



**Breathing Science is Life**.

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# Letter from the President and CEO

November 15, 2022

Dear Community Member,

Thank you for your interest in the health of our community. We appreciate your review of the many ways in which National Jewish Health serves those in need. In fact, we were originally founded in 1899 when we first opened our doors during the last respiratory pandemic to care for indigent tuberculosis patients. More than 123 years later, National Jewish Health is still focused on people in need and in early 2020 again began fighting a respiratory pandemic.

With the onset of COVID-19, we quickly transitioned our collective focus to address the needs of our communities. We redirected many of our daily operations and allocated resources to the diagnosis, treatment and research of COVID-19. We launched one of the first diagnostic tests, quickly opened acute treatment clinics for children and adults, treated those critically ill in intensive care units across the Denver metro area and throughout Colorado and other states, launched research to expand knowledge and opened mass vaccination clinics in our parking lots and at a number of community facilities.

Now, though the virus has not been resolved and continues to be an area we treat, we also are focused on meeting a wide variety of other community health needs. We care for patients from around Colorado and the nation who suffer from the most challenging respiratory and other diseases, including those with cardiac, gastrointestinal, immune and related illnesses. We are committed to caring for all patients on a first-come, first-served basis. Each year, we educate and care for up to 90 children with chronic diseases in our free K-8 school, the Morgridge Academy, located on our main Denver health campus. We conduct basic, translational and clinical research that brings new treatments to patients around the world. We have dozens of classes and support groups to educate our patients, as well as community members, about the diagnosis and management of their illnesses.

In 2022, we conducted an assessment of community health needs. We reviewed a wide range of published data, conducted focus groups with community members, consulted with health providers and queried experts within our own walls to understand better the community health needs and how we can help meet those needs.

These results are published here, in our 2022 Community Health Implementation Plan. We look forward to continuing our 123-year tradition of serving our community. We appreciate your interest and invite your feedback and guidance as we work together to meet the needs of our community.

Sincerely,

Michael Salem, MD President and CEO

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# **About National Jewish Health**

National Jewish Health is an academic, specialty care hospital, providing research, education and patient care. National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive and coordinated care.

National Jewish Health provides community benefit through its patient care, community outreach, patient and physician education and research. All patients, including Medicaid patients, are served on a first-come, first served basis, with no quotas or limits. National Jewish Health also operates the Morgridge Academy, a free K-8 school for students with chronic illnesses and medical conditions that keep them out of regular school programs. Morgridge Academy is the only school of its kind located on a medical campus.

With more than 20 practice locations across Colorado, National Jewish Health serves patients throughout the state. As a tertiary care, specialty center, National Jewish Health receives patient referrals from around the nation, many with conditions so difficult and baffling they could not be successfully treated anywhere else. National Jewish Health also has a joint operating agreement with Saint Joseph Hospital in Denver, a relationship that enables doctors from National Jewish Health to provide continuity of care for their patients when they require hospitalization. This relationship also taps the expertise of the pulmonologists, cardiologists and critical care specialists from National Jewish Health to serve all inpatients at Saint Joseph Hospital. We also collaborate with other hospitals, both locally and nationally, to focus on ways to elevate care and further research.

National Jewish Health faculty and staff conduct extensive basic, translational and clinical research that informs local and national communities on a wide variety of respiratory, immune and related diseases, laying the groundwork for discovery and improvement of care. National Jewish Health receives about \$57.9 million in grant revenue annually, primarily from the federal government, especially the National Institutes of Health (NIH) and is in the top 6% of institutions in the country funded by the NIH (in absolute dollars). This is a tremendous achievement for a specialty hospital/research center. National Jewish Health invests another \$20 million of its own funds each year into research.

Health care education is a central element of the National Jewish Health mission. From educating patients about how to better take care of themselves and manage their conditions to faculty-led trainings for medical students and postgraduate fellows, education is a primary focus. Additionally, National Jewish Health has a fully developed Professional Education Department that organizes seminars, webinars and hands-on workshops around the country to help health care professionals learn about respiratory-related illnesses and ultimately lead to better patient care.

# Responding to the Global COVID-19

Due to the COVID-19 pandemic in early 2020, National Jewish Health paused many planned initiatives to respond to the urgent community needs. Though unplanned, these community needs became the focus of much of the work for the community in the two-and-a-half years that followed.

