ANALYSIS ON DERMSKIN, DERMO INC

SHRI ABHIRAAMI THANGAVEL
Aug 7th, 2024

AGENDA

1. INTRODUCTION
2. PRODUCT REACH
3. SUCCESS METRICS
4. ACTIONABLE RECOMMENDATIONS

BACKGROUND

In January 2024, Dermo Inc launched its latest medication, DermSkin. Since its introduction, DermSkin has experienced remarkable growth and widespread adoption across the United States.

PRODUCT REACH

1. LOCATION
2. DOCTORS
3. PATIENTS

SUCCESS METRICS

1. INSURANCE COVERAGE
2. CREATED VS SHIPPED ORDERS
3. TIME TAKEN TO SHIP ORDERS
4. REFILL DETAILS
5. PATIENT ADHERENCE

KEY STATISTICS

2.2K

doctors across USA prescribing DermSkin

4.3K

patients across USA using DermSkin

7.0K

orders shipped across USA (including fills and refills)

58%

of the orders created were shipped

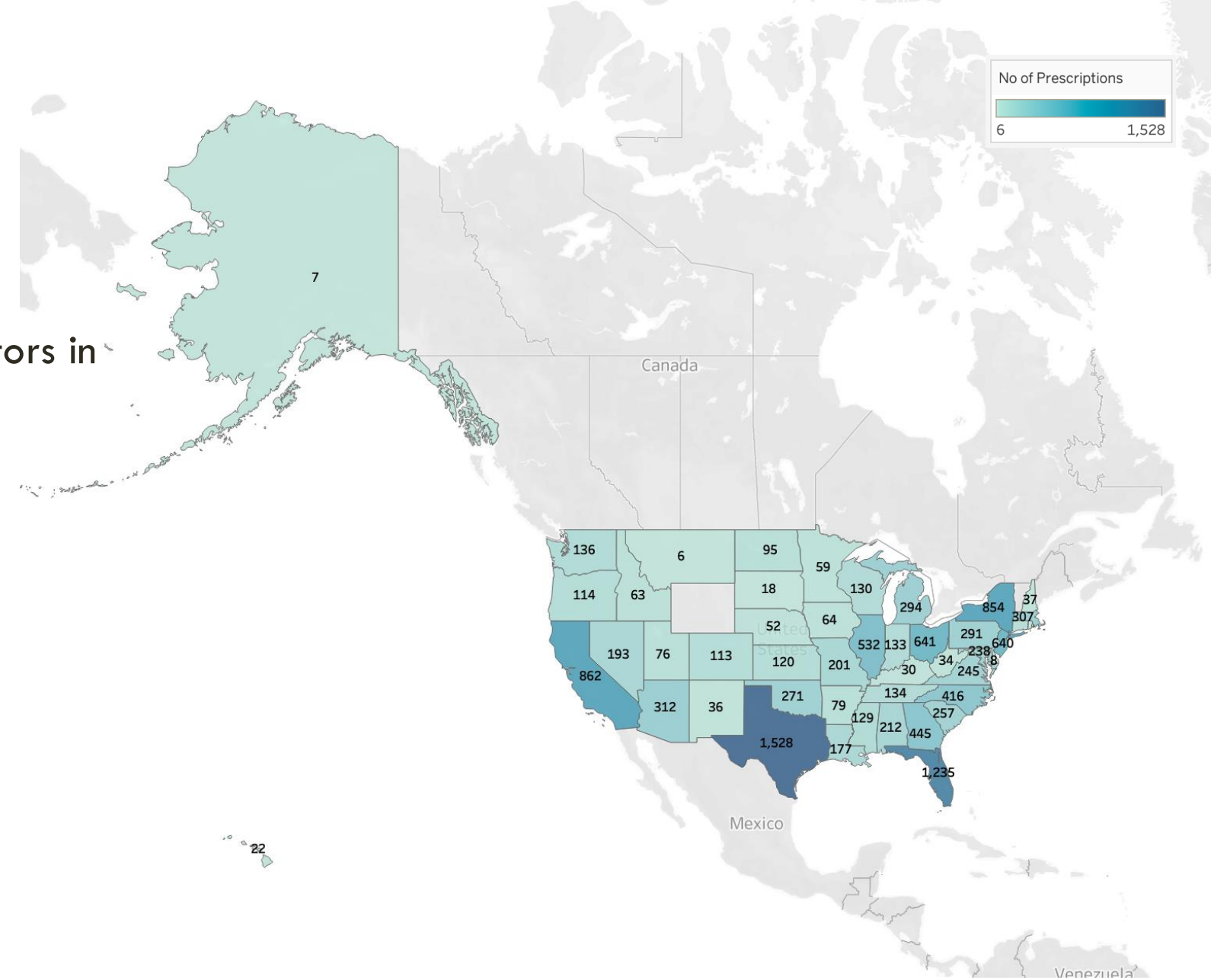
** from 1st January 2024 to 5th August 2024

