



# **Building a More Impactful Patient Journey Using Massive Data**

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**Keri Hettel**  
**Joe Priest**  
**Jamison Barnett**

# Welcome



**Keri Hettel**  
VP, Director Analytics  
Razorfish Health



**Joe Priest**  
VP, Biopharmaceutical Practice &  
Strategic Partnerships  
Practice Fusion



**Jamison Barnett**  
CTO  
Verilogue

# Session Objectives

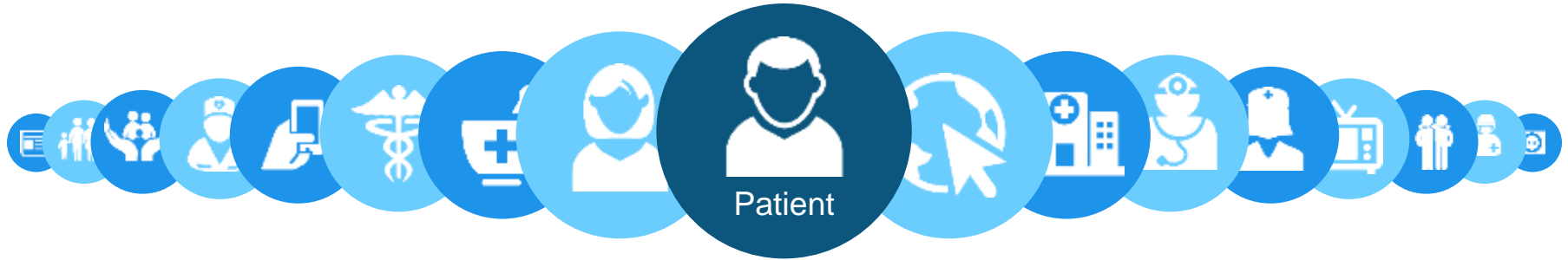
Demonstrate how to:

1. Develop an “in and out” of office patient journey utilizing EHR, PHR, online behavioral, and ethnography data
2. Utilize population health analytics to identify brand opportunities
3. Combine primary data elements to assess individual choices made along the patient journey

# Healthcare Experience: The Evolution



# Brand Success: Cross Channel Delivery



Sales



Professional



Patient



Payor

# Brand Experience: Optimizing Every Touch Point



## OPTIMIZED HEALTHCARE EXPERIENCE



Sales



Professional



Patient



Payor

# The Foundation: The Patient Journey

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Awareness &  
Recognition

Presentation  
& Diagnosis

Treatment  
Selection

Brand  
Selection &  
Access

Switching &  
Persistency

# Building a More Impactful Patient Journey

## Building a More Impactful Patient Journey using Real World Data



EHR & PHR  
Platform



Online  
Behaviors



Exam-Room  
Dialogue





# Building a More Impactful Patient Journey Using Massive Data



# Real World Evidence: Healthcare Platforms





# Real World Evidence: Social Behavior Analysis





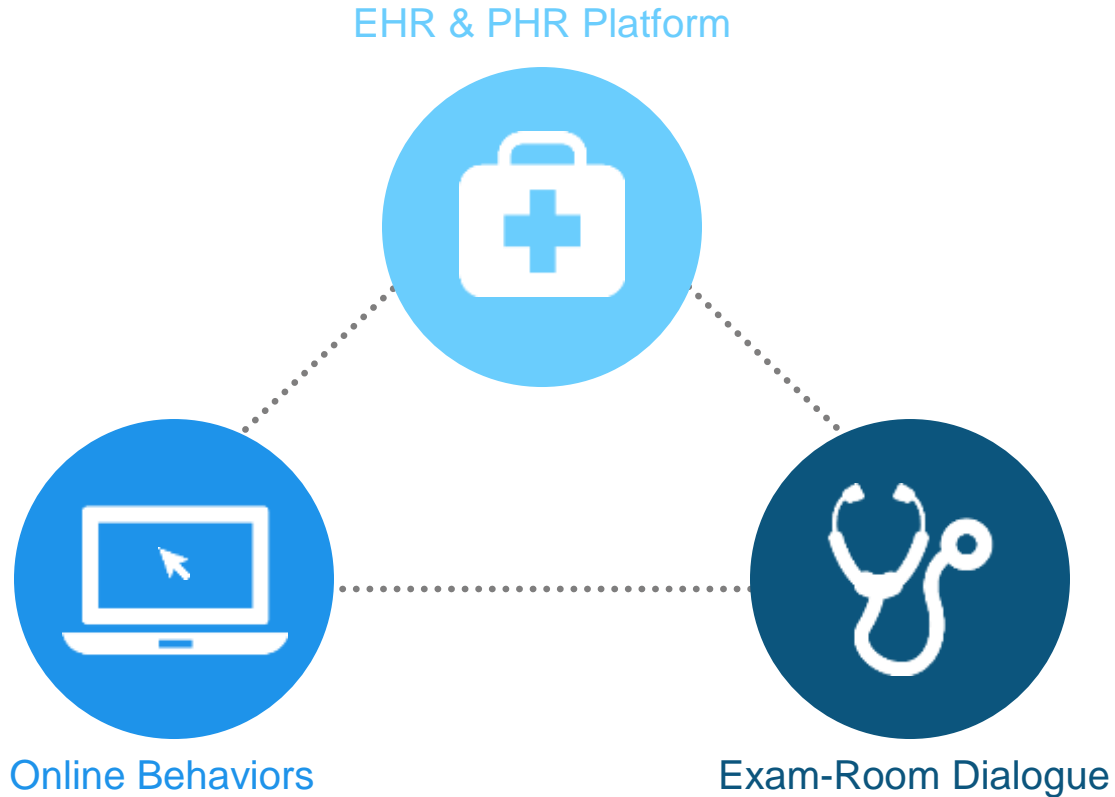
# Real World Evidence: Digital Ethnography



