



E-COMMERCE OF REPRODUCTIVE HEALTH SUPPLIES IN THE UNITED STATES



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Author Bio

Jennifer John is an independent consultant who managed research for and drafted the United States case study. Through her consultancy, Gender Lens Capital, Jen channels her insights and network in the gender lens investing field to projects and activities that will increase the quantity and sophistication of capital moving with a gender lens. This is an outgrowth of her work as Program Director of the Women Effect Investments initiative at Criterion Institute. Here, she ran a field building effort to mobilize diverse stakeholder support into a movement around building gender expertise as an investment discipline. Jen has an MBA from the University of Michigan's Ross School of Business, where she was selected to receive the merit-based Women's Leadership Council Scholarship and to work as a Teaching Assistant in the Strategy Department. Her work on gender lens investing began here with academic studies sponsored by Michigan's Finance and Gender Studies Departments. She earned her BA from Dartmouth College, where she managed programming for Dartmouth's Center for Women and Gender.





E-COMMERCE CASE STUDIES SERIES

This report is one of seven case studies, written to provide the reproductive health (RH) supplies community with a deeper understanding of the current landscape and future potential of obtaining RH supplies through e-commerce. Each case study focuses on either one specific country (India, Kenya, Mexico, and the United States) or one new and underused RH technology (emergency contraception, female condoms, and the Standard Days Method®). These case studies are descriptive only, and do not advocate for or against e-commerce as a means to distribute RH supplies.



EXECUTIVE SUMMARY

This case study examines the current landscape in the United States (U.S.) for e-commerce of reproductive health (RH) supplies and considers implications for the future. The U.S. has rapidly moved toward e-commerce, and “retailers in nearly every sector are investing in capabilities to meet growing shopper demand to purchase goods via e-commerce.”¹ The U.S. Census Bureau valued the 2014 U.S. e-commerce market at nearly \$300 billion, accounting for 6% of the \$5 trillion overall U.S. retail market.² While brick-and-mortar transactions continue to dominate the U.S. retail market, e-commerce is making significant headway with sales growing 15% annually and likely to double every five years.³ As a result, a number of e-commerce interventions to connect customers to their preferred contraceptive method have emerged in recent years.

To understand this U.S. landscape of e-commerce for family planning (FP), it helps to categorize contraceptive goods and services into three separate groups: over-the-counter products, prescription products, and information-based service provision. Many over-the-counter contraceptives are readily available through online marketplaces, some purely virtual and some e-commerce subdivisions of traditional brick-and-mortar drugstores. Meanwhile, though access is complicated by the U.S. Food and Drug Administration (FDA) regulations, prescription products are increasingly accessible online, especially for refills. A handful of websites have also emerged that provide “workarounds” for U.S. customers trying to purchase prescription contraceptives without visiting a health facility. Finally, new informational web and mobile applications (apps) now provide the basis for information-based FP methods, such as the Standard Days Method® with its associated app, CycleBeads®, and the TwoDay Method®.ⁱ

ⁱ Although they are an important part of the e-commerce landscape, in order to maintain a focus on RH supplies, websites and apps offering only RH information are not included in the scope of these case studies.

ENABLING factors	HINDERING factors
<ul style="list-style-type: none"> ✓ Rapid e-commerce expansion in recent years has resulted in extensive supportive infrastructure and a large number of Americans who are comfortable buying products online. This, and other factors, suggest that e-commerce will continue to grow rapidly across all product categories. ✓ U.S. market trends suggest online sales of health and personal care products are poised for fast growth compared to other product categories in the coming years. ✓ E-commerce lowers barriers to entry for RH and FP retailers, opening the door for increased competition among these retailers and greater product diversity. ✓ Expanded insurance coverage and federal funding programs lower the price of certain RH supplies for American customers, which may render the market more attractive for potential FP online retailers. ✓ Trends in internet use among the U.S. population suggest a market with under-exploited opportunities for online sales of RH supplies to key American demographics. ✓ Online resources can now help customers navigate contraceptive methods and brands placing potential customers “one click away” from points of sale. ✓ Americans have access to a variety of delivery services for products purchased through e-commerce, including a burgeoning industry of rapid and on-demand delivery. 	<ul style="list-style-type: none"> ✓ Medical prescription requirements persist for some methods, and e-commerce vendors have limited ability to sell the methods that first require consultation with a health care provider. ✓ Long-acting reversible contraceptives (LARCs) are not suitable for online sales; their use in the U.S. is increasing, which could limit the size of the online FP market.

