Unlocking Value in Healthcare Delivery Channels

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Patients are going outside traditional channels for their healthcare needs...

Zipdrug and PillPack

Pre-sorted Pills
We package your prescriptions and OTCs by the dose. Each packet is labeled with the date and time based on when you take them.
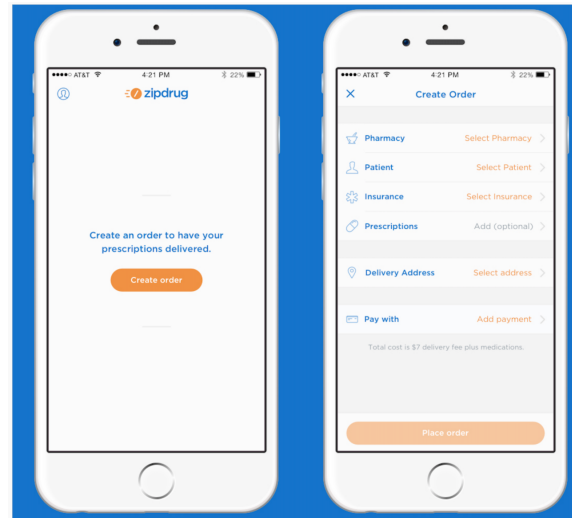
As-needed Meds
If you have medication you don't take on a regular schedule, we'll send it in a separate bottle.

Medications of All Types
We'll send inhalers, creams, and even refrigerated items like insulin. Need a special item? Just give us a call.

Discreet Packaging
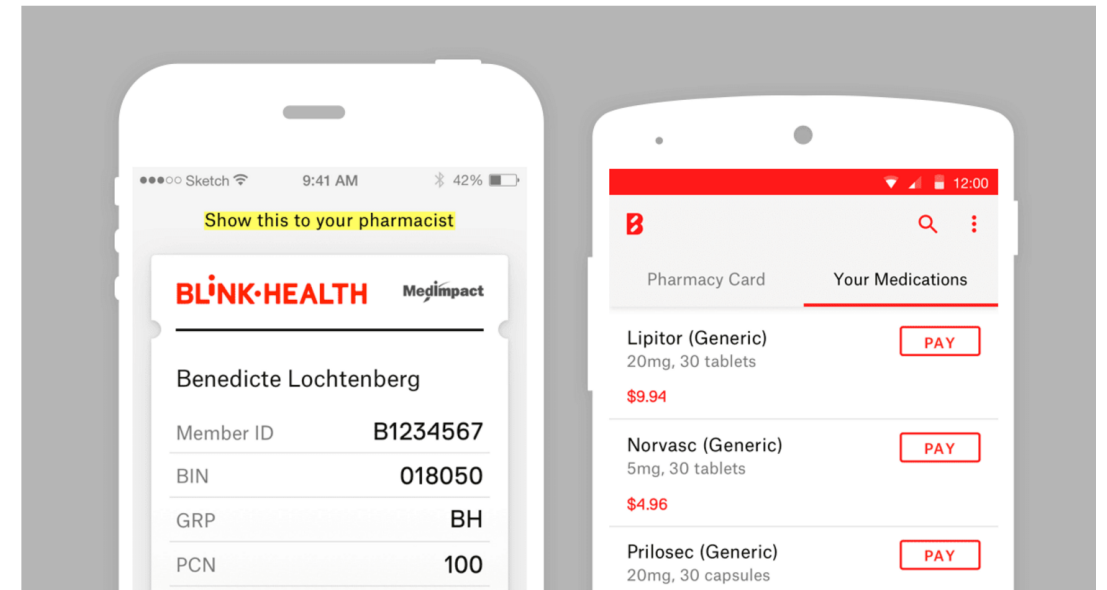Our secure and unmarked box means you don't have to worry about theft or tampering.

BLINK·HEALTH   Search for a medication   Testimonials

Get the free app

…and so is Big Pharma

Merck

▶ Partner with Aetna Care for patients with diabetes and hypertension; Geisinger Health System for an EHR and wellness app

AstraZeneca introduced "Symbicort Maintenance and Reliever Therapy" (asthma)

Pfizer UK partnered with NHS Direct to implement a telemedicine intervention from 2005-2013

▶ **27% reduction in utilization and 22% reduction in cost** of secondary care (Nymark et al, 2013)

Teva

▶ Shared Solutions platform for Copaxone (MS drug)

▶ Manufacturer-provided patient support programs improve adherence (40% more likely to be adherent after training on management of disease)

▶ 2014 **"Brand of the Year"**

Patients benefit from value-added services, including home delivery

▶ Iyengar et al, 2010: "beneficiaries who use home delivery ... have **a greater likelihood of being adherent** than patients who fill their prescriptions at retail."

