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Abstract Text:

Having its birth place in advance manufacturing and mechanical systems, the digital twin is proposed as a disruptor of the healthcare industry. The digital twin is a paradigm where physical artifacts are feeding data to *in silico* models creating specific dynamic representations of the state of those artifacts. When applied to healthcare, there is the concept of the in silico replica of the individual that will receive inputs providing a dynamic representation of the health status of the individual. Despite the value that the digital twin platform is poised to deliver, the implementation of the technology highlights existing challenges in medicine including the role of evidence based versus personalized medicine in clinical decision making, questions of patient behavior and compliance, and the digital transformation of medicine. This presentation will discuss the application of digital twin technologies using real-world examples from the perspective of the medical device industry.