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An Intelligent Risk Detection Framework Using Business Intelligence Tools to Improve Decision Efficiency in Healthcare Contexts

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ABSTRACT

Leading healthcare organizations are recognizing the need to incorporate the power of a decision efficiency approach driven by intelligent solutions. The primary drivers for this include the time pressures faced by healthcare professionals coupled with the need to process voluminous and growing amounts of disparate data and information in shorter and shorter time frames and yet make accurate and suitable treatment decisions which have a critical impact on successful healthcare outcomes. This research contends that such a context is appropriate for the application of real time intelligent risk detection decision support systems using Business Intelligence (BI) technologies. The following thus proposes such a model in the context of the case of Congenital Heart Disease (CHD), an area which requires complex high risk decisions which need to be made expeditiously and accurately in order to ensure successful healthcare outcomes.