

A Path for a Rapid Transformation of Clinical Analytics and Data Strategy

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What might the attendee be able to do after being in your session?

The attendees will leave with a practical roadmap for the implementation of a Clinical Data Governance strategy at their health system. They will receive insights from a real deployment, with best practices in the development of data strategies that support decision making in clinical and operational environments. They will also learn practical lessons on the application of maturity models to clinical data and analytics for strategy development, and will be able to identify what characteristics of different models are most useful in implementation.

Description of the Problem or Gap

There are not clear best practices and roadmaps for the deployment of data governance and data strategies within health care systems. While best practices can be represented by maturity models, there are multiple maturity models relating to analytics and data governance, with varying levels of utility.

Methods: What did you do to address the problem or gap?

We applied and evaluated multiple data governance maturity models, and identified specific benefits for each model. Among the three models applied, we found that different models provided value in different ways, and we were able to combine them at different times to leverage their value. This application of multiple models and learning from their application is innovative in both assessing current capabilities and developing strategies.

Results: What was the outcome(s) of what you did to address the problem or gap?

We have successfully implemented a new data strategy and data governance model based on applications of different maturity models. We have initiated execution on the strategy and realignment of enterprise resources to support this approach. In parallel, we implemented self-service tools with new data access policy changes and training, approved by health system.

Because the approach was thoughtful in its approach of identifying best practices, making assessments, and identifying pathways to achieve value, with multiple iterations of assessment and strategy refinement, we were able to create a robust strategy with significant organizational support.

Discussion of Results

To address growing analytics needs and challenges in addressing those needs, multiple data systems were consolidated to create a single data and analytics group at UW Medicine, with a goal of supporting existing needs and anticipated growth. However, the consolidation of disparate siloed data sources, teams and practices quickly emerged as a fundamental challenge, with a need for integration among both data and teams. In addition, it was recognized that consolidation alone would not address the current and expected needs, nor would incremental gains in efficiency be sufficient. In short, we needed to advance our core capabilities and do things not just better, but differently. We began by developing an enterprise strategy for transforming data use at UW Medicine. As a first step, we evaluated the many toolkits, maturity models and artifacts available to determine a transformation roadmap. However, we found many of these to be incomplete and wanting. One model identified core areas needed for strength, but were lacking in descriptions of pathways for confidently assessing our current capacity or capabilities in those areas. Another model was more descriptive for assessment, but lacked clear foundations for those descriptors, or details on pathways for achieving growth. We finally applied an adoption model which was more

helpful in defining specific levels for assessment and planning, as well as pathways for advancement; however, this adoption model lacked a detailed assessment of broad components necessary to achieve different levels. It was only in the application of multiple models that a comprehensive strategy could be defined.

Conclusion

By leveraging different maturity models and tools, UW Medicine addressed different concerns and issues regarding the technical and organizational readiness for a modern and future facing data strategy. This resulted in improvements to organization structure, governance and technology investments, with the support of the enterprise to provide alignment across teams.

Attendee's Take-away Tool

Attendees will be provided a two-page takeaway with data maturity model guidance and examples, as well as qualifying readiness questions.

Use of Knowledge Acquired at Previous AMIA Events

In 2017 at the Joint Summits meeting and as part of the new Implementation track, Dr. Wilcox organized a panel of experts in data and analytics across AMIA membership, who provided an initial application of analytics maturity along with descriptions of their activities. This was important for an initial foundation of using maturity models for data and analytics planning, and it did provide demonstrations of assessment and even comparisons across institutions. However, no clear pathways for improvement emerged from the discussions. Later in 2019, another panel on maturity models described both the breadth of application of maturity models that could be used in analytics, but some specific examples of application of models for planning. Those presentations were foundational in informing how maturity models could be applied, but they did not specifically address how to actually apply them. This presentation is intended to address that gap by describing lessons learned in the actual application of maturity models for improvement, and the need for varying models in terms of both breadth and specificity.

References

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