



# Data Analytics Drives Growth and Productivity

Roadmap to Real-Time  
Data in Medical  
Practice Operations



# Best of Business Intelligence

## Starts with Analytics

### SUMMARY

Quickly adapting to change is one of the most useful survival skills for people and businesses today. Emerging from the pandemic, the world has faced countless uncertainties, from supply chain challenges to extreme shifts in the workforce and unpredictable economic conditions. As organizational leaders cope with dwindling resources, tight budgets and thin margins, —agility and change management are essential going forward. To succeed in this competitive environment, organizations in the medical practice space are turning to data management tools, analytics, machine learning (ML), and automated processes to drive growth and improve margins.

[Staffing was rated as the top challenge](#) for medical groups heading into 2023, and the ripple effect can be felt beyond the HR team: Labor disruption causes operational shifts with bottom-line impacts. Data management and analytics help illuminate staffing workflow issues and their revenue cycle management (RCM) outcomes. Analytics applications collect and categorize large volumes of raw data that detect subtle trends. The information provides key insights that help decision-makers understand the risks and costs of inefficiencies to identify automated solutions. Find out how DataDiscovery, MGMA's newest analytics applications, drives growth and operational efficiency for medical practice professionals.

### THE MAKING OF DATADISCOVERY

DataDiscovery is an analytics tool, built in collaboration with MGMA and [WhiteSpace Health](#), a data analytics company that uses ML with predictive analytics technology to develop SaaS applications to optimize healthcare business processes. This analytics solution was designed with expert advice from decades of RCM and operational knowledge to create a user-friendly dashboard running real-time data analysis and reporting. Robust reporting features and data visualization models reveal business insights that help drive data-informed decision-making. This essential capability helps medical practice professionals minimize wasteful spending and improve business processes that optimize RCM.

DataDiscovery runs on Microsoft Azure, a cloud-based platform that stores real-time medical practice data in a data warehouse environment, ensuring your data is safe and secure.

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Medical practice professionals invest in data analytics solutions because they see improvements in cash collections within the first year. This includes fewer rejected healthcare claims. Cash flow improvements can incrementally improve revenue streams when RCM inefficiencies and faulty operational processes are detected and fixed.”

**WHITESPACE HEALTH**

Consider how monthly RCM improvements over 24 to 48 months could stack up over time. And how it could mean more funding availability for reinvestment back into the practice, something industry experts suggest helps to support healthcare innovation.\*

\*The RCM Process: [What Are The Revenue Cycle Steps?](#) [enter.health]

MGMA estimates that customers using DataDiscovery can save about 5% of their total operating costs, says Mike Gracz, MGMA DataDiscovery sales manager.

## DataDiscovery Dashboard

### AUTOMATED REPORTING FEATURES

Here are some key features found on the DataDiscovery dashboard. These tools translate raw data into meaningful information. The dashboard displays easy-to-interpret visual models, graphs and reports.

Easy access to automated reports using mobile devices and desktops provide business insights

- Receive KPI daily reports
- Set up notification criteria based on KPI thresholds
  - Receive alerts when KPIs fall out of range
- Review trend reporting for long-term business development planning, identifying growth opportunities
- Evaluate operations data with [root cause analysis](#) reports to identify and solve problems

### THE POWER OF DATA LITERACY

Organizations that embrace data literacy stand a better chance at identifying growth opportunities and building a competitive advantage. Why? Because data patterns hold powerful information that removes uncertainty and supports data-driven decision making.

A recent [Gartner survey](#) identified low data literacy skills, (ability to read, analyze and communicate data outcomes) as one of the five major roadblocks in organizations. Authors in the report predict that business leaders who lack data literacy skills will miss key opportunities due to a lack of awareness during shifting conditions in the marketplace or workforce. Data literacy skills help people spot trends based on patterns that emerge from data sets.

Poor data literacy ranked as the third most-critical roadblock to data and analytics success, with changing cultures as No. 1, followed by lack of resources and funding.

Source: [Gartner](#)

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**MGMA DATADISCOVERY**  
**SALES MANAGER**

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**GARTNER**

## Recover Lost Revenue with Automation

To develop business practices that strengthen your practice's finances, begin with an assessment of its strengths and weaknesses. Discovering previously unknown workflow issues that result in stagnant RCM is crucial for your finance and operations leadership team to develop business practice improvements.

In a 2020 [Boston Consulting Group](#) survey of more than 2,000 business leaders, nearly half (45%) reported revenue leakage as a systemic problem in the organization – and nearly three-quarters of survey respondents reported no access to automated processes to fix the problem.