PRODUCT REACH

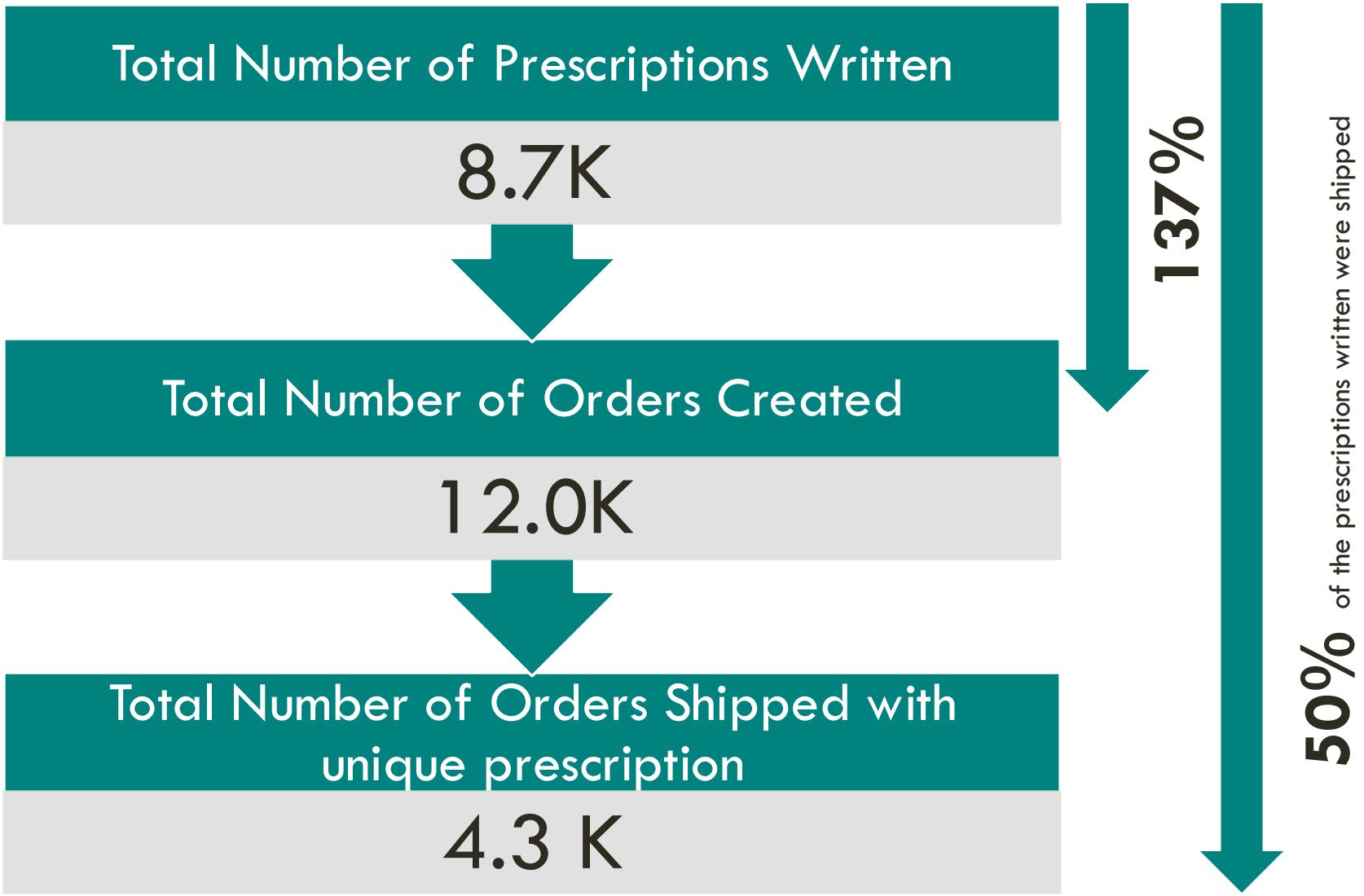
LOCATION

DermSkin is highly prescribed by doctors in

1. Texas (219 Doctors)
2. Florida (239 Doctors)
3. New York (177 Doctors)
4. California (176 Doctors)
5. New Jersey (101 Doctors)