▶ Moore et al, 2015: "The study demonstrated significant **improvement in both adherence to therapy and first-fill persistence** among patients in the new service model ..."

▶ Zuidema, et al (2015): "The most important support needs ... are more **informational, social and practical support and emotional support**. "

▶ Cabrera-León et al., 2012: "direct services are **cost-effective**"

Context & Scope

Key Research Questions:

- What are the key cost drivers for our current distribution model?
- How will these change with the volume growth we expect?
- How will these change if alternative channels were to be implemented?

Scope

- Market Focus: U.S.
- Product Characteristics: 1 SKU that is highly specialized, low-volume, high-value, chronic medication
- SC Focus: From receipt at own DC to distribution customer (wholesaler, etc) DC

Model Framework – Customer Segmentation

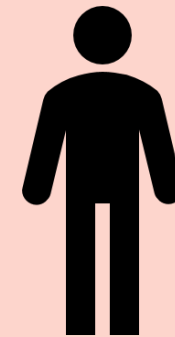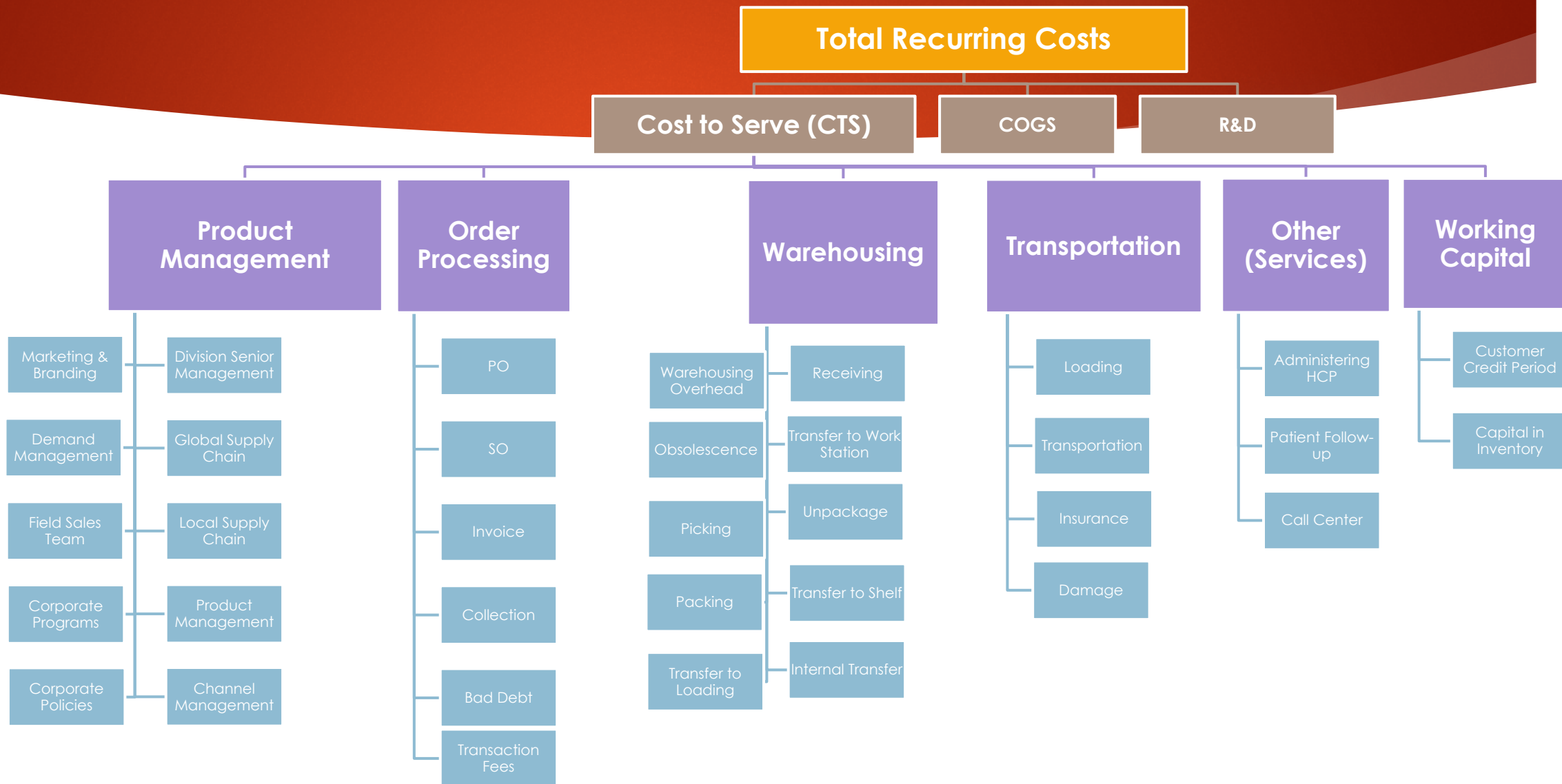| Wholesalers (90%)	Distributors (10%)	Individuals (0%)
W1	Large	
W2	Medium	
W3	Small	

