DRAFT FY’21 COMMUNITY BENEFITS REPORT

June 30th, 2022

Submitted to AG: 6/30/2022
Approved by AG: 10/27/2022
DRAFT FY’21 COMMUNITY BENEFITS REPORT
DANA-FARBER CANCER INSTITUTE
TABLE OF CONTENTS

June 30th, 2022

I. About Dana-Farber Cancer Institute.................................................................3
II. Dana-Farber Cancer Institute Community Benefits Mission Statement..............4
III. Community Benefits Planning Mechanisms..................................................5
IV. Community Health Needs Assessment and Implementation Plan......................8
V. Community Benefits Programs.........................................................................10
   A. Education, Outreach, Screening and Advocacy.............................................10
   B. Clinical Access & Health Equity Initiative..................................................17
   C. Cancer Care Equity Program.....................................................................18
   D. The Center for Community-Based Research.............................................22
   E. NCI-Sponsored Health Disparities Activities.............................................26
   F. Workforce Development and Community Programs.....................................29
   G. Services to Patients, Families and Communities..........................................31
VI. Community Benefits Expenditures..................................................................33
VII. Future Initiatives ............................................................................................34
VIII. Review/Evaluation of Community Benefits Plan..........................................35
I. ABOUT DANA-FARBER CANCER INSTITUTE

Since its founding in 1947, Dana-Farber Cancer Institute (Dana-Farber) has been committed to providing those afflicted with cancer with the best treatment available while simultaneously developing tomorrow's cures through cutting-edge research. The Institute's mission is to provide expert, compassionate care to children and adults while advancing the understanding, diagnosis, treatment, cure, and prevention of cancer and related diseases.

Dana-Farber is internationally renowned for its blending of research and clinical excellence, bringing novel therapies that prove beneficial and safe in the laboratory setting into clinical use as rapidly as possible for our patients. As an affiliate of Harvard Medical School and a Comprehensive Cancer Center designated by the National Cancer Institute, the Institute provides training for new generations of physicians and scientists, designs programs that promote public health particularly among high-risk and underserved populations and disseminates innovative patient therapies and scientific discoveries to our target community across the United States and throughout the world.

Notably, Dana-Farber embraces the “total patient care” philosophy of its founder, Dr. Sidney Farber, ensuring that patients’ psychological, family, and spiritual needs, as well as their medical needs, are met before, during, and after treatment. Its equal commitment to research and patient care is unique among cancer institutions, and this 50-50 balance results in extraordinary partnerships between laboratory scientists and clinicians. Reinforcing this exceptional model, Dana-Farber has been ranked the number one cancer hospital in New England by U.S. News and World Report for 17 consecutive years and is the only cancer center in the country ranked in the top four for both adult and pediatric cancer programs.

In addition to providing expert clinical care, Dana-Farber is committed to educating the community and raising awareness about the importance of cancer prevention, outreach, screening, early detection, and clinical trials. To this end, Dana-Farber’s Community Benefits Office provides education and screening for breast, cervical, and skin cancer throughout the greater Boston area; offers a variety of support services and resources to reduce access barriers to healthcare; and conducts a broad scope of evidence-based programs through its collaborative work in local, low-income neighborhoods throughout greater Boston.
II. COMMUNITY BENEFITS MISSION STATEMENT

In 1995, the Dana-Farber Cancer Institute Board of Trustees formally adopted a Community Benefits Mission Statement. This mission statement affirms the Institute’s commitment to support community-based programs, participate in outreach activities aimed at the reduction of cancer incidence, morbidity and mortality, and conduct community-based research.

Dana-Farber Cancer Institute’s community outreach mission contributes to the Institute’s goal of advancing the understanding, diagnosis, care, treatment, cure, and prevention of cancer and related diseases by:

- Ensuring that patients from diverse backgrounds receive equitable cancer care and treatment, including but not limited to, education about the importance of clinical trials participation.
- Establishing quantifiable, evidence-based, and sustainable programs in cancer prevention focusing on at-risk, underserved, and diverse populations.
- Providing expertise in cancer care to city and state health departments, community-based agencies and health care providers.

Updated: July 2009
Revised: January 1996
Approved: September 1995
III. COMMUNITY BENEFITS PLANNING MECHANISMS

The Dana-Farber Cancer Institute’s **Board of Trustees Community Programs Committee** oversees the development and implementation of Dana-Farber’s Community Benefits Plan. In their oversight capacity, Committee members provide the hospital’s Community Benefits staff with guidance and leadership around program initiatives and monitor the completion of the Community Health Needs Assessment (“CHNA”) and Community Health Implementation Plan (“CHIP”). Additionally, the Committee provides oversight to the hospital’s Community Benefits External Advisory Committee.

**Dana-Farber Cancer Institute’s Community Benefits External Advisory Committee** was established in 1997 and consists of representatives from various constituencies who share DFCI’s commitment to reducing disparities in cancer care, education, treatment and the social determinants of health. The External Advisory Committee is responsible for overseeing the development and implementation of specific Community Benefits initiatives and programs, including the Institute’s Determination of Need Community Health Initiative funding process.

The **Dana-Farber Community Benefits Internal Advisory Committee** provides input and shares responsibility for the implementation of key initiatives in the overall Community Benefits Plan.

Dana-Farber Community Benefits staff also participate in community outreach and planning activities with the following organizations:

**Massachusetts Department of Public Health (MDPH):** Through ongoing partnerships with MDPH’s Chronic Disease Prevention and Control Unit, programs in colorectal, prostate, skin and women’s cancers have been established with MDPH and other community agencies across the Commonwealth.

**Boston Public Health Commission (BPHC):** Dana-Farber works closely with the BPHC to implement and sustain initiatives that address the need for cancer prevention education, screening services, and survivorship education. BPHC is also an active member of Dana-Farber’s Community Benefits External Advisory Committee and plays a key leadership role as the co-convener of the Boston Breast Cancer Equity Coalition.

**The Conference of Boston Teaching Hospitals (COBTH):** Dana-Farber is an active member of COBTH, a coalition of thirteen Boston-area teaching hospitals who collaborate on community outreach and planning activities.

**Boston CHNA/CHIP Collaborative:** Dana-Farber is a founding member of the Boston CHNA/CHIP Collaborative, a large multi-sector effort launched in September 2018 to conduct the first citywide Community Health Needs Assessment and Implementation Plan (CHNA/CHIP). Dana-Farber also serves as the co-chair of the Collaborative and previously co-chaired the Community Engagement Work Group in collaboration with BPHC.
**Cancer Community Health Needs Assessment (CHNA) Partners:** Dana-Farber worked closely with Boston Medical Center (BMC) in 2019 to develop a cancer-specific CHNA report that provides a deeper analysis of the needs and experiences of cancer patients, survivors, and caregivers across the cancer continuum. Dana-Farber also worked closely with BMC, Enhance Asian Community on Health (EACH), BPHC, and Whittier Street Health Center (WSHC) to implement community engagement efforts for the Cancer CHNA Report.

**Union Capital Boston (UCB):** Dana-Farber is actively involved in a partnership initiative with UCB focused on promoting cancer prevention and survivorship and strengthening the work of Dana-Farber’s Community Benefits Office. Dana-Farber also worked closely with UCB to carry out focus groups with cancer patients, survivors, and caregivers for Dana-Farber’s 2019 Cancer CHNA.

**Boston Breast Cancer Equity Coalition:** Launched in 2014, this cross-sector coalition seeks to eliminate the differences in breast cancer care and outcomes by promoting equity and excellence in care among women of all racial/ethnic groups in the City of Boston.

**Madison Park Development Corporation (MPDC):** Dana-Farber has a longstanding history of collaboration with MPDC and continues to partner with MPDC to support health equity and wellness initiatives, including providing health and wellness programming to MPDC residents.

**Massachusetts HPV Coalition:** Dana-Farber continues to partner with Team Maureen to lead the statewide HPV Coalition and identify opportunities for greatest impact in increasing statewide vaccination rates and knowledge around HPV-related cancers. Dana-Farber also continues to play an active role in supporting the annual HPV-Related Cancer Summit.

**Tobacco Free Mass Coalition:** As a member of the Tobacco Free Mass Coalition, Dana-Farber supports the development of policies that aim to reduce youth access to tobacco, prevent nicotine addiction, and increase tobacco control funding.