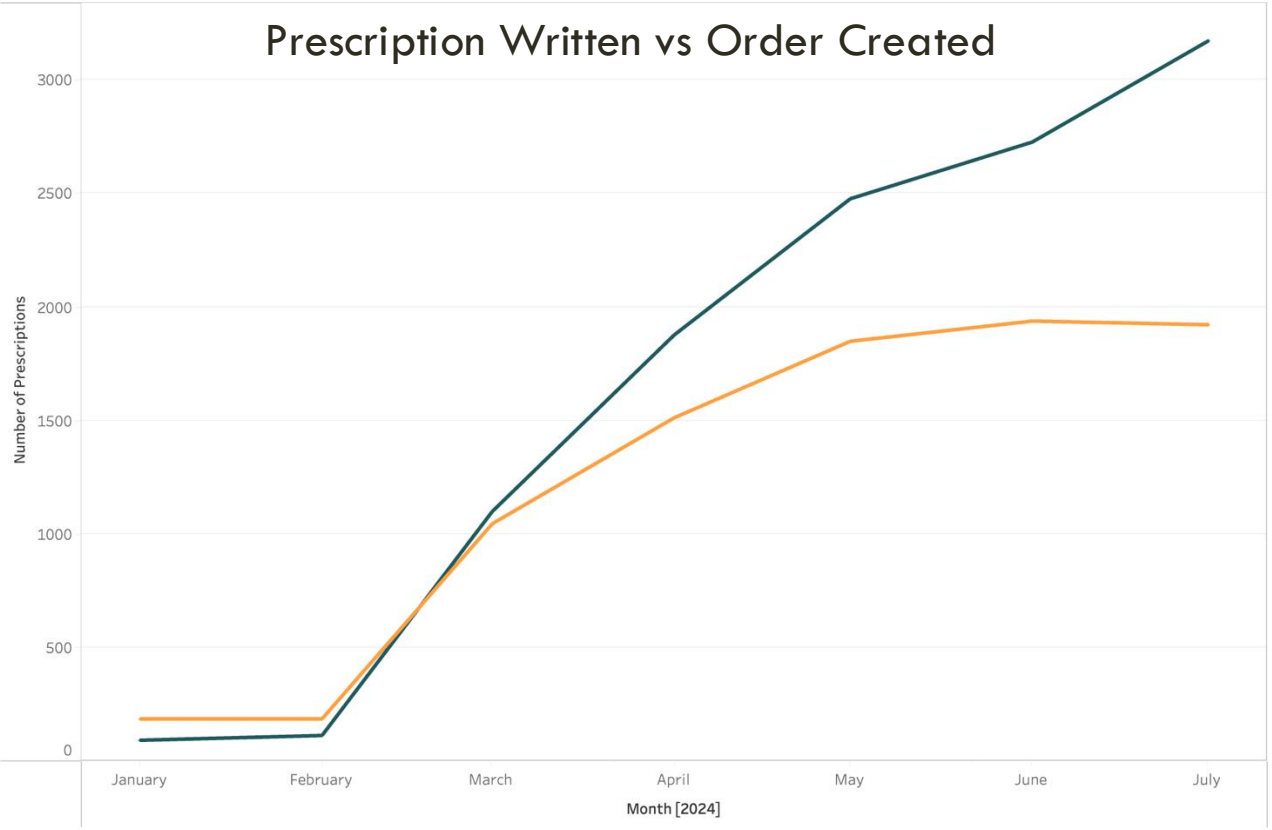


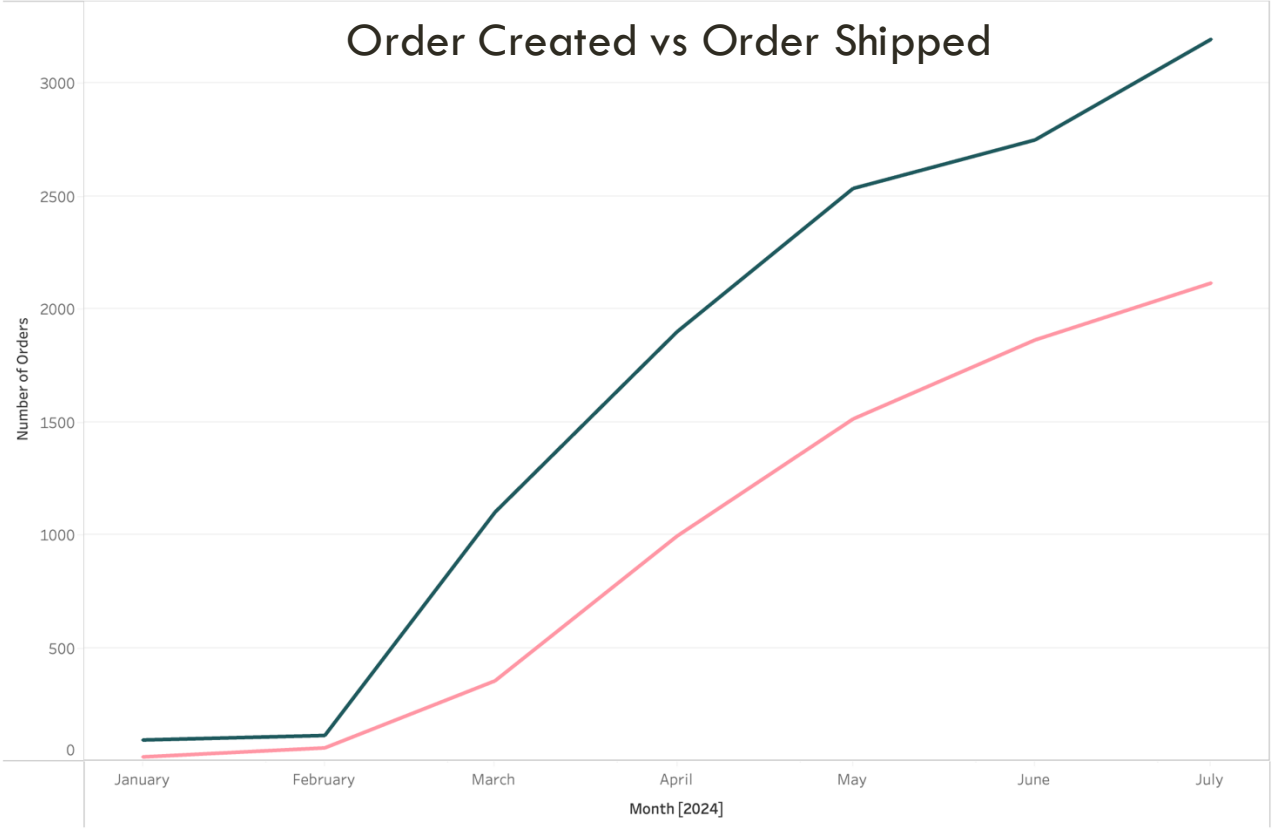
DOCTORS


Total Number of Prescriptions Written
8.7K
Total Number of Orders Created
12.0K
Total Number of Orders Shipped with unique prescription
4.3 K
137%
50% of the prescriptions written were shipped

TREND ANAYLSIS

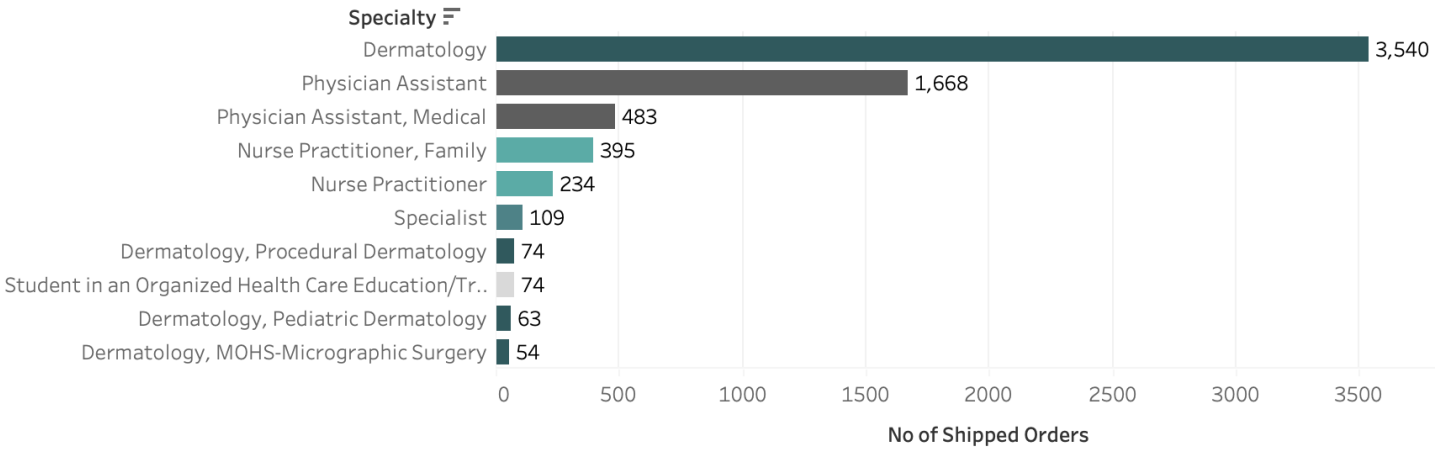
Prescription Written
Order Created
Order Shipped



