

What is the impact of clustering?

Clustering members within each cost bucket yielded better predictions for heart attacks within clusters.

Grouping patients in clusters exhibits temporal diagnostic patterns within nine months of a heart attack.

These patterns can be incorporated in the diagnostic rules for heart attacks.

The approach shows that using analytics for early heart failure detection through pattern recognition can lead to interesting new insights.

The findings here are reinforced by results from our research.

IBM, Sutter Health, and Geisinger Health Systems partnered in 2009 to research analytics tools in view of early detection.

Steve Steinhubl, a cardiologist from Geisinger, wrote, "our early research showed the signs and symptoms of heart failure in patients are often documented years before diagnosis.

The pattern of documentation can offer clinically useful signals for early detection of this deadly disease."