BG STRATEGIC ADVISORS

RAPID CHANGE IN THE LIFE SCIENCES SUPPLY CHAIN:

Five Industry-Altering Trends, and Implications for Your Business

by Benjamin Gordon and Daniel Milstein

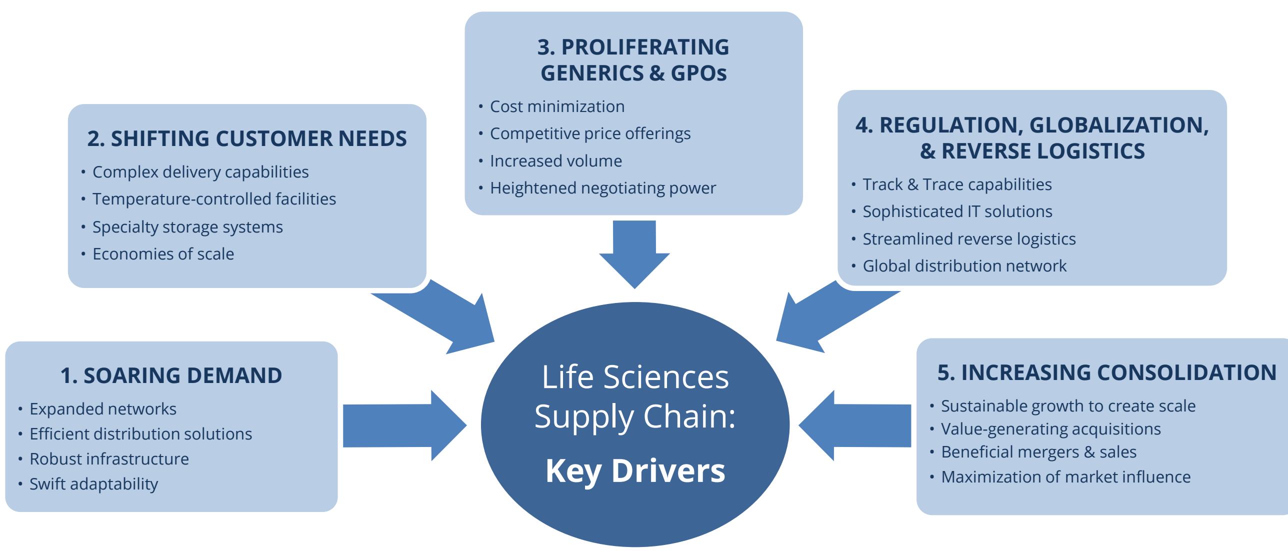
The deal environment in the life sciences supply chain is booming. Since the start of 2014, over 150 M&A transactions have been announced in this sector, totaling more than $4.9 billion in value.[1]

This June, Medline Industries – the nation's largest privately held manufacturer and distributor of healthcare supplies – acquired Triad Group for $7.1 million after the pharmaceutical distributor filed for Chapter 11 bankruptcy in 2012. By July, Medline announced it would invest $8 million to equip a former Triad plant with state-of-the-art equipment and technology, augmenting its existing network of 50 distribution centers and 17 manufacturing facilities worldwide.

Medline Industries is not alone. In fact, it is characteristic of similarly prudent distributors in the medical supply chain who are capitalizing upon opportunities to grow and position themselves as indispensable intermediaries in a rapidly evolving industry.

Even as many signs point to the need for ever-more-robust life sciences supply chain services in the coming decade, successful companies will have to quickly respond to the challenges posed by shifting customer needs and a changing competitive and regulatory landscape. How distributors react to the five major trends outlined below will determine their own success going forward.

FIVE MAJOR TRENDS



[1] S&P CapitalIQ.

