

# EXPERIENCE THE POWER OF BUSINESS INTELLIGENCE IN FIVE DAYS

## Sierra Systems

Sierra Systems is a leading IT consulting company, offering a full range of advisory services, systems integration, and managed application services.

## Health Practice

Sierra Systems' Canadian Health Practice has worked with clinicians and health system administrators across the continuum of care, helping them define and measure goals, and achieve quality improvements in areas that directly impact patient care and outcomes, while respecting healthcare's unique privacy requirements.



## Microsoft Power BI

Power BI is a business analytics tool for the aggregating, analyzing, visualizing, and sharing of data. Built to integrate with Office365, Microsoft offers both free and professional versions.

Healthcare decision-makers are increasingly looking to Business Intelligence (BI) solutions to help them quickly, and in a cost-effective manner, garner insights and get answers to help them make evidence-informed decisions in the planning and provision of healthcare services.

A cultural shift is required as we move towards bringing information sources together to provide insights into patient and population health, and place them in the hands of those who can have a meaningful impact on long-term outcomes. Interactive dashboards and reports provide powerful and valuable visualizations, enabling healthcare organizations to provide the next generation of care and value for the populations they serve.

## SOLUTION

One of the strongest offerings for data visualizations, Microsoft's Power BI adds new features regularly, keeping your organization at the forefront of this analysis. Using an Agile delivery method, Sierra Systems' Data & AI Team delivers an operational solution in just **five days**.

## BUILDING A CLINICAL REPORT IN FIVE DAYS



Many clinics need to align reporting with programs, combining disparate subsets of data into a monthly report to support benefits evaluation and continuous quality improvement. Within five days, Sierra Systems can develop this basic report from existing sources.

Sources can be as varied as provincial data tables, clinical data continuously updated on Excel files in the cloud, electronic medical records, or any major CRM/ERP system.



As soon as the sources are connected, their data is "blended" into a single population. This can then be segmented by population health screening data, such as *height & weight, lipid monitoring, diabetic screens*, or other clinical indicators.

Power BI is part of Office365, so all reports are easily accessible. Reports can be programmed to auto-populate, or be exported to mobile devices.

Within the report itself, each user can edit the information shown to look for specific correlations. The simple drag-and-drop interface in Power BI allows non-technical users to connect to almost any data source, and bring real-time reports to life using only a browser.

Data is automatically populated, so dynamic information, such as diabetic screening rates, reflect real-world changes. This visualizes up-to-the-moment data, setting the stage for new insight and new conversations.

## DAY 1

- Identify stakeholders
- Select business processes (two or less)
- Select limited data set (6-12 tables from one or two data sources)
- Determine the version of Power BI to use (Pro vs. Free)
- Create conceptual model of dimension and measures

## DAY 2

- Shape, transform, and clean data as required
- Build page one of report

## DAY 3

- Shape, transform, and clean data as required
- Build page two of report

## DAY 4

- Build page three of report
- If the Power BI service (cloud) is allowed, create a dashboard based on certain widgets from the three reports

## DAY 5

- Share the dashboard and reports with stakeholders
- Review how to access and use dashboard and reports
- Explore solutions and features
- Discuss next steps

## BUILD POPULATIONS

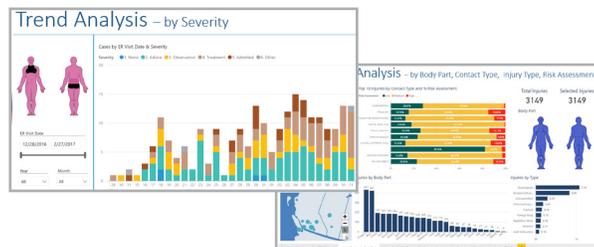
In the first day of our five-day solution, collective teams identify which sources the reports will draw data from. The strength of Microsoft's system collects data from almost any source: EMRs, HTML, public tables, or even internally-collected Excel documents.

## GET DATA

Sort, segment, and filter data with Power BI, even when the data comes from multiple, unrelated sources. Sierra Systems has the analytic experts to shape, transform, and clean the data, so that users can manipulate it in Power BI.

### ANY DATA SOURCE

- Population health
- Regional demographics
- Chronic disease management
- Wait times
- Cost of care
- Primary care screening:
  - Blood pressure
  - Tobacco use
  - Cancer screening
  - Diabetes screening
  - Height and weight, etc.
- Injury types and rates
- Dementia and Alzheimer's data
- Health system use:
  - Emergency visits
  - Hospital admissions & length of stay
  - Return visit rates



## DESIGN REPORTS

With a simple drag-and-drop interface, non-technical users can learn to edit reports in minutes. Users can edit, create, and invite people to view their layouts and graphics. Pre-built custom visuals are available from Sierra Systems.

## VISUALIZE REPORTS

This dashboard approach lets individual users modify what data is shown for them, while maintaining branding standards. As part of the **Five Day Power BI** offering, Sierra Systems also includes basic training, allowing your teams need to build, edit, and share new windows of insight into patient outcomes.

### Learn more

To learn more about how Sierra Systems' Health Practice can help you realize the benefits of analytics, contact us at:

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