

# Supporting Patient-Provider Communication and Engagement with Personal Informatics Data

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## Motivation

People are increasingly turning to mobile phone tracking apps and wearable tracking devices to record their health data. Self-generated data is also crucial in helping providers understand patient health information to achieve their health goals. Current research focuses on two populations:

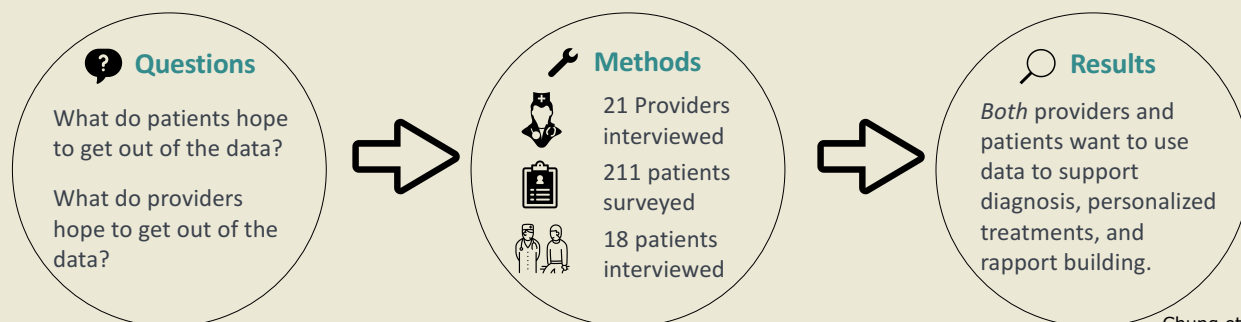


Irritable Bowel Syndrome (IBS) Patients



People with Healthy Eating Goals

## Patient and Provider Goals



Chung et. al, JMIR 2015

## Personal Informatics Data Can Support Patient-Provider Collaboration

Patients and providers collaborate during all stages of tracking

Data are transformed into various boundary negotiating artifacts to support collaboration

Providers and patients need better support to communicate data

Chung et. al, CSCW 2016

## Support Patient-Provider Collaboration On Utilizing Data



### Goal

- ✓ Understand when and how photos and its visualizations support collaborative review
- ✓ What information is necessary to complement photos?
- ✓ How systems support gathering such information?



### Lower Burden Data Collection

- ✓ Low burden data collection
- ✓ Help patients remember the context around eating
- ✗ Capture less details



### More focused collaborative reflection

- ✓ Explore relationships between different types of data
- ✓ Find clear, effective, and sustainable action

Chung et. al, CHI 2017

## Collecting and Integrating Context to Support Collaborative Review



**Current problem** is that contextual information are important to help providers and patients make sense of data, but too much data and complex integration remains barriers

**Prior findings** suggests that which contextual information is important and relevant depends on both specific health challenges and provider and patient goals of using the data



**Future plan** includes exploring the process of provider-patient communication about relevant contextual information and the appropriate system support to help people focus on this data collection and integration to review data relevant to their goals.

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