

ELH Fellow: Shubhika Srivastava MBBS

Title: Exploring the Transition from a Single Integrated Practice Unit (IPU Center) to Multiple IPU's (Institute) for Cardiovascular Care, from Maternal Fetal to Pediatrics to Adult Care

Institution: Nemours Children's Health, Wilmington Delaware; Thomas Jefferson University

Sponsor: Mark Mumford (CEO)

Consultant: Mark McDonald VP- Cincinnati Children's Hospital Medical Center

Background:

Nemours Cardiac Center is an Integrated Practice Unit (IPU) designed to deliver care to children with Congenital Heart disease. Originally defined by Porter and Lee, "IPUs are multidisciplinary teams, ideally colocated, that are structured to meet the needs of well-defined groups of patients, usually with similar conditions, over the full cycle of care. IPUs represent a profound organizational change in health care delivery and can enable better, more efficient care with shorter cycle times for groups of patients with similar needs." (1).

Currently subspecialty care remains in a fee-for-service model and does not support multidisciplinary team care needed for complex quaternary level conditions. IPU Model of care was proposed to address such complexities of medical conditions such as Cancer (1, 2, 3,4).

Cardiology services are integral to a health care facility and across many of the other service lines, including primary care. Additionally with over 150 congenital cardiac surgical centers across the country the need for regionalization and transparency for outcomes has become imperative (5). Nemours is exploring whether incorporation of specific additional multidisciplinary programs (MDP) or IPUs for comprehensive Cardiovascular Care, from Maternal Fetal to Pediatrics to Adult Care evolve Cardiac from a Center to an Institute

Aims / Objectives:

1. Identify medical condition-specific programs that integrate multidisciplinary care teams
With each, define outcomes and key performance indicators
2. Integrate education, research and quality assessment infrastructure into the clinical programs
3. Clearly define outcomes, ROI and key performance indicators

Method:

SWOT analysis of current programs at Nemours Cardiac Center;. Receive consultation from the nationally-ranked Cincinnati Children's Heart Institute VP. Collaborate on Data analysis and Financial Consultation from the SVP, Strategy and Business Development and Chief Finance Officer at Nemours.

Results

Nemours Cardiac Center is an IPU. Currently this includes: Cardiothoracic Surgery, Anesthesia, Intensive Care and Cardiology general and subspecialty care, Diagnostics, therapeutics,

interventions along with Psychology, Genetics, Pharmacy, respiratory therapy, nursing and other ancillary services. The existing Cardiac Center IPU is focused on surgical volume and outcomes and has been very successful with excellent survival outcomes (<https://publicreporting.sts.org/congenital/50067>)

Integrating additional MDP with general cardiology outreach will increase access. Six subspecialty cardiovascular care programs have been identified in addition to general cardiology: Fetal cardiology, Adult Congenital, Electrophysiology, Heart Failure and Cardiomyopathy, cardiovascular Genetics and Prevention.

Other multidisciplinary support programs such as Cardiac Neurodevelopmental psychology, Cardiac Oncology and Rehab are being prioritized to support other programs.

Each program will need a defined goal and mission; align with Institutional strategy and require corporate support for clinical and administrative resources; IT infrastructure, integrated data base to measure care delivery process and outcomes. Incorporate education and marketing directed towards health care personnel and community. Quality, Education and Research Infrastructure build will also be required to support above programs and to be accredited and recognized as centers of excellence. KPI would include outcomes, access, utilization, safety measures, trainees, publications and grants.

Conclusion: MDP and IPUs have been identified and are in various stages of development. Future direction: Strategic plan incorporating above to attain regional and national recognition

References

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