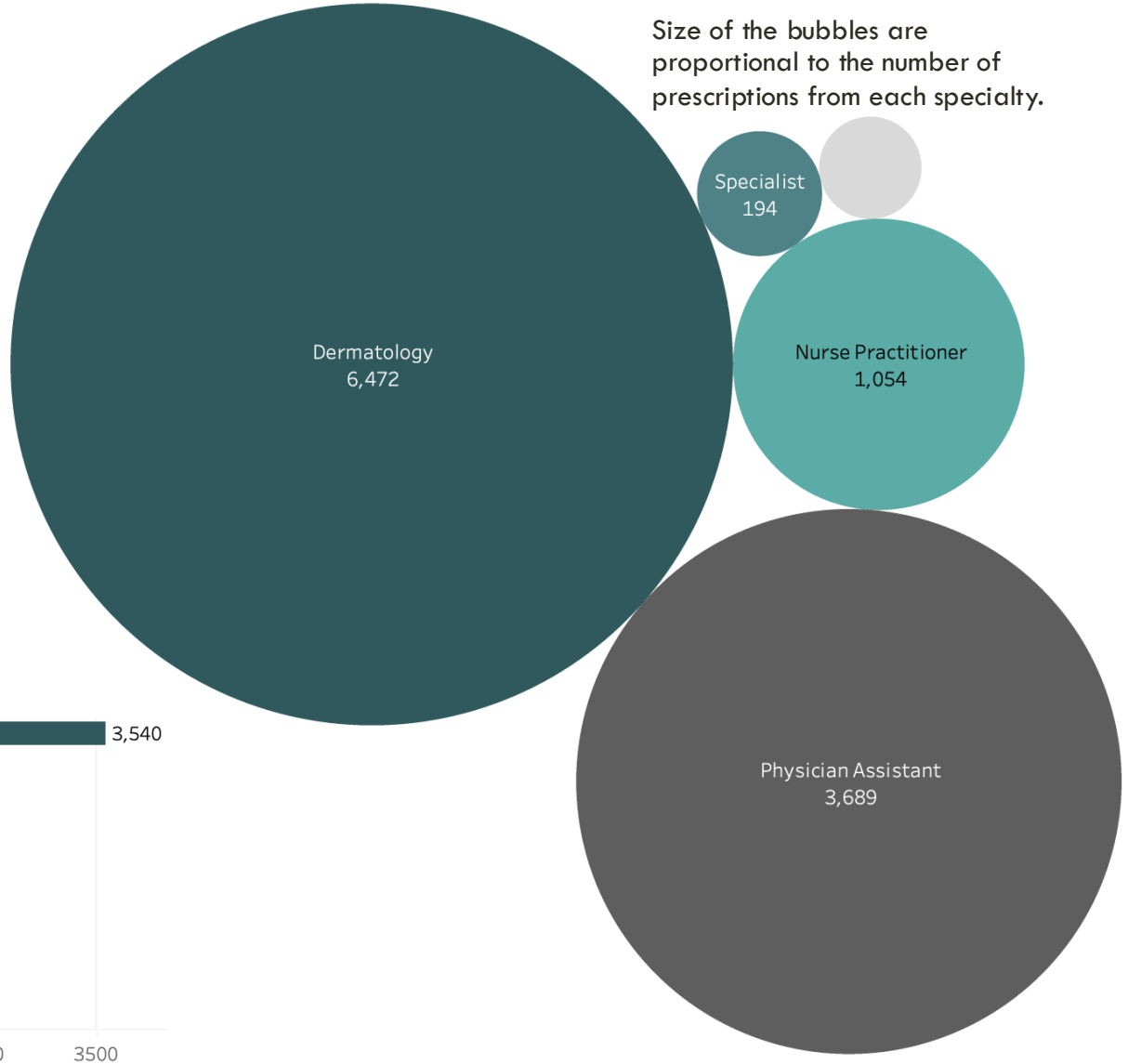


DOCTORS

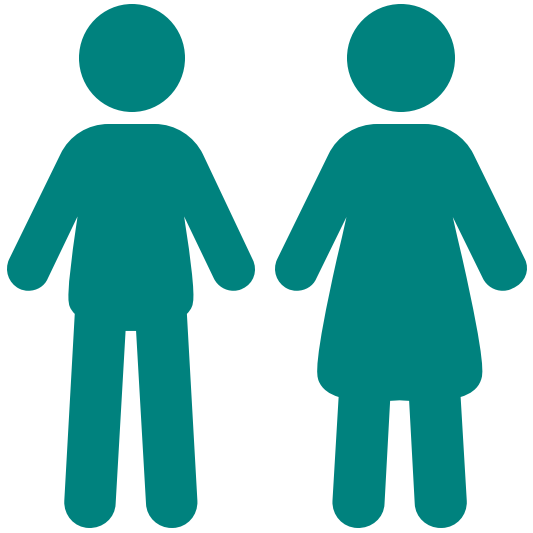
Dermatologists are the primary prescribers followed by Physician Assistants, Nurse Practitioners, and Specialists. This trend is also seen in the specialties with the highest number of shipped orders.



Size of the bubbles are proportional to the number of prescriptions from each specialty.



PATIENTS



94% of the patients using our product are between 12 to 49 years old.

29% Young Adult (18-24 years)

27% Early Adulthood (25-34 years)

22% Mid Adulthood (35-49 years)

16% Teenager (12-17 years)

SUCCESS METRICS

INSURANCE COVERAGE

Market Penetration

Wider Market Reach: Medicines that are covered by insurance can reach a larger segment of the market

Competitive Advantage: Coverage can provide a competitive edge over other medications that may not be covered, driving higher sales and market share.