CONTEXT

Demand in the U.S. for FP products is substantial and steady. According to the Centers for Disease Control (CDC), for the period 2011-2013, 90% of the 43 million American women seeking to avoid pregnancy used contraceptives – a proportion virtually unchanged since the 2006-2010 period.⁴ As shown in **Table 1**, the majority of women obtain their method of FP from their doctor or a Health Maintenance Organization (HMO), while 17% obtain their method from a drugstore.⁵ As of 2013, most women in the U.S. were able to obtain contraception through full or partial coverage by private or public insurance, but nearly one in five women did not have coverage for FP and had to pay out of pocket.⁶

The U.S. has more than 60 million women of reproductive age – ages 15-44 – of whom more than half (52%) are

Table 1. Sources of FP in the U.S.

Source	%
Private MD/HMO	61.0%
Drugstore/other	17.0%
FP Clinic/Planned Parenthood	10.0%
Community Health Center	6.0%
School/College	3.0%
Don't Know	2.0%
Total	99.0%*

Source: A. Salganicoff et al. Kaiser Family Foundation 2014.

* Does not add to 100 percent due to rounding error.

not at risk of pregnancy, because they don't have a need or are using a permanent or long-acting reversible method, such as an intrauterine device (IUD) or implant. The remaining 48% represent the primary potential market for online FP products. As shown in **Table 2** and **Figure 1**, these women are either using reversible short-term methods such as oral contraceptives (OCs), emergency contraception (EC), male or female condoms, or relying on withdrawal. Some, despite being at risk of pregnancy, are not using any method of FP.

E-commerce Market

In the U.S., e-commerce is quickly gaining market-share over traditional retail marketplaces. The U.S. Census Bureau valued the 2014 e-commerce market at nearly \$300 billion, accounting for 6% of the \$5 trillion overall retail market.⁷ While brick-and-mortar transactions continue to dominate retail, e-commerce is making significant headway with sales growing 15% annually and likely to double every five years.⁸ According to the U.S. Department of Commerce, this double-digit growth compares to only 3-5% growth for the overall retail market, positioning e-commerce for continued market-share growth.⁹ Sales channels for e-commerce include both web-only entities and traditional brick-and-mortar retailers with an additional web presence. For both physical goods and digital content, Amazon is the largest seller, accounting for 26% of e-commerce sales in 2014.¹⁰

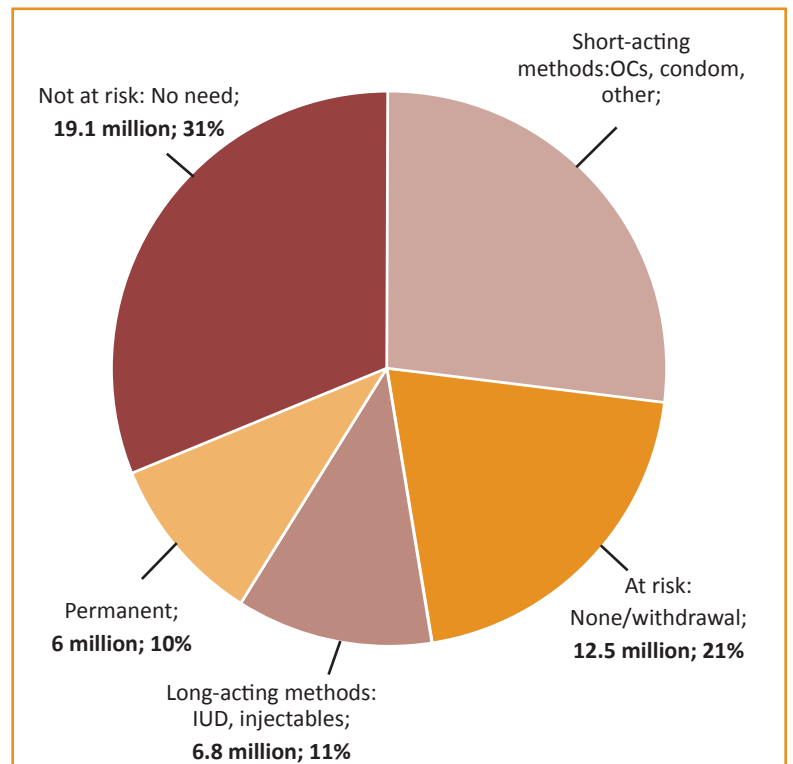
The U.S. market is moving toward e-commerce so quickly that "retailers in nearly every sector are investing in capabilities to meet growing shopper demand to purchase goods via e-commerce, with a variety of new business models emerging."¹¹ With nearly 75% of internet users already shopping online, this growth will largely stem from existing customers buying even more.¹² Mobile devices (smart phones and tablets) are a particularly interesting growth platform: mobile purchases are increasing at a faster rate than

Table 2. FP method used during month of interview (women ages 15-44), 2011-2013.

