Big Data in Pharma:
Current & Future Trends for Big Data Utilization Across Medical Affairs Functions

Best Practices, LLC

Strategic Benchmarking Research Study with Segmented Responses by Medical Affairs Functions

BEST PRACTICES, LLC

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Research Project Objectives & Methodology

Best Practices, LLC, conducted a customized study – with responses segmented by medical, commercial and HEOR functions - to better understand the growing influence of Big Data in the biopharmaceutical sector and how it impacts medical, HEOR, and commercial operations in the U.S.

Research Goal

- Produce reliable industry metrics on current and future trends for Big Data utilization across medical, commercial and HEOR groups.

Research Overview

- Investigate data types, data partnerships, and staffing/budget levels companies are using as they move to a more analytically based approach to commercial, HEOR & medical decisions.

Research Methodology

- Best Practices, LLC engaged 12 leaders from 11 pharmaceutical companies through a benchmarking survey in regards to Big Data usage in Medical Affairs.
- Research analysts also conducted seven deep-dive executive interviews with selected benchmark participants.

Topics Covered

- Types of Big Data Projects Used to Support Medical, Commercial and HEOR Decisions
- Big Data Capabilities and Governance
- Types and Value of Data Used for Big Data Projects
- Big Data Staffing and Budget Levels
- Value Rating of Partnerships on Big Data Projects
- Policies and Procedures Governing Big Data Activities

Eleven Companies Participated in the Benchmark Study

Best Practices, LLC engaged 12 leaders from 11 pharmaceutical companies through a benchmarking survey in regards to Big Data usage in Medical Affairs.

Benchmark Class:

AstraZeneca

GILEAD

Bayer HealthCare Pharmaceuticals

Boehringer Ingelheim

Genentech
A Member of the Roche Group

ESTEVE

janssen

Lundbeck

Pfizer

NOVARTIS

MERCK
Be well

Quantitative Findings: Big Data Types and Utilization

Across the medical segment, the following key Big Data types, sources and utilization were observed in this study.

Only 5 of 36 Types of Data Rated as Highly Valuable Across The Study

Only 5 of 36 types of Transactional, Reported, Online, Scientific and Machine-Generated data were rated highly valuable by a majority of study participants in Medical Affairs groups. They were: Claims; EHR (Electronic Health Records); Health Outcomes (provider/payer reported); Real World Studies; and Registries. No types of Online or Machine-Generated data were rated highly valuable by a majority of participants

Post-Launch and Customer Segmentation Studies Most Common Big Data Projects

Medical segment participants said post-launch studies around product use and health outcomes were the most common types of Big Data projects they conducted.