Accessibility and Affordability

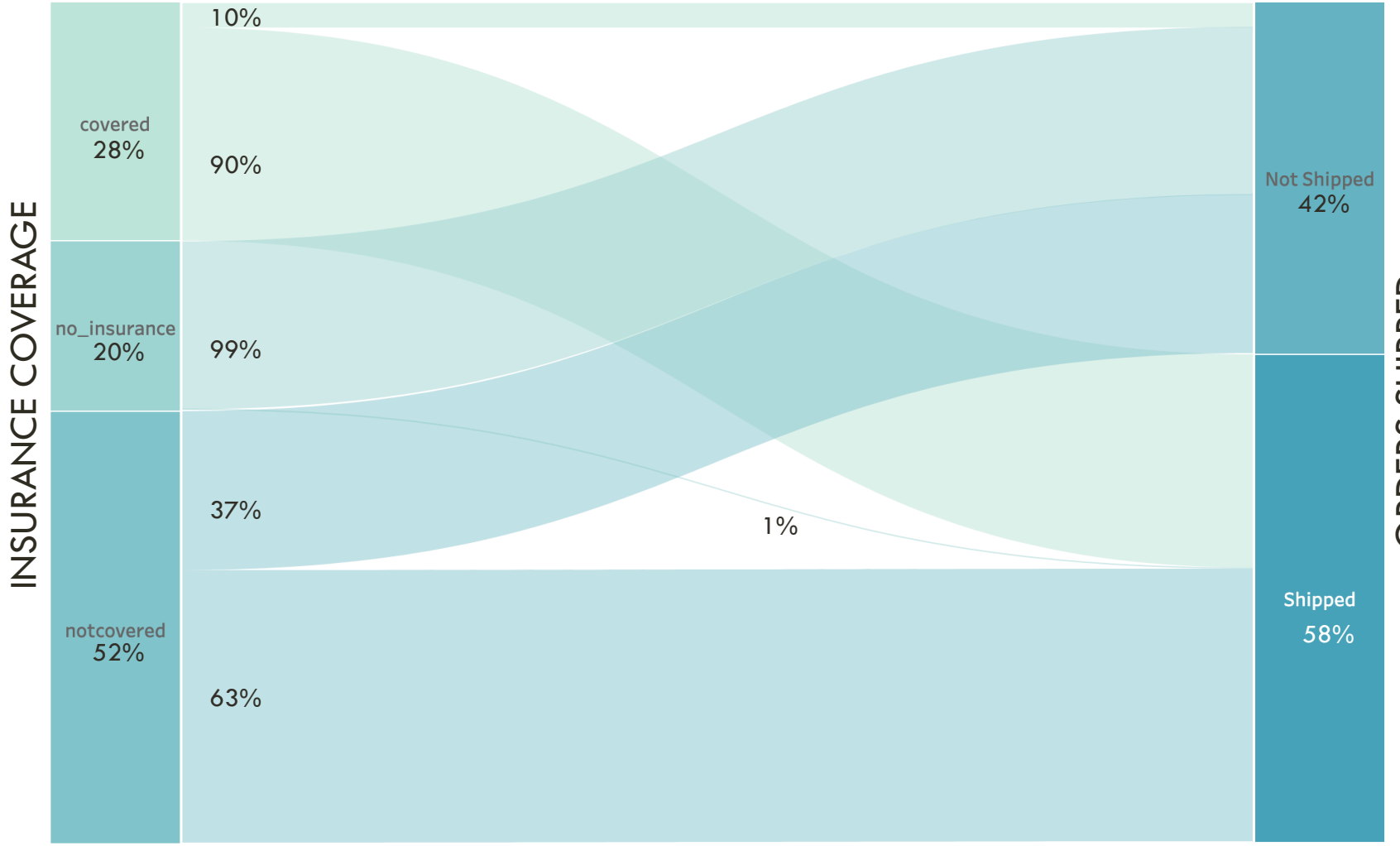
Patient Access: Insurance coverage directly affects the accessibility of a new medicine to a broader patient population

Affordability: High out-of-pocket costs can be a significant barrier to medication adherence.

INSURANCE COVERAGE TO SHIPPED ORDERS

Out of the total orders received, 52% were not covered by insurance. While, 28% were covered by insurance, nearly 20% had no insurance coverage at all.

90% of insurance covered orders and 63% of insurance not covered orders whereas only 1% of number insurance orders shipped.



ORDER CONVERSION RATIO

Physician Trust and Recommendations

Clinical Confidence: A strong conversion ratio shows that doctors are confident in recommending the new medication to their patients.

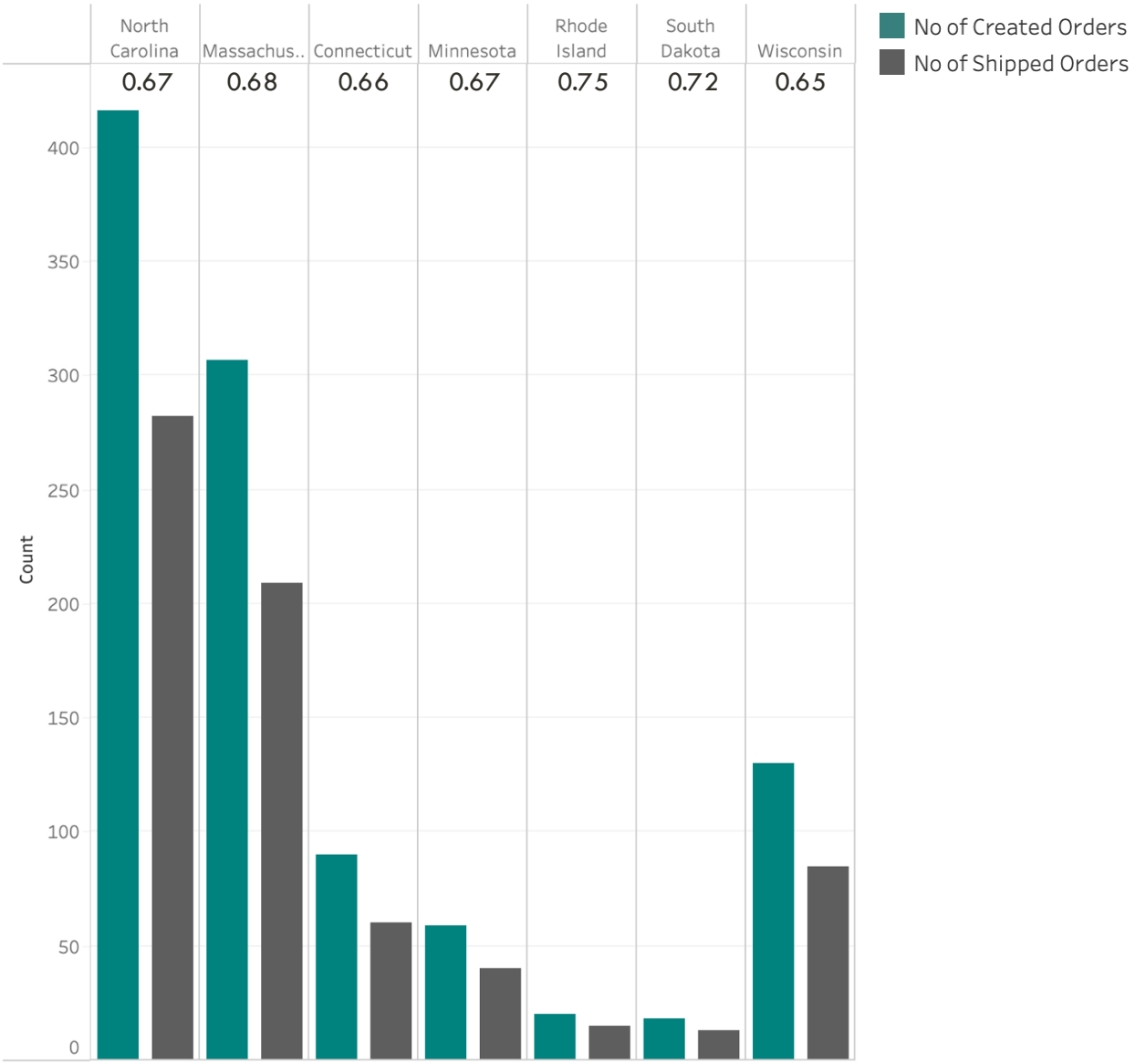
Revenue and Financial Performance

Sales Growth and Profitability : A high OCR translates directly into higher sales volumes and revenue growth. Increased conversions lead to better financial performance

