

Blending Six Sigma and Innovation Tools To Improve Quality Healthcare Delivery

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Abstract

Today, healthcare providers and policy makers are puzzled on how to improve care delivery's quality and efficiency to attain patient satisfaction and cost effectiveness. They need more than ever powerful tools to bring out-of-the box solutions to challenges of nowadays-unprecedented changes. Hopefully, an increasing number of hospitals are embracing the Lean Six Sigma (LSS) improvement methodology as a path to manage improvement and innovation. Although, the method can contribute toward achieving greater care quality and eliminating wastes, it is not designed to lead to transformational changes that are sought today. In fact, once identifying the problem's root causes, the current LSS toolbox has no tools for generating disruptive ideas. To address this shortcoming, this study aims at strengthening LSS methodology by innovation tools. This is ensured by combining the approach with Stanford Biodesign Process tools, leading to a more value-driven innovation system. This combination will not only enable doctors to identify patients' unmet-needs and create a variety of breakthrough solutions through Biodesign, but it will also allow them to deal with the intricacy of the solution's implementation in an efficient manner through LSS tools. Overall, this combined approach is intended to shape innovative solutions in the healthcare sector, ranging from treatment and surgical procedures to medical devices.

Keywords

Lean Six Sigma, continuous improvement, innovation and healthcare quality.

Biographies

Mouna Squalli Houssaini holds a master degree in Mechanical Engineering from the Faculty of Sciences and Technologies of Fez-Morocco (FSTF). At present, she is a PhD Candidate in the mechanical department of the FSTF, and works on the development of an approach for designing and implementing innovative solutions in healthcare.

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