# Case Study:

## Building a More Impactful Patient Journey using Massive Data

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# Patient Journey: The Foundation of the Healthcare Experience

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**TYPE 2 DIABETES**  
**Diagnosis Experience**



## Newly Diagnosed: Patient Vitals



**BMI** 32.5

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**BP Diastolic** 77.0

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**BP Systolic** 132.5

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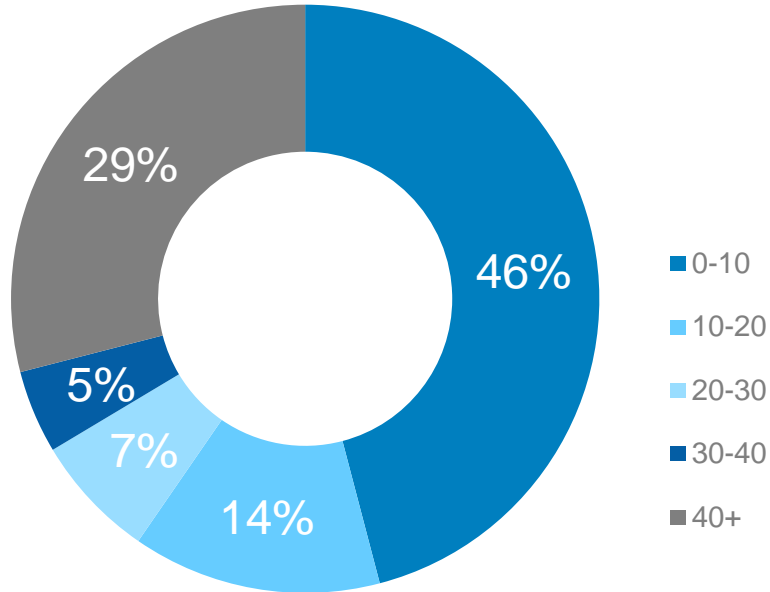
**HbA1c** 7.8



# Real World Evidence: Time to Diagnosis

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## Days from HbA1c to Diagnosis



43.9

Average Days between  
Last Visit & Diagnosis



# The Human Experience: In-Office Dialogue





# The Human Experience: In-Office Dialogue

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**Examining the in-office dialogues of Newly diagnosed Diabetes Patients highlights how:**

- Physicians distance themselves from diagnosis using agency  
“It did show” versus “it showed me”
- Physicians often soften bad news by emphasizing the positives
- The barrage of “medical-ease” is overwhelming with patients often disengaging



# Online Experience: Declaring Diagnosis



**Savanna** @bobbyonlygirl · Jul 3

So the **doctor told me** I might have **diabetes** so **I have** another **doctor** appointment to do tests to see if I actually have **diabetes** or not.



**Ambitious** @\_SnowBunniee · Oct 24

My **doctor told me I have diabetes** today...I'm not gonna stress though, just gonna pray and stay positive



**Nadine J Stewart** @GermanGirlnLDN · May 30

Waiting for my **blood test** results. Let's see what the doctor says... [#health](#)  
[#diabetes](#) [#insulinresistant](#)