Revenue Leakage – refers to loss of revenue caused by lag in cash flow, A/R delays, inaccurate data, excessive spending, and undetected financial or administrative errors.

*[Fundera by Nerd Wallet](#)*

For added context around challenges related to payment processing in healthcare, by 2009, [McKinsey & Company](#) research found approximately \$300 billion annually – or 15 cents per dollar – spent on healthcare claims processing, payments, was lost annually.


## STAFFING SHORTAGE FUEL FOR OVERHEAD

Even as the pandemic impacts on healthcare providers ebbed, labor shortages and rising expenses from a competitive market quickly became as big of an issue for practice leaders.

Undoubtedly, some healthcare jobs have shown somewhat slow recovery during the pandemic era. While healthcare jobs typically bounce back quicker than most, based on historical labor reports – this time was different. Fast forward to 2020 when lockdowns erased millions of jobs in many sectors, which included healthcare, with about 8% job loss reported in April 2020. By January 2023, healthcare job growth showed an upswing in spots like medical practice groups and outpatient care – yet it still remains sluggish in elder care and nursing care facilities. In December 2022, elder care facilities reported a 6.5% drop in jobs, according to [Peterson-KFF Health Tracker Report](#).

Operating costs are on the rise, specifically the increased costs of hiring staff, plus additional cost of living wage increases around 5% on average, captured in a [2022 MGMA Poll](#).

Practices report patient volume recovery ranging from patients seeking post COVID care – to resurgence of demand for care from a population of [75 million baby boomers](#) – a group that has outpaced the number of qualified healthcare providers able to treat their growing healthcare needs.



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### MGMA STAT POLL



Research on generational health trends from [Penn State University](#) concludes that older adults are more likely to have multiple chronic health conditions, ranging from heart disease and diabetes to arthritis and cancer. Read entire report in the [Journals of Gerontology](#).

In 2022, 90% of medical practice survey respondents reported costs rising faster than revenues, from an [MGMA poll](#). High-cost contributors fueling overhead include staffing costs, like raises and overtime, to [elevated expenses](#) for necessities like utilities, medical supplies and medications. Stagnant reimbursement rates from third party payers exacerbate RCM problems.

“Practices report some of the largest staffing expense increases because of the ongoing shortage of clinical support staff,” reported in [MGMA Stat poll](#).

The labor shortage magnified a need to hire highly sought after positions like medical assistants – where median salary rose about 12% between 2016 and 2020; and nearly 14%, for RNs. As growing demand for hard-to-fill jobs continues, recruiters must use swift measures when competing with large [physician groups and hospitals](#) that offer attractive perks and better bonuses.

## HR RESOURCES: BENCHMARK DATA FOR NEW HIRES

Recruiters are using benchmark data from MGMA DataDive because it helps the hiring team prepare competitive job offers based on national compensation data averages. Filter benchmark data by salary, geographic location and job title to determine if the job offer aligns with current market conditions. Read about [support staff salaries](#) and the importance of comparing compensation data during the hiring process.

## Optimize Workflow Continuity

How can information gleaned from visual analytics tools help you curb staffing costs? It begins by letting objective data tell the story.

Employers often experience staffing fluctuations – from people who quit, retire, accept promotions, or take maternity or paternity leave. And with the right technology, organizations can reshuffle and do more with less. DataDiscovery is fully integrated across different departments and systems. This means it can collect metrics that provide data visualization reports for detecting inefficient workflows across different departments. When inefficiencies are discovered, prescriptive analytics accompanied by machine learning provide options that can be used to swap out faulty workflows or time-draining repetitive processes. Essentially, the technology provides vital information that can inform methods that create more efficient or responsive workflows that can save time and improve accuracy.

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### MGMA STAT POLL

## MAXIMIZE WORKFLOW WITH ADMINISTRATION SUPPORT STAFF

- Upgrade to standardized forms and templates – speeds up and cleans up data collection
- Eliminate unnecessary manual processes and use automated processes instead – saves time on administrative and billing tasks
  - Useful for appointment setting, updating EHR, reducing denials, billing and claims processing

## SUPPORT INFORMATION TECHNOLOGY STAFF

MGMA estimates about 20% reduction in account research time because of features like machine-learning recommendations that improve data quality and reduce error, Gracz said.

These capabilities help the business intelligence (BI) and information technology (IT) teams save time when preparing data for actual use, Gracz said. DataDiscovery provides current data that is real-time and clients can access more than 300 built-in charts and graphs.

“During the implementation phase, custom reports can be created for each client,” Gracz said. “BI teams can now focus on putting the data to work for their organization, which will create more revenue.”

