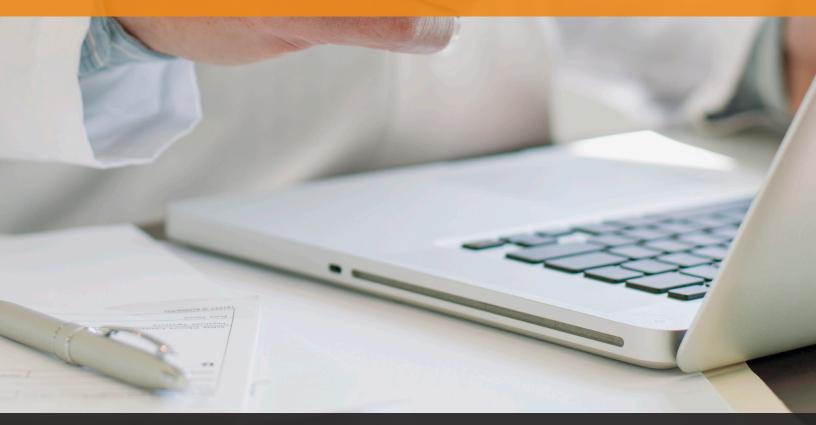
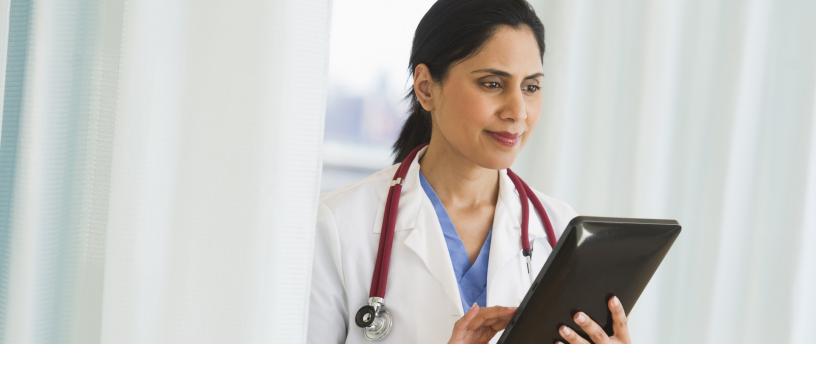


The Growing Role of Specialty Drug in Healthcare



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Healthcare is already the largest industry in the United States at \$3.5T in 2017 – reaching 19% of our Gross Domestic Product (GDP), with total social impact in excess of \$4.9T. ^{1,2} The Center for Medicare and Medicaid Services (CMS) forecasts that annual healthcare spend will reach \$5.5T by 2026 and account for almost one dollar out of every five spent in this country. The latest projection of trends for 2019 indicates an annual growth of 6%.^{3,4} According to CMS, the average annual rate of healthcare spending growth is projected to be one percentage point faster than our annual GDP growth rate through 2022.⁵

Some key initiatives reducing the rate of growth in healthcare costs include the cross-society application of innovative technologies and programs. Many of these new endeavors will help with costs, such as:

- Greater use of telehealth for in-home or specialized care,
- Improved sharing of in-common patient data among practitioners (while also protecting patient privacy),
- Increased coordination of care teams and patient utilizing telecommunications,
- More refined application of population health management programs via mobile apps and sensors across a lifetime of care, and
- Tailoring of knowledge gained from analytical insights and immediately applied to operational needs and clinical decision-making.

However, other factors, such as increasing life expectancy, larger elderly populations, and the growing complexity and utilization of more sophisticated hardware

technologies for chronic care, while improving our society's perception of quality of life will, unfortunately, be accompanied by dramatic increases in healthcare costs.

Although the annual rate of growth in medical costs steadily fell from 11.9% per year in 2007 to a low of 5.5% in 2017, these latter factors are growing stronger going forward. As a result, healthcare will once again become both our fastest growing and largest industry based on revenues.