**Dana-Farber’s Center for Community-Based Research (CCBR):** CCBR conducts cancer prevention research with the goal of developing effective intervention strategies to reduce the risk of cancer. CCBR works extensively with neighborhood health centers, low-income housing, faith-based organizations, health departments and community-based organizations.

**Dana-Farber/Harvard Cancer Center for Cancer Equity & Engagement (DF/HCC CCEE):** Dana-Farber and the DF/HCC continue to collaborate and develop programming in a variety of areas aimed at reducing the unequal burden of cancer in partnership with the Faith-Based Cancer Disparities Network and other community-based organizations. Early in its history, the consortium created the Initiative to Eliminate Cancer Disparities (IECD) to maximize the acceptance and desirability of cancer research in communities that have traditionally experienced significant disparities in cancer care. The DF/HCC IECD is also the convener of the Patient Navigator Network (PNN).
**Prostate Health Education Network (PHEN):** Dana-Farber and PHEN partner on education, outreach and advocacy efforts and together sustain a prostate cancer support group for men of color that meets monthly at Dana-Farber.

To ensure **ADA compliance**, the Community Benefits Office is committed to providing access to all individuals interested in attending cancer education programs and makes every reasonable effort to accommodate all participants.
IV. 2020-2023 COMMUNITY HEALTH NEEDS ASSESSMENT & IMPLEMENTATION PLAN

In 2019, Dana-Farber’s Board of Trustees approved the 2020-2023 Cancer-Focused Community Health Needs Assessment (CHNA) and Implementation Plan to ensure that our collective efforts have the maximum possible impact within the Institute’s priority neighborhoods. Dana-Farber’s Community Benefits Office retained Health Resources in Action (HRiA), a non-profit public health consultancy organization in Boston, to undertake a comprehensive assessment of the health needs within our priority communities, including how those needs are currently being addressed and where there are opportunities to address these needs in the future.

Dana-Farber’s 2020-2023 Cancer CHNA builds off previous efforts to gain a greater understanding of the health issues facing Boston residents across the continuum of cancer care, with a focus on the City of Boston and Dana-Farber’s priority neighborhoods for Community Benefits work – Dorchester, Roxbury, Mission Hill, Jamaica Plain, and Mattapan. The Cancer CHNA integrates key findings from the citywide CHNA and delves more deeply into the needs and experiences of cancer patients, survivors, and caregivers throughout the cancer continuum, exploring behaviors and health outcomes around prevention, screening, treatment, and survivorship using social determinants of health and health equity frameworks.

This effort not only complies with the IRS CHNA requirement under the Internal Revenue Code Section 501 (r) (3) (A) (iii) and the Massachusetts Attorney General’s mandates for conducting community health needs assessments but aligns with Dana-Farber’s approach of utilizing data to inform its initiatives and strengthen collaborative partnerships in Dana-Farber’s surrounding communities and satellite locations.

The CHNA findings have validated the current community outreach work that Dana-Farber has undertaken as well as helped guide the focus of future initiatives. The following list highlights Dana-Farber’s prioritized areas of focus in addressing the identified community health needs.

1) **Cancer Burden:** Cancer continues to be the leading cause of death in Boston and Massachusetts. Breast and prostate cancers are diagnosed most frequently, and mortality rates for these diseases have not improved. The CHNA findings indicate that Black men in Boston continue to experience the highest rates of overall cancer mortality and premature cancer mortality (death before age 65). Moreover, Black men under age 65 die from nearly all cancers at significantly higher rates than White men. Similar to the 2016 CHNA, compared to White men, Black men have more than double the rate of death from prostate cancer, as well as dying from prostate cancer before age 65. The data reflects that Black women under age 65 are significantly more likely to die from all cancers combined compared to White women. There are significant disparities in cancer mortality across Boston neighborhoods, including Hyde Park, Dorchester, East Boston, and Fenway, warranting further investigation. Additional disparities are seen across other groups:

- The incidence of all cancers has increased significantly among Asian and Black women over time.
- Breast cancer incidence rates have risen significantly among Asian women over time.
• Asian men have significantly higher liver cancer incidence and premature (<65 years) liver cancer mortality rates compared to White men.
• Significant disparities in cancer screening and risk behaviors exist among select subgroups, including immigrant, low-income and unemployed residents.

2) **Access Barriers:** Across the continuum of cancer care, barriers to accessing cancer services include confusion about screening guidelines, cost of treatment, maintaining employment, transportation, and limited opportunities to participate in clinical trials. Numerous cancer patients and survivors remarked that having cancer depleted their resources. Cost challenges are compounded by the fact that cancer patients may be unable to work full time (or at all) during or even after treatment. Language barriers and lack of cultural competency among providers as well as institutional racism were also mentioned as challenges for patients of color and immigrants. The CHNA findings underscore the need for greater engagement of primary care providers and assistance navigating the cancer care system from screening through survivorship.

3) **Cancer Survivorship:** Cancer survivors experienced a significant drop-off in support following treatment and expressed a need for increased post-treatment support for issues such as managing medication needs and long-term side effects, feelings of isolation, fear of cancer recurrence, rejoining the workforce, and “normalizing” life after cancer. In addition, focus group participants emphasized the importance of cancer-specific support groups and expressed the need for more groups in different languages serving different populations, as well as support groups facilitated by cancer survivors and people of color.

4) **Social Determinants of Health & Primary Prevention:** Dana-Farber’s priority neighborhoods are dealing disproportionately with challenging situations related to the upstream social and economic factors that impact health. When Boston CHNA respondents were asked to identify the most important concerns in their neighborhood that shape their community’s health, housing quality or affordability and alcohol/drug abuse emerged as the top priorities, followed by mental health and community violence. In addition to poverty and high housing costs that force individuals to prioritize their spending, a lack of affordable physical activity opportunities and access to nutritious food were described as barriers to healthy living. Lower income neighborhoods were described as having fewer affordable gyms, grocery stores, and more fast food and convenience stores compared to more affluent areas.

5) **Community Strengths:** While residents living in Dana-Farber’s priority neighborhoods face significant socioeconomic challenges, these communities possess numerous assets and strengths including strong neighborhood cohesion, faith-based networks, diversity, community resilience, and numerous community-based organizations/resources. Boston CHNA participants also noted proximity of health care services and educational institutions, diversity and multiculturalism, and engaged residents as key strengths that can be leveraged in future efforts.
V. COMMUNITY BENEFITS PROGRAMS

A. Education, Outreach, Screening and Advocacy

Community outreach at Dana-Farber focuses on increasing awareness about the importance of cancer prevention, outreach, screening, early detection and clinical trials education. Examples of prevention programs are:

1. Dana-Farber’s Mammography Van (DFMV)

Dana-Farber’s Mammography Van was launched as a joint venture between the City of Boston and Dana-Farber in April 2002. The DFMV continues to be the only mobile mammography program in the Commonwealth of Massachusetts. It provides digital screening mammograms and breast health education to women 40 years of age and older. Ultimately, it aims to decrease breast cancer morbidity and mortality among medically underserved women and increase survival rates for those diagnosed with breast cancer.

Priority populations include women who are low-income, elderly, immigrants, non-English speaking, people of color, and other minority backgrounds. Priority neighborhoods in Boston include Roxbury, Jamaica Plain, Dorchester and Mission Hill. In partnership with 20 community-based organizations and neighborhood health centers, such as The Dimock Center and Charles River Community Health, the Van is on the road three days per week year-round. Dana-Farber continues to partner with community-based organizations serving diverse racial/ethnic populations, such as the Latino Health Insurance Program, to increase the number of Latina, Asian, and other racial/ethnic minority patients screened on the van.

Offering digital screening mammograms on the van provides an entry point into the larger health care system. Women who lack a primary care provider are referred to one of our partner neighborhood health centers for assistance in acquiring health services, including health insurance enrollment and an appointment with a primary care provider, as well as a referral for follow-up care if an abnormality is identified. The DFMV provides an effective way for women to continually monitor their breast health and to stay connected to the health care system at large.

COVID-19 Impact

In April 2021, DFCI obtained its new mammography van, which has state-of-the-art technology (digital breast tomosynthesis), a private reception area, and real-time image transmission. Upon receiving the van, DFCI requested from the manufacturer some modifications to ensure safety and improve the patient experience during the pandemic. As a result, the mobile mammography service was suspended from July 2 – August 30, 2021. Administration worked with facilities and purchasing to install barriers at the check-in desks and procure precaution supplies. Additional safety measures include:

- Screening scheduled patients for viral symptoms and exposure twice:
  - Up to 72 hours prior to appointments
  - Upon arrival for appointments
- Providing patients with surgical/procedural masks prior to entering the clinics
- Reducing the van schedule from 40 to 20 appointment slots
Because of limited space, only one patient is allowed on the van at a time.