ORDER CONVERSION RATIO

From creating to shipping an order - Conversion Ratio is higher for

1. Rhode Island (0.75)
2. South Dakota (0.72)
3. Massachusetts (0.68)
4. Minnesota (0.67)
5. North Carolina (0.67)



TIME TAKEN TO SHIP ORDERS

Business Continuity

Adaptability: Efficient shipping practices demonstrate a company's ability to adapt to challenges ensuring that patients receive their medications.

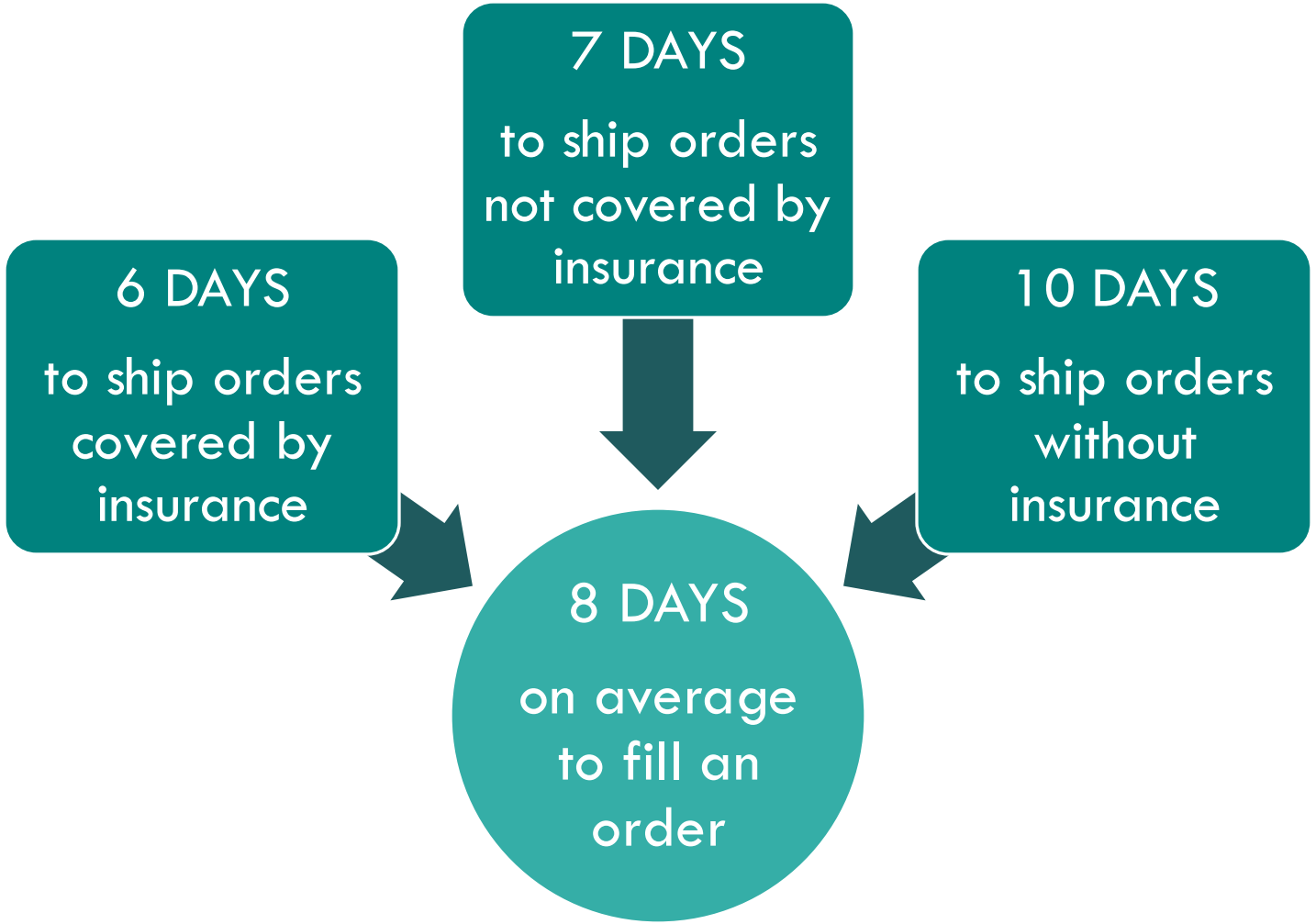
Sustainability: Timely shipping is part of a sustainable business model that ensures long-term viability and customer satisfaction.

Operational Efficiency

Supply Chain Management: Efficient shipping is a sign of a well-managed supply chain, which can reduce costs and improve overall operational efficiency.

Inventory Management: Quick turnaround times in shipping help in better inventory management, reducing the risks of stockouts or overstocking.