For example, a recent article in Health Affairs projected that prescription drug spend will grow at 6.3% annually through 2026, exceeding both the rates noted above for healthcare spend and GDP.1 Efforts to slow this trend - generic drugs, value-based care payments, utilization reductions and more - have been effective and are still advantageous, but are reaching their limit of influence.

Specialty Pharmacy - A Primary Driver of Both Costs and Outcomes

A deeper look at this rise in drug spend identifies two components: Traditional Drugs and Specialty Drugs. While the growth in our national spend on Traditional Drugs has been flat or even negative over the past decade, spend on Specialty Drugs has escalated rapidly. In 2012, Specialty Drugs comprised 0.5% of pharmacy claims, but 17.6% of pharmacy benefit expenditures at one pharmacy benefit management (PBM) company. Since 2012, however, the rate of growth has averaged 17% per year. By 2017, Specialty Drug spend reached \$235B – 50% of all drug spend.



However, Specialty Drug (also known as Specialty Pharmacy), costs can be difficult to evaluate due to two primary reasons:

- There is no standard definition for Specialty Drug
- These drug products typically require highly complex, personalized care (hence the term Specialty Pharmacy) and the costs of these products and services is commonly spread across both two subsegments of the healthcare industry with two disparate sets of data: medical claims (health insurers) and pharmacy claims (PBMs).^{7,8}

However, Specialty Drugs – and their associated care – have also demonstrated significant improvements over traditional drugs in many medical conditions, with efficacy rates far exceeding rates for traditional medications. This could well be why one pharmacy chain noted adherence rates greater than 90% across the medical conditions (cancer, immunology, HIV, and hepatitis C) they evaluated for prevalence in a specialty setting.⁹



Improving Healthcare via Improved Insights

The complexity in both operations and information insights regarding the impact of all components of care with Specialty Pharmacy highlights one of the problems with how to control drug costs as well as how to control their influence on (the significantly larger) healthcare costs. As mentioned, Specialty Drugs are poorly defined, but part of this is due to their complex care requirements and assessing their impact on medical conditions. The National Association of Specialty Pharmacies states that

"the complexity of these medications may be due to the drug itself, the way it is administered, the management of its side effect profile, the disease or condition it is used to treat, special access conditions required by the manufacturer, payer authorization or benefit requirements, patient financial hardship or any combination of these. As a result, patients being treated with specialty medications require comprehensive patient care, clinical management, and product support services." 10

These various, often nebulous factors, combined with the benefits that are achievable, and along with the ability to capture and analyze all of this information, has created confusion on how best to pay and provide these services to patients in need. A recent study noted that, across 3,417 drug coverage decisions for Specialty Drugs, only 16% percent were covered the same way by all of the health plans, and only 48% were covered in the same way by 75% of plans. In addition, only 52% of these coverage decisions were consistent with FDA labelling.¹¹

As a result, escalating costs associated with Specialty Drugs, the significant benefits they appear to achieve, and the complexity in optimizing their use prompted an article in JAMA recommending several ways to consider controlling these costs:

- Enforcing more stringent requirements for the award and extension of exclusivity rights
- Enhancing competition by ensuring timely generic drug availability
- Providing greater opportunities for meaningful price negotiation by governmental payers
- Generating more evidence about comparative costeffectiveness of therapeutic alternatives; and finally
- More effectively educating patients, prescribers, payers, and policy makers about these choices.¹²

The last item on the list in JAMA is the most likely to be accomplishable in our economy and, arguably, by far the most likely to achieve significant financial and clinical benefits. But this will only be achieved via improved information integrity and sophisticated analytics. It is vital for practitioners and business executives to recognize insights that can be achieved by performing well-controlled comparative analyses evaluating the impact of both diagnosis and treatment over time in a hypersegmented, longitudinal approach to population health management.



The Bigger the Data, The Deeper the Information, The Better the Outcomes

Insights on how to improve patient satisfaction, enhance operational efficiencies, forecast healthcare outcomes, resolve quality issues, manage costs, speed inventory turn, predict logistics shortages, and smooth financials are all achievable to various degrees, dependent on the quantity – and quality – of data available. Quite often, departments rely on various sources of information that are, quite often, limited to their business unit, with no ability to integrate useful information from across an enterprise.