FY21 VAN HIGHLIGHTS

- **Patient Volume:** In FY21, Dana-Farber’s Mammography Van provided 1,140 mammograms. Since program inception in April 2002, Dana-Farber’s Mammography Van has provided more than 50,000 mammograms to more than 21,500 unique patients.

- **Race/Ethnicity:** The largest racial and ethnic groups seen on the van in FY21 were White women and those who identified as “Other” (i.e., not identifying as Black, White, Asian, American Indian, or Pacific Islander). Of all van patients with complete self-reported race/ethnicity data available (68.8%), 17.2% self-identified as being Black, 21.2% as White, 25.6% as Other and 4.3% as Asian.

- **Primary Language:** Over the past year, 60.5% of van patients spoke a first language other than English. In FY21, Dana-Farber’s Mammography Van patients self-reported a total of 17 different languages. The top three primary languages after English (39.5%) were Spanish (39.3%), Portuguese Creole (6.1%), and Portuguese (5.8%).

- **Boston Residence:** Over 42% of van patients hail from Boston and 57.6% from the rest of Massachusetts. The Boston neighborhoods represented include Dorchester, Mattapan, Roxbury, Allston, and Jamaica Plain.

- **Breast Cancer Diagnoses:** 166 breast cancer diagnoses have been confirmed for patients originally screened on Dana-Farber’s Mammography Van since the program’s inception. For every 1,000 mammograms conducted on the van, three women are diagnosed with breast cancer (0.32% diagnosed).

- **Re-screening Rates:** 49% of patients screened on the van were returnees from prior years; 18.5% of van patients returned for re-screening in a “timely” manner (10-18 months from last screen).

- **Baseline Mammograms:** 9% of van patients served this year had their baseline (first-ever) mammograms on the van.

- **Follow-Up Rate:** 159 patients (14%) screened on the van in the past year received a recommendation for follow-up.

- **Insurance Status:** Over the past year, the insurance status of van patients was 58.9% publicly insured (Medicare, MassHealth, Health Safety Net, etc.) and 41.1% privately insured.

**Dana-Farber Cancer Institute at Whittier Street Health Center Mammography Suite:**

Building on their shared commitment to caring for community residents, Dana-Farber opened a mammography suite within the Whittier Street Health Center, located in Boston's Roxbury neighborhood in 2013. Open to all residents, the mammography suite, which is situated on the clinic's first floor, is staffed with skilled, registered mammography technologists and additional members of the care team focused on reducing health care disparities. The suite uses 3D tomosynthesis mammography, which is interpreted by board-certified radiologists with extensive experience in mammography.
FY21 MAMMOGRAPHY SUITE HIGHLIGHTS

- **Patient Volume:** In FY21, the mammography suite provided 634 mammograms. Since program inception in October 2013, the mammography suite has provided more than 5,000 mammograms to more than 2,400 unique patients.

- **Breast Cancer Diagnoses:** For every 1,000 mammograms conducted at the suite, approximately three women are diagnosed with breast cancer (0.3%). Fourteen breast cancer diagnoses have been confirmed for patients originally screened at the mammography suite since program inception.

- **Re-screening rates:** 55.7% of patients screened at the suite were returnees from prior years; 32.8% of suite patients returned for re-screening within 10-18 months from the last screening appointment.

- **Baseline Mammograms:** 8.2% of suite patients served this year received their baseline (first ever) mammogram at the suite.

- **Follow-up Rate:** 11.4%, or 72 patients screened at the suite this past year received a recommendation for follow-up.
2. **Sun Safety Education and Screening Program**

The Sun Safety Education and Screening Program is a comprehensive initiative that provides free skin cancer prevention education and screening to community residents and those at highest risk for skin cancer. The purpose of this program is to reduce the incidence and prevalence of skin cancer, one of the most common forms of cancer. The American Academy of Dermatology estimates that one in five Americans will develop skin cancer in their lifetime.

**Sun Safety Education:**

The program utilizes an evidence-based curriculum developed by the Dana-Farber Center for Community-Based Research, which includes an informative quiz and biometric demonstrations of skin damage resulting from unprotected sun exposure.

**Skin Cancer Screening:**

Free skin cancer screenings are provided aboard the Blum Van along with ten board-certified dermatologists from the Brigham and Women’s Hospital Dermatology Department. The Blum van is a 39-foot mobile clinic which contains a 15-person classroom and an exam room for screenings and private consultations. When clinically appropriate, dermatologists make biopsy recommendations related to presumptive diagnosis of different skin cancers, including basal cell carcinoma, squamous cell carcinoma, and melanoma. Sun safety program staff emphasizes the importance of additional follow-up for suspected abnormalities and spots of concern. Participants seen aboard the Blum Van are prioritized when scheduling an appointment at Brigham and Women’s Hospital dermatology department.

During the summer, the Skin Cancer Screening Program provided services at four local public beaches: Nantasket Beach, Revere Beach, Nahant Beach, and Wollaston Beach. The target population at these events includes beach goers, lifeguards, outdoor parks and recreation workers, and community residents; in short, those at highest risk. The Blum Van also visited five private host sites: Quincy Senior Center, Waltham Fire Department, IBA Boston, Westwood Council on Aging, and the Quincy Fire Department. Due to city and statewide COVID-19 restrictions, each event required communication and compliance with the city’s health department and/or event coordinator. DFCI developed a COVID-19 Protocol to ensure that adequate health and safety measures were followed at each screening event. All participants were screened under a tent outside rather than inside of the Blum Van, with the exception of few participants that required more privacy. These adjustments allowed for all 11 screening events in 2021 to take place in-person rather than virtually.

**FY21 HIGHLIGHTS**

- In FY 21, 11 in-person Sun Safety screening events were held with added health and safety measures and approval from local health departments.
- 484 participants were screened by a dermatologist and 133 people were referred for follow-up appointments.
• 65 participants were referred for a biopsy. The majority of biopsy recommendations were due to a presumptive diagnosis of basal cell carcinoma, squamous cell carcinoma or melanoma.

3. Tobacco Treatment Program at Whittier Street Health Center

Smoking is the most preventable cause of death and disease in the United States and is responsible for 480,000 deaths each year. The Tobacco Treatment Program (TTP) provides individual tobacco treatment counseling to patients of Whittier Street Health Center (WSHC) in Roxbury, a diverse and medically complex patient population which includes many patients living with poverty, mental health issues, substance abuse, and multiple chronic illnesses. The program aims to reduce the risk of many cancers associated with tobacco use, including lung, mouth, throat, bladder, pancreas, cervix, and colon cancers.

Through Dana-Farber’s partnership with WSHC, patients are referred by their primary care provider to the Tobacco Treatment Program, which provides support to patients in their tobacco treatment efforts as well as assisting them in reducing their exposures to smoking environments (e.g. second or third-hand smoke). Upon receipt of each referral, the tobacco treatment counselor attempts to contact the patient to offer tobacco cessation support. Patients who elect to participate in the program receive individual counseling, which can be provided in English or Spanish. Patients participating in the program receive information regarding the harms of tobacco use, the benefits of quitting, and the health impacts linked to tobacco use and cancers. The tobacco treatment counselor also provides follow-up support to patients who are ready to pursue tobacco cessation treatment and communicates with referring providers to request prescriptions for nicotine replacement therapy and other tobacco cessation medications. The tobacco treatment counselor and WSHC staff also collaborate to provide group education sessions on tobacco use to encourage participants to talk to their health care provider about quitting.

FY21 HIGHLIGHTS

• In FY21, the Tobacco Treatment Program received 96 referrals and provided a total of 125 individual tobacco cessation counseling sessions to 41 patients.
• 36 participants were able to reduce their total number of cigarettes smoked per day, and 10 of these reported being able to quit completely.
• In FY21 the TTP received a grant from Friends of Dana-Farber Cancer Institute. The funds were used to provide financial incentives for patients enrolled in the TTP smoking cessation program, and for participants to attend more sessions in order to help more vulnerable individuals reduce their tobacco usage and quit smoking.
• Due to the COVID-19 pandemic, the TTP pivoted from in-person sessions to telehealth counseling.
4. HPV and Associated Cancer Outreach Program

Dana-Farber's HPV and Related Cancers Outreach Program is a cancer prevention initiative that aims to reduce the HPV-Related Cancer burden in Massachusetts. The outreach program is designed to address common barriers to vaccination by providing medically accurate and culturally appropriate information and access to health resources. Dana-Farber’s curriculum has been proven to increase medically accurate knowledge of HPV and related cancers, intention to be fully vaccinated, and comfort level discussing the topic with others. The curriculum was developed in partnership with Dana-Farber/Harvard Cancer Center and reviewed and approved by Pediatric Oncology staff. The curriculum is delivered as a workshop and is tailored to be culturally appropriate for the audience, including: young adults, parents and guardians, community health and education professionals, and medical and dental professionals.