Method	Percent of women
Oral Contraceptive Pill (OCs)	16.0%
Tubal (female sterilization)	15.5%
Male Condom	9.4%
IUD	6.4%
Vasectomy (male sterilization)	5.1%
Withdrawal	3.0%
Injectable	2.8%
Vaginal Ring	1.2%
Fertility awareness-based methods	0.8%
Implant	0.8%
Patch	0.4%
Emergency Contraception (EC)	0.2%
Other Methods	0.2%
No method, at risk of unintended pregnancy	6.9%
No method, not at risk of pregnancy	31.4%
Total	100.0%

Source: NHSR No. 86 Nov. 10, 2015

Figure 1. FP method use (women ages 15-44), 2011-2013.



Source: CDC Nov 10, 2015 Table 1.

their desktop counterparts and accounted for 11% of sales in 2013. They are expected to reach 35% in 2017.¹³

FINDINGS

The FP retail market offers buyers a wide array of products with various brands for each type of method, whether sold through the traditional health care sector or through commercial channels.¹⁴ Importantly, a thriving FP market does offer customers a range of options so that individuals can choose the best method for themselves.¹⁵ Since e-commerce can contribute additional sales channels and greater product variety for customers, it holds the potential for expanding contraceptive access not only by reaching new customers but also (and perhaps more importantly) by expanding product options. A number of e-commerce interventions for connecting customers to their preferred contraceptive method have emerged in recent years.

To understand the landscape of e-commerce for RH supplies, it helps to think about contraceptive goods and services as falling into three groups:

1. Over-the-counter products
2. Prescription products

3. Information-based service provision

Over-the-Counter Contraceptives Online

Over-the-counter contraceptives are readily available through various online marketplaces, some of which are purely virtual while others are e-commerce subdivisions of traditional brick-and-mortar drugstores. Online prices tend to be lower, but many then require the customer to pay additional shipping costs.¹⁶ Many retailers with online and physical sales channels have different contraceptives available online versus in-store. Many also offer the option to go online to check whether a desired product is in stock at a local store.¹⁷ **Table 3** shows examples of well-known contraceptive online marketplaces for U.S. customers and the products they carry.

A new e-commerce phenomenon for over-the-counter RH supplies is the concept of contraceptives “on demand.” These supplies are easily selected and purchased via a web or mobile application, delivered to your exact location any time of day and transported so that the delivery contents are anonymous, often even to the person delivering the package.¹⁸ Many major drugstores are moving in this direction as well via partnership with on-demand courier services.¹⁹

Table 3. Examples of contraceptives available from online marketplaces in 2015.

Marketplace	Condoms		Spermicides					Sponge	Emergency Contraception	
	Male	Female	Film	Foam	Gel	Jelly	Insert		Plan B	Take Action
ACareOT.com	X		X	X	X	X	X	X		
Amazon.com	X	X	X	X	X	X	X	X	X	X
Condomania.com	X	X								
Condomjungle.com	X	X								
CVS.com	X		X	X	X	X	X	X	X	X
Drugstore.com	X	X	X	X	X	X	X	X	X	X
LuckBlake.com	X	X								
Pharmapacks.com	X		X	X	X	X	X			
RiteAid.com	X		X	X	X	X			X	
SirRichards.com	X					X	X			
Target.com	X		X	X	X				X	
Walgreens.com	X	X	X	X	X		X	X	X	X
Walmart.com	X						X	X		



Drugstore.com offers female condoms online.

Prescription Contraceptives Online

Importantly, the U.S. medical industry draws a distinction between pharmaceuticals and medical supplies, with pharmaceuticals subjected to close regulation by the FDA and unique transfer restrictions, as products move along the industry's supply chain. This distinction applies to RH supplies as well. Some FP pharmaceuticals, like OCs, require a prescription and some, like EC, are sold over-the-counter.

Prescription refills are increasingly available online. Major fillers of FP prescriptions, like Planned Parenthood, many drug store chains, and student health centers allow

customers with a prescription to order their monthly refills online. On the other hand, a handful of sites have emerged to provide “workarounds” for U.S. customers who want to purchase prescription FP without visiting a health care provider. Amid growing frustration about the need for a prescription and the annual exam often required to get a prescription, some customers report turning to such websites based in countries like Canada, where prescriptions are not required.²⁰ Online research revealed over 20 websites promising OCs to American customers without a prescription.

Service Provision Online for Information-Sensitive Products

Both web and mobile applications are an increasingly popular medium for U.S. customers opting for information-based FP methods (See the case study on CycleBeads for examples of web and mobile apps in the U.S.). The internet is bringing FP information sources to existing and would-be customers.

