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Supporting Embedded Medical Software Development with MDevSPICE® and Agile Practices

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Abstract : Emerging medical devices are highly relying on embedded software that runs on the specific platform in real time. The development of embedded software is different from ordinary software development due to the hardware-software dependency. MDevSPICE^{®} has been developed to provide guidance to support such development. To increase the flexibility of this framework agile practices have been introduced. This paper outlines the challenges for embedded medical device software development and the structure of MDevSPICE^{®} and suggests a suitable combination of agile practices that will help to add flexibility and address corresponding challenges of embedded medical device software development.

Keywords: agile practices, challenges, embedded software, MDevSPICE®, medical device

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