Case Study: Bundle Formation and Pricing for Payers

Client Requirements

The client is a leading healthcare payer. Client needed to use their large repository of paid claims to identify episodes of care such as hip replacement surgery that could be bundled at a fixed cost.

The client desired to design bundles by identifying clinically acceptable procedures required during the episode and benchmarking the spend for the required procedures to set the price of the bundle.
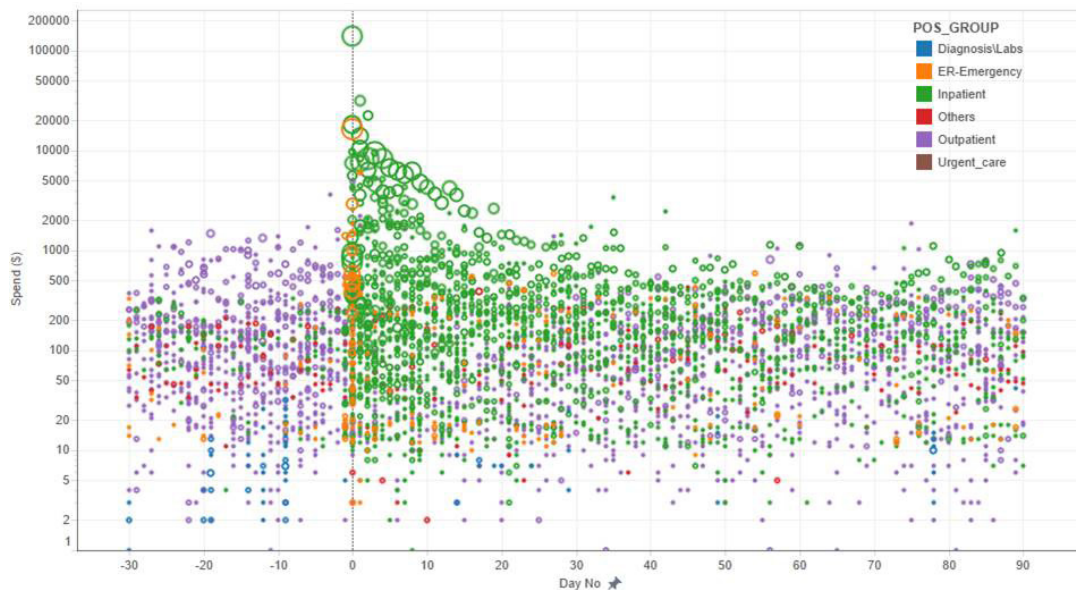
Algorithms Used

Pre/ post event analysis, and recency, frequency and monetary (RFM) analysis to determine procedure bundles

Input Parameters

Claims remits and patient demographics

Output Parameters

RFM analysis identified most important procedures in each POS, allowing clinicians to determine procedure bundle that achieves desired clinical outcomes at an optimal price.

Medictiv for Bundled Payments

CitiusTech's Medictiv suite enabled the client to analyze the procedures conducted on the members in various places of service (POS) during episode of care, before and after the hip replacement surgery, by creating a pre- and post-event timeline. Subsequent analysis scored procedures according to the frequency, time proximity to the surgery, and the spend conducted at each place of service setting. The analysis focused on the function of the clinical board in determining the necessity and spend for the procedure by each place of setting, allowing definition of bundle suitable for the member population of the payer.

Value Delivered

By partnering with CitiusTech, the client was able to:

- Leverage Medictiv's predictive analytics capabilities to create a customized model for bundle formation and identify episodes of care
- Define pragmatic bundles for the most valuable and important procedures without compromising the quality of care delivered
- Ensure comprehensive hip replacement that can be bundled from day 10 to day 30 at a fixed cost of USD 45,000

About CitiusTech

CitiusTech is a specialist provider of healthcare technology services and solutions to medical technology companies, providers, payers and life sciences organizations, with over 2,700 professionals worldwide. CitiusTech's services and solutions include healthcare software development, healthcare interoperability, regulatory compliance, BI/analytics, consumer engagement, care coordination and population health management. CitiusTech helps customers accelerate innovation in healthcare through a number of solutions and accelerators for clinical quality reporting, healthcare big data, cloud computing, mobile health and predictive analytics. With cutting-edge technology expertise, world-class service quality and a global resource base, CitiusTech consistently delivers best-in-class solutions and an unmatched cost advantage to healthcare clients worldwide.

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