TIME TAKEN TO SHIP ORDERS



REFILL

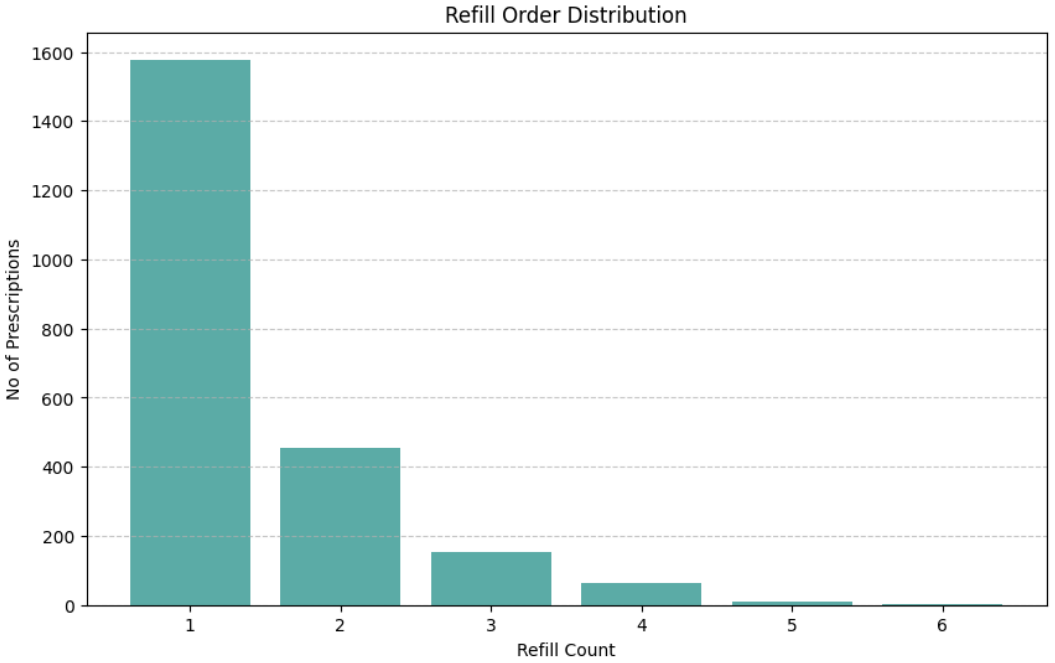
Adherence and Effectiveness

Adherence Indicator: A high refill rate often indicates that patients are consistently taking their medication as prescribed, suggesting good adherence to the treatment regimen.

Patient Satisfaction

Satisfaction Proxy: Consistent refills can reflect patient satisfaction with the medicine, including its efficacy and tolerability. If patients are not refilling, it might indicate issues with the medicine's effectiveness, side effects, or overall satisfaction.

REFILL DETAILS



Total Refill Orders

5.5K

46% of the total orders were refill orders.

Number of Patients got Refills

2.2K

No of Refills ranging 1 to 6 Refills

Average Number of Refill

1.5

Average Number of Refills = Total Refills / Total Prescriptions with Refills

Refill Rate

64%

Refill Rate refers to the proportion of patients who refill their prescriptions within a specified timeframe (7days).

PATIENT ADHERENCE

Healthcare Provider Relationships

Physician Support: High adherence fosters strong relationships with healthcare providers, who are more likely to continue prescribing and recommending the medicine, further enhancing prescription rates.

Behavioral Insights

Understanding Barriers: Monitoring adherence helps identify barriers to medication usage, such as side effects, complex dosing regimens, or lack of patient education.

PATIENT ADHERENCE – MPR (MEDICATION POSSESSION RATIO)

MPR calculates the proportion of days a patient has medication available over a specified period.

MPR = Total days of medication supplied / Number of days in the measurement period

	MPR				
Age Group	0-0.25	0.25-0.5	0.5-0.75	0.75-1.0	1.0 and above
Teenager (12-17 years)	44	126	152	96	240
Young Adult (18-24 years)	71	265	250	166	423
Early Adulthood (25-34 years)	68	267	262	132	320
Mid Adulthood (35-49 years)	74	262	200	108	240
Late Adulthood (50-64 years)	15	58	53	23	55

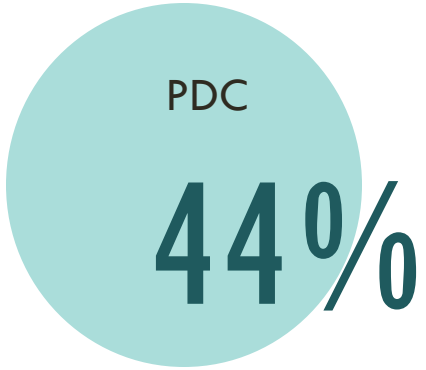
Measurement Period here is First Shipped Order Date to today

PATIENT ADHERENCE – PDC (PROPORTION OF DAYS COVERED)

PDC measures the proportion of days in a measurement period during which a patient has enough medication available to meet their prescribed regimen.

PDC = Number of days covered by medication / Number of days in the measurement period.

A higher PDC indicates better medication adherence, meaning the patient has medication available for a greater proportion of the days in the measurement period.



PDC is low the number of fills are higher than refills (ie) they took a one course of prescription and didn't get any refills during the measurement period.

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ACTIONABLE RECOMMENDATION

KEY OBSERVATIONS

- Dermatologists and Physician Assistants across USA are prescribing the most.
- Most Prescribers are from Texas, Florida, New York, California, New Jersey.
- No Prescribers (Doctors) from Maine, Puerto Rico, Vermont, Wyoming.
- Number of orders where insurance doesn't cover are higher.
- Time Taken to ship products are slightly high.
- Conversion rate of orders shipped compared to orders created is decreasing each month.

RECOMMENDATIONS

01 Target High-Prescribing Professionals: Focus marketing and educational efforts on dermatologists and physician assistants, as they are the top prescribers of DermSkin.

02 Expand Geographic Reach: Investigate and address the lack of prescribers in Maine, Puerto Rico, Vermont, and Wyoming. Conduct outreach campaigns or provide incentives to encourage doctors in these regions to prescribe DermSkin.

03 Improve Affordability: Work with more insurance providers to include DermSkin in their coverage plans, making it more accessible to patients. Develop programs or offer discounts to make DermSkin more affordable for patients without insurance.

04 Enhance Supply Chain Coordination: Work closely with suppliers and logistics partners to improve coordination and reduce delays in the supply chain.

05 Address Declining Conversion Rate: Analyze the reasons behind the decreasing conversion rate of orders shipped compared to orders created.

