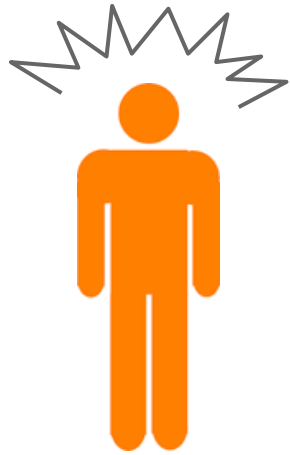


# The Internet of **Healthy** Things: *BioStamp*

Michelle Graff, Maddie Jones, Dillon Paul, Kevin  
Czarnowski

# Meet David



**Productivity • Transparency • Quality of Care**



**MedStar Washington  
Hospital Center**

# The Problem - Chronic Health

US Adults with Chronic Conditions: **45%**

Visits from recurring chronic checkups: **38%**

Hospital Readmissions: **Billions**



**\$1 TRILLION**

total costs Chronic Diseases annually <sup>3</sup>

**1/2**

nearly half the people in the U.S. have chronic conditions

**\$234**

billion in lost productivity

**\$425**

billion in medical spending every year in US <sup>2</sup>

**\$91**

billion annually in lost productivity of caregivers to people suffering from chronic conditions

**4X**

Productivity loss owing to a chronic condition disease is four times as great as the direct medical costs of a chronic condition. <sup>3</sup>

# The Problem - Wearables



US Consumers  
using activity  
tracker 6 months  
after purchase:

