Medical Affairs Advisory Committee Meeting January 15, 2020

Members Present: Feyi Adunbi, Jawad Al-Khafaji, Suomya Rangarajan, Rishindra Reddy (Chair), Marshall Runge (Dean)

Presenter: Amy Cohn, Ph.D.

Alfred F. Thurnau Professor, Department of Industrial & Operations Engineering Associate Director of the Center for Healthcare Engineering and Patient Safety (CHEPS)

Topic of Discussion: CHEPS: The Center for Healthcare Engineering and Patient Safety: An Introduction and Overview

Dr. Reddy opened the meeting and the minutes from December 18, 2019, were approved.

Background:

- Dave Munson, Dean of Engineering & James Wollscroft, Dean of Medical School worked together in partnership about 10 years ago, and worked together to create CHEPS.
- Challenges with attracting/training engineers:
 - 1. They don't know the complexity of variables of healthcare
 - 2. Bias to overcome

CHEPS

- Challenges for medical field:
 - 1. In the clinical domain the problems are lack of understanding where the problem is. CHEPS will continue to ask 'but why', to drill down to the basic processes.
 - 2. Dr. Runge asked/commented: How do we educate people to problems? Systems are similar & different
- Rishi & Amy gave an example of their project:
 - 1. Rishi came to Amy, giving her a scenario of training residents to perform lung transplants. The challenge was, how to complete the required number of lung transplants within the time frame for certification. The solution was to create a simulation training for residents.
 - 2. Challenges on both sides were feeling comfortable asking about acronyms and/or don't know what they don't know. Along with ownership levels of the project.

What We Do

- Shifting manufacturing/aviation techniques to healthcare setting.
- Students from the CHEPS program are being sought out by Mayo Clinic & Dana Farber.

How We Do It

- Jawad Al-Khafaji from the VA commented that everyone is competing for 'my time'. He didn't learn Lean techniques in medical school, what is the minimum info that I need to learn, etc.
- Dr. Runge commented: How do we perpetuate this philosophy? Amy's response:
 - 1. Put resources to train (RISE) and they spread learning
 - 2. Start at trainee level
 - 3. Medical school curriculum/Trunks
- Rishi commented that working with Amy, changed his mind-set. He has taken a supply chain class, and feels that it should be part of the medical school & residency curriculum.

Types of Problems We Solve

- Dr. Runge asked if they have looked at:
 - 1. Length of stays at the hospital?
 - 2. Emergency Department?
 - 3. His concerns about burnout: meetings (vs. working sessions) & emails
- Amy is open to working on projects, "whoever comes knocking at her door/"