

IMPACT REPORT

2021-2022 // PC3I.UPENN.EDU

Founded at the Abramson Cancer Center at Penn Medicine

PC3I AT A GLANCE

Our Mission

We make cancer care better for patients, clinicians, and communities.

Our Approach

We work at the nexus of research and practice to create, test, and scale solutions to:

- Improve health, health care, and health equity
- Enhance the patient and clinician experience
- Increase efficiency and value

Our Team

26
Innovation Faculty

11
Innovation Fellows

130
Leadership and faculty affiliates, staff, and trainees

Our Laboratory

Embedded across the world-class clinical and research environment of Penn Medicine



19,435
New Cancer Patients a Year



3
States



6
Hospitals



14
Outpatient Sites



18
Radiation Sites

HIGHLIGHT: Our Leadership Team

PC3I is delighted to announce the appointment of our Deputy Director for Research and 8 Associate Directors.



HIGHLIGHT: Our Thought Leadership

We harness the insights of top researchers and multidisciplinary thought leaders across Penn Medicine.

JAMA Oncology

Uptake and Survival Outcomes Following Immune Checkpoint Inhibitor Therapy Among Trial-Ineligible Patients With Advanced Solid Cancers.
Parikh & Mamtani, et al.

JGIM

Journal of General Internal Medicine

Text Messaging and Opt-out Mailed Outreach in Colorectal Cancer Screening: A Randomized Clinical Trial.
Mehta et al.

Radiology

Artificial Intelligence Tool for Assessment of Indeterminate Pulmonary Nodules Detected with CT.
Vachani et al.

JAMA Surgery

Trends in Racial, Ethnic, and Sex Representation Among Surgical Faculty Members and Medical Students in the US, 2011-2020.
Fayanju et al.

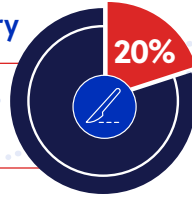
HIGHLIGHT: Our Solutions

We **create**, **test**, and **scale** solutions to address the most intractable cancer care problems.

CREATE

Reducing Post-Surgical Hospital Readmissions & Improving Recovery

Patients undergoing Whipple procedures may be at risk for hospital readmissions and prolonged recovery



The Oncology Prehab to Rehab (P2R) program is a technology enabled, home-based program that connects patients undergoing the Whipple procedure (a major surgical operation for pancreatic cancer and chronic pancreatitis) with critical wraparound services to reduce unnecessary health care utilization, decrease postoperative complications, and improve a patient's quality of life.

Grischkan & Bekelman, et al.

Tackling Financial Toxicity



With leadership from the School of Social Policy & Practice (SP2), the Guaranteed Income and Financial Treatment Trial (GIFTT) pairs a financial navigation program with guaranteed monthly income and evaluates its impact on cancer-related financial hardship.

Doherty et al.

Improving New Patient Access to Care



New gynecologic oncology patients at UPHS may wait up to **35 days** for an appointment

A scheduling triage algorithm will prioritize new patient visits by type and urgency in conjunction with patient coordinators and nurse navigators to decrease burdensome manual scheduling and delays in diagnosis and treatment.

Ko et al.

TEST

Reducing Patient Care Time through E-Triage

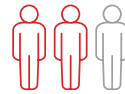


20% of office visits for patients could be eliminated

After demonstrating that a text-based instrument is both feasible and effective at identifying patients who are not experiencing symptoms of immune toxicity, a randomized control trial is comparing how the use of this e-triage instrument impacts total care time.

Bange & Mamtani, et al.

Default Orders to Palliative Care



2/3 Nearly 2/3 of patients with advanced cancers do not receive palliative care

Through a partnership between PC3I and Tennessee Oncology, a randomized control trial analyzes a behavioral intervention built into the EHR, which will detect high-need patients with advanced cancer and create a default order to palliative care.

Parikh et al.

Health Equity-Informed Screening



30% of deaths due to colorectal cancer occur in adults over the age of 75

A decision aid tool — specifically tailored to the needs of older adults (75+) with low health literacy — is being tested to ideally guide those who are in good health and at higher risk for colorectal cancer towards screening, while guiding those in poor health and/or at lower risk away from potentially risky screening.

Cadet et al.