Only **33%**



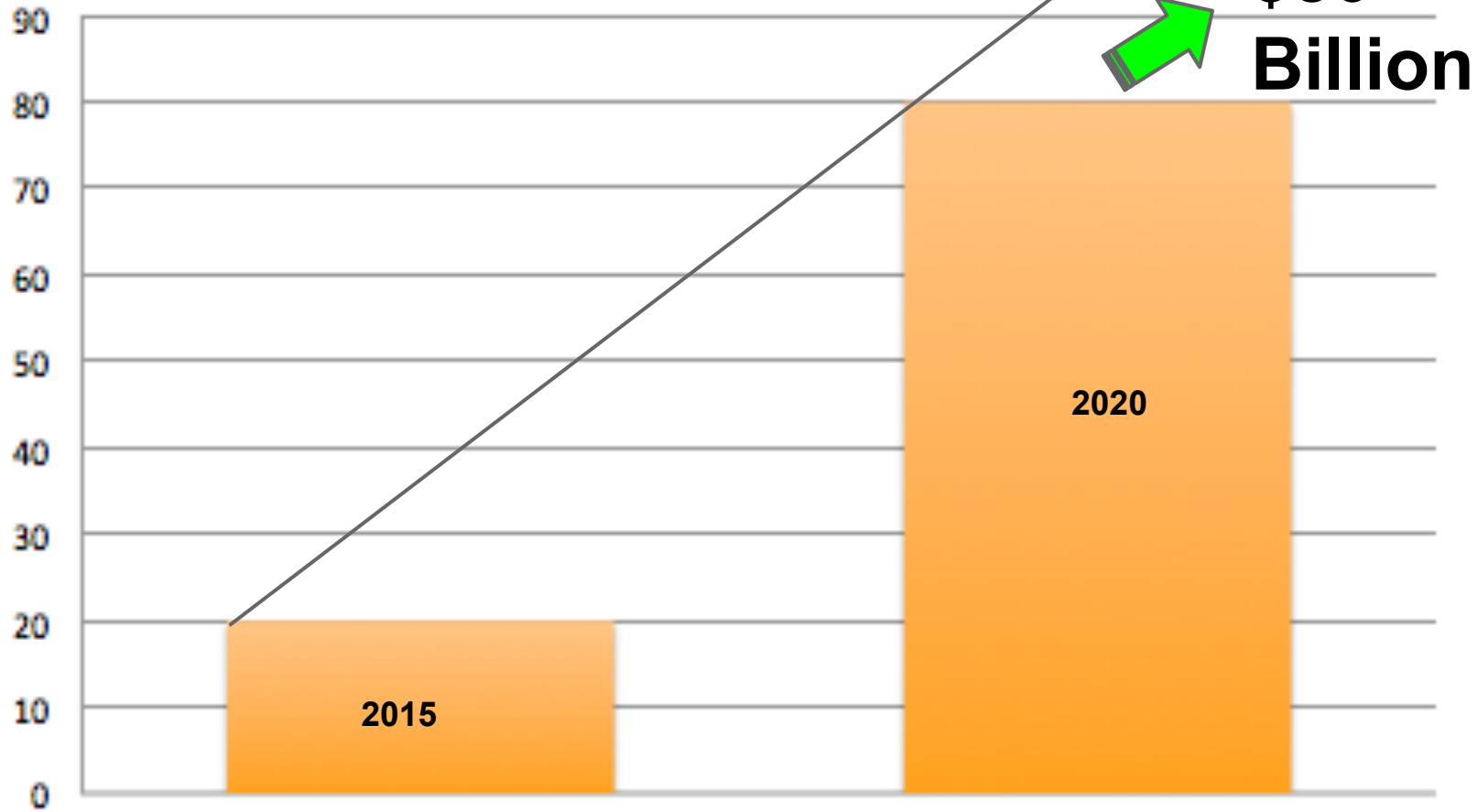
## TORY BURCH FOR FITBIT

A fashion-forward collection of Tory Burch accessories designed exclusively for Fitbit Flex.