Massachusetts HPV Coalition

Dana-Farber is a founding member of the MA Coalition for HPV/HPV-Related Cancer Awareness and continues to partner with Team Maureen to lead the Coalitions’ efforts. This includes organizing the Coalition’s Oral HPV Task Force, Health Equity Work Group, and Cervical Cancer Work Group, which bring together subject-area experts, providers, and community advocates to collaborate on outreach and research.

- This year, the Coalition’s Oral HPV Task Force launched the second edition of their Dental Toolkit, which includes original provider and patient-facing education materials. It is available for free online in seven languages.
- Dana-Farber continues to play an active role in supporting the annual HPV-Related Cancer Summit. Approximately 105 medical and dental providers, public health professionals, and community advocates attended the FY21 educational event on the latest HPV research and best practices.
- Dana-Farber helps Team Maureen manage the Coalition’s website, social media, and monthly newsletter. By supporting the Coalition’s growth, Dana-Farber is able to facilitate collaboration and increase the impact of HPV-related cancer efforts across the state.
5. Community Outreach and Partnerships

Dana-Farber’s Community Benefits work is conducted through collaborations with internal departments and numerous community partners, including the Boston Public Health Commission, community health centers, Union Capital Boston (UCB) and other community-serving organizations. Through this collaborative approach, Dana-Farber provides community outreach and education about cancer prevention, screening, early detection and survivorship to residents in Boston and surrounding neighborhoods, reaching high-risk and medically underserved individuals in our communities. Dana-Farber also works closely with community partners to address broader issues that go beyond the cancer continuum through collaboration on partnership initiatives and the Institute’s Determination of Need Community Health Initiative funding process.

In FY21, a total of 1,512 individuals were reached through 17 community education, outreach, and screening events. Program volumes have continued to be impacted by the ongoing COVID-19 pandemic, and the Community Benefits Office has continued to adapt to these challenges. In particular, the Community Benefits Office continues to provide education virtually in partnership with Union Capital Boston (UCB) and other community partners and is working to expand and strengthen digital education and outreach strategies.

In addition, in FY21 Dana-Farber convened an Allocations Committee and worked virtually with this committee throughout the year to implement the Institute’s Determination of Need Community Health Initiative funding process. Through this collaborative process, Dana-Farber developed robust strategies to address two key priority areas: 1) Access to services, with a focus on cancer control and 2) Social determinants of health, with a focus on housing.

FY21 Highlights

- Dana-Farber worked closely with the Allocations Committee to implement a Determination of Need Community Health Initiative grantmaking process focused on Access to Services and selected the first round of recipients for grant funding. Funding will be awarded to 12 nonprofit organizations in Greater Boston to support long-lasting community health improvement and boost linkages to existing health and support services in the region. Dana-Farber also selected the Healthy Neighborhoods Equity Fund II as part of a robust funding strategy to address the priority area of housing.
- The Community Benefits Office partnered with Union Capital Boston and DF/HCC to host four Cancer Awareness Resource Nights focused on breast and colorectal cancer screening, HPV vaccine, cancer clinical trials, and cancer survivorship, engaging over 800 community residents virtually. These events featured an education session on a cancer-related topic, survivor testimony, and Q&A sessions with audience members.
- The Community Benefits Office launched a new partnership with MyHealthFair.org to increase virtual education and outreach with the local Spanish-speaking community.
B. Clinical Access and Health Equity Initiative

Dana-Farber is committed to reducing barriers to high-quality cancer care for medically underserved patients. As part of this commitment, the Institute launched a comprehensive Clinical Access and Health Equity Initiative in FY21 in collaboration with the Community Benefits Office, the Cancer Care Equity Program (CCEP) and other departments across the Institute. This initiative will allow Dana-Farber to lead new systems-wide efforts to reduce cancer disparities and broaden access to high-level, quality care for vulnerable populations, with a central focus on expanding patient navigation services.

Patient Navigation Programs

Community-Focused Patient Navigation:

The CCEP’s Clinical Outreach Initiative has demonstrated the benefit of community-based cancer care and patient navigation services and the need to expand services across Dana-Farber sites. In response to these needs, CCEP is piloting a Community-Focused Patient Navigation integration model within Dana-Farber Treatment Centers in collaboration with Community Benefits and other departments across the Institute. This model will address persistent health inequities and barriers to obtaining high quality cancer care for adult patients from historically marginalized populations. Inspired by Dr. Harold Freeman’s principles of patient navigation, CCEP’s goal is to proactively engage with these patients at point of cancer detection, eliminate barriers to timely diagnosis and treatment, and help navigate health care system complexities and logistics throughout the care continuum.

In October FY21, CCEP hired a full-time patient navigator and launched the Community-Facing Patient Navigation Program, which was piloted in the Gastrointestinal (GI) Cancer Center at Dana-Farber.

Dana-Farber/Brigham & Women’s Cancer Center Patient Navigator Program

The Breast and GYN Patient Navigators help patients make their way through the healthcare system by providing streamlined access and identifying resources for patients with abnormal findings, patients at increased risk of developing cancer, or patients diagnosed with cancer. The Patient Navigators are bilingual in Spanish and available to work with any patient in the program’s target population whose socioeconomic status or limited English proficiency may be a potential barrier to screening or follow-up care.

The Breast Patient Navigator is available to support patients at the BWH Comprehensive Breast Health Center and Dana-Farber/Brigham and Women’s Cancer Center. The Breast Patient Navigator also supports patients enrolled in the Translating Research Into Practice (TRIP) project, a patient navigation program led by six Boston hospitals. The project aims to improve the delivery of breast cancer care among vulnerable patients through a coordinated care delivery model, which includes screening and referrals for social determinants of health. The Breast Patient Navigator served approximately 100 patients in FY21.
The GYN Patient Navigator supports patients seen at the BWH Pap Smear Evaluation Center (PSEC), serving approximately 211 new patients this past fiscal year. The patient navigator reported more than 580 activities and provided approximately 300 follow-up calls to remind patients about upcoming appointments, educate them about the new COVID-19 screening protocols implemented in the hospital/clinic, and assess potential barriers to providing resources. The patient navigator also enrolled more than 37 patients in the Patient Gateway portal to provide direct access to test results and facilitate telemedicine appointments and communication between patients and providers. The navigator also collaborated with Boston Medical Center to develop a bilingual website to educate high-risk patients with abnormal HPV/Cervical cancer findings to understand their results and the importance of following appointments and treatment. [https://www.cervicalrisk.com/en/index.html](https://www.cervicalrisk.com/en/index.html)

**Patient Navigation COVID-19 Impact**

Throughout the pandemic, patients have reported many challenges including isolation, mental health issues and technology and communication limitations, especially among marginalized patients. Throughout the pandemic the Patient Navigator has enrolled more than 130 patients in Patient Gateway and provided guidance on using Zoom for virtual appointments. In collaboration with Interpreter Services, Social Work, the Communications Department, and Patient Navigation Program, an informational video was developed in English and Spanish with instructions on connecting and having a virtual appointment with providers. The Patient Navigator has also continued to provide education and support around new COVID-19 protocols, financial support, and other patient needs.

**C. Cancer Care Equity Program**

Established in January 2012, the Cancer Care Equity Program (CCEP) aims to place Dana-Farber Cancer Institute at the forefront of efforts to reduce disparities in cancer outcomes for historically marginalized groups locally, as well as become a national model for translating cancer equity research into interventions. The role of CCEP is to:

- Facilitate clinical access to Dana-Farber’s spectrum of preventive medicine, treatment, and clinical trials
- Partner with Community Benefits Office to enhance and expand Dana-Farber’s community outreach and educational programs
- Initiate and unite cancer equity research across Dana-Farber

Through these efforts, CCEP broadens access to historically marginalized populations and joins community partners in the pursuit of equitable care across the spectrum of cancer-related disease.