# Newly Diagnosed: What Real-World Evidence Tells Us

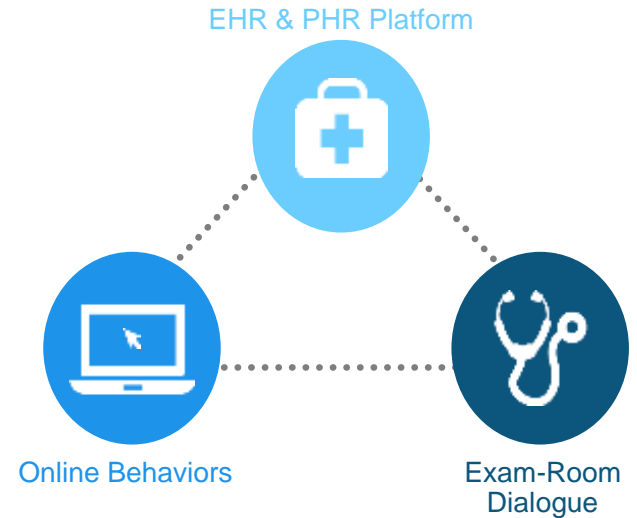
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## Key Insights from Real-World Evidence:

- Diagnosis often lacks a “defined moment”
- Long term implications not apparent

## Moments of Opportunity for Brand:

- Shorten and Strengthen Diagnosis Experience
- Describe disease progression

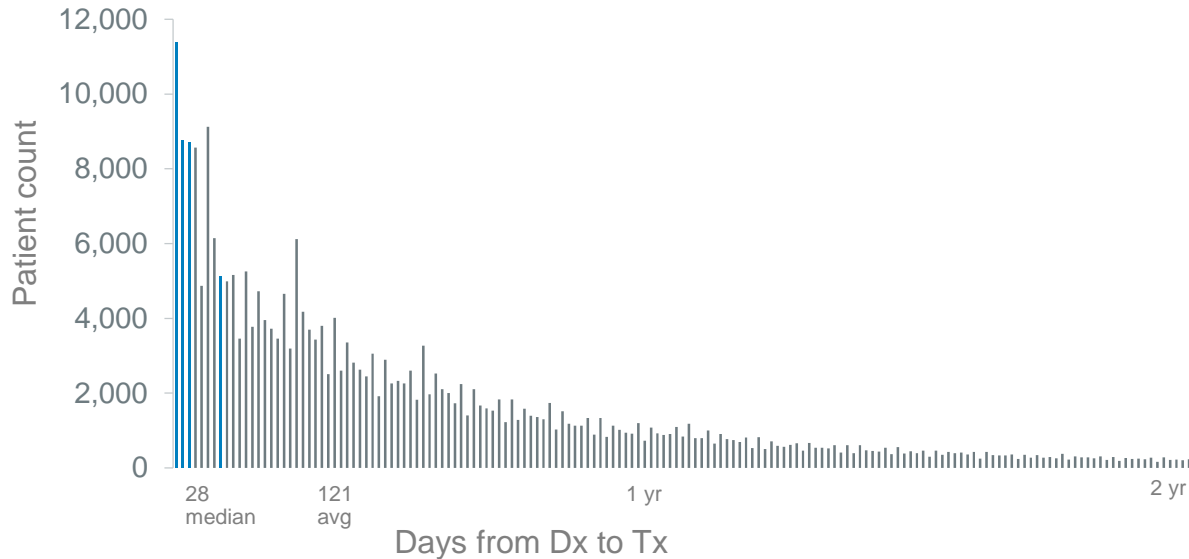


**TYPE 2 DIABETES**

# Treatment Initiation Experience

# Real World Evidence: Diagnosis to First Treatment

## Avg Time from Diagnosis to Treatment

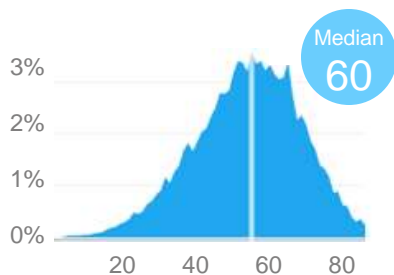


50% of diagnosed receive treatment within the **1<sup>st</sup> month**

However, on average, a diagnosed patient does not receive treatment for **4 months**

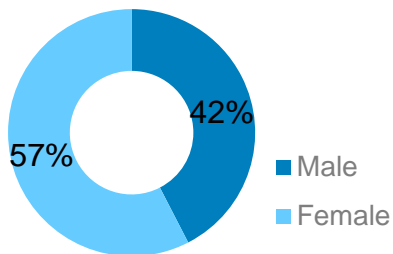
*Note: Data Patients with Dx prior to Tx = 465.1K*

