



Sam HEY...I'M SAM. THIS IS MY JOURNEY

I overheard my doctor call me a HONDA: a Hypertensive, Obese, Non-compliant, Diabetic Asthmatic, and I guess I am.

Most days I feel lonely. I'm embarrassed by my weight and physical appearance and angry about my diabetes. I hate to admit I even have the disease. I know I would feel better if I took better care of myself, but I hate sticking my finger to check my blood sugar and never really understood what I'm supposed to do with the information anyway.

For a few weeks, I haven't been able to sleep well because my feet burn at night.

My wife and I read online that I might have a circulation problem or something called neuropathy.

I finally made a doctor's appointment. It took a while to get in to see him (and when I did I never really got a chance to talk about the burning).

I registered in the office and waited with the other patients until my name was called.

I went into a cold exam room, where I undressed, got weighed, had my blood pressure taken—and sat feeling embarrassed in my paper gown. I hated it. I think the nurse was judging me.

After about 20 minutes my doctor came in, said hello, and started reading my chart, barely looking at me.

I started to tell him about the numbness, but he interrupted me and talked about my blood pressure. I think he was mostly worried about my circulation.

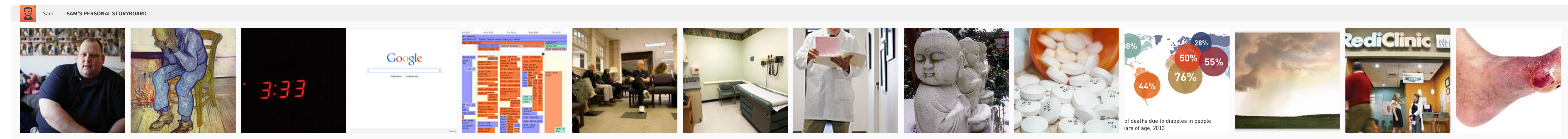
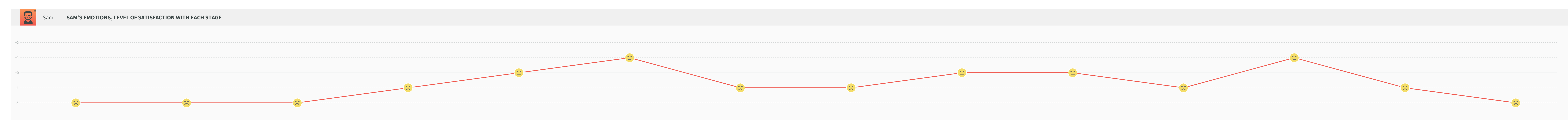
"Sam the burning sensation in your feet is because of poor circulation. We are going to increase your BP meds and that should resolve the problem. If you have more symptoms just come back in for a visit." He turns and walks out.

There's so much I want to tell him—that I'm depressed, lonely, unable to change. I never feel healthy. I worry that I'll die young. I wish I had the energy to play with my grandkids. I don't know how to tell him.

I leave the doctor's office, feeling relieved about being the burning sensation in my feet.

While walking through the pharmacy to pick up my meds I felt depressed, alone, and a little scared again. And I wondered about the irony of my doctor thinking he had a near perfect visit with me, solving my immediate problem while not even considering the train wreck that I worried was about to occur.

Deep down my doctor barely scratched the surface; I will be back to see him or have a trip to the emergency room very soon.



- OPPORTUNITIES TO DESIGN NEW SERVICES, TOUCHPOINTS AND EXPERIENCES TO REDUCE FRICTION, SIMPLIFY, PERSONALIZE, COORDINATE, TRANSFORM THE HEALTH EXPERIENCE**
- Enable 24/7 Access to Care Team, Incl. House Calls (e.g., Pager)
 - Enable On-Demand Home Visit by CDE, Phlebotomist (e.g., Igibo, Uber)
 - Unique Content Strategy for HONDA Customers (External, Internal)
 - Design New Care Delivery Model (incl. Epic + Redox) = New EHR Experience
 - Add Value at Retail Pharmacy via iBeacon/mHealth ("Diabetes-Related" Products, Payment, Clinic)
 - Predict Asthma Readmissions from Twitter posts
 - Innovate Benefit Design
 - Reward Behavior Change (Incl Caregiver/Loyalty/Rewards in the Community)

DATA POINTS AND NOTES

- The incremental spend by the top percentile of patients is disproportionately distributed:**
 - The top 5% of patients (by cost) are responsible for 50% of total U.S. healthcare expenditures.
 - The average individual healthcare cost of the top 5% of patients is \$2,555,400.