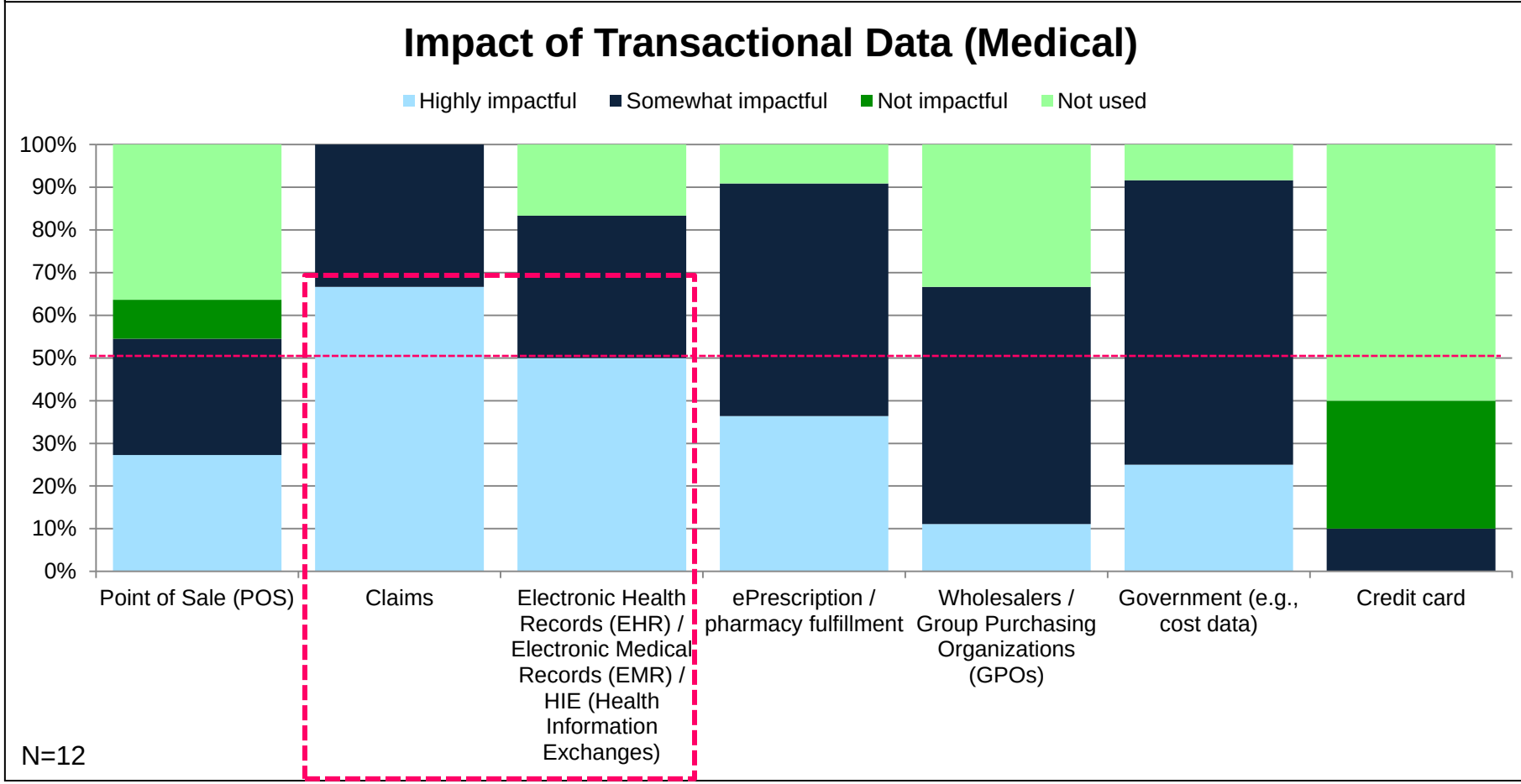
Payers & Data Aggregators Cited as Best Partners by Majority of participants

A majority of participants said that partnerships with payers and data aggregators were highly impactful. Health systems were also seen as valuable partners by each of the three segments.

Transactional Data: Medical Segment Rates Claims, EMR Most Valuable

A majority of participants responding from a Medical perspective rated claims and Electronic Medical Records (EMR) as highly impactful or valuable types of transactional data for Big Data studies.

