



# Pharmaceutical Market Trends

External research and findings

Alex Jung  
2017



## Alex Jung – Partner/Managing Director

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Alex is a partner in Parthenon-EY Strategy where she works primarily on growth strategy projects. She helps clients define and implement their strategy and build organizational capabilities to deliver sustainable business results both through organic and inorganic approaches. She is a thought leader in the industry and specializes in asset repurposing and optimizing value propositions.

Alex Jung is a partner in Parthenon EY. Prior to joining EY, she was the Senior Vice President of Walgreens Corporate Strategy based in Deerfield, IL.

Mrs. Jung has over 30 years of experience working on strategic growth and risk mitigation engagements. She began her career with Arthur Andersen and after ten years moved into consulting with Mercer as the leader of the National Health Care Analysis Unit, helping to architect one of the first data analytics platforms.

She later became the Managing Director for the General Board of Pension and Health Benefits of the United Methodist Church. Alex returned to consulting to lead the health care practice at Aon Consulting and their significant growth into the number one consulting firm in the space.

She is a regular speaker at events such as the California Governor’s Women’s Conference, World Healthcare Congress, Midwest Business Group on Health, Crain’s Annual Health Care Conference, the Benefits Management Expo, the Self Insurance Association of America, John Marshall Law School, and HRMAC where she serves as the Chair for the Total Rewards Interest Group. She sits on the advisory board of the Michael Reese Health Trust and the Healthy Chicago initiative. She is also a member of the Board of Directors for the Respiratory Health Association and Chair of the Health and Wellness Council of the City of Chicago’s Chamber of Commerce.

Alex has worked globally with Fortune 500 companies and has developed and implemented large scale strategy, operations and financial projects. She specializes in asset repurposing and value proposition development. Her domain expertise in healthcare spans from hospital operations, clinical intervention programs, benefit plan designs and funding, commercialization strategy for new products and growth strategies including M&A.

She has performed work on several large scale transactions, mergers and acquisitions including the divestiture of Walgreen’s PBM, acquisition of AllianceBoots and other assets while at Walgreens. She also architected the health and wellness strategy for the company as part of the pharmacy transformation.

She has developed new business models, redesigned operating models,, labor models and workflow processes in many environments including real estate footprint redesign, go to market/commercialization strategies for new products and services including launch strategies for pharma and medical device companies. She has also helped redesign countless products, service offerings, medical devices and value propositions for providers, payers and patients.

She has been quoted in numerous articles in Kennedy Research, Forrester, Forbes Magazine, The Chicago Tribune, Business Insurance, Workforce Management Magazine, Crain’s Chicago Business and other industry publications. She is on the editorial board of Inside Patient Care magazine.

### Education

- B.S., Business Management, Northeastern Illinois University, Northwestern University
- Licensed broker health, accident and life
- Certified project manager (CMP) and trained in Juran and W. Edward Deming Quality Process
- CEBS, International Foundation of Employee Benefits

### Knowledge & Skills

- Corporate and usiness strategy, asset repurposing and business model redesign
- Operations and process improvement
- Mergers & acquisitions
- Clinical program development
- Employee benefits strategy, plan design and funding strategies

### Industries

- Healthcare providers/hospitals/retail clinics
- Managed care/Insurance payers
- Life Sciences/Pharmaceuticals
- Medical Device/Diagnostics
- Clinical Interventions
- Consumer Products/Retail

