How Evergreen Health Embraced A Data-Driven Culture And Substantially Reduced Time Spent Reporting

Introduction

Navigating the healthcare system and accessing care can be a difficult and overwhelming experience for many Americans. Evergreen Health works to decrease the barriers faced by many people in Western New York by providing medical, supportive and behavioral services to individuals and families – especially those who are living with chronic illness or who are underserved by the healthcare system.

Founded in 1983 by a handful of volunteers to address the HIV and AIDS crisis in Western New York, Evergreen Health has capitalized on the breakthroughs and advances in medical therapy and expanded its range of services beyond HIV care to meet the ever-growing needs of the community. Today, Evergreen operates as a comprehensive healthcare delivery system that provides a multitude of services **– ranging from HIV prevention to specialty care for the LGBTQ and transgender community to harm reduction programs and services for drug users –** under one roof. By virtue of a holistic approach to addressing the needs of their patients, and by striving to push the boundaries of improving health outcomes, Evergreen – an enterprise well-versed in facing unique challenges – has made accessing and receiving healthcare easy and inclusive for all, whatever their health and wellness goals may be.

Evergreen Health

Their Needs

In 2017, Evergreen Health committed to undertaking a large data governance initiative, with the intention of **leveraging and exploiting their vast quantities of disparate data to better serve their patients,** with a particular focus on the social determinants of health – Economic Stability, Education, Health and Healthcare, Neighborhood and Built Environment, and Social and Community Context.

> "... infuse the massive volumes of data they'd amassed into every role, every process, and every decision they were to make."

After developing a data warehouse, transitioning away from access databases, and moving towards more ETL-based environments that provided steadier streams of patient data, Evergreen concluded that in order to drive significant change, they needed to turn their attention to their reporting structure, and seriously evaluate ways in which they could **infuse the massive volumes of data they'd amassed into every role, every process, and every decision they were to make.** It was one thing to have a surplus of data. It was now imperative they find ways in which to take advantage of and use it more effectively to deliver true business growth.

Evergreen also had an insatiable appetite for growth. Beyond their desire to improve the patient experience, they also had a very real need to enhance productivity and create stunning insights. It wasn't unheard of for their Quality team and medical committee to **spend weeks upon weeks manually sifting through Excel workbooks to produce paper reports** that ultimately spurred more dialogues on data quality and extraction processes rather than illuminate insights and generate actionable next steps. Evergreen Health knew that in order to shatter the restraints imposed by their Excel-based reporting structure, to shift the culture to one that's data-driven, and to get data in front of everyone, they needed to invest in a business intelligence, reporting, and data analytics solution.

Their Solution

Evergreen Health envisioned a certain level of data-centricity within the organization; one where everyone – from different departments and with varying technical skills – was empowered to use data to think critically, make their own decisions, and foster conversations that historically may never have happened. Many of their primary users were expected to be executives, so, in order to achieve this, they knew they needed to deliver an analytics application that was advanced and customizable enough for various use cases, yet at the same time, wouldn't overwhelm their users. In this case, one size would not fit all, and Evergreen knew that if they were to break down the barriers preventing the organization from embracing a data-driven culture, they **needed a business intelligence software that would deliver a fully governed experience and allow their users to personalize and create actionable, easy-to-consume content.**

"... replicate the look and feel of their newly re-designed website by combining elements of it with their business intelligence solution..."

Beyond being able to tailor the output – by virtue of interactive dashboards, reports, and data visualizations – for each of their four healthcare service departments – and respective divisions within (i.e., finance) – to get data in the hands of everyone, and have them each create their own significant, actionable insights, Evergreen needed to create an integrated experience by **replicating the look and feel of their newly re-designed website by combining elements of it with their business intelligence solution**, which was to be securely hosted internally. To accomplish this, the data analytics software would need to be able to meet highly specific design requirements and essentially mirror the layout and structure Evergreen's users have grown so accustomed to. Ensuring that level of familiarity could be maintained within the interface was crucial in Evergreen's decision.

"... rather than conform to the architecture requirements imposed by other software vendors, Evergreen Health opted for a business intelligence solution with zero limitations..."

But perhaps most importantly, **what Evergreen Health sought was a zero-compromise solution**. With data stored not only in their new warehouse, but also across innumerable additional data sources and with extracts updated nightly, it was decided that they proceed with a data analytics vendor capable of connecting to any data source in as close to real-time as possible. While Evergreen's data was increasingly becoming more and more structured, they still wanted the freedom and space to explore it as they wanted to, without any unnecessary restrictions. After evaluating both Tableau, Microsoft Power BI, and Dundas BI, **what stood out the most, was Dundas BI's immense flexibility in regard to data connectivity and how data can be prepared for analysis.** So, rather than conform to the architecture requirements imposed by other software vendors, Evergreen Health chose the path of least resistance and **opted for a business intelligence solution with zero limitations** to how data is discovered and analyzed.