[SHOP NOW](#)

# Wearable Industry Growth

In Billions







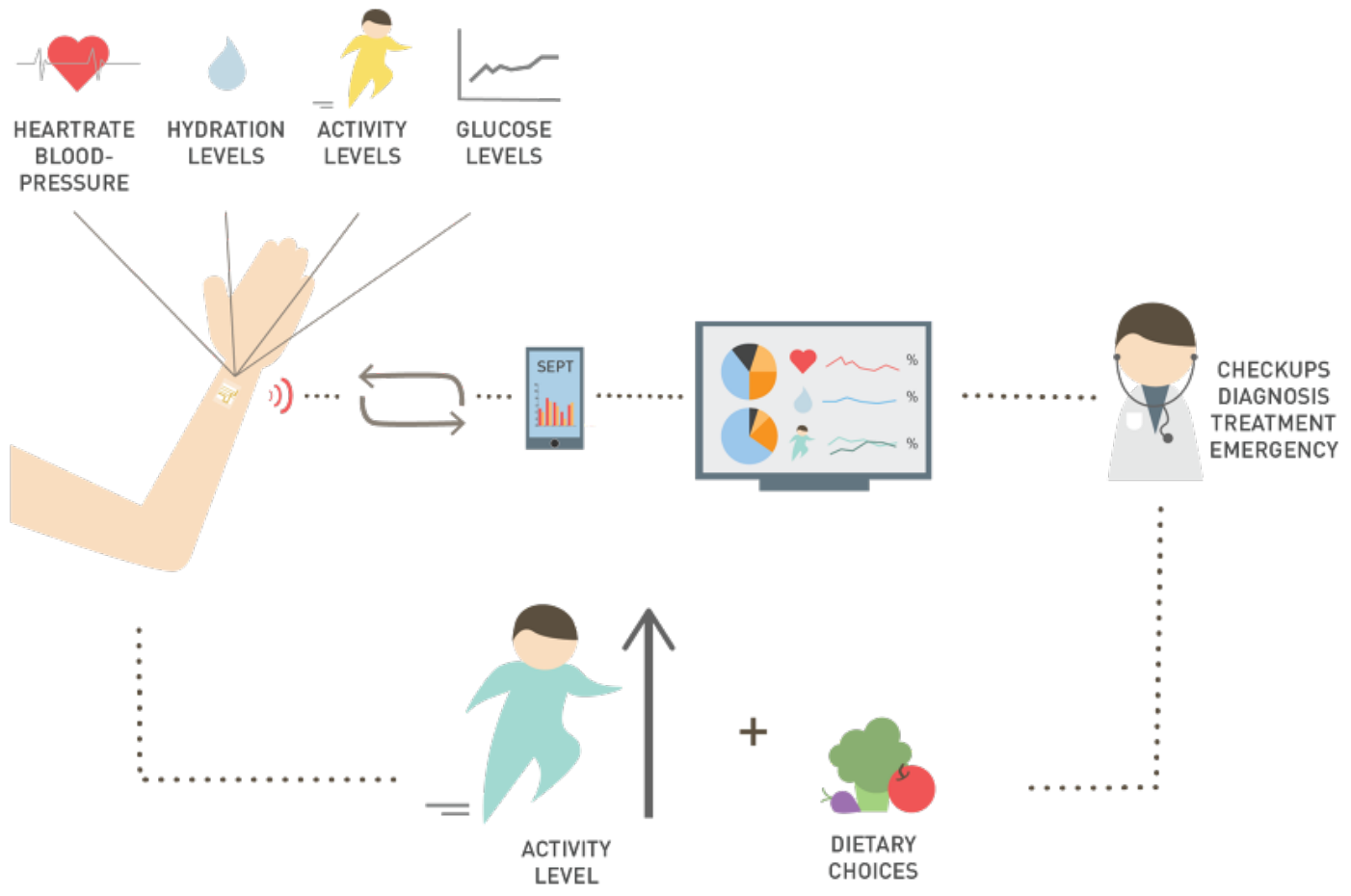
Biostamp- the next  
frontier of wearables

