

ePROmetric

A mobile application for patient
driven drug development

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Introduction

- Many healthcare organizations consistently measure
 - Mortality rates
 - Readmissions
 - Lab values
- Issues impacting patients' quality of life often overlooked
- Need to prioritize patient-reported outcomes → clinical decision support tool
- Digital health interventions

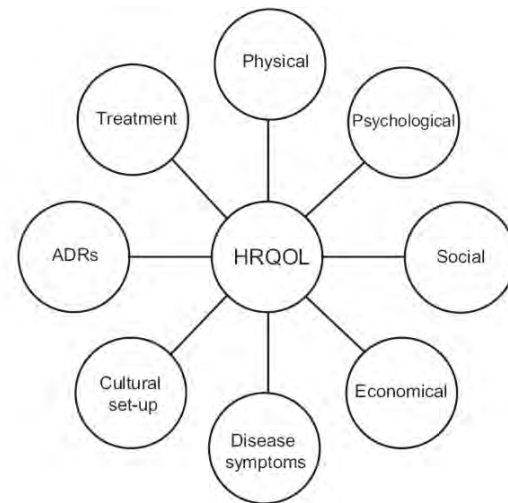
FDA Research Priority Areas

- Develop methods and tools to streamline clinical and postmarket evaluation of FDA-regulated products
 - Scientifically valid approaches to incorporating **patient input** (e.g., patient preference, patient reported outcomes) into regulatory decision-making
 - Approaches to leveraging complex data to inform regulatory decision-making, including use of **real world data** sources and **mobile technologies**

ePROmetric



- Proactive patient health monitoring app
- Wearable tech-enabled
- Patient interface relays data to physicians
 - Efficient vitals and symptoms collection
 - Predictive analytics for personalization
 - Secure transmission



Wearable Technology



Peer mobile eye exams. Image via BBC



ADiVCo's microcirculogram.



The LifeScan Verso Sync.



University of Houston cancer detecting app. Via Engadget



The mobile dermatoscope by Handyscope.



Product Overview

9:41 3 of 5

Mini Form

Male

Other

Basic Information

Blood Type

Date of Birth

Weight

Do you have a headache?

Yes

No

Next

Skip Cancel

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Scale

On a scale of 1 to 10, what is your mood?

8.725

10

1

Next

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Selection Survey

How did you feel last night?

Next

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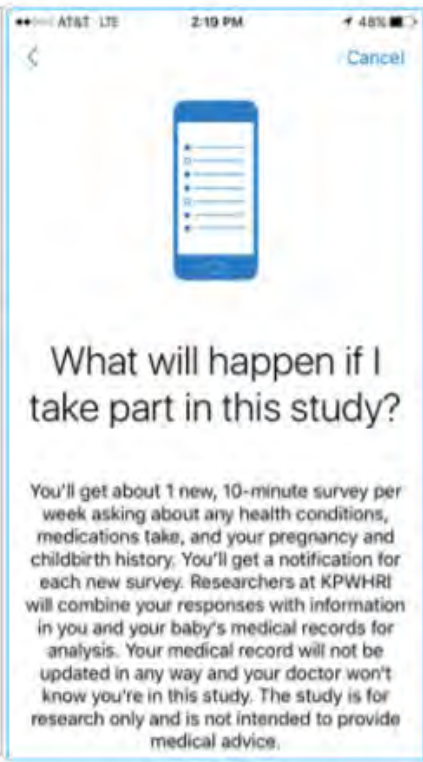
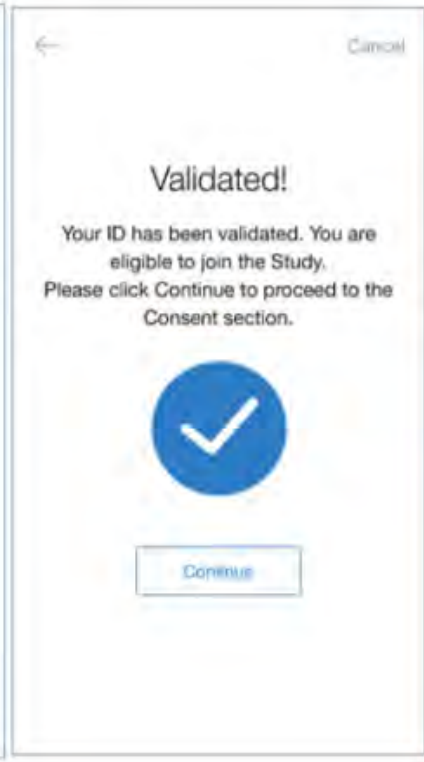
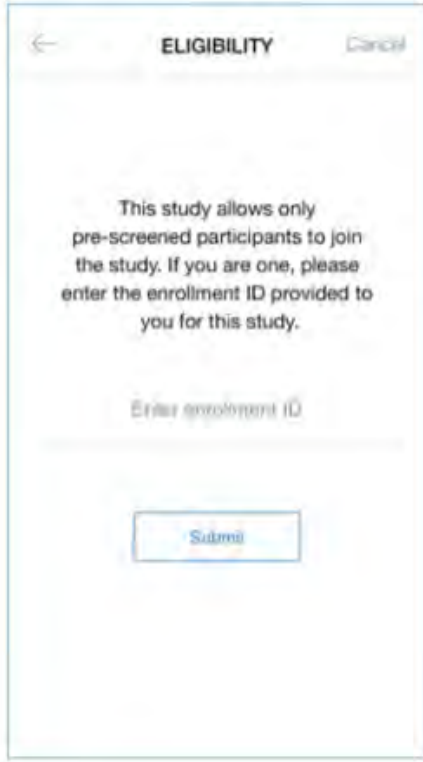
Selection Survey

Which symptoms do you have?

Next

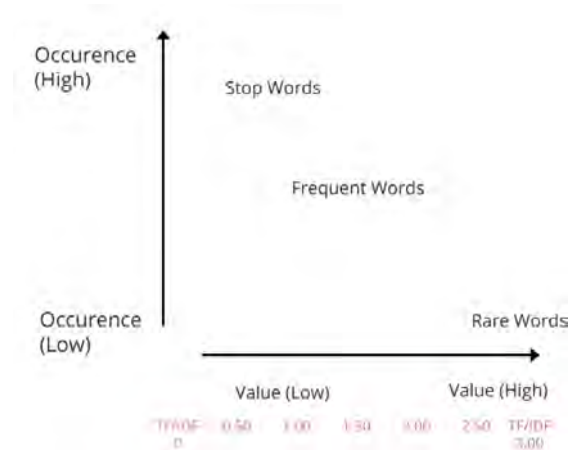
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Enrollment and Consent



Predictive Analytics

- Anticipating and reducing risk based on current and historical patient data
- TF-IDF (term frequency -inverse document frequency)
 - finding patients' similarity in observational studies
 - discovering disease correlations
 - finding sequential patterns in databases



Competitors

	Collect vitals and symptoms	Predictive analytics	Wearable tech enabled	Secure data transmission to FDA
ePROmetric	✓	✓	✓	✓
MyStudies (FDA)	✓			✓
E-PRO (Exco InTouch)	✓		✓	
EXACT (CRF Health)	✓		✓	
E-trials eDiary 5.0 (Merge Healthcare)	✓	✓		
MedApps solution suite (AT&T)	✓		✓	

Summary

- Secure and complex patient symptoms → **real -world data**
- Standardized mobile application for clinical trials
- Integrates physical, mental, and emotional symptoms
- Comprehensive clinical measure

References

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THANK YOU! QUESTIONS?

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Appendix: Secure Storage Environment