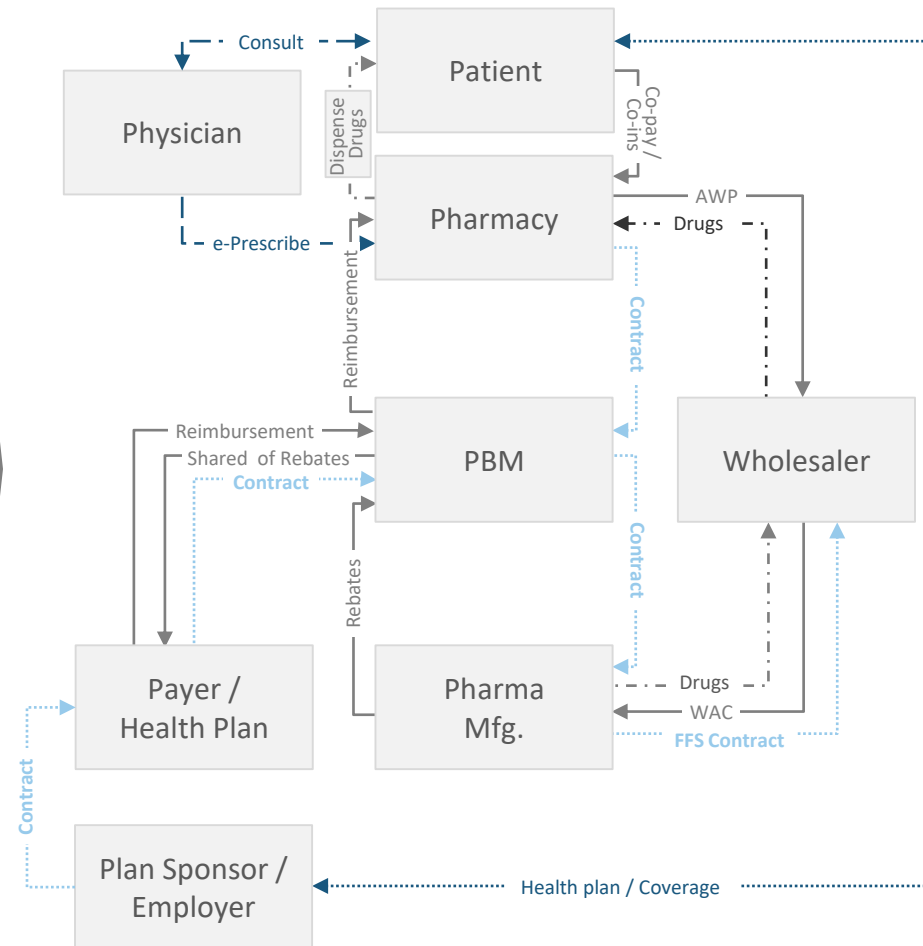
# Value-chain and key stakeholders

There are several stakeholders that exist in the pharmacy value chain, each with different needs

## Mapping the Pharmacy Value Chain

Stakeholder	What are their roles / needs?
Pharma Mfg.	▶ Supplier / manufacturer of generic, branded, specialty, and biologics drugs
Wholesaler	▶ Intermediary, group purchaser of drugs, distribution infrastructure
Pharmacy	▶ Chain and community pharmacy, point of patient distribution
Patient	▶ Consumer of prescription drugs and pharmacy services
Physician	▶ Driver of script volume, drug mix and prescription trends
PBM	▶ Intermediary for drug plan design, adjudication, and formularies
Payer / Health Plan	▶ Health plan / insurer control cost associated with health spend
Plan Sponsor / Employer	▶ Employers provide employee coverage

## How do they collaborate / engage?



# Prescription Drug Growth

The aging US population and rise of chronic disease are likely to drive steady increase in drug spend / utilization

## Commentary

**Over the next three decades, the 65+ population is expected to increase at a rate of 1.7% per year**

- ▶ This increase in the 65+ age demographic will likely cause a corresponding rise in demand for pharmaceutical products
- ▶ Many of the regions with the highest growth rate in this population segment are located in the Midwest and Great Plains regions, where Nile already has a strong presence

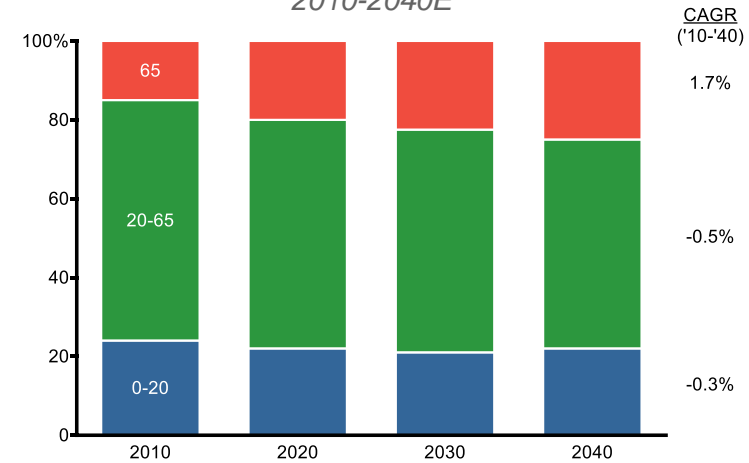
**Growth in chronic conditions in the U.S. has been rising in recent years and is forecasted to continue to rise**

- ▶ In 2014, chronic disease affected approximately 133m people in the U.S.; that figure is expected to rise to 157m by 2020
  - ▶ 81m people are expected to be affected by multiple chronic conditions by 2020
- ▶ Top growing chronic conditions include obesity, diabetes, heart disease, and depression

