Data Analytics in Healthcare

Insights from leveraging Data Analytics for Population Health Management

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Agenda

- Introduction
- Case Studies
- Insights from Customer Implementations
- Wrapping Up
Introduction

- Zenith Technology Solutions (ZTS)

- Helps organizations succeed with Value-Based Contracts
  - Identifying members at risk
  - Reducing readmissions, improving adherence
  - Monitoring/Improving care quality scores, strengthening network collaboration

- Integrated Care Delivery Platform (ICDP)
  - Population Health Management, Care Coordination Technology
  - Leveraged by Health Plans and Providers to manage high-needs, vulnerable populations

- Data is only as good as it is actionable
Big Data can significantly impact Healthcare

1. Identify which patients to focus on
2. Collaborate with partners
3. Engage patients in their care

Government
Employers
Individuals

Payers
Providers

Patients
Consumers

Providers

Administer and Manage Care

Purchasers

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Case Study: Barriers to Accessing Care

- Color scale identifies number of patients, from green (lowest) to red (highest)

- Size of the circles represent the number of services provided

- Informed provision of resources
  - Primary Care facilities
  - New service locations
  - Collocation

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Case Study: Reducing Readmissions

- Specialized Clinical Protocol
  - 9-touch point
  - First contact before discharge

- Follow-up within 7 days
  - Near real-time feeds from hospitals

- Risk of Readmission
  - Historical claims data + Admissions data
  - 100K messages/month from 500 facilities

- Operationalizing data
  - Last known case manager
Case Study: Contract Performance Management

- **Performance Metrics**
  - Roll up/drill down by org

- **Trends**
  - Target vs. Achieved
  - 12-month rolling window

- **Benchmarks**
  - Across orgs, state and national level

- **Additional (Projected vs. Required)**
  - To meet measured objective
Never stop learning, because life never stops teaching.

Unknown
Data Maturity: Understand your audience

Predictive and Prescriptive Analytics

Descriptive Analytics

OPTIMIZATION: “What’s the best that can happen?”

PREDICTIVE MODELING/FORECASTING: “What will happen next?”

RANDOMIZED TESTING: “What happens if we try this?”

STATISTICAL ANALYSIS: “Why is this happening?”

ALERTS: “What actions are needed?”

QUERY/DRILL DOWN: “What exactly is the problem?”

AD HOC REPORTS: “How many, how often, where?”

STANDARD REPORTS: “What happened?”

Adapted from “Competing on Analytics”, Davenport, Harris
Choose your battles wisely

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Data Governance: Your compass

- **LEADERSHIP TEAM**
  - Provides overall governance, prioritization, and cultural change leadership for all outcomes improvement

- **DATA GOVERNANCE TEAM**
  - Provides overall governance over Data Governance

- **GUIDANCE TEAM(S)**
  - Provides domain oversight and recommended priorities

- **CLINICAL IMPLEMENTATION TEAM(S)**
  - Refines Work Group output and leads implementation

- **CONTENT AND ANALYTICS TEAM(S)**
  - Supports development of clinical content and supporting analytics

- **WORK GROUP(S)**
  - Provides clinical forum to develop clinical content and analytics feedback

**ENSURE THAT...**

- Governance and Teams are appropriately empowered to make decisions
- Teams are created based on organizational improvement priorities
- Teams are cross-discipline, permanent and include the right stakeholders
Perfect is the enemy of good – Voltaire

- Quality over Quantity: Finding the right balance between “something” and “everything”
- Data from Medicaid, Medicare, Commercial, Out-of-pocket
- Clinical data is just one piece of this puzzle

Data is not like wine: The older the data, the lesser its value

Operationalize data: Different roles have very different needs

- Data Analyst vs. Care Team Member: One size does not fit all

And the intangibles…

- Organizational transformation requires a shift in thinking, culture