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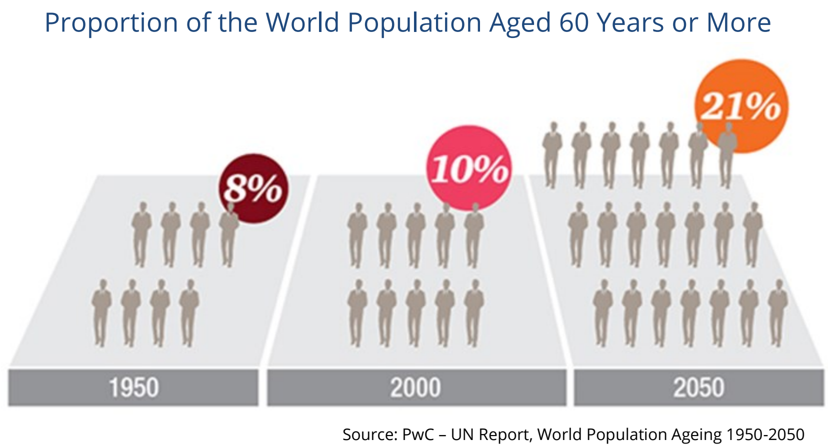
1. SOARING DEMAND



As the world's population ages, chronic diseases will become more common and increased pharmaceutical solutions will be necessary. In fact, the United Nations Department of Economic & Social Affairs estimates that the number of people over the age of 60 will nearly triple to about two billion by 2050 and will account for over 21% of the world population.[2] In developed economies, the percentage of people over the age of 65 is already in the double digits and is expected to grow. Meanwhile, as the longevity of older persons in developing countries continues to rise, the need for pharmaceuticals in these countries will become amplified. Thus, the most predominant change in customer needs will come from a sheer increase in the volume of drugs and medical supplies demanded. In order to cement a piece of the expanding market, distributors will be tasked with widening their networks and investing in the infrastructure and technology to support them.

Drug shortages are also indicative of the changing marketplace. As chronic conditions become more prevalent, the need for medications that treat such diseases magnifies. Unfortunately, output tends not to keep pace with the growing need. In recent years, the use of injectable cancer treatments has increased by 20% without related production growth.[3] In 2012 alone, there were over 100 reported disruptions in the supply of crucial medications.[4] The conclusion: production will need to scale up, mounting further pressure on suppliers to provide efficient distribution solutions.

2. SHIFTING CUSTOMER NEEDS

As research and development continues to advance, drug portfolios of pharmaceutical firms will begin to take different shape. By 2016, bioengineered vaccines and biologics are expected to account for 23% of the global market, up from just 17% in 2009.[5] For pharmaceutical distributors, this translates into more complex means of manufacturing and delivery, such as the construction of additional climate-controlled facilities and specialty storage systems. Beyond new capital-intensive plants and equipment, we predict wholesalers who develop sufficient clout to play an active role in influencing *which* drugs will be dispensed most frequently will reap the largest profit from this trend.

Patients are also beginning to administer drugs in their homes. Since 2002, home healthcare employment has grown 74%, and by 2018 is expected to increase by another 23%.[6] Supply chains will have to learn to adapt to distributing to more locations, including residential homes, retirement homes, and community centers. Finding more economical ways to access local settings is key, and creating economies of scale is essential to ensure that numerous locations can be reached with ease.

