Improving Integration of Clinical Research with Clinical Care: Moving Towards a Patient-Centered Academic Health Care Model

Katherine J. Deans, MD, MHSc
katherine.deans@nationwidechildrens.org
Mentor: Dennis Durbin, MD, MSCE

PRIMARY OBJECTIVE: TO MORE DEEPLY AND BROADLY INTEGRATE CLINICAL RESEARCH INTO CLINICAL CARE

**CURRENT STATE**

- Health Research System
- Retains dual patient care and research institute components
- Integration is outside of the patient experience, occurs randomly
- Perceived inequity in resources
- Lack of transparency around processes

**DESIRED STATE**

- Patient-Centered Academic Health Care System
- Integrates clinical care and research processes
- Demonstrates an enterprise effort to minimize barriers for research participation
- Patient experience is the unifying goal for both clinical care and research

**BRIDGING THE GAP**

- Aligning Faculty, Infrastructure, and Strategic Plan
- Clinical Research Champions
- Strategic faculty recruitment
- Increase partnerships
- Expand clinical research infrastructure
- Improve engagement and communication with faculty
- Increased utilization of technology
- Centralized clinical research space to foster collaboration

**IMPLEMENTATION TIMELINE:** 2022-2026
**APPROVED BUDGET:** $8 million over 5 years
ABSTRACT: 2021 ELAM Institutional Action Project

Project Title: Improving Integration of Clinical Research with Clinical Care: Moving Towards a Patient-Centered Academic Health Care Model

Name and Institution: Katherine J. Deans, MD, MHSc, Nationwide Children’s Hospital

Mentor: Dennis Durbin MD, MSCE

Topic Category: Administration

Project Background:
Nationale Children’s Hospital (NCH) has emerged as a leader in both patient care and clinical research innovation. Previously, NCH functioned within a traditional Health Research System (HRS) model which retained separate clinical care and research institute components. However, this model is restricted in its ability to promote deeper integration around core strategic initiatives, improve operational efficiency, and promote a culture of inclusivity for research participants.

In contrast, the Patient-Centered (PC) framework for an academic health care system compels healthcare providers and researchers to be more responsive to the healthcare consumer. It maintains the patient experience as the central tenet. It facilitates generalizable research results by being more inclusive, encourages faculty and staff to think innovatively, and creates unity around the mission of the enterprise.

Transitioning to a PC model of academic healthcare requires all stakeholders to be well informed about both clinical and research values, operations, and productivity metrics. The first step in this process is to identify how existing people, processes, and the environment need to evolve to facilitate deeper and broader integration of research into clinical care.

Purpose: The goal of this project is to integrate clinical research more deeply and broadly into clinical care.

Methods:
- Conducted a Formal Needs Assessment (FNA) to identify opportunities to expand current clinical research infrastructure to support integration.
  - Semi-structured interviews with faculty and administrative leaders
  - Survey of faculty and gap analysis of current vs. desired state for clinical research
  - Semi-structured follow-up integration interviews
- Aligned FNA results with enterprise strategic plan.
  - Engaged key organizational stakeholders
  - Designed strategic initiatives
  - Conducted resource cost analysis
  - Identified metrics
  - Evaluated scalability
  - Planned implementation strategy

Results:
FNA results from 90 semi-structured leadership interviews and 894 faculty surveys identified barriers to conducting clinical research. Largest opportunities for improvement included: research training, process integration, transparency/communication, and more equitable resource access. Furthermore, when asked on how to best support the integration of clinical research into clinical care, accessibility to patient data, embedded research personnel in the clinical environment, improved linkages with satellite clinical sites, better advertisement of research opportunities in the clinic setting, and increased investment in dually trained (clinical/research) staff and faculty were identified as the most prevalent areas of opportunity. In direct response, our strategic initiatives were designed to expand clinical research resources, improve training, reduce redundancy and inefficiencies in processes, increase utilization of technology for data collection and accessibility, and create both a virtual and a physical centralized clinical research home for patients, families, researchers, and clinicians.

Statement of Impact:
Aligning the observations and needs of key organizational stakeholders with our NCH strategic plan enables us to better integrate clinical research into clinical care. This provides the foundation for a collaborative transition into a more patient-centered academic healthcare model.