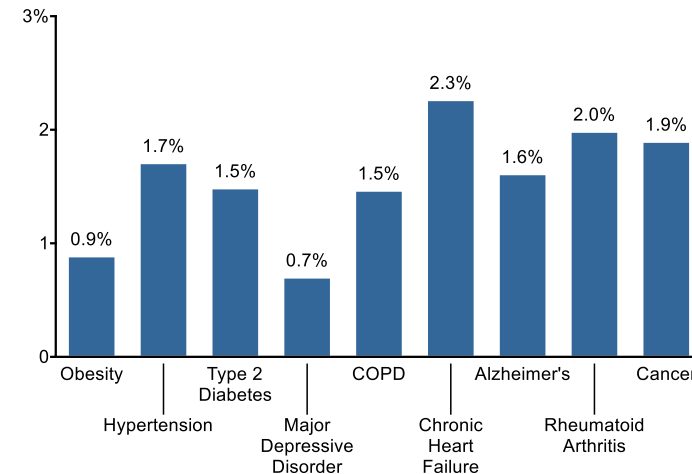
**Robust pharmaceutical pipeline and new specialty and biologic therapies will drive continued growth as well**

- ▶ By 2018, the FDA could approve 200 new drugs
- ▶ Most anticipated disease categories for FDA approvals include liver disease, oncology, HIV, multiple sclerosis, hepatitis C, psoriasis, rheumatoid arthritis, Parkinson's Disease, and atopic dermatitis

**Total U.S. Population by Age Group**  
2010-2040E



**CAGR of Selected Chronic Conditions in U.S.**  
2015-2020E



2015 Prevalence	96m	81m	29m	16m	16m	5m	4m	2m	1m

# Collaboration & Consolidation

## Competitive dynamics in pharma and payer landscapes have changed due to significant recent M&A activity

### Commentary

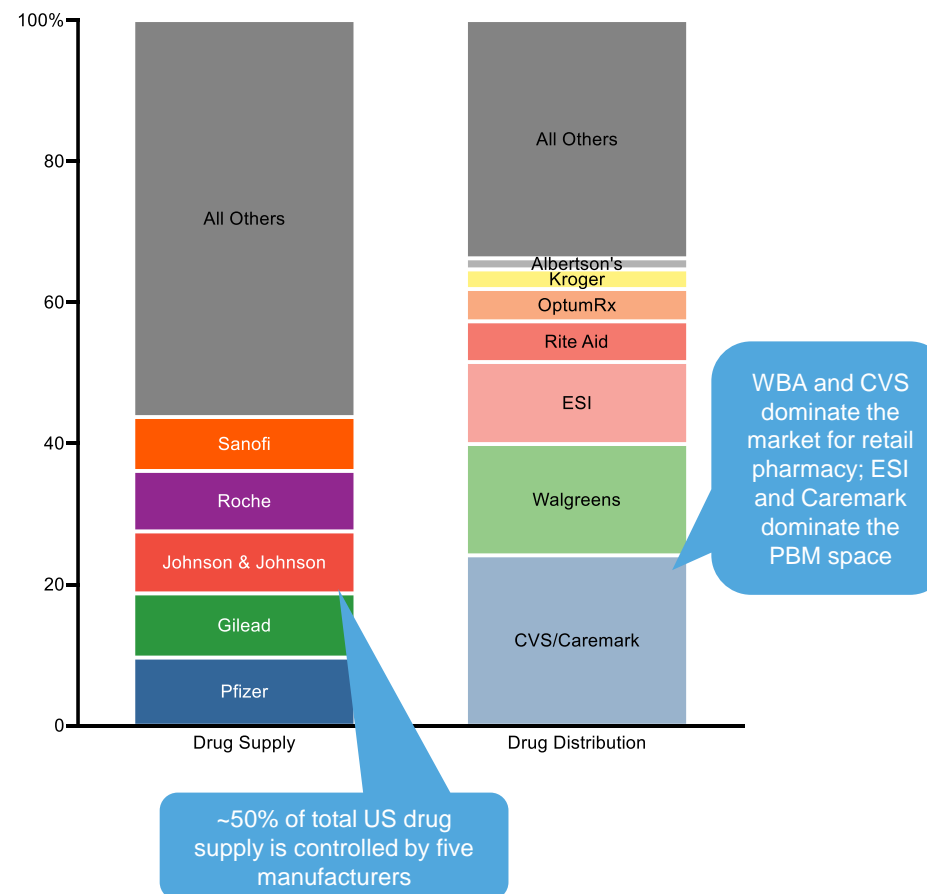
**Significant M&A activity has occurred within healthcare in recent years, with this activity expected to continue for the foreseeable future**