Pandemic COVID-19 Diagnostic Testing. At the outset of the pandemic, National Jewish Health rapidly developed and launched tests for COVID-19, including tests for antibodies that indicate past infection. In addition to purchasing equipment to run the tests and developing protocols to obtain dependable, accurate results, National Jewish Health set up testing facilities in campus parking lots for drive-through testing. These programs continued to operate through 2021 and provided publicly available testing capabilities for walk-in patients and for those referred by a doctor. As the need for high quantities of testing lessened, particularly as more people were vaccinated, testing options were moved into regular clinic operations.

**COVID-19 Vaccination**. In December 2020, when the first vaccine received Emergency Use Authorization (EUA), National Jewish Health turned its attention to helping distribute vaccine as quickly and as effectively as possible with vaccination events taking place most weekends and serving as many as 3,500 people daily. Vaccination events were staffed entirely by volunteer health care providers and staff, with doctors, nurses and others pulling volunteer shifts in addition to their regular work hours to make the vaccine available.

Each variant that arises presents new challenges for testing and for vaccinations. National Jewish Health maintains the ability to ramp up again in each of these areas, should the need arise.

**COVID-19 Recovery**. Many COVID-19 patients continue to have persistent symptoms and ongoing functional impairment as they recover from the disease. National Jewish Health saw the need to provide ongoing care for these patients and their unique symptoms and quickly developed both adult and pediatric Respiratory Recovery Clinics, now operating as the **Center for Post-COVID Care and Recovery**. This program helps care for patients with functional impairment and persistent symptoms, helping them return to their usual state of health and usual function. The clinics continue to serve both existing National Jewish Health patients and the broader community. The clinics also focus on research to help increase understanding of the unique difficulties that many patients face when recovering from COVID.

**COVID-19 Research**. In addition to caring for patients, National Jewish Health researchers focused resources on understanding the SARS-CoV-2 virus, how it spreads, how to best detect it, how to treat COVID-19 disease and how it affects lung health. More than 80 research projects and clinical trials focused on COVID-19 continue.

# Community Health Needs Assessment

During 2021 and early 2022, National Jewish Health conducted a Community Health Needs Assessment that was approved by the National Jewish Health Board of Directors on June 29, 2022.

- **Community.** We defined the community geographically as comprising five counties (Denver, Adams, Arapahoe, Douglas and Jefferson) in which 70% of our patients live. As the only hospital in the nation focused on respiratory and related disease, we further defined our community as patients living in those counties who have or are at risk for respiratory disease.
- Assessing Health Needs. In order to assess the health needs of the community, we examined a
  wide variety of published health data, with a special eye on the social determinants of health.
  We also conducted two community focus groups (the most recent 2022 meeting recording can
  be found <a href="here">here</a>), surveyed several community health providers and gathered input from National
  Jewish Health experts on community health.
- Identified Health Needs. Following input and analysis from various published and human resources, we identified several community health needs. After more than two years of health care institutions focusing heavily on COVID-19, many other health concerns remain. We have divided them into two categories: respiratory health and social and behavioral health. The identified community health needs are:
  - Respiratory Health
    - Asthma
    - COVID-19 and Long COVID
    - Sleep Apnea
  - Social and Behavioral Health
    - Tobacco Use
    - Air Pollution
    - Education
    - Access to Specialty Care

# **Selected Areas of Focus**

Based on a combination of community needs and National Jewish Health capabilities, the following areas will be the primary focus of the National Jewish Health Community Health Needs Implementation Plan to address community health needs.

#### **Pediatric Asthma**

Rates of asthma, and especially rates of emergency room visits and hospitalizations among children living in the National Jewish Health community, along with universal mention of asthma among pediatric community health providers, suggests this is a large unmet community health need. National Jewish Health has the expertise, knowledge, capacity and tools to improve diagnosis and treatment of children with asthma.

#### Long COVID

Many COVID-19 patients continue to have persistent symptoms and ongoing functional impairment as they recover from the disease. National Jewish Health sees the need to provide ongoing care for these adult and pediatric patients and their unique symptoms that remain long after infection has subsided.

#### **Education**

Both providers and patients could benefit significantly from better understanding respiratory health and ways to protect it, from educating physicians about handling difficult respiratory cases, to educating patients about managing their disease and reducing exposure to respiratory irritants.

#### **Access to Specialty Care**

The use of our Comprehensive Respiratory Care Clinic and high rates of emergency care and hospitalizations for asthma and COPD indicate that uncontrolled respiratory disease continue to plague our community and that respiratory patients and their physicians need better access to the knowledge and expertise of National Jewish Health.

#### **Health Needs Not Addressed**

All of the identified significant health needs are important to National Jewish Health. However, the institution must focus its leadership, time and resources on the selected needs in order to make a difference in the community's health. The selected needs were ones to which National Jewish Health brings extraordinary expertise and capabilities not widely available in the community. Limitations of funding, staff and expertise at the hospital were considered barriers to effectively addressing the unselected needs. Unselected needs were also ones that could be addressed by other organizations.

