



Adam Himes, M.S.
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Adam Himes is a mechanical engineer in the Cardiac Rhythm and Heart Failure division of Medtronic. His primary area of focus is in the use of engineering and statistical models for predicting and analyzing medical device reliability and performance. Since coming to Medtronic in 2009, Adam has worked with in-vitro bench tests, medical imaging, and computational models to understand problems ranging from fatigue fracture to tribology of insulation materials. Adam's activities have ranged from early concept evaluation to pre-market regulatory submissions, to analysis of post-market product performance.

In addition to research and development activities within Medtronic, Adam is an active participant in the Association for the Advancement of Medical Instrumentation (AAMI) Transvenous Cardiac Leads Working Group. This group is developing the next generation of cardiac lead standards that will incorporate in-vitro test to failure data along with measured in-vivo human use conditions.

Adam has also been an active member of the Medical Device Innovation Consortium (MDIC) Virtual Patients project since its inception in 2014 (<http://mdic.org/computer-modeling/virtual-patients/>). This project has pioneered the use of engineering models for clinical outcomes in a Bayesian statistical framework that enables improvements in clinical trial efficiency. The members of the project come from across the medical device industry and FDA. A key activity of the group was a mock IDE submission to demonstrate the use of the Bayesian framework in clinical study for a hypothetical new medical device.

Prior to Medtronic, Adam spent 15 years working in the inkjet printing and hard disc drive industries. He received a B.S. in Mechanical Engineering from Michigan Tech and a M.S. in Mechanical Engineering from the University of Minnesota.