacenter/pressreleases/2015-news/millions-of-smokers-may-have-undiagnosed-lung-disease>

Researchers identified osteoporosis as a common problem among males smokers, a group generally ignored in the discussion of osteoporosis. So alerted, male smokers can take steps to improve bone health and reduce fractures and disability.

<https://www.nationaljewish.org/about/mediacenter/pressreleases/2015-news/male-smokers-at-higher-risk-than-females-for-osteoporosis-fractures>

National Jewish Health secured \$11.5 million in grants from the Department of Defense to better understand lung disease that disproportionately affects veterans of Iraq and Afghanistan military campaigns. They will also test promising treatments.

[https://www.nationaljewish.org/about/mediacenter/pressreleases/2016-news/national-jewish-health-awarded-\\$11-5-million-in-department-of-defense-grant](https://www.nationaljewish.org/about/mediacenter/pressreleases/2016-news/national-jewish-health-awarded-$11-5-million-in-department-of-defense-grant)

Community Outreach

Free lung-testing – In 2014-2016, National Jewish Health specialists conducted 242 free community outreach events in and around Colorado, at which educational materials and free lung testing were offered. These events helped people better manage their lung disease and discover respiratory disease that would benefit from medical care.

The manager of our free lung-testing program also reviewed the demographic characteristics of people who attended events and identified new areas to better reach people who can benefit from free lung-testing.

Miners clinic. From 2014-2016, National Jewish Health also offered free lung testing and general physical examinations for 1,210 miners and ex-miners across Colorado. The clinic provided additional care, referrals, and assistance with disability claims for those discovered to have respiratory and other conditions that limit them.

Lung Line - Lung Line nurses provided free and informed answers via email to approximately 600 people per year with questions about lung disease and health. This information service helped people better understand lung disease and to seek appropriate care for breathing problems they have.

Lung cancer screening – National Jewish Health developed a comprehensive program to screen at-risk individuals for lung cancer, identify and follow patients who need future screening, automatically reach out to patients for timely follow-up screening, and refer potentially ill patients to appropriate care.

Patient Education

Classes - In 2015, 2,978 people attended one or more free classes at National Jewish Health, improving their knowledge of respiratory disease and ability to manage their disease.

Health Content - In 2015, more than 950,000 visitors viewed the educational content covering a wide range of respiratory, immune and related diseases.

Morgridge Academy – National Jewish Health continued providing free elementary education to about 90 elementary school children per year with chronic diseases that previously caused them to miss school and fall behind academically. The children also learned how to better manage their diseases through education at the school.

Professional Education

Academic Training - At any given time, about 70 residents and fellows are receiving training for careers in medicine at National Jewish Health.

Asthma and COPD Toolkit Initiatives - The program has so far trained caregivers in 150 primary care practices that serve medically underserved populations in eastern Colorado, southern Colorado and the Denver metro area.

Professional Education – In 2015 and 2016, the National Jewish Health Office of Professional Education provided accredited continuing medical education to 11,268 physicians and 19,666 allied health professionals.

Tobacco Use

In 2016, we engaged in more than 200,000 free phone conversations via the 12 state tobacco cessation quitlines, we operate. Callers ranged along the spectrum from curious to committed and successful quitters.

The National Jewish Health Tobacco Quitline has developed a program to specifically address the unique perspectives and needs of American Indians. The American Indian program launched in August 2015 and had 661 participants through the fall of 2016.

Program managers also conducted research and incorporated protocols to address members of the LGBT population.

Currently, research is underway to inform the development of protocols to address specific needs of smokers with mental health issues.

Obesity

In an effort to combat both adult and childhood obesity, National Jewish Health developed and tested a program called Fitlogix Family Challenge in 2015 and 2016. The program was designed to encourage families to address the four categories proven to improve health: nutrition, exercise, sleep and stress management.

Testing occurred with participants from:

- National Jewish Health
- Salvation Army
- Ohio State University

Methods to Monitor and Assess Needs and Successes of Programs to Address Community Health Needs

Community Input

National Jewish Health plans to work closely with clinical joint operating partner Saint Joseph Hospital on an online community survey and as a part of their Community Health Advisory Task Force session. Our goal will be to incorporate more questions and gather more information regarding specific National Jewish Health programs to address community health needs.

Quantitative Resources

National Jewish Health will review any updated statistics available regarding the health and health needs of people within our primary service area.

Outcomes

National Jewish Health will evaluate outcomes for patient care, research and education to identify successes, potential improvements and ongoing needs of our patients and professional partners.