E-commerce already includes RH supplies and services but has the potential to expand sales both to new customers and at greater volumes to existing customers. A number of factors affect this potential; some enable expansion while others hinder it.

Enabling Factors

Extremely Rapid E-commerce Expansion

Although it currently accounts for only 6% of the U.S. retail

Figure 2. Condoms-on-delivery.



In a handful of major cities, male condom companies have launched pilots of on-demand delivery services. L. Condoms promises 1-hour delivery of its eco-friendly, socially responsible male condoms via bike messenger 24-hours a day to customers in San Francisco and Manhattan. The concept is catching on – sales have increased 500% in the past year.

Online refill services, e.g., via mobile apps.



market, e-commerce sales channels are growing rapidly, and it is reasonable to assume that the well-established and steady-growth RH supplies market will grow along with it.²¹ Online retail sales are projected to grow 57% by 2018.²² With nearly 75% of U.S. internet users already shopping online, this growth will largely stem from existing customers buying more products.²³ Mobile devices (smart phones and tablets) are a particularly interesting growth platform – mobile purchases are increasing at a faster rate than desktop counterparts, accounting for 11% of sales in 2013 and set to hit 35% in 2017.²⁴ In addition to traditional credit and debit cards, the emergence of payment mechanisms like PayPal and Apple Pay facilitate the expansion of online services.²⁵

E-sales of Health and Personal Care Products Poised for Growth

The market category of “health and personal care” items seems poised for rapid e-sales growth in the coming years relative to other retail categories, which bodes well for online sales of RH supplies. E-commerce penetration varies significantly across product categories in the U.S. While the \$300 billion health and personal care market is second only to groceries in overall sales volume, it has experienced a comparatively slow transition online relative to many other product categories.²⁶ This is

consistent with an industry distinction between “durables” and “consumables.” While e-commerce penetration happened earlier with durables, sales of consumables are now growing.²⁷ In keeping with this trend, online health and personal care sales – presumably including RH supplies – are expected to grow at a much faster rate than traditional drug store sales.²⁸ Already, 36 million U.S. customers shopped online for health and personal care products in 2014, up from 20 million in 2010.²⁹

Lowering Barriers to Entry for RH and FP Retailers

E-commerce presents an intriguing possibility for lowering barriers for retailers to enter the FP market. Specifically, start-up contraceptive companies can establish an online presence and reach significantly more customers at a lower fixed cost than was previously possible through brick-and-mortar sales. This is making room for differentiated products like eco-friendly male condoms that, fueled by online marketing, are emerging as e-commerce for RH supplies becomes more pervasive.³⁰ Naturally, it also fosters increased competition, which has the potential to lower prices, increase product options, and encourage retailers to expand marketing efforts.

Expanded Insurance Coverage for FP

The U.S. FP market is unique when it comes to pricing. First, the U.S. Department of Health and Human Services Office’s Title X Family Planning Program enacted in 1970 is a federal grant program dedicated to providing comprehensive FP and related public health services. Of the 38 million women in need of FP in 2013, 20 million were eligible for subsidized contraceptive services and supplies through Title X based on income level and age.³¹ This population is increasing, rising 17% from 2000 to 2010.³² In 2013, public funding for FP services totaled \$2.37 billion.³³ Second, millions of women have historically relied on private health insurance coverage to make contraceptive services and supplies more affordable.³⁴ The implementation of the Affordable Care Act in the U.S. has made FDA-regulated contraceptive products and services more affordable for most women with private health plans by eliminating all co-pays on the provision of all FDA-approved contraceptives.³⁵ This opens up a range of contraceptive drugs, devices and

services to 27 million privately insured women at no extra cost to them.³⁶ Because of the price incentives they provide, these programs may boost overall consumer demand for contraceptive goods and services; this could increase the market’s attractiveness to emerging e-commerce platforms and prompt them to prioritize sales of RH supplies.

Population Trends That Favor E-commerce

The majority of the population uses the internet (78%) or social media platforms (74%), though rates vary demographically.³⁷ For example, 97% of people ages 18-29 use the internet, but only 77% living on less than \$30,000 per year use the internet.³⁸ Meanwhile, contraceptive needs and use rates also vary demographically. Across age segments, the proportion of women at risk of pregnancy who are not using a FP method is highest among those aged 15-19 (18%) and lowest among those aged 40-44 (9%).³⁹ Overlapping trends in internet use and the need for RH supplies across key demographics presents interesting opportunities for e-commerce to expand contraceptive access. For example, teenagers are most at risk of unintended pregnancy and most likely to be online.