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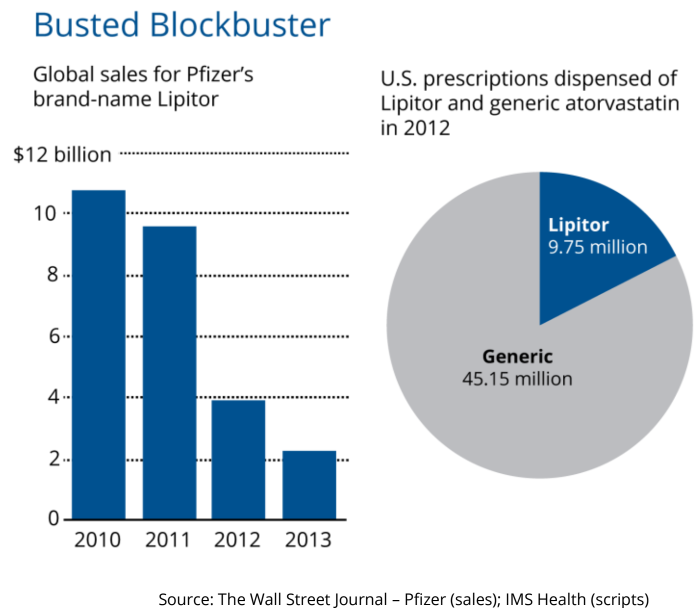
[2] *World Population Ageing 2013*, United Nations, Department of Social & Economic Affairs, Population Division, 2013.
[3] "Generic Injectable Drugs Get a Boost," *Barron's*, Feb. 2014.
[4] Douglas Throckmorton, *FDA Response to Drug Shortages*, Center for Drug Evaluation and Research, FDA, June 2014.
[5] Alex Kudrin, "Business Models and Opportunities for Cancer Vaccine Developers," *Human Vaccines & Immunotherapeutics,* PMC, U.S. National Library of Medicine, Aug. 2012.
[6] *HIDA Extended Care Market Report*, Health Industry Distributors Association, Nov. 2012.

3. PROLIFERATING GENERICS AND GPOs

Though changing customer needs are key components of the revolution in the pharmaceutical industry, evolving competitive dynamics are arguably an even greater piece of the transformation. The principal change the industry is experiencing is the fall from the "Generic Cliff" (the expiration of the patents of Big Pharma), which is expected to continue into 2016. As popular brand name drugs come off patent, companies will no longer be able to boost their bottom lines with brand name sales. Indeed, a recent government study found that on average, the retail price of a generic drug is 75% lower than its brand-name counterpart, with generics accounting for a staggering 78% of all drugs dispensed in retail settings. [7] Consequently, companies are expected to look to their supply chains to find ways to streamline and cut costs.



Another competitive change will present itself as the Affordable Care Act takes effect. Pressure to provide the best care to an increasing number of patients with declining financial resources from public and private sector payers is resulting in an increased reliance on group purchasing organizations (GPOs) in order to cut costs. Already, about 72% of hospital purchases are made using GPO contracts.[8] The specialized supply chains that these GPOs oversee are soon likely to experience increased activity, and the high-volume purchasing power GPOs leverage will place large companies who can offer competitive prices at a steep advantage. As a result, now more than ever it is critical for distributors to increase their volume to cut costs while boosting revenue.

4. REGULATION, GLOBALIZATION, AND THE RISE OF REVERSE LOGISTICS

Companies must also be prepared to implement new federal regulations designed to protect the integrity of the pharmaceutical supply chain. Over the next 10 years, the FDA will phase in the Drug Supply Chain Security Act, which outlines specific "track and trace" requirements for wholesalers of prescription drugs. It also calls for a national electronic, interoperable system to identify and trace certain drugs as they are distributed. At the same time, the manufacturing and consumption of healthcare products in countries like Brazil, Russia, India, and China (the BRICs) is resulting in a longer supply chain with increased costs and complexities. Indeed, the IMS forecasts China to experience 14-17% pharmaceutical sector growth annually between 2013 and 2017, compared to 1-4% for the United States.[9]

To ensure supply chain safety as regulation and globalization intensify, sophisticated technology solutions are in demand. Successful distributors have already begun to invest in state-of-the-art IT systems, such as advanced tracking and cloud computing, to more effectively exchange information, reduce fraud, and exploit emerging markets.

