



PROVIDING BETTER HEALTHCARE THROUGH
SYSTEMS ENGINEERING:

How Lean Culture is Fighting Against the Coronavirus

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We've all been impacted by the COVID-19 pandemic in different ways. For me, one of the ways was receiving a call to "deploy" to our ventilator manufacturing facility to help make an unprecedented volume of ventilators as fast as possible. The world needed ventilators to fight COVID-19 and we needed to ramp production using our best manufacturing methodologies. Using Lean techniques was once described by one of its founding leaders, Taiichi Ohno, as "looking at the timeline, from the moment the customer gives us an order to the point when we collect the cash. And we are reducing the timeline by reducing the non-value adding wastes." GE Healthcare has incorporated Lean into its operational fabric just as described in the quote to delivery reliable daily output as well as to take on new manufacturing challenges. In this presentation, I will describe the challenge that COVID-19 presented to our company, to the production process & to the cross-functional group of people involved in supporting production. To tell this story, I will be sharing some basics about Lean Methodologies and how it influenced our approach, communications & the execution of an unprecedented ventilator output. Finally, I will discuss how these same methodologies and approach can be used to positively impact your business, career, or challenge you're facing.

Passion: My passion is serving the Healthcare community by educating eager learners, utilizing Lean-6 Sigma methodologies & incorporating Advanced Technologies to challenge the status quo & bring about meaningful improvement.

Experience: I've been with GE Healthcare for 15 years in a variety of roles from a manufacturing engineer, to a site & national Lean Leader to a multi-state field service director. These roles have including manufacturing, service & commercial elements to them and always included a primary focus on healthcare. Additionally, I have worked within the aviation, energy & financial industries through cross-business projects. With my experience, I was recently called on by GE to help during the COVID-19 response to drive increased output, improved quality & to build a supportive culture in our ventilator manufacturing business. Additionally, I have used this knowledge to start an education & consulting group focused on Lean methodologies called ripple Solutions LLC. My small business has allowed me to expand outside of healthcare & connect with the printing, distribution, university & non-healthcare manufacturing industries.

Education: I have a degree in Industrial Engineering with additional courses in Medical Sciences from University of Michigan, class of 2007. I am a GE Healthcare Operations Management Leadership Program graduate, I'm a certified Black Belt in DMAIC Lean Six Sigma and I'm Green Belt certified in DFSS Six Sigma. I have also received extensive GE Healthcare & Shingijtsu Lean training.

This seminar series is presented by the U-M Center for Healthcare Engineering and Patient Safety (CHEPS): Our mission is to improve the safety and quality of healthcare delivery through a multi-disciplinary, systems-engineering approach. For the Zoom link and password and to be added to the weekly e-mail for the series, [please RSVP](#). For additional questions, contact CHEPSseminar@umich.edu. Photographs and video taken at this event may be used to promote CHEPS, College of Engineering, and the University.