**Clinical Outreach Initiative:** CCEP holds on-site cancer outreach clinics at Federally Qualified Health Centers (FQHC) in historically marginalized communities staffed by a Dana-Farber clinical team, including a Physician Assistant, Nurse Director, Social Worker, Genetics Counselor, Patient Navigator and Research Assistant. Clinical services include:

- Cancer screening
- Diagnostic workups and follow-up care
- Reconnection to cancer care
• Referrals for second opinions
• Genetic cancer risk evaluations and testing
• Cancer survivorship care
• Provider and community education
• Patient navigation

Primary care providers can refer adult patients with a new, existing, or past cancer diagnosis, benign hematology diagnosis (neutropenia, anemia, clotting disorders, thrombocytopenia), breast issues (abnormal mammography studies, lumps, pain, discharge) or any worrisome (cancer related) symptoms without clear cause (lumps, bumps, bruises, weight loss).

If patients have an active cancer question or issue, CCEP navigates them to Dana-Farber and Brigham and Women’s Hospital (DF/BWH) and/or another cancer facility of choice for further care. For benign issues, CCEP connects patients to specialty care for follow-up.

Objectives of Clinical Outreach Initiative:

1. Decrease wait times for diagnosis and treatment of cancer: To achieve this objective, CCEP established regular on-site cancer outreach clinics at FQHCs in Roxbury and Dorchester, MA. Patients seen at CCEP’s outreach clinics who are diagnosed with cancer are referred to DFCI for potential treatment and further diagnostic procedures. Imaging is performed at DF/CFI/BWH, and personalized patient navigation services are provided to each patient to ensure seamless coordination of care. If a patient prefers to receive oncology care and diagnostic workups outside of DFCI/BWH, CCEP facilitates this referral to support transition of care. About 50% of patients seen at CCEP’s outreach clinics do not end up with a cancer diagnosis. CCEP’s clinical team manages non-oncology diagnoses and workups, such as complicated anemias and other hematological diseases and genetic evaluations and testing.

2. Increase awareness and knowledge of cancer prevention and treatment: In collaboration with the community outreach teams at FQHCs, CCEP’s clinical team along with other DFCI providers offer educational lectures to patients, staff, and the community at large. These lectures focused on prevention, treatment, survivorship, and clinical trials. During Covid-19, in-person educational activities were put on hold. CCEP continued to provide educational programs via zoom.

3. Foster trust with providers and patients: By directly involving and encouraging patient-centered collaborations between oncologists and primary care providers in FQHCs, CCEP establishes trust and a high level of comfort that reflects a commitment to treatment equity. CCEP shows a commitment to historically marginalized communities by working side-by-side with community partners toward the common goal of expedient diagnosis and work-up of mutual patients.

4. Create a research cohort of patients for observational and interventional studies: Patients evaluated as part of CCEP’s clinical outreach initiative have the option of enrolling in a research cohort. This allows DFCI/Harvard Cancer Center researchers to conduct
observational studies examining disease presentation and treatment responses, as well as qualitative and interventional studies with a racially and ethnically diverse population. The formation of this unique research cohort is an important part of the clinical program and provides an opportunity to bring together investigators across DFCI who share an interest in disparities. Clinical trial investigators, community-based researchers, and laboratory-based researchers are encouraged to consult the CCEP for questions about this research cohort. A total of 444 patients have consented to enroll in the cohort since 2012, representing nearly 89% of all patients informed of the study to date (n = 497).

5. **Increase enrollment in clinical trials:** Education regarding the concept of clinical trials is provided to all patients seen at DFCI through CCEP. By increasing access to DFCI and improving relationships with historically marginalized communities and providers who practice in these communities, CCEP removes some of the structural barriers to clinical trial enrollment. CCEP evaluates barriers to clinical trial entry and works to differentiate systems-level barriers from patient-level barriers.

6. **Create a model for addressing the health disparities gap in cancer care:** A key objective for CCEP is to create a national model for addressing health disparity gaps in cancer care. One of the program’s goals is to develop a support program to help other organizations who wish to develop similar programs. Since CCEP has demonstrated success with the care model, the program is well positioned to help other organizations develop programs of their own.

**COVID-19 Impact:** Due to COVID-19, CCEP shifted its approach to patient care and navigation by staying in close contact with referring primary care providers via e-mail and cell phone communication. This shift allowed CCEP to navigate newly diagnosed cancer patients remotely and support them across the treatment continuum. CCEP returned to regularly scheduled in-person clinics in July 2021, offering a hybrid of remote telehealth and in-person visits, depending on the patient’s preference. Enrollment in CCEP’s research cohort study was suspended and residential education programs focused on tobacco cessation ceased during COVID-19. The lung cancer screening program was also paused during the height of the pandemic but has since resumed.

**FY21 Highlights:**

- CCEP hired a new full-time outreach patient navigator.
- CCEP has seen 692 new patient consults and 507 patient follow-up visits since 2012, of which, 63 (9%) new patient consults and 29 (6%) follow-up visits were performed in FY21.
- The median number of days from initial appointment to diagnostic resolution totaled 14 days for patients with a cancer diagnosis, exceeding the program’s goal of 21 days.
- Since 2012, 17% of patients with cancer diagnoses have enrolled in clinical trials at DFCI.
- Patients had a wide range of diagnoses, such as breast cancer, lung cancer, and benign hematology, and were referred to DFCI/BWH treatment centers and specialty clinics as well as Faulkner Hospital (FH) for low-dose chest CT (LDCT).
• The highest volume of referrals from primary care providers are patients with a family history of cancer. An oncology geneticist and genetic counselor provided special genetic evaluation clinics with immediate, on-site genetic testing if warranted. In 2022, CCEP will change this model based on DFCI practice changes: the genetic counselor will be in-person in the outreach clinics and only patients with a genetic mutation and/or a personal diagnosis of cancer will be seen by the geneticist (on-site at DFCI’s main campus).

• CCEP opened a new outreach clinic on January 13, 2021 at Harvard Street Neighborhood Health Center (HSNHC) in Dorchester, MA providing clinical evaluation services on-site. The goal is to gradually rollout a range of services, including genetic evaluations and testing. CCEP is in the process of setting up the research cohort study infrastructure with plans to start consenting patients in early 2022 and planning community education programs with HSNHC’s community outreach team, including:
  o Providing education at HSNHC’s Veteran’s Center
  o Participating in a radio program for Haitian patients
  o Offering tobacco education

• CCEP initiated planning to expand its care services at The Dimock Center (DC) in Roxbury, MA beyond lung cancer screening by providing the program’s full scope of clinical care. CCEP’s on-site outreach clinics are slated to begin in early 2022.

**CCEP/IECD Cancer Disparities Research Symposium:** In collaboration with the DF/HCC Initiative to Eliminate Cancer Disparities (IECD), CCEP hosted the annual Cancer Disparities Research Symposium on April 23, 2021. The event featured a keynote by Dr. Ray Osarogiagbon, MBBS, FACP, entitled “Tudor Hart’s ‘inverse care law’: Uncovering and Overcoming the Drivers of Lung Cancer Care and Outcome Disparities.” Dr. Osarogiagbon’s research interests center around improving population-level outcomes of cancer care by improving systems of care-delivery, improving the accuracy of cancer staging and evaluating the biologic drivers of outcome differences in potentially curable lung cancer. 293 people attended this virtual webinar.
D. Center for Community-Based Research

Dana-Farber’s Center for Community-Based Research (CCBR) conducts research aimed at cancer prevention and control, with a particular emphasis on the development, evaluation, and dissemination of effective interventions designed to modify behaviors, policies, and practices to reduce cancer risk. CCBR’s public health approaches are an important complement to the clinical and basic research being conducted at Dana-Farber. This research program has a special focus on reducing racial/ethnic and socio-economic disparities across the cancer control continuum, from prevention to survivorship. CCBR interventions are evaluated in randomized controlled studies, with the intent that the tested models will ultimately be applied broadly through community and health organizations nationally.

CCBR faculty also focuses on research projects aimed at understanding health communication processes that contribute to reducing the burden of cancer across the cancer control continuum. Research projects focus on understanding the impact of mass-mediated and interpersonal communication on cancer prevention and control outcomes, patient-provider communication and active information seeking among cancer survivors; direct-to-consumer advertising of cancer treatments; emerging health information technology; and advertising of novel tobacco products. This research has elucidated associations between different forms of health communication and important population health outcomes, including surveillance adherence, preventive behaviors, and patient-reported measures of quality of life. These findings help guide future innovations in health communication interventions for cancer prevention and control.