- ▶ 2014 and 2015 were both record breaking years for M&A activity
- ▶ If recent proposed mergers between health insurers take place, three major players will dominate the insurance market by 2017

**Companies across the healthcare value chain utilize acquisitions to reduce costs and accelerate growth**

- ▶ As consumer trends continue to evolve across the retail industry, pharmacies and drug stores are being viewed as an integral provider between patients and physicians. As a result, acquisitions will become key to managing costs and streamlining care
- ▶ Executives are increasingly utilizing alliances to accelerate growth; 40% plan to enter alliances with other companies or competitors to help create value from underutilized assets
- ▶ Drug companies are looking beyond traditional M&A by acquiring “beyond-the-pill” products and services to bolster their portfolios and drug pipelines
- ▶ Independent hospitals and clinician groups will find it difficult to compete on their own. Attempting to generate more touchpoints with existing customer bases, large physician management companies are acquiring complementary groups

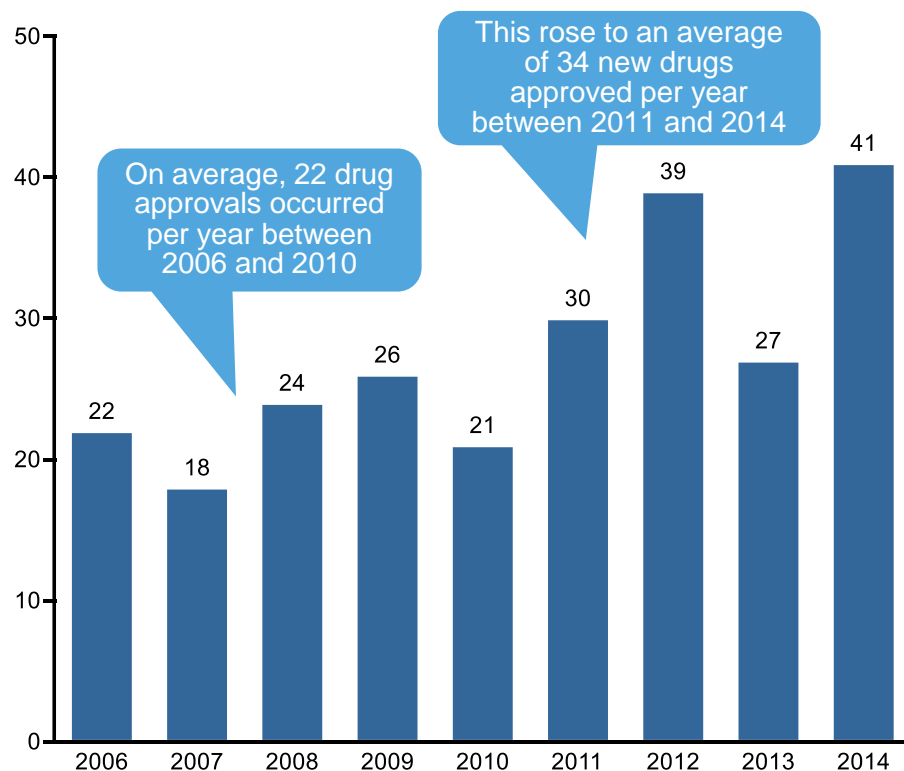
**Top Pharmaceutical Manufacturers and Distributors in U.S.**  
2014 (Drug Supply), 2015 (Drug Distribution)



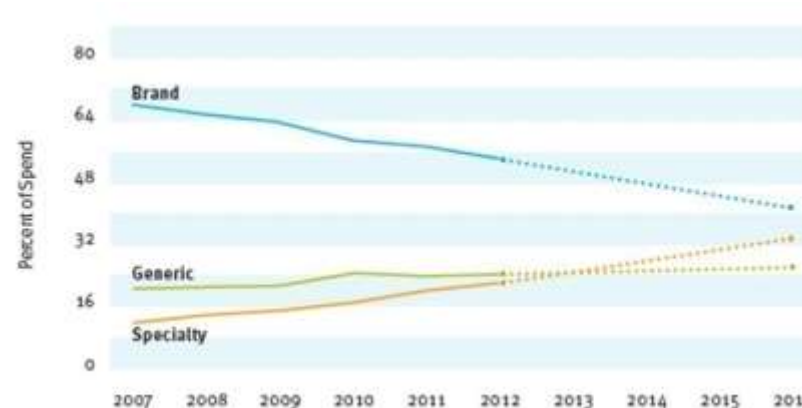
# Emerging Therapies/Specialty Drugs

Strong growth in scientific discovery has resulted in significant new cures and specialty medications