Online Help for Customers to Navigate Contraceptive Options

The internet is bringing a myriad of FP information sources to existing and would-be contraceptive customers. Although websites and apps offering only RH information are not included in the scope of the case studies, they are an important part of the e-commerce landscape; in many cases, they encourage users to move to the next step—purchase of contraceptives online.

As shown in **Figure 4**, the internet can expand access to health care services through tools such as video visits with providers online. Many RH supplies require a face-to-face consultation with a medical professional. However, some providers, particularly those with a mandate to expand FP access, are looking for innovative ways to expand the reach of their services. This interest may reasonably result in broader demand for RH supplies and services accessed through e-commerce channels.

Table 4 presents several new web and mobile apps

directly aimed at influencing purchasing decisions, by providing customers with information or helping them navigate FP options.

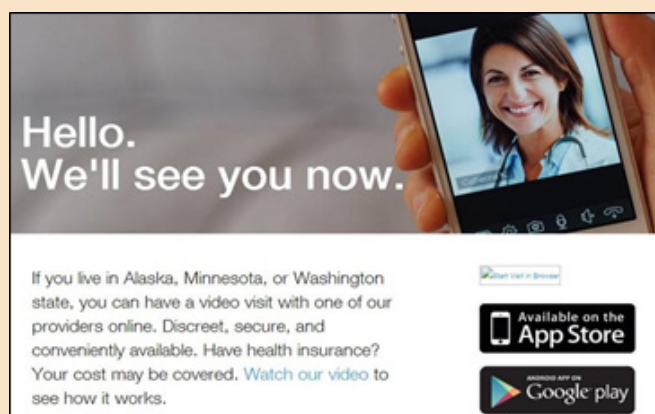
A New Era of Delivery

Recent innovations in the package delivery industry show potential for expanding access to RH supplies. The U.S. delivery system is already well-established. It reaches nearly the entire population and could therefore expand access to RH supplies to customers who face physical or social barriers to access. Delivery can provide anonymity for would-be customers who may not want to be publicly identified. Already, national delivery giants like Fed Ex, UPS, and USPS have achieved geographic saturation with delivery trucks on “almost every block in America.”⁴⁰ Meanwhile, recent innovations in package delivery are expanding the system’s reach. New players like Postmates and Instacart offer comprehensive, on-demand local delivery services, largely enabled by ubiquitous smart phone use in the United States.⁴¹ Emerging transportation alternatives like Uber and Lyft bring their driver infrastructure as a competitive advantage into the historically hard-to-crack market, replacing scheduled pick-up and delivery with instant services.⁴² Amazon recently introduced two new concepts – Sunday deliveries and deliveries by drones—further expanding delivery services.

Table 4. Examples of apps that provide information services for FP.

App	Function
condomfinder.com	Helps users locate nearby free condoms.
CDC Contraception App	Helps physicians prescribe the right contraceptive for women.
Plan A Birth Control	Helps women prepare for a consultation with an OB-GYN, in order to choose the right contraceptive.
mypillapp.com	Reminds women to take their daily OC pill via phone alarms.

Figure 4. Online video ‘visits’



State regulations permitting, Planned Parenthood offers patients video “visits,” bringing one-on-one information exchanges to clients who could not or would not have spoken with a skilled provider otherwise.

Hindering Factors

Medical Prescription Requirements

The FDA requires prescriptions for a number of RH supplies, including popular OCs, despite ongoing debate over the appropriateness of these requirements. Sometimes, prescriptions even require proof of annual pap smears, which could represent a burden for many women.⁴³ Obtaining prescriptions is a key barrier for many women. Some e-commerce providers offer online consultations that meet strict state regulations and circumvent the prescription barrier.ⁱⁱ These solutions to the prescription problem are not widespread, and e-commerce is unlikely to replace clinic-based consultations, at least in the short-term. However, as noted above, e-commerce has made it easier for many women in the U.S. to refill their

prescriptions; a growing number of major drug stores, like CVS and Walgreens, fill prescriptions online, and have established refill request systems.⁴⁴