CURRENT RESEARCH PROJECTS

Sodexo Project: Improving and protecting the health and well-being of low-wage workers (Sorensen, 2016-2021): The objective of this project was to develop and test feasible intervention methods to modify the work organization and support reduced risk of musculoskeletal disorders and other outcomes critical to worker health, safety, and wellbeing among one group of low-wage workers: food service. Both the intervention implementation and final data collection phases were completed. Of note, it was not possible to complete all final data collection in four out of nine Proof-of-Concept accounts due to the impact of COVID-19. The Sodexo staff in those accounts were laid off due to account closures. Employees of those client companies were able to move to remote work and food service was therefore not needed. An extension phase was granted through July 2021 for final data analysis and manuscript preparation and several manuscripts were completed.

Cancer Prevention for Fire Fighters: A Collaboration with the Boston Fire Department

The Center is working with the Boston Fire Department (BFD) to apply a Total Worker Health® approach to examine physical, psychosocial, and organizational factors in the firefighters’ work environment that may influence contamination control practices at the scene of fires and at the fire station. This work is being conducted through a two-year postdoctoral fellowship, funded by the DFCI Pan Mass Challenge (PMC) Team Boston. The goal of this work is to identify modifiable upstream factors, in order to target them in future interventions to improve the effectiveness of existing policies on preventing cancer. Specifically, the research aims to identify priority best practices for exposure reduction based on existing standard operating
procedures and available guidelines, as well as determine to what extent factors in the firefighters’ environment may serve as barriers or facilitators in reducing harmful exposures.

In 2021, Dr. Winnie Chin was hired as the post-doctoral fellow to work on this project under the mentorship of Dr. Glorian Sorensen. Dr. Chin conducted key informant interviews to inform the survey which is designed to better understand the barriers and facilitators to adherence to exposure reduction standard operating procedures. The survey has been developed and formatted for online administration. Dr. Chin visited the participating stations to promote the survey. Survey administration was launched in November 2021 and will be completed by February 2022. Data will be analyzed and will inform a Recommendation Report for the BFD.

Viswanath Lab Response to COVID-19:
In response to the COVID-19 pandemic and the rapid spread of information, misinformation, and disinformation, the Viswanath lab developed a dashboard (https://www.hsph.harvard.edu/viswanathlab/) to provide evidence-based information, collated from reliable sources on COVID-19. The dashboard includes answers to frequently asked questions about the COVID-19 vaccines and the disease, facts debunking the myths circulating, social media tips, and access to trustworthy resources and data. It also features infographics developed in collaboration with the communities served and is translated into Spanish and Portuguese. The infographics are also being widely shared on the lab’s social media pages.

Outreach to Address Cancer Disparities: Engaging Community Partners and Leveraging Evidence (Viswanath and Ramanadhan 2016-2021): Outreach is a core activity of the UMass Boston Dana-Farber/Harvard Cancer Center Partnership (DF/HCC), with the goal of building relationships with external partners, promoting evidence-based cancer prevention in communities, training UMass Boston students in community engaged research, supporting Partnership research projects, and participating in NCI National Outreach Network (NON) activities. CCBR is building on the activities of the initial funding period, during which the UMass Boston-DF/HCC Partnership built a strong track record in: a) building capacity for evidence-informed cancer prevention in three Black and three Latino faith-based institutions through Health Ministries; b) training under-represented minority (URM) students in community-based research; and c) disseminating the NCI NON biobanking/biospecimens education program. CCBR is building on this strong foundation and broadening the range of community organizations that benefit from the resources and expertise of the UMass Boston-DF/HCC Partnership. CCBR is further integrating the Outreach Core with the research projects to support dissemination of findings in close coordination with community partners. CCBR is taking a participatory approach to engage local and regional community-based organizations (CBOs) and faith-based organizations (FBOs) conducting cancer control programming, particularly among underserved communities. CCBR is building capacity and support CBOs to use existing evidence, a hallmark of dissemination and implementation (D&I) science. The approach reflects the integration of research, capacity-building, and outreach to address disparities, as highlighted in the NIH Health Disparities Strategic Research Plan. The key Aims of the Outreach Core are:

- **Aim 1**: Develop and institutionalize participation by key partners through a Community Advisory Board (CAB) that includes representatives from CBOs and FBOs in partner communities in the DF/HCC catchment area. The CAB will be closely involved in all
aims and will provide strategic advice on the goals and implementation of the activities of the Outreach Core and research projects.

- **Aim 2:** Conduct a needs assessment to elucidate and characterize the interest in and capacity for cancer control activities with a focus on addressing disparities in the region.

- **Aim 3:** Build capacity among students and CBO staff members / FBO program coordinators.
  - A. In collaboration with the CAB and the Research Education Core, we will recruit URM students to participate in outreach, and community-based research efforts focused on cancer control.
  - B. Build capacity in CBOs and FBOs to: a) use evidence-based programs (EBPs) for cancer prevention, b) conduct outreach to promote the NCI NON biobanking/biospecimens program, and c) conduct evidence based outreach education to promote Human Papillomavirus (HPV) vaccination.

- **Aim 4:** Develop and disseminate products that will synthesize and summarize the results from the Partnership research projects to inform the activities of community partners working to address cancer disparities.

**FY21 Outreach Core Project Accomplishments:**

- **Student training /career advancement.** Seven URM undergraduate students were placed in full-time internships during the summer of 2021. Student were from a variety of majors (e.g., Chemistry, Psychology, Biology, and Exercise and Health Sciences). Internship placements included the Center for Community-Based Research at Dana-Farber/Harvard Cancer Center and UMass Boston, Harvard T. H. Chan School of Public Health, the Brazilian Worker Center, Asian Women for Health and the Boston Public Health Commission.

- **HPV education Mini-Grants for Local Outreach.** between November 2020 and April 2021, the U54 Outreach Core team trained twelve leaders from FBOs and CBOs in Greater Lawrence and Greater Boston in how to adapt and deliver an evidence-based program for HPV education. Each organization participated in a 1.5-hour virtual training led by a Cancer Prevention Post-Doctoral Fellow at the Harvard T.H. Chan School of Public Health and Dana-Farber Cancer Institute. They also received a mini-grant to support their training efforts, and technical support from the study team. Grantees were asked to adapt the curriculum as appropriate for their community and audience and virtually deliver the HPV education to at least ten participants per organization. The 12 grantees delivered 14 sessions to 161 participants, exceeding the goal of 120 participants.

- **National Cancer Institute Colorectal Cancer Education Outreach Screen to Save.** Screen to Save aims to increase colorectal cancer screening rates among men and women age 50 and older from racially and ethnically diverse communities. In FY21, this included a collaboration with the Community Benefits Office at DFCI where outreach education was delivered to over 130 participants in Union Capital Boston’s Virtual Cancer Awareness event.

- In January 2021, Community Board Advisory Member Elecia Miller and Dr. Siqueira guest lectured at the City of Lawrence Mayor’s Health Task Force General Meeting about vaccination hesitancy among people of color. In addition, Dr. Siqueira participated in a series of ethnic radio shows and organized audio-visual and virtual materials for a social media
campaign aimed at increasing vaccination rates among Brazilian populations in Massachusetts.

**Dissemination Efforts**

- In FY 2021, a student-led Science Café was convened highlighting and sharing the internship and research experiences of students who participated in summer 2021 STEM internships with UMASS Boston-DF/HCC Partnership’s Outreach Core, Research Education Core, and the CURE Program. Interns from each program presented their internship experiences, and the audience had the opportunity to ask them questions about their academic journeys, internship experiences, future plans, and more. The Science Café served to celebrate the students’ work, build community across the Partnership and DF-HCC internships, and spread the word about the program to prospective interns.

