Optimizing the EHR though Experience and the Agile Process

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Keywords: Clinical Documentation, Go-live Process Change, Enhancing EHR, Inpatient and Ambulatory, Agile

Introduction/Background

Boston Childrens Hospital underwent a multi-year process in order to optimize the EHR in all ambulatory clinics and locations. More recently, the hospital was tasked with the implementation of many of these same tools into the world of inpatient care but was given the lofty goal of a one year completion time. This project is expected to alter physician workflow, nursing workflow, all documentation, ED care, ICU care, and the discharge process. The experience gained from the ambulatory portion of the project, mixed with a brand new system of implementation, called Agile, will help to make this massive change a reality and lead to more streamlined patient care and documentation.

Methods

Agile has a much different approach to process change in the hospital as "the agile methodology is based on adaptive planning, early delivery, and continuous improvement with the mindset of responding to change quickly and naturally" [1]. As opposed to the "big bang" approach (where one day things are one way and then next day everything is vastly different), Agile strives for rolling go-lives in set amounts of time, called iterations. Each iteration brings small changes to enhance the product for the end user and gives the clinicians time to work with the product in real time while giving effective feeback on disruptive parts of the documentation process. Because the iterations are rolling, we can make these change in test areas and then release these changes into the clinician world in just a matter of weeks. This also allows for a more immersive approach to training and learning as the group has the ability to learn one or two things per iteration rather than trying to comprehend hours of classroom material in one sitting.

Results

Though the project is still underway, we have gone live with our pilot group. It took four weeks for the changes to be implemented, staff to be taught, demos to be run, and end users to adopt the product. This is a great improvement from the ambulatory world, where design alone took between 5 and 6 weeks. The lessons learned from the ambulatory group is a factor in the success and adoption of this tool. In the inpatient setting we can forsee issues and difficulties before go-live to ensure we tackle the issues before they arise. The fluid process enhances staff satisfaction with the products as they feel as though they understand the program, and that they have a say in the changes to be made.

Discussion/Conclusion

While the total project go-live will not occur until this summer, the preliminary responses from the pilot group are very positive and the analytics are showing that people are using this product more while spending less time in the chart jumping from one page to another. The application does have some downfalls, but through the beauty of the Agile process these are issues that have been added to our worklist and we are actively working to resolve them. With the changes being noticed and felt every few weeks, the staff feels empowered to use the new tools and feels reassured knowing that both the technical teams and the clinical teams are working cohesively to better patient care. As Lee and Chang noted, "once the system had been revised and redesigned, nurses could benefit from the EHR use and provide constructive comments" [2]. We believe that the ability to redesign and improve the information systems concurrently will help the overall adoption and understanding of the EHR changes.

References

1. Janclaes, J. Agile Methodology Fosters Flexibility. *Credit Union Directors Newsletter*, 2018; *44*(11). Retrieved from Business Source Premier Database.
2. Lee, T, Chang, C. Nurses' Experience of an initial and Re-Implemented Electronic Health Record Use. *Studies in Health Technology & Informatics, 2016: 802 – 803.* doi http://dx.doi.org.proxy.hsl.ucdenver.edu/10.3233/978-1-61499-658-3-802 .