"Dundas has been instrumental in developing data analytics that inform our decision making. The platform is intuitive and provides accessibility of data across management. In healthcare, having real-time data is critical and Dundas provides unique, customizable dashboards that places that data at our fingertips"
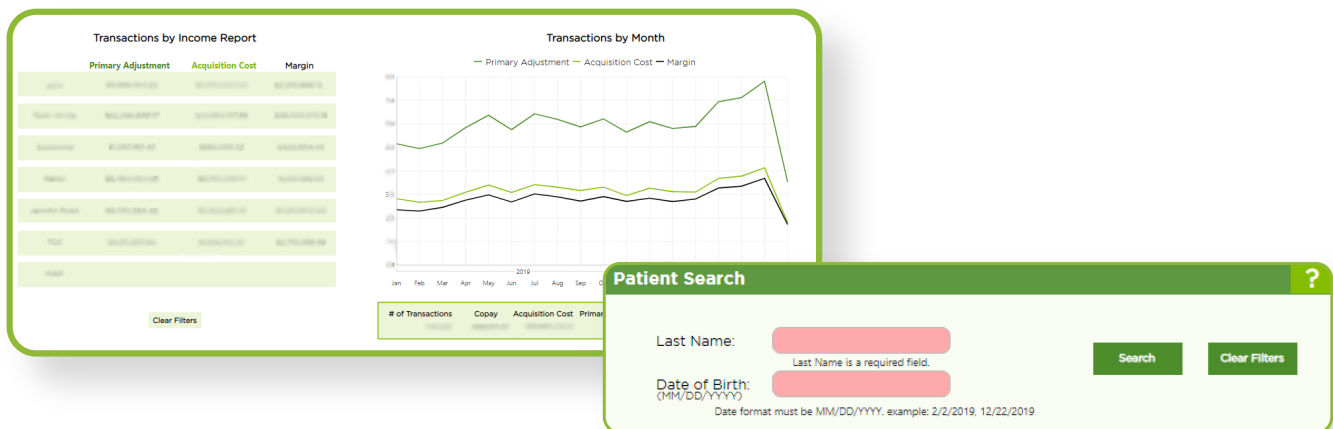
Jesse Gasbarro
Vice President & CFO

Why Evergreen Health Chose Dundas BI

✓ Personalized Analytics Experience

Not all of Evergreen's users are data analysts or developers. However, they still wanted to provide each of them with a self-service experience. With Dundas BI, their users – regardless of technical expertise – are empowered to extract more from their data and analyze metrics most pertinent to them. They can **visually interact with and explore the data, filter, perform drill-downs, navigate personalized, pre-defined dashboards and reports**, and make more accurate and informed decisions.

"... they were able to build a responsive and polished data analytics solution that looked and felt identical to how they envisioned it"

✅ Complete Control of Visual Design

Evergreen wanted to create an integrated experience between their website and business intelligence and data analytics solution, and to do so, needed it to embody the 'Evergreen brand'. So, using Dundas BI's rich white-labelling capabilities along with its PowerPoint-like user experience and pixel-perfect canvas, they were able to build a **responsive and polished data analytics solution that looked and felt identical to how they envisioned it**. By removing stock components (such as labels, images, menus, etc.), and replacing them with custom design elements (such as brand colors and micro-interactions), they were able to build an application their users were already familiar with, ensuring a higher adoption rate.
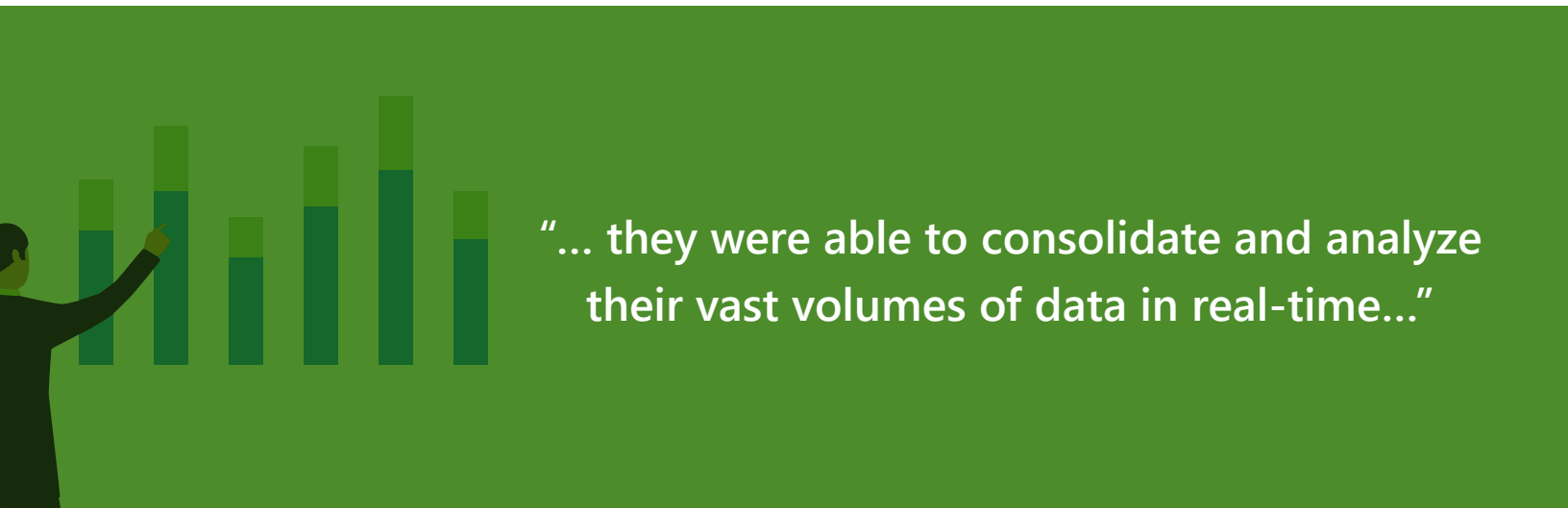
✅ Store User Searches with Data Input