Q & A SESSION

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- **4.3K** patients across USA using DermSkin
- **7.0K** orders shipped across USA (including fills and refills)
- **58%** of the orders created were shipped

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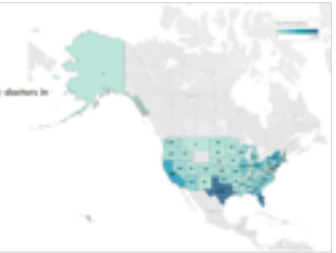

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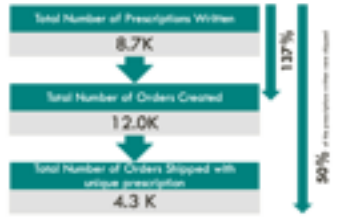

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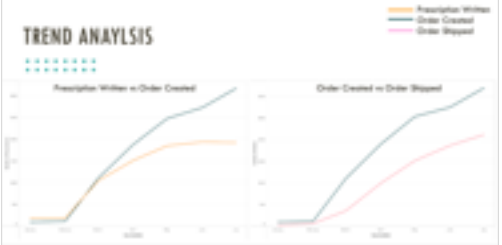

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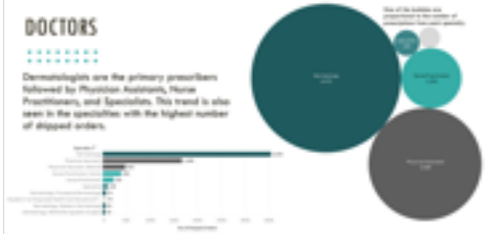

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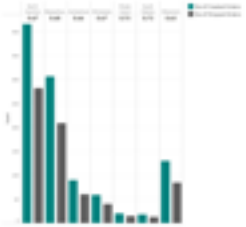

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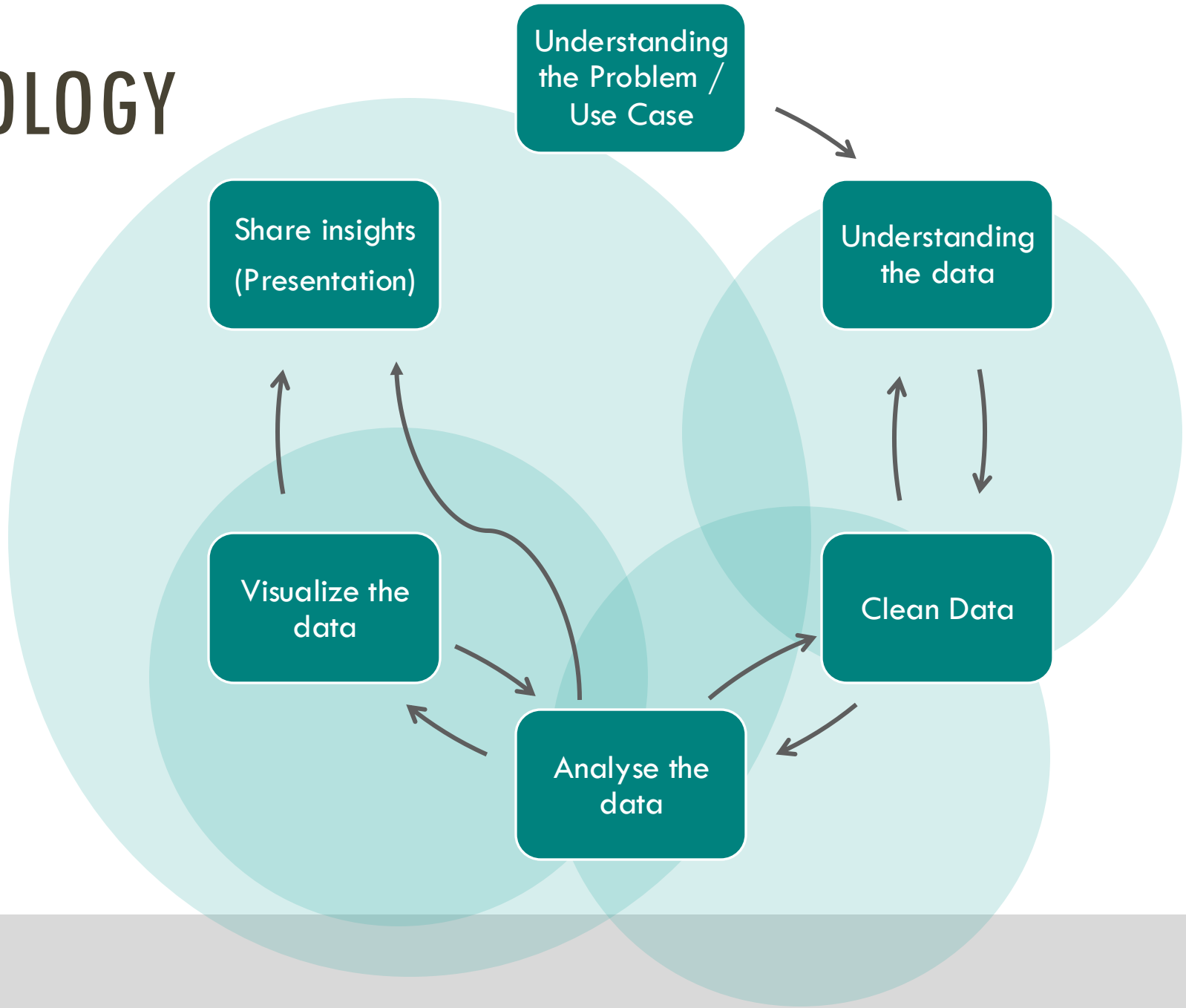
APPENDIX

METHODOLOGY



Tool Used:

- Python
- Tableau
- Excel

ASSUMPTIONS MADE AND DATA CLEAN

DermSkin was released in Jan 2024. Only the prescriptions written on or after that date is taken into consideration for analysis.

RH in state code is invalid as per Federal Aviation Administration Website, USPS Website and Wikipedia. Hence the record with RH as State is dropped from Doctor Table.

Cleaning the Specialty in Doctor's Table (Derm, DERMATOLOGY, and some missing commas).

Deleting nulls if their impact on the data is negligible.

Cleaning Date Fields (Removing Time zone, Converting Time to usable format).

Created new columns like Age, Age Groups, Primary Specialty, Sub Specialty, etc.

Replacing nulls in INSURANCE_COVERAGE to no_insurance.

Days of Supply had 1,3, 303, 180 days with negligible no of prescriptions and a data entry error. Dropped them out of analysis from Orders Table.

PREFERABLE ADDITIONAL DETAILS FOR FUTURE ANALYSIS

01

Patient Demographics (Gender, Ethnicity, Socioeconomic status, Medical History, Zip Code, Employment Status, Vaccine Upto Date)

02

Medication Details (Dosage Prescribed, Frequency of administration)

03

Insurance Details (Type of insurance (public, private), Coverage percentage, Out-of-pocket cost for patients)