- Additionally, in FY21, we collaborated with our Community Advisory Board on two publications focused on capacity-building interventions and community-engaged research to address cancer disparities and support underserved communities in Massachusetts.
E.  NCI Sponsored Health Disparities Activities

The Dana-Farber Harvard Cancer Center (DF/HCC) has for many years actively ensured that research undertaken by DF/HCC scientists impacts our catchment area by monitoring and prioritizing cancer needs, partnering with community organizations, ensuring participation of minority and underserved communities in research, and enabling cancer research results to have maximal impact in the catchment area through Community Outreach and Engagement (COE) initiatives. The DF/HCC cancer center support grant (CCSG) was submitted for renewal and received an exceptional to outstanding rating by the reviewers. The score of 14 recognizes our members’ high impact in collaborative research and lauding our education enterprise that produces exceptional trainees. Over the next five to seven years, we are seeking to reverse persistent inequities in cancer care access, research environments and leverage the center’s vast training resources to groom future generations of research leaders. The DF/HCC formalized COE activities in 2001 with the formation of the Initiative to Eliminate Cancer Disparities (IECD). Expanding the IECD model, the Center for Cancer Equity and Engagement (CCEE) was established in 2019. This structure was formally approved as part of this year’s CCSG.

The specific aims of DF/HCC COE activities are:

- Understand and monitor the cancer burden in Massachusetts.
- Create and enhance partnerships between DF/HCC and communities to address the cancer burden in Massachusetts, particularly cancer disparities.
- Increase access to clinical trials among underserved and minority communities in Massachusetts.
- Strategically advance DF/HCC research to address cancer burden priorities in communities across Massachusetts and beyond.

Outlined below are selected COE activities which have occurred during the past year:

Our collaborations with Baystate Medical Center in Springfield, MA continue to expand. We are jointly planning for April 2022 a cancer awareness and survivorship program. Building on the Faces of Faith program, Baystate Medical will recruit and feature through a photographic exhibit of local cancer survivors. With an effort focused on youth, we are currently exploring opportunities to engage Springfield youth by inviting them to participate in our virtual CURE related summer programming.

Website Development – With a goal of making DF/HCC a goto repository for cancer related information and knowledge, two websites are being developed to provide easy access to cancer related data. Cancer Fact Finder will provide evidenced based information on common cancer and health beliefs. The Cancer in Massachusetts website will offer up to date cancer information specifically relevant for Massachusetts resident and providers. Additionally, specialized fact sheets detailing cancer incidence and mortality by county and cancer type will also be available. The plan is to roll out both websites in early 2022.
In recognition of **National Minority Cancer Awareness (NMCA)**, the eighth annual Cancer Disparities Research Symposium was held virtually on April 23rd. Our keynote was provided by Ray Osarogiagbon, MBBS, FACP, a chief scientist at Baptist Memorial Health Care Corporation and director of the Multidisciplinary Thoracic Oncology program at the Baptist Cancer Center in Memphis. Dr. Osarogiagbon’s talk focused on the delivery of lung cancer care. Tudor Hart’s inverse care law states that the availability of good medical care varies inversely with the need for it in the population served. Poor and marginalized groups, who suffer disproportionately for many disorders, often face the greatest obstacles to quality treatment. The keynote was followed by two panel discussions representing key stakeholders in the areas of prevention/screening and treatment.

Additional community programming for NMCA focused on clinical trials, HPV, brain health, screening and early detection, prevention, and risk reduction.

**The Faith Based Cancer Disparities Network (FBCDN)** continues to meet regularly to explore health and wellness topics for implementation within their congregation and beyond. The network consists of ten Black churches primarily located in the neighborhoods of Boston/Cambridge. A total of seven health-related workshops were held virtually. In addition, several churches planned and served as sites to host COVID testing, vaccine and flu clinics.

In partnership with Union Capital Boston, a signature program for the FBCDN, Faces of Faith, a cancer survivorship photo exhibit was launched on June 3rd. The 1.5-hour program featured Dr. Mallika Marshall, a Harvard trained physician and Emmy award winning journalist who serves as the medical director for WBZ-TV in Boston. Dr. Marshall’s message was clear – health matters, you have control, and you deserve it! In addition, eleven new cancer survivors’ photos were revealed. A record of over 323 individuals participated remotely in this event. The Faces of Faith exhibit was also featured at Boston City Hall in October in recognition of breast cancer awareness month.

**The Patient Navigation Network (PNN)** brings together oncology clinical and non-clinical patient navigators and community health workers to engage in training, networking and peer to peer support. In 2021, the Network met virtually on four occasions. The March meeting was designed to strategically gather and explore ideas for future programming and opportunities to enhance the profession and role. Ideas included: mental health, insurance and financial literacy, standards of practice to assess patient support systems, HIPPA and how to overcome social justice issues. The June meeting focused on food insecurity. Sarah Cluggish from Project Bread provided an overview of food insecurity in MA and strategies to address needs. In September, doctoral candidate Yaminette Diaz-Linhart engaged our audience in a session on using resilience to enhance professional identity. This session provided an opportunity for the attendees to share their stories of strength, perseverance and empowerment. The final session for 2021 focused on the use of telehealth in the area of navigation.

**The Continuing Umbrella of Research Experiences (CURE)** provides pipeline programs to support the engagement and education of under-represented students interested in cancer-related research. Since the program’s inception in 2002, the IECD has engaged and placed over 600 students across the DF/HCC institutions in basic, clinical, nursing and population science.
Over the course of the summer 2021, CURE provided 100 trainees with a research experience. Based on the needs of the PI and research project, trainees participated either in a remote, hybrid or in-person cancer research experience. Highlights of the summer included a research lecture series highlighting under-represented cancer faculty across the country. Additionally, a program focused on building awareness related to sickle cell disease featured a keynote from Dr. Tolulope Rosanwo and sickle cell patients and providers. The culminating event included final scientific research presentations by the CURE trainees.
F. Workforce and Community Development

Dana-Farber Cancer Institute’s Office of Workforce Development works collaboratively and strategically to create pathways to clinical, research and healthcare administration careers at DFCI. The Office of Workforce Development provides professional growth opportunities for youth and adults with the intention of ensuring a health care workforce of well-prepared, highly skilled individuals who are reflective of the diversity of the communities in which Dana-Farber resides. We work to ensure that underrepresented and underserved populations from Boston’s most disadvantage communities have equitable access and opportunity to learning experiences at Dana-Farber that offer training, employment, and mentorship.

Workforce Development works to ensure that its programs remain strong and impactful despite the challenges of the pandemic. We continue to prioritize 1) maintaining a comprehensive Student Training Program that now incorporates virtual programming, 2) ensuring safe practices and guidelines for hiring and onboarding program participants and 3) being intentional about programs and coaching services that foster engagement, support, and the well-being of program participants and staff.

In FY21, a Program Manager was hired to expand and build on career development and advancements programs offered to incumbent staff as well as unemployed and underemployed adults. We continue to work with agencies, schools, and association to ensure access to career and career advancement opportunities at the Institute.

- **College and Career Coaching Services:** Incumbent staff members looking to advance their careers at Dana-Farber have access to academic and career coaching services. Staff can meet with a coach, develop an action plan, and learn about the tools and resources available to help them achieve academic and career goals. Due to the pandemic, these services continue to be offered virtually.

- **External Leadership Advancement Forums:** Dana-Farber sponsors several educational leadership development program and forums throughout the year hosted by The Partnership, Inc., Conexión and McKinsey and Company. In FY 21, 23 staff completed the program.

- **Online Degree Program:** For several years we have offered staff, pursuing undergraduate degree, access to an affordable competency-based degree program through Southern New Hampshire University. In FY21, we enhanced the program by partnering with DUET, a non-profit that provides enrollment, academic and financial aid coaching to ensure student success and completion.

**Community and Educational Partnerships:** Dana-Farber continues to partner with YMCA Training Inc. and other community-based pre-employment training programs to identify unemployed and underemployed skilled adults seeking career opportunities. In FY 21, we built on the YMCA partnership, creating a specific pipeline program to positions within Access Management. This department is responsible for patient registration, insurance verification and financial services. The program includes a combination of on-the-job training, classroom learning, career counseling, and other skill building activities. Dana-Farber continues to partner with Jewish Vocational Services in creating pipelines to careers in Pharmacy. The Pharmacy
Tech pipeline program hosted 3 interns in FY21. All three were hired into full-time Pharmacy Tech position at Dana-Farber.

**Student Training Programs:** To encourage underrepresented minority (URM) students to explore and pursue careers in health and science, Dana-Farber maintains educational partnerships with Boston area high schools, colleges, and universities. Dana-Farber hires upward of 60 students throughout the school year and summer. During the Academic Year 2021, 21 paid interns supported research and patient care departments in a meaningful way and participated in additional programming focused on college and career readiness.