# Real World Evidence: Drug A Treatment Patient Profile

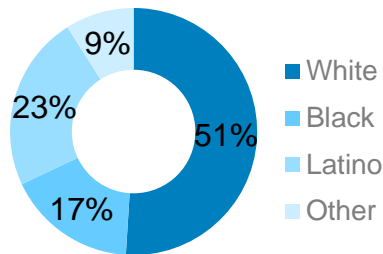


## Age

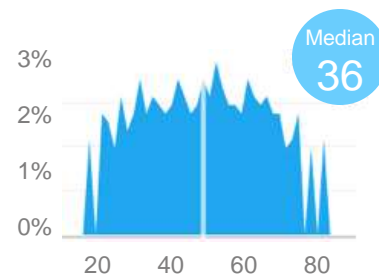
% of patients



## Gender

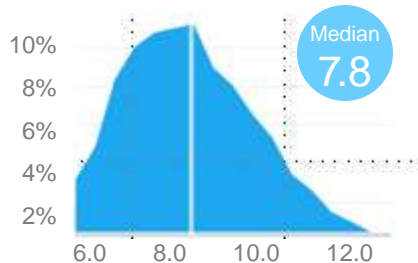


## Ethnicity



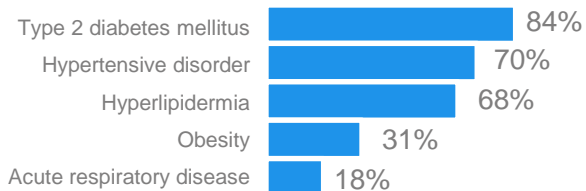
## BMI

% of patients



## HbA1c

Hemoglobin A1C/Hemoglobin.tot



## Most Diagnosed

% of patients

**6.9** Chronic conditions per patient  
**7.7** Drugs prescribed in last 12 months  
**7.9** Visits in last 12 months

## Burden of Disease

Average per patient



# The Human Experience: In-Office Dialogue

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# The Human Experience: In-Office Dialogue

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**In-office dialogues from Patients receiving their First Treatment tell us:**

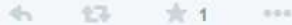
- Physicians leave very little room for patient input in the decision to start treatment or in treatment selection
- Physicians often set expectations that more treatments will follow in the future
- Physicians have trouble positioning insulin

# Online Experience: Starting Treatment



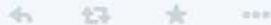
**Charly** @charassic - 28 May 2014

Start my diabetes meds tomorrow. Really hope they make me feel better, as I've felt like a zombie for weeks.



**Cody** @BeadFaceGamer - 28 May 2014

@Charassic what mess u on? I was started on Metformin. Took my body about 3 weeks to adjust.



**Charly** @charassic - 28 May 2014

@SocialNerdgasm I'm on **Metformin** too. Hoping I don't get hit too hard by the side effects- I'm **starting** on a low dose and working my way up.

5:20 AM - 28 May 2014 - Details



[Hide conversation](#)

Reply to @charassic



**Brian Taylor** @MrBritorious - 28 May 2014

@Charassic @SocialNerdgasm Yay we can all be Metformin family. :D Damn Diabetes.



**Donna Adams** @DonnaAdams3 - 13 Dec 2012

I'm confused...**metformin**: My doc says i don't need to take this with food. Pharmacy sticker says I do. I'm supposed to take it morn...



**Donna Adams** @DonnaAdams3 - 28 Nov 2012

can somebody PULEEEASE help me with this **Metformin** junk?: I'm really confused right now about the doses and what the xl, er lx etc.....



# Treatment Initiation: What Real-World Evidence Tells Us

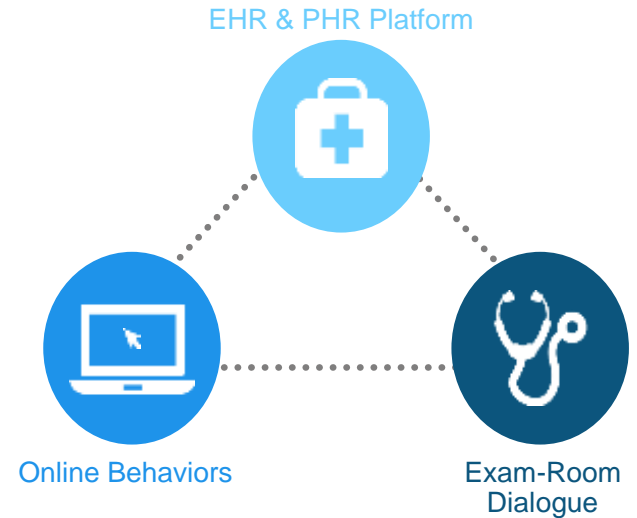
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## Key Insights from Real-World Evidence:

- Confusion surrounding initial medication -> administration, benefits, consequences
- Future sequencing of treatments poorly positioned

## Moments of Opportunity for Brand:

- Define treatment path to [Your Brand]
- Associate key benefits with treatment experience



# Conclusion

# Summary: Patient Journey from Massive Data

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When Building Your next Patient Journey Consider:

- 1 Healthcare Experience**  
Understand and transform the full healthcare experience
- 2 Real World**  
Beyond recall & claims, actual customer behaviors and medical evidence
- 3 Interconnectivity**  
Platforms that seamlessly connect the patient experience; wherever they are: at home, in the office, and online
- 4 Measured Outcomes**  
Interventions are tracked in clinical measures and outcomes

# Questions

Thank you