# Implementation Strategy

# Pediatric Asthma

Goal: Serve more children with asthma.

## **Objectives**

- Improve access through telehealth. We are extending the availability of our physicians to engage with pediatric patients across the metro area and state through telehealth visits. This will allow more patients convenient access to our pediatric respiratory experts.
- **Grow availability through faculty and staff.** We plan to hire additional pediatric allergists and pulmonologists who will be able to care for more children.
- Expand asthma and wellness program. We continue to provide and grow our <a href="Pediatric Asthma Tune Up and Wellness Program">Pediatric Asthma Tune Up and Wellness Program</a>, an intensive program bringing asthma under control and improving wellness while increasing asthma knowledge, correcting inhaler technique, instilling asthma self-management skills and changing behaviors that lead to healthy lifestyle choices.
- **Partners.** We have an agreement with **Rocky Mountain Hospital for Children** (RMHC), a part of the HealthOne system, to use our services to provide expanded pediatric pulmonary care for RMHC patients, leveraging our specialty expertise to reach more children.

#### Measurement

• Track numbers of patient and geographic expansion within target areas.

#### Goal: Provide better care for children with asthma.

## **Objectives**

- Clinical trials of new medications. National Jewish Health consistently conducts clinical trials
  of experimental medications for pediatric asthma patients, many of which lead to approvals
  for new medications for treating pediatric asthma. This practice will continue in the
  coming years.
- Training providers. The National Jewish Health for Kids Asthma Toolkit Bootcamp program has trained general practitioners in Colorado to better diagnose and manage pediatric and adult asthma in communities that are under-resourced. The program has been taken to La Plata, Chaffee, Custer, Fremont, Huerfano, Las Animas, Lake, Park, Pueblo, Teller and El Paso Counties in Colorado, as well as provided in the Denver area. We engage additional counties throughout the state to expand provider education.

#### Measurement

Track research studies and published findings. Document grants and research.

# Long COVID

# Goal: Provide care for more patients suffering from Long COVID.

## **Objectives**

- Intervene long COVID treatment sooner. National Jewish Health will provide comprehensive care for those with Long COVID symptoms through the COVID Assessment Program.
- Expand long COVID patient care. We are extending the number of physicians and nursing staff treating patients with Long COVID through our adult and pediatric <u>Center for Post-COVID Care</u> and <u>Recovery</u>.
- Grow knowledge of Long COVID through research. National Jewish Health has more than 80 projects related COVID-19. Many research projects are currently underway to investigate safe treatments, disease transmission, severe disease development, the relationship between COVID and food allergies and more. We will continue leading respiratory research to contribute to the body of COVID knowledge and to protect and improve the health of patients.

#### Measurement

- Track number of patients and geographic expansion within target areas.
- Track COVID-19 research studies and published findings. Document grants and research.

# Education

Goal: Educate patients and their families on how to manage asthma and other respiratory diseases.

## Objectives:

- Morgridge Academy. National Jewish Health operates a free, K-8 school for up to 90 chronically ill children on the organization's main campus in Denver. The school teaches predominantly low-income and minority students in the community how to manage their diseases, 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. Through an active marketing campaign and outreach efforts, we will work to expand the school to serve more children with respiratory and other chronic diseases.
- Health content. National Jewish Health provides a robust library of health content, authored
  exclusively by experts at National Jewish Health, both in print and online. The educational
  material produced ranges from more than 200 MedFacts, TestFacts and Understanding booklets
  to dozens of instructional videos on topics such as inhaler technique and "What is COPD?" We
  will continue to expand our consumer-facing health content, with special focus on increasing
  our library of educational videos.
- Patient education classes and support groups. National Jewish Health will continue to focus on education and support of patients with chronic illnesses and will strive to expand access to patient education classes and support groups.

#### Measurement

- Document number of students reached and success rates within the program through standard academic measures.
- Document number of patients reached.

## **Goal: Educate health care professionals**

# **Objectives**

- **Physician training.** National Jewish Health provides active training programs for medical students, interns, residents and postgraduate fellows in allergy, immunology, environmental and occupational health sciences, pulmonology, pediatrics and more. At any given time, about 70 residents and fellows are receiving training at National Jewish Health for future careers in medicine. National Jewish Health will extend this training with partner Saint Joseph Hospital.
- Continuing medical education. The Office of Professional Education regularly develops multicity 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. The Office will also expand online continuing
  medical education courses on asthma, cardiology, COPD, cystic fibrosis, obesity, lung cancer and
  other areas of expertise.
- **Conference presentations.** National Jewish Health faculty educate their peers about the care of patients at dozens of conferences throughout the year.