During the summer of 2021, Dana-Farber hired 54 Boston high school and college students into department-based internships. Students’ placements were either fully onsite, hybrid, or fully remote. In addition to the job experiences, students participated in virtual professional development, college readiness, and life skills workshops. Eligible students either attended or graduated from Boston Public Schools. The program successfully retained 100% of students.

Dana-Farber actively participates in school-to-career programs with the Boston Private Industry Council (PIC). One program includes Groundhog Job Shadow Day, where high school students shadow Dana-Farber employees learning about careers in healthcare and specific job responsibilities, as well as the skills and training needed for the position. FY21, Job Shadow Day was canceled due to COVID. Dana-Farber staff also participates in school-based events including Fenway High School’s annual career fair. In FY21, the event was virtual. DFCI volunteers lent their expertise in mock interviews and served on career panels.

Dana-Farber’s **Administrative Internship Program** is another student training program for undergraduate rising seniors and graduate students. This program is designed to increase the talent pipeline for management level positions and attract talent that adds to the Institute’s diversity. The 10-week summer program engages interns in project work, professional development, and mentorship working alongside executive leaders. Over the last three summers, 25 interns completed the program. To date, seven participants have been hired into positions at Dana-Farber.

In FY21, we served 47 high school students of which 96% are URM, 7 college students of which 84% are URM and 100% are STEM or health sciences majors, and 9 graduate administrative interns of which 56% are URM.

**E1. Community Development/City of Boston Support:**
- Dana-Farber continues to provide a limited number of low-cost rooms that serve as a home away from home for pediatric oncology patients and their families. Additional lodging support is provided through the American Cancer Society Hope Lodge.
- Dana-Farber continues to make payments in lieu of taxes (PILOT) to the City of Boston to support important services that benefit the community.
G. Patients and Family Programs and Services

Patients and Family Programs and Services

Dana-Farber offers a variety of services to patients, families, and the wider community to help address the challenges that accompany a cancer diagnosis. These include:

Support Groups for Adults:
- Prostate Cancer Support Group and Workshops
- Circulo de Vida (Circle of Life) Support Group in Spanish for Women with Cancer
- Bereavement Support Group and Seminar: When Grief is New
- Brain Tumor Support Group
- Breast Cancer Support Group
- Carcinoid and Neuroendocrine Tumor Seminar and Support Group Series
- Caregivers Support Group and Workshops
- Coping with Cancer Support Group
- Facing Forward after Breast Cancer Treatment
- Family Connections Program: supportive resources, information, and events for parents with cancer and their children
- Gynecologic Cancer Support Group
- Inflammatory Breast Cancer Support Group
- Kidney Cancer Support Group
- Light One Little Candle: Connecting through Reading. Free children’s books for parents with cancer
- Living with Cancer Support Group
- Look Good, Feel Better (sponsored by the American Cancer Society)
- Lung Cancer Support Group
- Lymphoma Support Group
- Melanoma Support Group and Special Events, in collaboration with the Massachusetts Melanoma Foundation
- Metastatic Breast Cancer Support Group
- Multiple Myeloma Education and Discussion Group
- One to One: Connecting with Someone Who’s Been There (Peer Support)
- One Year Post Bone Marrow Transplant Support Group
- Rest and Resilience: a patient support group for those who identify as black, indigenous, or as a person of color
- Sarcoma Support Group
- Telephone Support Group for Young Women with Breast Cancer
- Thyroid Cancer Center Education and Support Group
- Waldenstrom’s Macroglobulemia Support Group
- Young Adult Support Group

Blum Resource Center and Shapiro Center for Patients and Families:
- Blum Digital Resource Center – Online extension of our physical resource center, over 500 resources available
• Pre-Covid: Physical resource centers on-site
  • **Overdrive:** Complimentary magazines, newspapers and books transition to Overdrive – Dana-Farbers digital library to offer e-books, audiobooks and magazines to patients and families digitally (500 library cards issued since August 2021)

• Pre-Covid: Physical Resources in centers on-site
  • Virtual Live and Recorded Programs and workshops (**Zoom/YouTube Playlist**)
    • Over 1000 (as of 12/3) attended live and 5000+ views of 25+ recorded sessions
      ▪ Spirituality and Cancer Workshop Series
      ▪ Caregivers Connect
      ▪ Step 1: Help with Insomnia After Cancer Treatment
      ▪ Managing Your Finances During Cancer Treatment
      ▪ Survivorship 101
      ▪ Coping with Loss During COVID-19
      ▪ Patient Gateway Tutorial
      ▪ Genetics in Spanish

• Pre-Covid: Sessions hosted in the resource center around a small conference table.
  • Collaboration to Host Bone Marrow Transplant Webinars
    • Over 1000+ Patients and Caregivers attend these group zoom webinars as they are preparing for transplant.
    • Pre-Covid: Nurse Navigators would do in person teaches.

• Outreach to Spanish speakers with new Welcome Notebook – Over 160 notebooks distributed since August 2021 – Plan to expand to additional languages.

• One-to-One Telephone Peer Support Program –255 requests for support in 2020; Increase to 376 requests for support in 2021 (68% increase)
VI. COMMUNITY BENEFITS EXPENDITURES

FY’21 Community Benefits Expenditures

<table>
<thead>
<tr>
<th>Community Benefits*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Expenditures</td>
<td>$4,946,991</td>
</tr>
<tr>
<td>Determination of Need</td>
<td>$0</td>
</tr>
<tr>
<td>Associated Expenditures</td>
<td>$0</td>
</tr>
<tr>
<td>Employee Volunteerism</td>
<td>$0</td>
</tr>
<tr>
<td>Other Leverage Resources</td>
<td>$3,300,336</td>
</tr>
<tr>
<td>Total Community Benefit</td>
<td>$8,247,327</td>
</tr>
</tbody>
</table>

Total Net Charity Care
(includes HSN assessment, HSD denied Claims, Free/Discounted Care)

| Corporate Sponsorships | $192,886 |
| Total Expenditures     | **$29,411,244** |

The total cost of Unreimbursed Medicare and Medicaid Services: **$92,596,070**
Dana-Farber is dedicated to addressing cancer-related disparities in Boston and across the state using evidence-based strategies that address the social determinants of health. In FY2019, Dana-Farber conducted its 2020-2023 CHNA and Implementation Plan, which informs Community Benefits strategies and initiatives over the next three years. Dana-Farber’s Community Benefits Department will continue to sustain and enhance existing programs that provide education and screening to Boston-area residents and implement strategies outlined in the FY2020-2023 Implementation Plan, with an emphasis on the following activities:

- Dana-Farber will continue to broaden access to high quality care for vulnerable populations, with a focus on expanding patient navigation services through the Institute’s Clinical Access and Health Equity Initiative and expanding digital health education and outreach efforts.

- Dana-Farber will continue to sustain efforts that streamline the diagnosis and treatment of breast, gynecologic, and skin cancers to shorten time to resolution and reduce cancer-related disparities among vulnerable patient populations.

- Dana-Farber will continue to monitor the lasting impacts of the COVID-19 pandemic and social determinants of health in our priority neighborhoods so we can continue to be proactive in supporting the needs of community partners.

- Dana-Farber will continue to fully implement the approved Determination of Need Community Health Initiative (CHI) Plan and leverage community investment opportunities.

- Dana-Farber will conduct a new cancer-focused Community Health Needs Assessment and Implementation Plan for the next triennial cycle.

- Dana-Farber will continue to partner with the Boston CHNA/CHIP Collaborative to implement citywide efforts that address the social determinants of health and other priorities for collaborative action.
Dana-Farber’s Community Benefits Office conducts evaluation in several ways. The staff regularly review and update the logic model for all Community Benefits programming. Additionally, individual programs collect demographic data about the residents served when feasible. This data identifies which populations are reached by CB programming and allows staff to strategize about how to ensure that priority vulnerable populations are served most robustly.

Additionally, impact studies are conducted periodically on our services with a quality improvement lens that seeks to strengthen our programming. The evaluation staff are currently overseeing a rigorous evaluation of our Determination of Need grantees; smaller grantees are conducting process evaluation while larger grantees will conduct individual impact studies and gather collective lessons on common indicators.

Name / Address of Hospital:
Dana-Farber Cancer Institute
450 Brookline Avenue, BP 111
Boston, MA 02215-5450

Name of Hospital Employee Primarily Responsible for Community Benefit Planning:
Magnolia Contreras, Vice President of Community Health
Dana-Farber Cancer Institute
450 Brookline Avenue, 10BP, 1st floor
Boston, MA 02215-5450
617-632-4433