## Analytics Enhance Productivity

### STAFFING PRODUCTIVITY IMPACTS RCM

Manual processes and inconsistent data entry often introduce errors that affect processes downstream, such as billing, claims and revenue reporting. To prevent these issues, organizations turn to analytics applications like DataDiscovery because it catches errors and improves productivity by helping staff quickly resolve issues that disrupt RCM.

“DataDiscovery is a real-time digital consultant. It’s like having another tool that offers ways to streamline business practices that increase revenue while simultaneously cutting costs,” Gracz said.

One method to use DataDiscovery to cut costs is regularly monitoring staffing per physician by location in the dashboard, Gracz suggested. This helps ensure that staff scheduling matches patient volume and unnecessary overtime is reduced.

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## FEWER CLAIM DENIALS

DataDiscovery uses built-in AI and ML to detect medical coding errors known to trigger denied claims. It applies prescriptive analytics algorithms that generate automated processes with step-by-step recommendations for correcting denied claims.

A dialog box pops up with ICD-10 codes showing the highest probability of reimbursement approval based on historical data. With the click of the mouse, medical coding staff select appropriate ICD-10 code(s) and resubmit the claim. Revenue cycles improve each time DataDiscovery recovers lost revenue from denied claims.

“On the DataDiscovery dashboard, the REV INTEL module is part of the Resolution Center where your staff receive actionable steps to fix a claim that was denied. These steps are based on industry guidelines, machine learning, and artificial intelligence,” Gracz said.

Recommendations provided by DataDiscovery mimic a training tool that can teach staff how to optimize business processes that generate better outcomes – from billing to patient scheduling related to historical no-show data. Built-in problem-solving capability and ML make this training feature possible thanks to proactive tools that use real-time data to generate recommendations and possible corrective steps. This support feature helps boost employee productivity and performance through automated process recommendations that reduce human error. “Since it is live and easy to use, the training is quick for new employees to learn. The ML recommendations take the guesswork out for new employees who may not have seen a specific scenario in the past,” Gracz said.

As technology continually advances and more organizations in healthcare embrace ML, AI and data management solutions, we see a bright future lies ahead.

## Closing

As technology continually advances and more organizations in healthcare embrace ML, AI and data management solutions, we see a bright future lies ahead. MGMA and our technology partner, WhiteSpace Health, look forward to providing innovative solutions designed to keep medical practice operations running smoothly.

**Take a Test Drive** ➡

# Appendix

## Key Concepts

**Artificial intelligence (AI)** – Applications that collect historical data to formulate pattern recognition that informs accelerated decision making. AI is used in spam filters and complex health analysis detection – to suggested playlists on streaming music libraries. An AI goal is to provide machines with human-like traits, including planning, reasoning, learning.

[Microsoft](#) and [MIT](#)

**Machine learning (ML)** – A subset of artificial intelligence that uses algorithms that train computers to learn; it includes identifying data patterns that feed predictive analysis and forecasting models. Increases in data volume and repeated use over time improves ML accuracy. AI and ML are often used synonymously.

[Microsoft Azure](#) and [MIT](#)

**Data analytics** – Translates raw data into meaningful information by spotting patterns and trends to help solve problems.

[Investopia](#)

**Data literacy** – Skill that includes the ability to read, understand, work with, and argue data.

[QLIK](#)

**Benchmarking** – Process where organizations compare competitor data against their own to track performance, identify gaps and develop improvements.

[Oberlo.com](#)

**Key Performance Indicators (KPIs)** – Used to evaluate performance and compare results - in core business areas, like HR, finance and operations. KPIs are used to inform business process improvements that address strategic goals like growth and revenue.

[Forbes](#)

**Metrics** – “Tools designed to facilitate decision making and improve performance and accountability through collection, analysis, and reporting of relevant performance-related data.”

[NIST](#) and [CRSC](#)

## ABOUT MGMA

Founded in 1926, the Medical Group Management Association (MGMA) is the nation's largest association focused on the business of medical practice management. MGMA consists of 15,000 group medical practices ranging from small private medical practices to large national health systems representing more than 350,000 physicians. MGMA helps nearly 60,000 medical practice leaders and the healthcare community solve the business challenges of running practices so that they can focus on providing outstanding patient care. Specifically, MGMA helps its members innovate and improve profitability and financial sustainability, and it provides the gold standard on industry benchmarks such as physician compensation. The association also advocates extensively on its members' behalf on national regulatory and policy issues.

To learn more, go to [mgma.com](https://mgma.com) or follow us on social media



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