Dundas BI includes the ability for end users to add and modify data within the application and store it in its warehouse data storage area. Using these built-in Data Input and Writeback capabilities, Evergreen was able to store each of the searches their phone operators were performing and put them into a Data Cube. Using this data, they were able to **audit patient searches and use the records that were created to keep better track of user behavior.**

☑ Superior Navigation Menu

To ensure their users were able to quickly and easily obtain the information they needed, Evergreen opted to build a near replica of their website navigation menu on their dashboards. However, as different users were to have access to different reports and dashboards, it was important for Evergreen to not have to manually update their menus for every user or every time new content was available. **Using the highly versatile Menu Component in Dundas BI, they're able to populate menu items automatically** and ensure their users are able to navigate through other views and custom items quickly and securely.

> "... they were able to consolidate and analyze their vast volumes of data in real-time..."

☑ Flexible Data Prep and Connectivity

Evergreen maintained a lot of data across a variety of data sources. As such, it was very important for them to be able to connect all of it to their BI application regardless of where it lived or what form it took. With Dundas BI, they were able to **consolidate and analyze their vast volumes of data in real-time**, and not worry about having to invest in multiple tools to prepare it. Whereas other platforms are restrictive in their data prep and connectivity functionality, Dundas BI is fluid, and adapts to Evergreen's needs.

✓ Powerful Scripting Engine

Scripting is synonymous with Dundas BI and experimenting with how much you're able to extend and customize the platform is part of what makes it so alluring and enjoyable to use. Using JavaScript, Evergreen was able to **pass parameter values from dashboards to stored procedures**, preserving context as their users analyzed data at progressively deepening granularities.

"As a member of the Phone Operator Team, we do not have access to clinical systems. Instead, we utilize the patient lookup dashboard that was created in Dundas, which combines patient information from all of our systems into one location. This feature improves our patients' telephone experience as it allows us to assist patients directly by verifying the time, date, and even what type of appointment they have scheduled with any and all providers. This has greatly reduced transfers to other departments, which can be frustrating to our callers. Using Dundas to search for and view this information has made our jobs easier and more efficient, and I can say our patients have been very satisfied with their experience when calling"

Christina Sheppard
Phone Operator Generalist

Key Benefits

With Dundas BI, Evergreen Health was able to **completely eliminate their reliance on manual reporting and Excel-based processes**, and usher in an era of automated dashboards and reports. In fact, prior to implementing Dundas BI, the executives on Evergreen's Finance teams would spend upwards of two weeks looking through Excel workbooks, performing advanced calculations and analysis. Hard copies of the reports were then distributed, their only identifiable attributes being the way they were colored. **Now, financial data is accessible to the executive team in real-time**. The data is always at their fingertips, meaning they're able to analyze the financial health of each program and service area whenever they want, without toiling endlessly in Excel.

Furthermore, Evergreen has been able to eliminate redundancies caused by manual reporting and have managed to **combine 12 recurring reports for one department into one dashboard that's accessible by multiple users**. With less information to sift through, Evergreen's users are having an easier time consuming data pertinent to their success, leading to increases in their productivity.

""Evergreen has been able to enhance the quality of care that's being delivered to each patient..."

Financials weren't the only thing greatly impacted by Dundas BI at Evergreen Health. Both their Behavioral Health Programs and Medical Services benefited tremendously by acquiring the ability to identify and track population data and perform analysis on it. By obtaining a deeper understanding of who their patients are (their demographics, psychographics, behavioral habits, etc.), and by being able to group them accordingly (by the number of services, encounters, insurance providers, etc.), **Evergreen has been able to enhance the quality of care that's being delivered to each patient** and work more closely and strengthen relationships with their payer groups and funders to ensure greater sustainability for the company. This information is also now accessible at exquisite granularities, giving Evergreen unprecedented insights which never before existed.

Final Statements

Evergreen Health wanted the freedom to work with their data how they wanted to, when they wanted to. They weren't willing to compromise when it came to their analytics and refused the restrictions other business intelligence platforms imposed upon them. By choosing Dundas BI, Evergreen stepped free from the constraints of Excel and realized their dream of becoming a data-driven organization. As a result they've been able to **slash their time spent on reporting exponentially, deliver real-time, custom insights across the organization, and improve the quality of care delivered to their patients.**