#### Measurement

• Assess how many providers reached and programs held within these areas.

# Access to Specialty Care

## **Goal: Expand capacity to see patients**

## **Objectives**

- Immediate Care Center. Demand for National Jewish Health care has expanded tremendously in recent years, including access for acute respiratory and related illness. We also have identified a need for specialized immediate care in our community. To address this need we have very recently opened an immediate care center for the community and our patients. Through this Center we are able to triage acutely sick patients, treat them or transport them to inpatient or emergency services if needed.
- **Faculty and staff growth.** We anticipate continued growth in our faculty and staff so that we have the human resources to see more specialty care patients.
- More locations. We will work with Saint Joseph Hospital, a part of the SCL Health system (soon
  to be known as part of Intermountain Healthcare), and Rocky Mountain Hospital for Children,
  a part of the HealthOne system, to deliver National Jewish Health expertise at more locations
  across Colorado.

#### Measurement

- We will assess success by existing patient and community use of our Immediate Care Center.
- We will develop individual measures for programs with our partners and as we identify other new programs.

# Goal: Make it easier for outside health care providers to work with National Jewish Health and to refer patients

# Objectives

- Operational and technology improvements. We are planning several operational and technology improvements that will make it easier for outside health care providers to consult and refer to National Jewish Health physicians. These include:
  - Changing our electronic health records to the Epic® system, which is in many ways an
    industry standard system, and which will allow a more efficient and superior exchange
    of health information about and for patients. This transition will be completed in
    spring 2023.
  - We have prioritized completion of upgrades of our audiovisual system, which will facilitate more effective education sessions as well as the sharing of information internally and with collaborating external institutions.

#### Measurement

- Successful initial installation of Epic platform.
- Monitor use and fully access for benefits to patients.

## **Goal: Additional Specialty Services**

# **Objectives**

• **New and expanded programs.** We are expanding a new program for cardio-oncology, pediatric wellness and existing programs in pulmonary hypertension and scleroderma. Additionally, we are expanding our radiology capabilities by adding new state-of-the-art MRI and CT equipment. This will enable us to serve better the high demand for imaging services.

#### Measurement

• Develop appropriate goals as programs are introduced.

# Additional National Jewish Health Services Provided to the Community

In addition to the Goals and Objectives outlined above, we have numerous other programs we will continue to provide to meet the community's health needs. These include:

**Free lung testing.** National Jewish Health staff participates in free community outreach events in and around Colorado, at which educational materials and free lung screenings are offered. Lung testing can help detect lung disease that needs medical attention. This program was largely paused during the COVID-19 pandemic. We will monitor the environment to determine when we can resume these outreach efforts in the coming year or develop new offerings.

**Tobacco cessation.** National Jewish Health currently operates the tobacco-cessation **QuitLines** for 21 states, including for Colorado. The National Jewish Health "Health Initiatives" department, which manages these QuitLines, also works to develop tobacco-cessation protocols for especially impacted populations and offers a wide array of educational materials. Targeted programs for groups such as American Indians and the LGBTQ community have been successful.

**Addressing the vaping epidemic.** We have researched and developed a free QuitLine tailored specifically for teens, especially those who want to quit e-cigarettes. We have ongoing research into the biological and behavioral aspects of e-cigarette use. Findings reported so far highlight negative impacts of e-cigarette vapor on the immune system and that e-cigarette use among tobacco smokers does not promote reduction of tobacco use for most smokers.

**Clinical and Translational Research Center.** Funded by the National Institutes of Health, the center provides an infrastructure for community-based research in collaboration with University of Colorado.

**Lung Line.** A free information service for health care consumers provided by National Jewish Health, Lung Line 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 have provided answers to more than 1 million callers.

**The Miners Clinic of Colorado.** This program provides nationally recognized medical screening, diagnosis, treatment, pulmonary rehabilitation, education, counseling and prevention services through free screening programs held at various locations around the state. This program was paused during the pandemic but has resumed in 2022.

**The Black Lung Clinic.** This clinic offers 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 and Casper, Wyoming. This program was paused during the pandemic and has resumed in 2022.

The Radiation Exposure Screening and Education Program (RESEP) Clinics. This program helps thousands of workers who were involved in the mining, milling and transporting uranium used to produce atomic weapons for the United States. It provides screening for diseases related to radiation exposure, referrals for patients needing further diagnostic or treatment procedures and help with documenting claims under RECA.