Number of NME Approvals by the FDA  
2006-2014



Pharmacy Benefit Spend (By Drug Type)  
2007-2016



## High growth in specialty pharmaceuticals has been driven in part by significant profitability opportunities

- ▶ 600 drugs are currently in Phase II or higher clinical trials, with cancer treatments dominating the pipeline
- ▶ Gross margins for non-hospital specialty pharmacies range from 13% to 30%
- ▶ Cost to patient for a one-month supply of specialty prescription is 28-times that of traditional prescription
- ▶ Specialty drugs are expected to increase from 27% of pharmacy industry revenues in 2015 to 44% in 2020

Continuing the wave of innovation in scientific discovery, nearly 200 new drugs are forecasted to be launched in the next five years, with a high number of NMEs expected every year due to a rich specialty drugs pipeline

# Key Strategic Alliances

Along with value chain consolidation, several interesting alliances are forming in the market

Recent Alliances & Partnerships		
Walgreens & OptumRx	Target & CVS/Pharmacy	CVSHealth and CardinalHealth
<p><b>Description:</b></p> <ul style="list-style-type: none"> <li>▶ PBM OptumRx and Walgreens partnered to sell pharmacy and drug management services to clients. As part of the partnership, OptumRx will charge its customers less for certain drugs if patients fill prescriptions at Walgreens locations. The program applies to 90-day prescriptions aimed at maintaining chronic diseases</li> </ul> <p><b>Objective:</b></p> <ul style="list-style-type: none"> <li>▶ Through the partnership, Walgreens hopes to capture a larger share of the prescription market</li> </ul> <p><b>Industry Dynamic Implication:</b></p> <ul style="list-style-type: none"> <li>▶ The partnership may result in an increased share of the pharmaceutical market for WBA, and increased patient loyalty</li> </ul> <p><b>Commentary</b></p> <ul style="list-style-type: none"> <li>▶ <i>“It’s a partnership aimed at improving costs”</i> – CEO, PBM</li> </ul>	<p><b>Description:</b></p> <ul style="list-style-type: none"> <li>▶ CVS acquired Target’s pharmacy and clinics for ~\$1.9B. CVS now owns Target’s 1,672 pharmacies through a store-within-a-store format. All Target pharmacies will be rebranded as CVS, and the clinics will become MinuteClinics. New target locations with pharmacies will also be CVS-branded</li> </ul> <p><b>Objective:</b></p> <ul style="list-style-type: none"> <li>▶ Target is able to focus on other business segments and drive additional in-store foot traffic, while CVS expands its brand presence in retail pharmacy</li> </ul> <p><b>Industry Dynamic Implication:</b></p> <ul style="list-style-type: none"> <li>▶ The partnership may result in increased share for CVS, as prescription programs attract customers to CVS locations</li> </ul> <p><b>Commentary</b></p> <ul style="list-style-type: none"> <li>▶ <i>“Today’s milestone in our relationship with CVS Health is an important step in driving Target’s strategic priorities forward while giving our guests easy access to industry-leading health care services”</i> – CEO, Mass Merchandiser</li> </ul>	<p><b>Description:</b></p> <ul style="list-style-type: none"> <li>▶ CVS Caremark and Cardinal Health entered into a 10-year joint venture. The JV formed the largest entity in the U.S. to negotiate prices with drug manufacturers. The JV sources and negotiates generic supply contracts for both CVS and Cardinal Health. CVS receives \$25M quarterly payments from Cardinal Health as part of the JV</li> </ul> <p><b>Objective:</b></p> <ul style="list-style-type: none"> <li>▶ The JV will assist in generic drug sourcing and pricing for CVS, and allow Cardinal Health to expand its presence</li> </ul> <p><b>Industry Dynamic Implication:</b></p> <ul style="list-style-type: none"> <li>▶ CVS may gain a larger share of the generic drug market over the next 10 years due to its ability to negotiate lower generic drug prices as a result of the JV</li> </ul> <p><b>Commentary</b></p> <ul style="list-style-type: none"> <li>▶ <i>“We view this agreement positively as it provides an effective way to drive better purchasing through increased scale without a large capital commitment or increased complexity of international markets”</i> – Lisa Gill, Analyst, JP Morgan</li> </ul>
<p><b>These narrow networks will increasingly challenge competitors and limit access to customers / patients</b></p>		

# Flow of Dollars