Model Framework – CTS Modules

Total Recurring Costs

- **Cost to Serve (CTS)**
- **COGS**
- **R&D**

Product Management
- Marketing & Branding
- Demand Management
- Field Sales Team
- Corporate Programs
- Corporate Policies
- Division Senior Management
- Global Supply Chain
- Local Supply Chain
- Product Management
- Channel Management

Order Processing
- PO
- SO
- Invoice
- Collection
- Bad Debt
- Transaction Fees

Warehousing
- Warehousing Overhead
- Obsolescence
- Picking
- Packing
- Transfer to Loading
- Receiving
- Transfer to Work Station
- Unpackage
- Transfer to Shelf
- Internal Transfer

Transportation
- Loading
- Transportation
- Insurance
- Damage

Other (Services)
- Administering HCP
- Patient Follow-up
- Call Center

Working Capital
- Customer Credit Period
- Capital in Inventory

Current CTS

Legend: Product Management, Order Processing, Warehousing, Transportation, Other, Working Capital

Scenario Testing – Future Outlook

Revenue Outlook 2016-2020

Legend: Product Management, Order Processing, Warehousing, Transportation, Other, Working Capital, Profit Before COGS

Values: 2016: 88%, 2017: 271%, 2018: 511%, 2019: 941%, 2020: 1436%
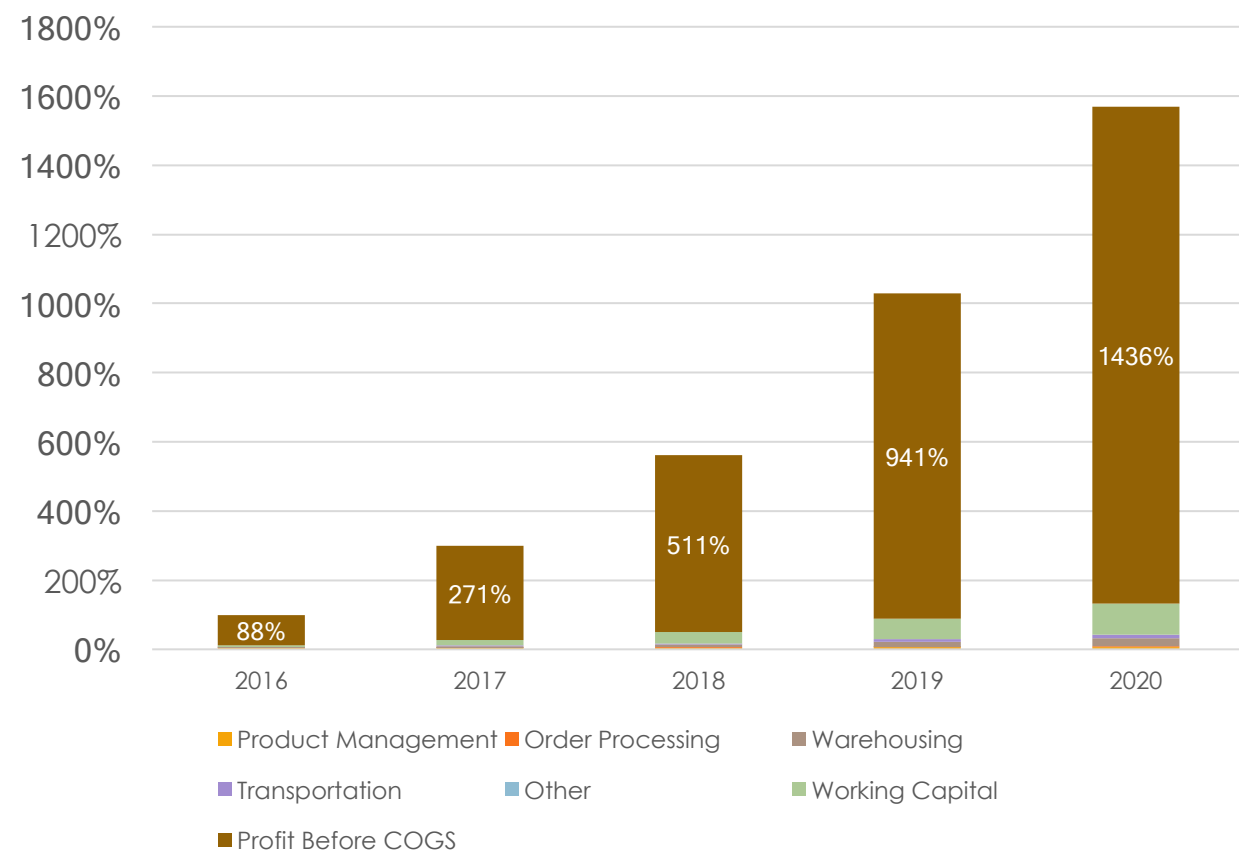
CTS per unit Outlook 2016-2020