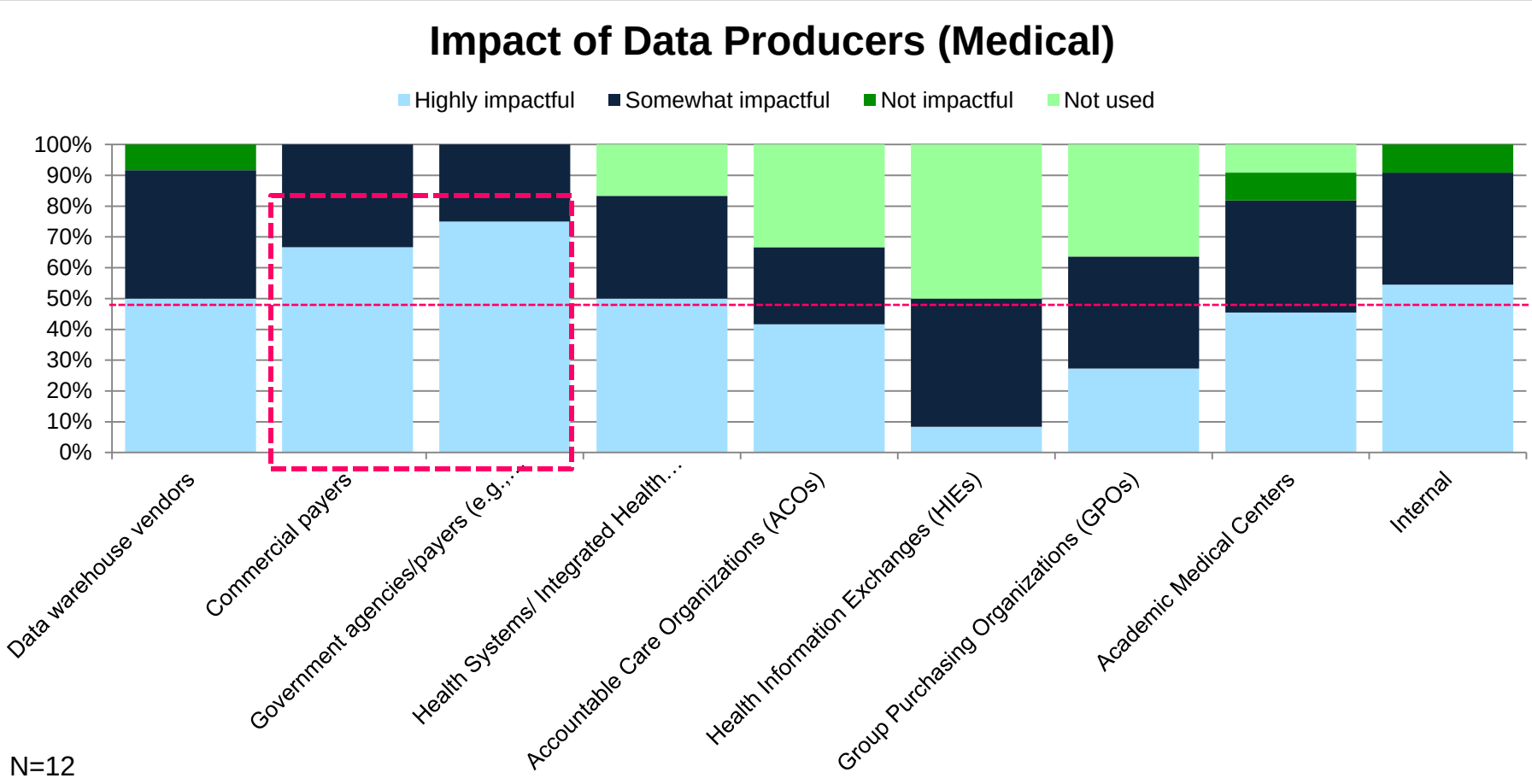
Q: How impactful (or valuable) has each of the following types of transactional data sources proven to be?



Medical: Many Find Range of Data Producers Useful

Medical teams broadly find more value across data sources compared to analytics in other functions. Government agencies and commercial payers are clear leaders, likely due to their growing influence on formularies and the need to understand their value calculus.

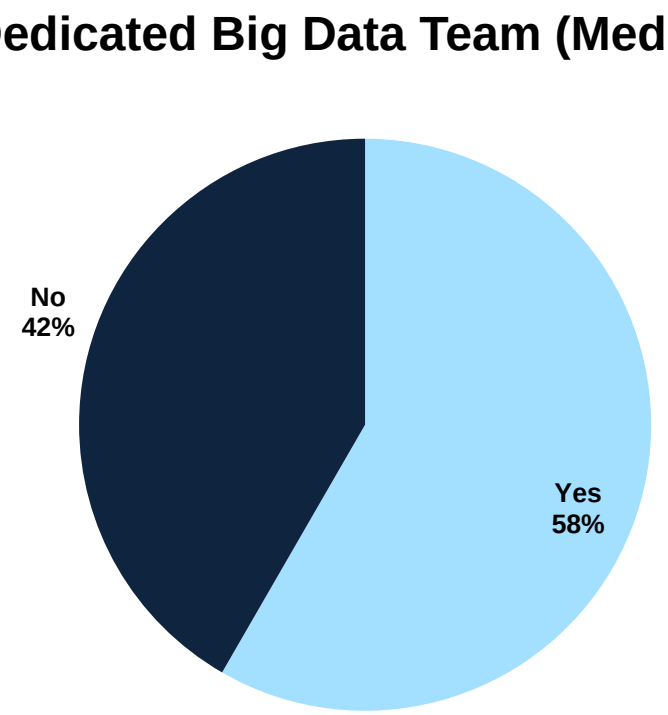
Q: How impactful (valuable) is each of the following types of data producers?



Medical Leaders Describe Analytics As Centralized

Medical leaders were the most likely to describe their analytics efforts as having centralized or dedicated personnel.

Q: Do you have a centralized/ dedicated group of individuals to support Big Data projects?