Greater Use of LARCs, Which Are Not Suitable for Online Sales

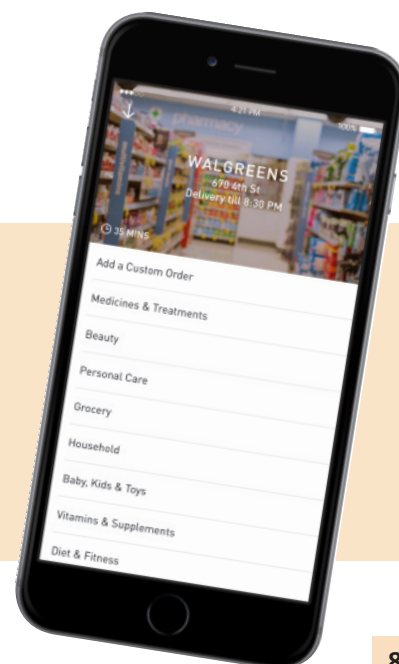
LARCs, like IUDs and implants, are gaining popularity among women in the U.S. Usage rates are up from 2.4% in 2002 to 12% in 2014.⁴⁵ The FP community encourages the use of LARCs because of their efficacy, and these methods require an in-person consultation with a trained medical professional for insertion.⁴⁶ As the number of women using LARCs rises, the number of women using OCs, male or female condoms and other short-term contraceptives — the most likely products sold online — could commensurately decrease.


CONCLUSIONS

On balance, based on the mix of enabling and hindering factors, e-commerce of RH supplies is likely to grow and will complement traditional fixed clinical settings and pharmacies as a source of contraceptives. A mature offline market for RH supplies and a robust, innovative infrastructure for online purchases make the U.S. a likely place for this sector to expand. However, regulatory and legal factors that affect prescription requirements or insurance coverage will continue to influence access and availability.



In September 2015, Postmates and Walgreens announced an official partnership for same-day delivery. Walgreens made the shift as part of its effort to stay current with evolving consumer demand, in which convenience is increasingly important for maintaining a competitive edge.



ENABLING factors		HINDERING factors
<ul style="list-style-type: none"> ✓ Rapid e-commerce expansion ✓ Online sales of health and personal care products poised for growth ✓ Lowering barriers to entry for RH and FP retailers ✓ Expanded insurance coverage for FP ✓ U.S. population trends that favor e-commerce ✓ Online help for customers available ✓ New era of rapid deliveries 	<p>Higher Impact</p>  <p>Lower Impact</p>	<ul style="list-style-type: none"> ✓ Medical prescription requirements ✓ Increasing use of long-acting reversible contraceptives (LARCs), which are unsuitable for online sales

FUTURE RESEARCH

Findings of this case study suggest a market opportunity around e-commerce for RH supplies that industry players spanning both the FP and e-commerce markets will likely gravitate towards. To better understand the scope and scale of this opportunity in the U.S., some critical follow-up areas of research recommended for future research include:

- **A comprehensive analysis of the U.S. family planning market:** The last publicly available report is from the 1990s, meaning those looking to shape the U.S. FP market are operating with limited insight. Signs point to a market opportunity around e-commerce sales channels and contraceptives, and such a report would make this opportunity more clear.
- **A research study to understand FP within the current and future state of overall U.S. healthcare market:** Due to changes like industry consolidation and government reform, such as the Affordable Care Act, the U.S. healthcare industry is changing quickly. Dynamics relevant to this study include trends like incentivizing preventative care and efficiency overhauls in medical product delivery systems.


- **Demographic research to hone-in on “low-hanging fruit” for expanded access to contraceptives through e-commerce campaigns:** Due to great diversity across the U.S. population, certain segments are particularly high-need in terms of contraceptive access or are particularly primed for e-commerce for FP products. Drivers vary from geographic location to internet use behaviors and more. Better understanding of these drivers and the opportunities their overlaps present points the way to the most attractive opportunities for e-commerce to expand contraceptive access for U.S. customers.
- **Opportunity assessment for marketing and awareness campaign(s):** The U.S. e-commerce infrastructure and buying habits seem primed for purchasing family planning products via e-commerce. Strategic awareness-raising could accelerate the process. A review of social media strategies may drive high-need populations towards under-used marketplaces. A landscape map of quality online information sources may reveal critical gaps. An opportunity assessment for TitleX program facilitation online and e-commerce platform partnerships could greatly expand the program’s scale of impact.

ⁱⁱ See the emergency contraception case study, which describes the development of effective online counseling in the U.S. with physicians, which circumvents the prescription barrier.