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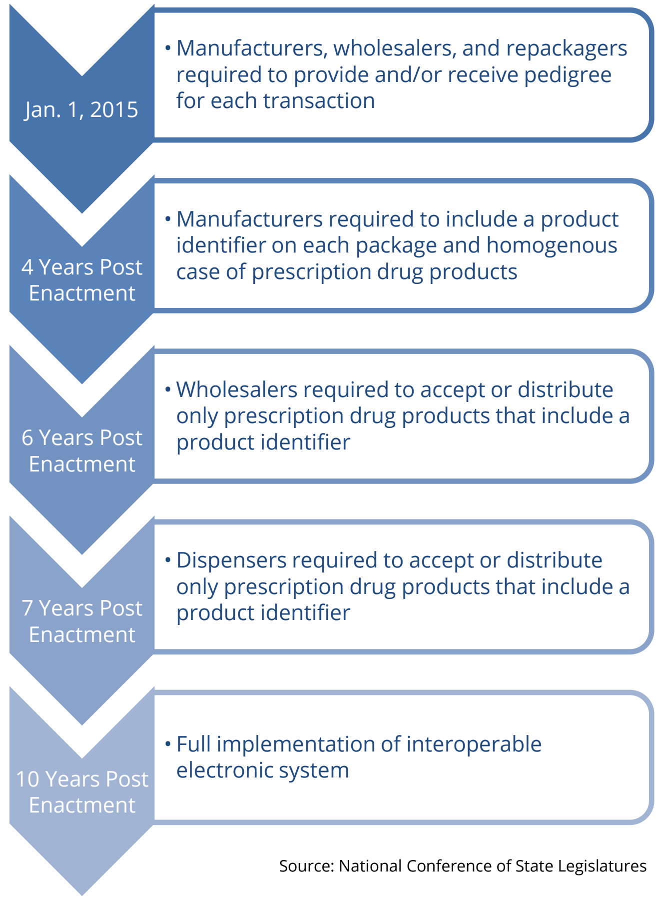
[7] *Drug Pricing: Research on Savings from Generic Drug Use*, United States Government Accountability Office, Jan. 2012.
[8] *A Primer on Group Purchasing Organizations,* Healthcare Supply Chain Association.
[9] *The Global Use of Medicines: Outlook Through 2017*, IMS Institute for Healthcare Informatics, Nov. 2013.

Additionally, as oversight increases, recalls are more frequent and the removal of larger quantities of pharmaceuticals is required. In 2009, the FDA recalled 1,742 medicines, a 309% rise in the number of recalls in a single year.[10] Expiration handling is also a growing market segment. Frequently, manufacturers insure the sale of particular drugs by guaranteeing to credit pharmacies for unsold product that reaches expiration. Combined with higher public scrutiny, an increased need for reverse logistics is emerging. And, as globalization continues, instances of counterfeit drugs can be expected to multiply. The global market for fraudulent drugs is already estimated to be between $75 billion and $200 billion a year, and the number of recorded cases of counterfeit, stolen, or illegally diverted medicines has increased nine fold since 2002.[11-12]



Source: National Conference of State Legislatures

An opportunity thus presents itself for pharmaceutical distributors to position themselves as industry leaders by establishing and/or enhancing reverse logistics and supply chain security capabilities. This means developing additional sites and technological resources that will enable companies to take advantage of the high number of returns while safeguarding against counterfeits.

5. INCREASING CONSOLIDATION

One final but critical market change is consolidation. Reflective of the groundbreaking $49.6 billion in total healthcare M&A deals in Q1 2014 (more than three times Q1 2013's $15.6 billion),[13] the emerging trend in the medical distribution sector is that smaller distributors are losing market share as the Big Three companies in this arena – Cardinal Health, McKesson, and AmerisourceBergen – continue to acquire and expand.

In the past five years, Cardinal Health has closed over 40 transactions, ranging from less than $1 million to over $2 billion, including minority investments, partnerships, and acquisitions.[14] Last December, it joined with CVS Caremark to create the nation's largest generic drug sourcing entity. Similarly, in an effort to strengthen its international presence and improve bargaining power with pharmaceutical firms, this February McKesson closed a $5.4 billion deal to acquire German distributor Celesio. If anything has become clear, it is that healthcare distributors need scale to compete, or risk being squeezed out of the market.