With recognition of the growing power of technology to help with insights, however, companies and organizations are seeing powerful enhancements by integrating data sources from across the enterprise and creating a highly granular, highly tailored, timely information architecture providing each patient, caregiver, care team, logistics personnel, operations support, and financial department to take the right action at the right time. To achieve greater clarity toward "the right action at the right time" companies are, to various degrees, integrating medical claims, pharmacy claims, HL7 data from both hospitals and community practices, radiology systems,



demographic and geographic information, regulatory information, and socioeconomic information to provide deeper insights.

While having all the data surely helps in driving the right outcomes, the ability to access and utilize in a way to improve outcomes for these patients is very complex. Understanding what data is important for the challenges one is trying to solve, plus implementing enterprise governance around how and who utilizes the information are critical. Having the right information architecture to support business needs is critical to success. Having the right partners engaged from the beginning for this type of endeavor is an extremely important line order to assure compliance.

This ability to learn more about your patient, your operations, your finances, and your business is as true for Specialty Drugs as it is for any part of the business. Examples where these insights can be applied include, but are not limited to, the following:

OUTCOMES ENHANCEMENT

- Challenge: The high risk of poor therapy, combined with the great benefits from appropriate therapy, drive the need for better insights to how the patient is doing and what are best practices.
- Solution: Operationalize analytics using key factors like hyper segmented views of the combinations and order of occurrence of diseases, medications, care teams, medical equipment and more to predict outcomes.
 Identify best practices, better coordinate care, and develop a patient-centric engagement strategy to achieve desired outcomes.
- BENEFIT: GREATER VALUE TO PAYORS, REDUCED COSTS, LOYALTY GAIN, MORE REVENUES.

SUPPLY PERFORMANCE MANAGEMENT

- Challenge: Drug product and medical equipment carrying costs are extremely high with Specialty Drugs.
 Over-ordering with limited shelf-life creates waste.
 Inaccurate demand prediction creates out-of-stocks, thus hindering adherence and encouraging overstocks.
- Solution: Move beyond intuitive decision-making.
 More accurately forecast refills, patient visits, and
 credentialed practitioner availability by factoring in
 consumer-specific demographics, human resource
 records, product demand, marketing, geographic and
 seasonal data.
- BENEFIT: LEANER INVENTORY, REDUCED OOS, IMPROVED MARGINS.



PAYOR PERFORMANCE MANAGEMENT

- Challenge: Losses due to imperfect claims management (formulary changes, contract noncompliance or collections timing) significantly impacts actual revenues.
- Solution: Analyze integrated pharmacy and medical claims, contracts and formularies for more accurate payments and improved contract negotiations.
- BENEFIT: IMPROVED REVENUE CYCLE MANAGEMENT, BETTER MARGIN, MORE FAVORABLE CONTRACTS.

FRAUD, WASTE AND ABUSE (FWA) FORECASTING

- Challenge: FWA accounts for 5-10% of healthcare costs. Undetected billing and practice deficiencies cause large fines; penalties can be severe to a reputation as well. Multi-party participation over time creates difficulty in finding true-positive insights.
- Solution: Analytically discover practice or pricing inefficiencies, dispensing errors or inconsistencies between orders and actual stock. Predict fraud, increase visibility into waste and abuse, promote information-driven best practice policies and procedures.
- BENEFIT: REDUCED RISK, IMPROVED MARGIN, BETTER BEST PRACTICE COMPLIANCE.

CONNECTED CUSTOMER ENHANCEMENT

- Challenge: Growing access to additional data sources (mobile, social, purchasing behavior, real world evidence, etc.) offer even better insights into patient care, but are disparate and difficult to integrate. Taking the next best action with each patient is difficult to communicate in a coordinated fashion in a timely manner to each participant in a patient's care.
- Solution: Connect with consumers with real-time discovery and outreach to provide desired services in a highly granular fashion in true business-time.
- BENEFIT: TAILORED SERVICE, GREATER LOYALTY, IMPROVED REVENUES.



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