Endnotes

1. "E-Commerce Supply Chain Insights in Groceries and Consumer Packaged Goods in the U.S." February, 2015, University of Michigan, file:///C:/Users/Jennifer/Downloads/ecommerce_white_paper.pdf.
2. "U.S. Census Bureau News," U.S. Census Bureau, August 2015, http://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf.
3. "E-Commerce Supply Chain Insights in Groceries and Consumer Packaged Goods in the United States" February, 2015, University of Michigan.
4. "Use of Highly Effective Contraceptives in the U.S. Continues to Rise, with Likely Implications for Declines in Unintended Pregnancy and Abortion", 2014, Guttmacher <http://www.guttmacher.org/media/inthenews/2014/12/12/> & "Contraceptive Use in the United States – Fact Sheet," 2015, Guttmacher, http://www.guttmacher.org/pubs/fb_contr_use.html.
5. A. Salganicoff et al., "Women and Health Care in the Early Years of the Affordable Care Act", (Oakland, CA: Kaiser Family Foundation, 2014), available at <http://kaiserfamilyfoundation.files.wordpress.com/2014/05/8590-women-and-health-care-in-the-early-years-of-the-affordable-care-act.pdf>.
6. D. Barry and A. Esenstad., "Ensuring Access to Family Planning Services for All," Center for American Progress, 2014, <https://cdn.americanprogress.org/wp-content/uploads/2014/10/FamilyPlanning-brief.pdf>.
7. "U.S. Census Bureau News," U.S. Census Bureau, August 2015, http://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf.
8. "E-Commerce Supply Chain Insights in Groceries and Consumer Packaged Goods in the United States", February, 2015, University of Michigan, op.cit.
9. "Total US Retail Sales to Top 4.5 Trillion in 2013, Outpace GDP growth," eMarketer, April 2014, <http://www.emarketer.com/Article/Total-US-Retail-Sales-Top-3645-Trillion-2013-Outpace-GDP-Growth/1010756>.
10. "E-Commerce Sales Grow 6 Times Faster for U.S. Top 500 merchants than Total Retail Sales," Internet Retailer, April 2015, <https://www.internetretailer.com/2015/04/13/e-commerces-sales-outgrow-total-retail-sales-2014>.
11. "E-Commerce Supply Chain Insights in Groceries and Consumer Packaged Goods in the U.S." February, 2015, University of Michigan, file:///C:/Users/Jennifer/Downloads/ecommerce_white_paper.pdf.
12. "Retail E-Commerce Set to Keep a Strong Pace through 2017," eMarketer, April 2014, <http://www.emarketer.com/Article/Retail-Ecommerce-Set-Keep-Strong-Pace-Through-2017/1009836>.
13. "Retail E-Commerce Set to Keep a Strong Pace through 2017," IBID.
14. "Contraceptive Use in the U.S. – Fact Sheet," 2015, Guttmacher, http://www.guttmacher.org/pubs/fb_contr_use.html & "Birth Control Methods," Bedsider, 2015, <http://bedsider.org/methods-usage-is-among-women-age-15-44-during-a-month-long-period-in-2012>.
15. "Market Shaping for FP, Dahlberg, June 2014, http://www.dalberg.com/documents/Market_Shaping_for_Family_Planning.pdf.
16. "How to Get Birth Control Over the Counter," Bedsider, 2010, <http://bedsider.org/features/78-how-to-get-birth-control-over-the-counter>.
17. "Getting Birth Control Online," Bedsider, 2014, <http://bedsider.org/features/345-getting-birth-control-online>.
18. "Durex Rolls out Condom App and Delivery Service," LA Times, 2013, <http://articles.latimes.com/2013/feb/01/business/la-fi-tn-durex-sos-condoms-20130201> & "24 Hour Condom Delivery is about as Awesome as it Sounds," Huffington Post, 2014, http://www.huffingtonpost.com/2014/08/08/l-condoms-delivery_n_5658594.html.
19. "Postmates and Walgreens Team Up For on-Demand Delivery," Techcrunch, 2015, <http://techcrunch.com/2015/09/15/postmates-and-walgreens-team-up-for-on-demand-delivery/>.
20. "Women Boycott Unnecessary Pelvic Exams by Buying Birth Control Pills Online," personal blog, 2013, <http://forwomenseyesonly.com/2013/02/14/women-boycotting-unnecessary-pelvic-exams-by-buying-birth-control-pills-online/comment-page-1/#comment-1138>.
21. "E-Commerce Supply Chain Insights in Groceries and Consumer Packaged Goods in the United States" February, 2015, University of Michigan, file:///C:/Users/Jennifer/Downloads/ecommerce_white_paper.pdf.
22. "U.S. Online Retail Sales Will Grow 57% by 2018," 2014, Internet Retailer, <https://www.internetretailer.com/2014/05/12/us-online-retail-sales-will-grow-57-2018>.
23. "Retail E-Commerce Set to Keep a Strong Pace through 2017," eMarketer, April 2014, <http://www.emarketer.com/Article/Retail-Ecommerce-Set-Keep-Strong-Pace-Through-2017/1009836>.
24. "Retail E-Commerce Set to Keep a Strong Pace through 2017," IBID.
25. "The number of people who make a mobile payment at least once a year will grow from nearly 8% of the US consumer population in 2014 to 65% by 2019. The growth in mobile payment users will largely be driven by mobile wallet initiatives from Apple, Samsung, and Google. When these are in place, 90% of the forthcoming smartphones in the US will come with mobile wallets preinstalled". <http://www.businessinsider.com/the-mobile-payments-report-2015-5>.
26. "E-Commerce Supply Chain Insights in Groceries and Consumer Packaged Goods in the U.S." February, 2015, University of Michigan, file:///C:/Users/Jennifer/Downloads/ecommerce_white_paper.pdf & "E-Commerce and Healthcare – Changing the Traditional Landscape," <http://www.reuters.com/article/2015/06/10/research-and-markets-idUSnBw105501a+100+BSW20150610>.
27. "E-Commerce: Evolution or Revolution in the Consumer Goods World?" Neilsen, August 2014, <https://docs.google.com/viewer?a=v&pid=sites&srcid=Z2VvcmdldG93bi5lZHV8ZmFtaWx5LXBsYW5uaW5nLW5uZC1Y29tbWVvY2V8Z3g6NTg3MjFkODNhOTMxNjgzMg>
28. "The Health and Personal Care E-Commerce Report: How online retailers are finally disrupting the \$300B a Year Industry," 2015, Business Insider, <http://www.businessinsider.com/e-commerce-disrupting-health-and-personal-care-market-2015-4>.
29. "E-Commerce and Healthcare – Changing the Traditional Landscape," <http://www.reuters.com/article/2015/06/10/research-and-markets-idUSnBw105501a+100+BSW20150610>.
30. Stakeholder Interview – Leslie Heyer.
31. "Publicly Funded FP Services in the U.S., Guttmacher Institute", 2015, http://www.guttmacher.org/pubs/fb_contraceptive_serv.html.
32. "All growth in the need for publicly funded contraceptive services between 2000 and 2013 was among low-income adult women."