SCALE

EHR Nudges + Plasma Molecular Genotyping

Non-Small Cell Lung Cancer (NSCLC) is the most common type of lung cancer, and while testing for molecular alterations is recommended upon initial diagnosis, 40-50% of NSCLC patients treated in the community are not appropriately tested. After demonstrating that a provider-focused electronic health-based nudge intervention led to improvements in comprehensive tissue and plasma molecular genotyping for a significantly higher number of patients with NSCLC, an agreement with Loxo@Lilly extends this work to eight additional sites between UPHS and Orlando Health..

Aggarwal et al.



50%

Fewer than 50% of patients with NSCLC receive molecular testing in the US, despite recommendations

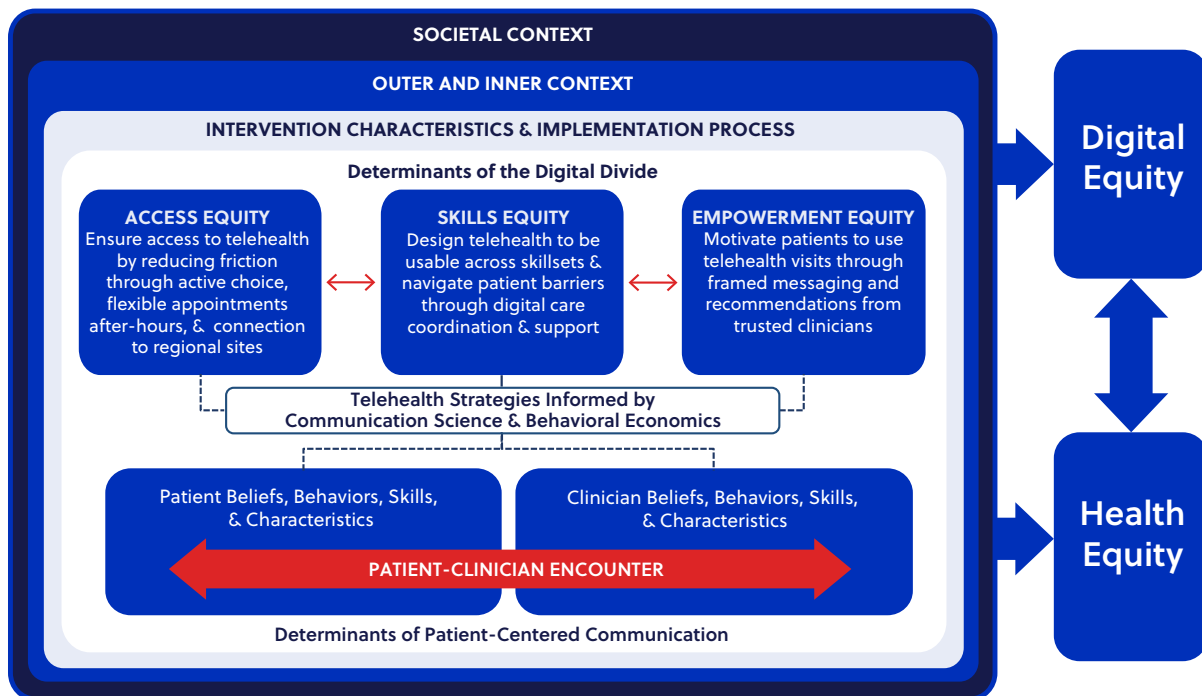
Addressing the Digital Divide Across the Cancer Care Continuum

Through a five-year, \$5.7 million P50 grant from the National Cancer Institute, and with support from the White House Cancer Moonshot, the University of Pennsylvania (Penn) Telehealth Research Center of Excellence (Penn TRACE) applies insights from communication science and behavioral economics to design and test innovative telehealth approaches to improve effectiveness and equity across the cancer care continuum, with an emphasis on advancing health equity and addressing the digital divide.

The pragmatic trial compares the effectiveness of telehealth strategies to increase shared decision making for lung cancer screening using a Sequential Multiple Assignment Randomized Trial (SMART) design. The first of two pilot studies tests a telehealth strategy for patients with advanced lung cancer to improve timely treatment recommendations through early integration of plasma-based molecular testing.

Bekelman, Rendle, Vachani, et al.

FRAMEWORK FOR INTEGRATING TELEHEALTH EQUITABLY (FITE)



Source: Developed by Penn TRACE Investigators, informed by concepts from the Health Equity Implementation Framework and the Patient-Centered Communication in Cancer Care Framework