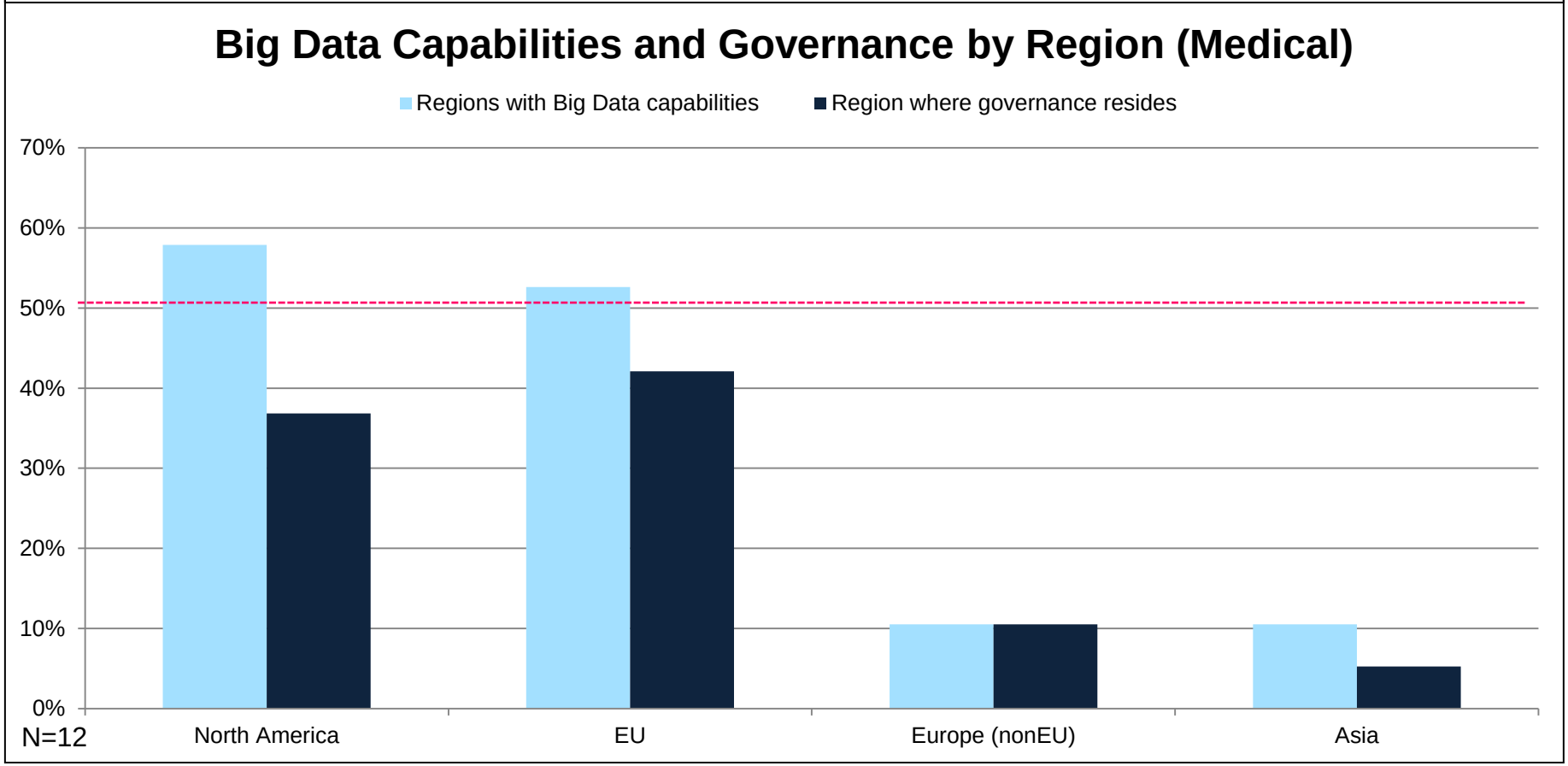


N=12

Medical Leaders See Smallest Governance Gaps

Our benchmark class reported that their Big Data capabilities and governance are generally based in North America and the EU. This finding varies little between functions, although medical leaders were more likely to report capabilities and governance residing in the EU than commercial leaders.