- "Publicly Funded FP Services in the U.S.," Guttmacher Institute, 2015, IBID.
33. "Publicly Funded FP Services in the U.S.," Guttmacher Institute, 2015, IBID.
 34. "Publicly Funded FP Services in the U.S.," Guttmacher Institute, 2015, IBID.
 35. "Contraceptive Use in the U.S. – Fact Sheet," 2015, Guttmacher, http://www.guttmacher.org/pubs/fb_contr_use.html.
 36. "The High Costs of Birth Control: It's not as affordable as you think," Center for American Progress, 2012, http://www.cdc.gov/nchs/data/series/sr_23/sr23_029.pdf.
 37. "Social Networking Fact Sheet," Pew Research Center, 2014, <http://www.pewinternet.org/fact-sheets/social-networking-fact-sheet/>.
 38. "Internet User Demographics," Pew Research Center, 2014, <http://www.pewinternet.org/data-trend/internet-use/latest-stats/>.
 39. Guttmacher Institute. Fact Sheet. Contraceptive Use in the United States. October 2015. Available at: http://www.guttmacher.org/pubs/fb_contr_use.html.
 40. "Why your next package will be delivered by an Uber," Tech Crunch, 2015, <http://techcrunch.com/2015/06/28/why-your-next-package-will-be-delivered-by-an-uber/>.
 41. "Apps tap into \$70 billion a year food delivery industry," CBS News, 2015, <http://www.cbsnews.com/news/postmates-instacart-tap-into-growing-food-delivery-industry/>.
 42. "Why your next package will be delivered by an Uber," Tech Crunch, 2015, <http://techcrunch.com/2015/06/28/why-your-next-package-will-be-delivered-by-an-uber/>.
 43. These include: oral contraceptives, hormonal patch, vaginal ring, diaphragm (skilled provider must fit to shape), cervical cap, /injections (dispensed at doctor's office or clinic), IUD (inserted by doctor), Implants (inserted by doctor). Source: "Birth Control Methods Fact Sheet," U.S. Department of Health and Human Services, 2015, <http://www.womenshealth.gov/publications/our-publications/fact-sheet/birth-control-methods.html#e>.
 44. "Moving Oral Contraceptives to Over the Counter in the US," IBIS Reproductive Health, 2015, <http://www.womenshealth.gov/publications/our-publications/fact-sheet/birth-control-methods.html#e>.
 45. "Use of Highly Effective Contraceptives in the U.S. Continues to Rise, with Likely Implications for Declines in Unintended Pregnancy and Abortion". 2014, Guttmacher <http://www.guttmacher.org/media/inthenews/2014/12/12/> & "Contraceptive Use in the United States – Fact Sheet," 2015, Guttmacher, http://www.guttmacher.org/pubs/fb_contr_use.html.
 46. "Use of Highly Effective Contraceptives in the U.S. Continues to Rise, with Likely Implications for Declines in Unintended Pregnancy and Abortion". Guttmacher Institute, 2014, IBID.

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