&

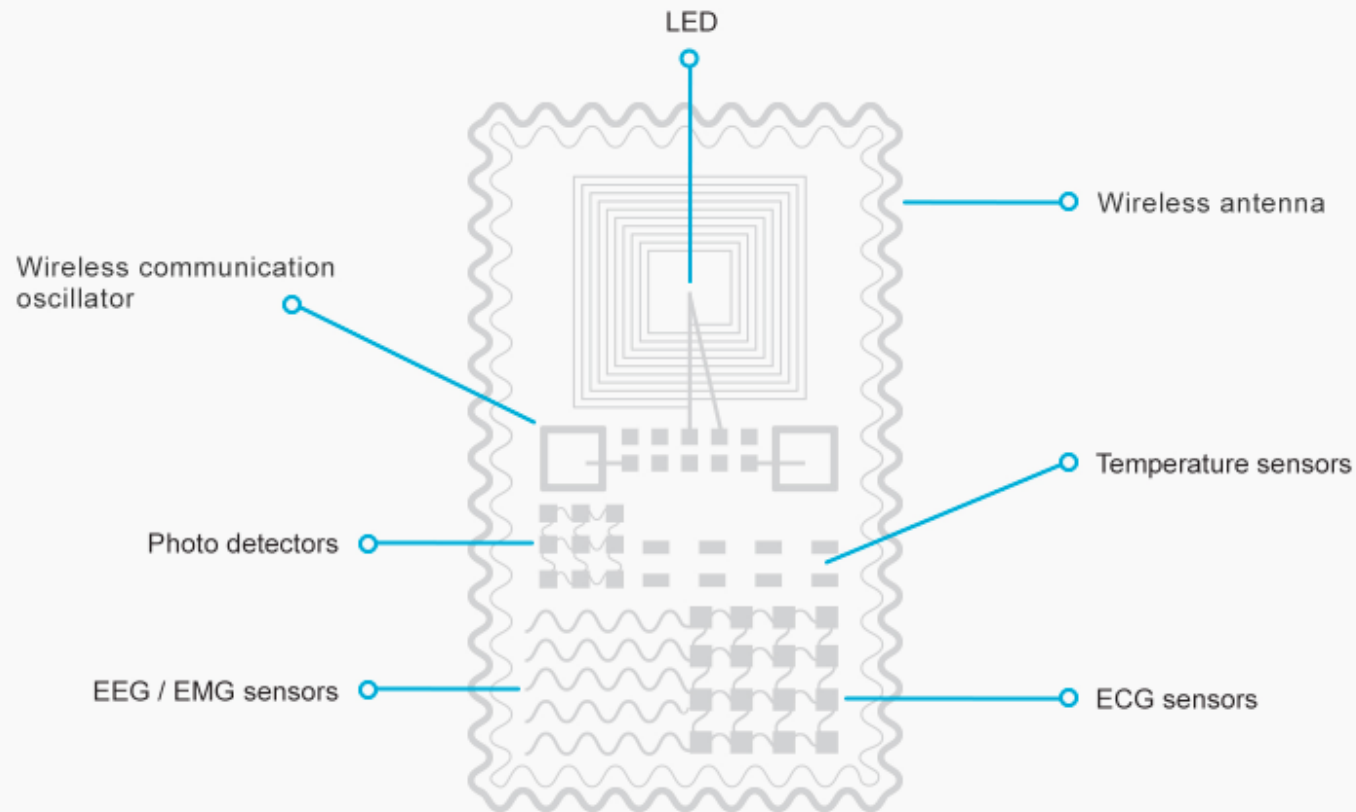


MedStar Washington  
Hospital Center

Department of Neurology



# THE BIOSTAMP CIRCUITRY



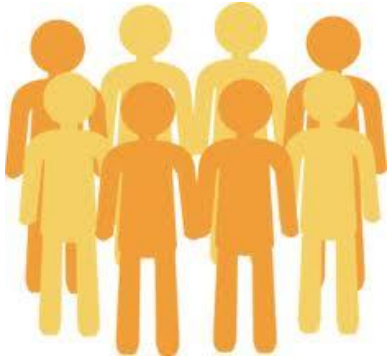
# Competition



# Acquisition Benefits

- ★ Efficient diagnostic process
  - Early detection & prevention
  - Substitute thousands of dollars in lab work
- ★ Heightened quality of care
  - Constant supervision
  - Eliminate more than 10% of visits
- ★ Transparent stream of revenue
  - Reduce dependence on expensive equipment

# Implementation Timeline



**1st Year:** Equip facility

**2nd Year:** Formalize monitoring procedure

**3rd Year:** Reform standard diagnostic operations

**4th Year:** Transition from acute to chronic care model

# Projected ROI

<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
<b>.40</b>	<b>3.0</b>	<b>4.2</b>	<b>4.7</b>	<b>5.2</b>

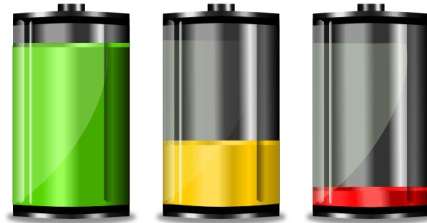
# Drawbacks & Mitigation

Extending past Chronic Segment

-R&D, wide scale marketing

Battery Life

-Clinical Trials





**Productivity • Transparency • Quality of Care**



**MedStar Washington  
Hospital Center**



# Q&A

# The Internet of **Healthy** Things: *BioStamp*

Michelle Graff, Maddie Jones, Dillon Paul, Kevin  
Czarnowski

# Appendix A

HealthCare Partners	<ul style="list-style-type: none"><li>• ROI = 1.3 in Year 1</li><li>• Total returns/patient = \$4388</li><li>• Returns attributable to reduced hospital admits</li></ul>	<ul style="list-style-type: none"><li>• California-based patients with COPD and other chronic health conditions</li><li>• Utilized low-cost interactive voice response monitoring (IVR) system</li><li>• 6 month average intervention length</li><li>• Pre-post comparison</li></ul>
---------------------	--	--

<http://www.techandaging.org/ROIModelReport.pdf> - Center For Technology and Aging: Measuring Return on Investment of Remote Patient Monitoring