Data from Kaiser Family Foundation, Kleiner Perkins, Decision Resources.
- CMS launches largest-ever multi-payer initiative to improve primary care in America**

April 11, 2016 — The Centers for Medicare & Medicaid Services (CMS) today announced its largest-ever initiative to transform and improve how primary care is delivered and paid for in America. The effort, the Comprehensive Primary Care Plus (CPC+) model, will be implemented in up to 20 regions and can accommodate up to 5,000 practices, which would encompass more than 20,000 doctors and clinicians and the 25 million people they serve.
- More than 75 percent of patients prioritize access to care over the need for human interaction with their providers.**

"Telehealth Promises to Reshape Health Care: Hospitals embrace powerful new tools to continuously connect to patients" — Hospitals and Health Networks, March 10, 2015; American Hospital Association Trendwatch.
- Caregivers are highly engaged in the pursuit of health information, support, care, and advice, both online and offline.**

"Family Caregivers are Wired for Health" - Pew Research Center on the Internet, Science and Technology; June 20, 2013.
- The Quadruple Aim: Physician Burnout Climbs 10 Percent in Three Years.**

Medscape Lifestyle Report 2016: Bias and Burnout; January 13, 2016.
- Research has shown that a well-designed waiting room — one that includes everything from comfortable chairs to clear signage to easy-to-use patient response forms — can bolster how patients feel about the care they receive and even streamline the care process itself.**

Fast Company Design, August 16, 2011.
- Designer Diane Von Furstenberg helps Cleveland Clinic design new hospital gown.**

Cleveland Plain Dealer, September 7, 2010.
- It is time to talk about people: a human-centered design for healthcare**

Health Res Policy Syst. 2010; 8: 35.
- Prevention in the Shadows: America's Quick Fix Culture**

Huffington Post, July 2, 2015
- Risk Calculator For Cardiovascular Disease Overestimates Risk; Statins May Be Overprescribed**

"Accuracy of the Atherosclerotic Cardiovascular Risk Equation in a Large Contemporary, Multiethnic Population." J Am Coll Cardiol. 2016;67(18):2118-2130. doi:10.1016/j.jacc.2016.02.055
- Fifty percent of the determinants of health are due to our behaviors; 20 percent to environmental factors; 20 percent to genetics; and only 10 percent to having access to medical care. Yet in California (and in the nation), 95 percent of health expenditures are spent on medical services and only 4 percent on promoting health behaviors.**

"What's the biggest driver of health care costs? Our personal behaviors." — Steve Shortell, Dean Emeritus, UC Berkeley School of Public Health, October 27, 2010.
- The 30-day readmission rates among patients with diabetes is 18.9%**

"New bundled world: quality of care and readmission in diabetes patients" — J Diabetes Sci Technol. 2012 May 1;6(3):563-71.
- The majority of the nation's hospitals are being penalized by Medicare for having patients frequently return within a month of discharge — this time losing a combined \$420 million.**

"Half Of Nation's Hospitals Fall Again To Escape Medicare's Readmission Penalties" — Kaiser Health News (August 3, 2015)
- Asthma-related Twitter posts could aid hospital preparation for emergency asthma visits**

"The Twitter Asthma Pulse: Using Real-Time Twitter Data to Prospectively Predict Asthma Emergency Department Visits or Hospital Admissions in a Population." Pediatric Asthma Societies Meeting, May 3, 2016; Poster Symposium: General Pediatrics & Preventive Pediatrics: Asthma.

- PROGRESSIVE INTEGRATION OF EMERGING TECHNOLOGIES**
- Big Data Intelligence
 - Next Gen Internet of Things
 - On-Demand Telemedicine
 - Visualization Approaches for Neuroscience
 - Embeddables and Wearables