[10] Meghan Lehmann, *Drug Recalls,* Pharmacotherapy Update (Vol. 13, No. 4), Cleveland Clinic, July/Aug. 2010.
[11] "Poison Pills," *The Economist*, Sep. 2010.
[12] *Pharma 2020: Supplying the Future,* PwC, 2011.
[13] "Health Care M&A Activity in Q1 2014," Irving Levin Associates, April 2014.
[14] Mark Blake, *M&A Trends in Healthcare,* Cardinal Health, Jan. 2014.

Highlighted M&A Transactions, Life Sciences Supply Chain, 2014		
Announced Date	**Target**	**Buyer/Investors**
07/02/14	Green Calyx	Modern Mobility Aids
07/01/14	Noven Therapeutics (NDA for Lithobid)	ANI Pharmaceuticals
06/25/14	Medical Action Industries	Owens & Minor
06/04/14	LABREPCO	VWR International
06/02/14	System C Healthcare	Symphony Technology Group
05/28/14	Quantity Serviços e Comércio de Produtos Para Saúde	Henry Schein
05/27/14	The Hilsinger Company	Blue Point Capital Partners
04/16/14	Shasta Technologies	Pharma Tech Solutions
04/02/14	AccessClosure	Cardinal Health
04/01/14	Oncology Rehab Partners	McKesson Corporation
03/17/14	Town and Country Medical	Therapy Support
03/13/14	Life Systems	Steris Corporation
03/03/14	Sonexus Health	Cardinal Health
02/25/14	Air-Care Home Health	Aeroflow
02/17/14	Chindex International	Fosun Industrial Co./TPG Capital
02/07/14	SouthWest Imaging	Merry X-Ray Corporation
01/31/14	Professional Hospital Supply	Medline Industries
01/20/14	Surfactants International	Tri-K Industries

Source: S&P CapitalIQ

Astute companies in the life sciences supply chain are thus recognizing that value-generating mergers and acquisitions are a must. As distributors strive to achieve greater capacity, adapt to a market dominated by GPO-coordinated generic pharmaceutical purchases, and keep pace with escalating regulation and rapid globalization – all the while cutting costs and offering competitive prices – even more transactions are set to materialize in the next 12 months.

THE ROAD AHEAD: CHALLENGE OR OPPORTUNITY?

In light of the new burdens imposed on distributors by these five industry changes, we see three options available to companies in this sector:

- Establish critical capabilities through acquisitions, with a growth strategy to extend your network and enhance your competitive edge.
- Take advantage of favorable capital markets and record deal levels by pursuing a sale or utilizing additional equity to invest in the innovative technologies and modernized facilities necessitated by the transformation.
- Do nothing. However, consolidators like Medline, VWR, and others are swiftly pursuing acquisition-led growth, and you may find your competitive edge eroding in the face of more aggressive competitors.

To compete successfully, you should consider what strategies best allow you to cultivate a sustainable growth position in the evolving space. By contrast, unsuccessful companies will ignore the changing landscape at their peril. For companies stuck in between, you may find competitors gain economies of scale and long-term differentiation, while the majority in the middle will fall behind.

In closing, the life sciences supply chain sector faces an inflection point. While rising healthcare demand, proliferation of generic pharmaceuticals, and globalization can provide opportunities for medical distributors, intensifying competition, regulation, and consolidation pose sizable challenges. Therefore, in light of fast-paced change, one thing is certain: as a buyer, a seller, or otherwise, now is a great time to solidify your strategy and take advantage of a favorable market.

Benjamin Gordon and Daniel Milstein work at BG Strategic Advisors ("BGSA"). BGSA is a leading global investment banking firm specializing in M&A advisory services for companies in the life sciences and supply chain sectors. BGSA provides investment banking services through BG Strategic Advisors LLC, a registered broker-dealer and member of FINRA and the SIPC. For more information, please visit BGSA's website at www.BGSA.com, contact Benjamin Gordon directly at Ben@BGSA.com, or call (561) 932-1600.