Seton Healthcare Family

# reducing readmissions to improve care

## The Challenge

Working with jStart, Seton Healthcare sought to address a need to reduce the occurrence of high cost Congestive Heart Failure (CHF) readmissions. How would Seton do this? By proactively identifying patients likely to be readmitted on an emergent basis. Bringing in jStart's expertise with sophisticated text analytics, Seton hoped to address this issue by leveraging key IBM text analytics technologies.



*Image courtesy and © Seton Healthcare Family*

*"IBM Content and Predictive Analytics for Healthcare uses the same type of natural language processing as IBM Watson, enabling us to leverage information in new ways not possible before. We can access an integrated view of relevant clinical and operational information to drive more informed decision making and optimize patient and operational outcomes."*

*Charles J. Barnett*
*FACHE, President/Chief Executive Officer*
*Seaton Healthcare Family*

See how IBM is applying sophisticated data analytics to create Smarter Healthcare

## The Solution, Identified

The jStart team immediately matched Seton's needs with an existing IBM product: the IBM Content and Predictive Analytics for Healthcare solution. This sophisticated analytics package, based on IBM's Content Analytics offering, would give Seton the capabilities it needed to tackle the challenge. In addition, the team knew that this technology could help the client better target and understand high-risk CHF patients for care management programs by:

■ Utilizing natural language processing to extract key elements from unstructured History and Physical, Discharge Summaries, Echocardiogram Reports, and Consult Notes

■ Leveraging predictive models that have demonstrated high positive predictive value against extracted elements of structured and unstructured data

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## Seton Healthcare Family at a glance

- Founded in 1902 in Austin, TX.
- Over 12,000 employees; over 2600 credentialed physicians
- Top ranked health system in Texas
- 1.35M outpatient visits; over 68,000 admissions to its hospitals; over 265,000 emergency room visits per year
- 38 clinical locations; 10 acute care hospitals
- Over $419M in care for the poor and in community benefit in 2011
- Engaged in partnerships with the University of Texas System, including the UT Southwestern Medical Center in Dallas

## get started with jStart:

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- Providing an interface through which providers can intuitively navigate, interpret and take action

## Smarter Business Outcomes

By leveraging jStart's sophisticated data analytics skills and capabilities, combined with IBM's text analytics technologies, Seton Healthcare Family has been able to proactively target care management and reduce re-admission of CHF patients. The benefit? For Seton, a reduction in costs and risks associated with complying with Federal readmission targets. For Seton's patients, fewer visits to the hospital and overall improved patient care. By teaming unstructured content with predictive analytics, Seton is able to identify patients likely for re-admission and introduce early interventions to reduce cost, mortality rates, and improved patient quality of life.



*Image courtesy and © Seton Healthcare Family*

## Who is jStart?

jStart is a highly skilled team focused on providing fast, smart, and valuable business solutions leveraging the latest technologies. The team focuses on emerging technologies which have commercial potential within 12-18 months. This allows the team to keep ahead of the adoption curve, while being prepared for client engagements and partnerships. The team's focus currently includes: big data, text analytics, business events processing, mobile platforms, and mashups/widgets.

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