Legend: Product Management, Order Processing, Warehousing, Transportation, Other, Working Capital

Scenario Testing – Alternative Distribution

Revenue Outlook With Alternative Distribution

- 91%
- 94%
- 105%
- 125%
- 158%

Legend: Product Management, Order Processing, Warehousing, Transportation, Other, Working Capital, Profit Before COGS

CTS Outlook With Alternative Distribution

Legend: Product Management, Order Processing, Warehousing, Transportation, Other, Working Capital
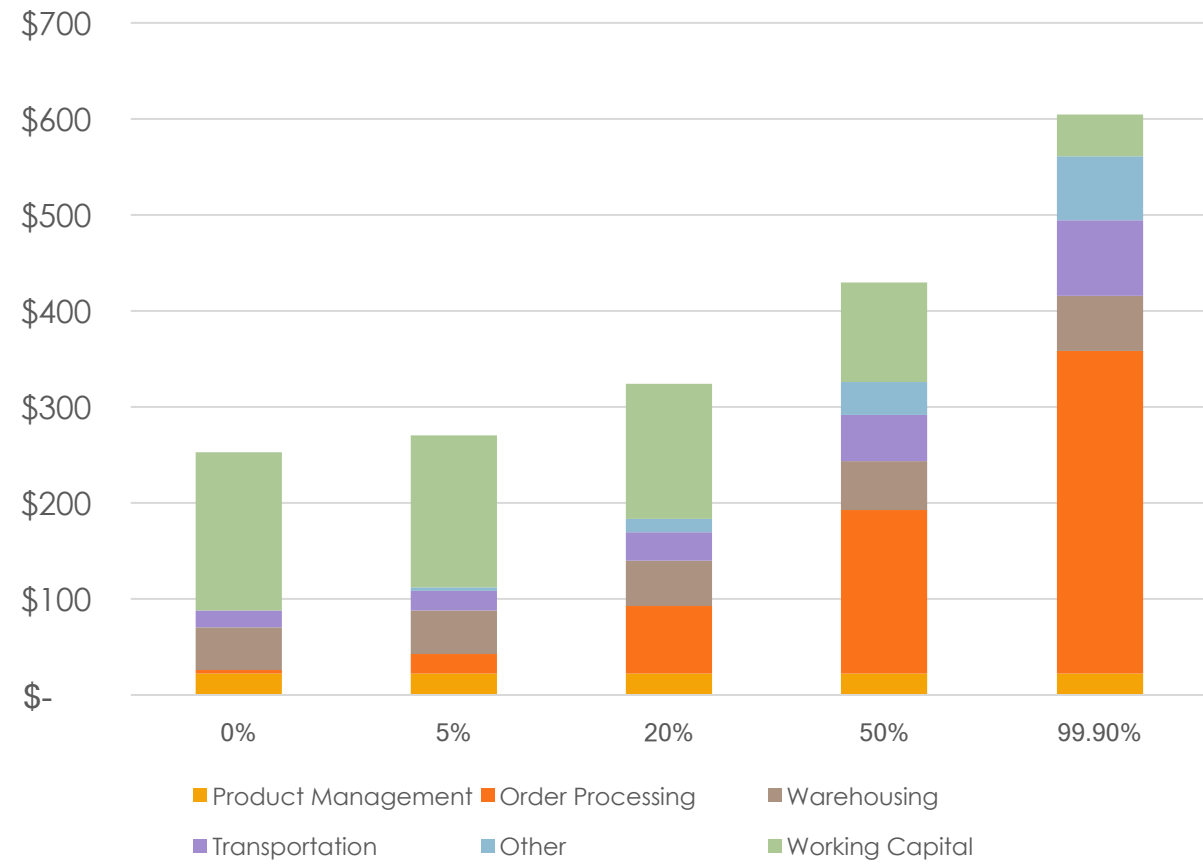
Limitations of the Model

- Aggregated Calculations
  - Does not consider seasonality or change in purchasing pattern
- Does not consider Capital Investments
- Does not consider effect on demand
  - Ex. Will going direct increase market share and lead to more sales volume?
- Does not consider response of other stakeholder parties
  - Ex. How will the wholesalers respond to going to direct?

Discussions & Future Direction

1

Make the Model Accurate
- Refine parameters & assumption
- Maintain & Update

2

Integrated Decision Support
- Cross-functional discussion (induce global optimization)

3

Geographical Extension
- Adopt the tool to other geographies of concern

4

Product Extension
- Adopt the tool to other products & portfolios

5

Value Chain Extension
- Extend the framework to the end customers

Q & A