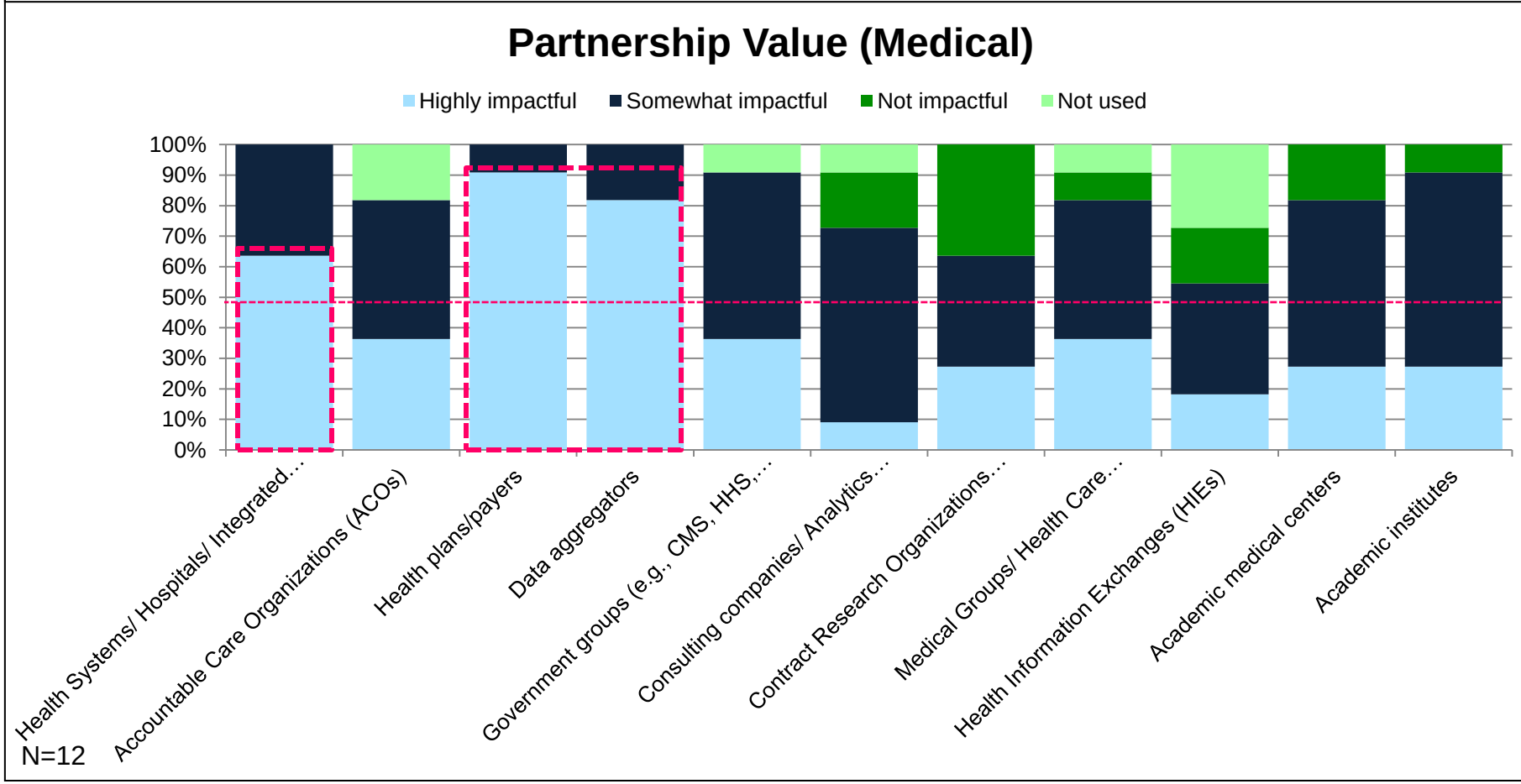
Q: Please indicate the regions below where your organization has Big Data capabilities, and where Big Data governance resides.



Medical: Health Plans/Payers, Aggregators and Health Systems Seen as Highly Impactful Partners

Medical leaders were most likely to rate partnerships as highly valuable across all varieties of collaborations. Most popular were collaborations with payers and data aggregators.

Q: Which of the following partners are most impactful/ valuable on Big Data programs and projects?



About Best Practices, LLC

Best Practices, LLC is a research and consulting firm that conducts work based on the simple yet profound principle that organizations can chart a course to superior economic performance by studying the best business practices, operating tactics, and winning strategies of world-class companies.

Best Practices, LLC

6350 Quadrangle Drive, Suite 200

Chapel Hill, NC 27517

www.best-in-class.com