

# SAVING LIVES

BELINDA JU...AND YOU! | 2017.07.21

# MEET MARÍA



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- \* 76 years old, on Medicare & Medicaid
- \* Lives in East New York with daughter's family
- \* Has 3 children & 5 grandchildren
- \* Is Dominican immigrant, speaks limited English
- \* Is hard of hearing and has some vision impairment
- \* Has arthritis, diabetes, hypertension, high cholesterol
- \* Takes 10 medications

# JOURNEYMAP

## HOME

- Fell
- Found 8h later by daughter
- Got complex hip fracture, pneumonia, dehydration

## HOSPITAL

- Went via EMT
- Had ORIF surgery
- Received IV antibiotics & hydration
- Diagnosed with sacrum bedsore
- Discharged 1w later with care notes in English, walker

## HOME

- Experienced delirium and fever

## HOSPITAL

- Readmitted for delirium
- Urine analysis detected UTI (which OA present atypically)
- Realized discharge paperwork didn't state restart at increased dose for anti-hypertension medication

# ROOT CAUSES

## MARÍA

- Was disoriented from fall upon ER admission
- Depended on daughter's translation
- Daughter didn't know complete list of medications;  
María wasn't in condition to answer;  
was never asked again
- Daughter had to leave for work
- Depended on poor translation technology
- Frictionful UX meant fewer questions & education

## HOSPITAL

- There was incomplete medication reconciliation
- María's doctor was called once which went to voicemail and never called again
- Had EMR unintegrated with any other
- Was shortstaffed so couldn't turn her every 2 hours as recommended
- Designed to treat single disease at a time
- Specialists aren't familiar with other specialties
- Geriatric specialists aren't employed
- Assigned attendant who hadn't slept in 24h





**“Your life is surrounded by appointments”**

**“They assume that 93 means senile.”**

**“You don’t know what’s going on unless you get their mobile number and you hound them”**



**Medical error is the third leading cause of death → directly causing \$17B and indirectly causing \$1T**

**100,000 people die from infections that they pick up as a result of their hospital care.**

**One in six hospital admissions of older adults is because of an adverse drug event.**

**For Medicare patients, one in five is rehospitalized within 30 days (at \$17.4B/yr), one in three within three months.**

# OPPORTUNITIES

## **PRODUCTS NONTECH OPPTS**

- Checklist for OA/CG
- Dignity Manifesto
- Shirt: "I'm older, not dumb"
- Quiz: How Well Do You Know Your Older Patient
- Volunteer force of medical students to adopt an OA
- Blanket advocacy services for an OA per HCZ model
- Telemedicine chat roulette for advocates

## **PRODUCT CARE MANAGEMENT**

- Focus on the 30-day post-discharge window
- Rides on Affordable Care Act which has penalized hospitals

## **PRODUCT THE PHARMACIST**

- Inputs
  - Diagnoses
- Outputs
  - Recommended medication do's and don'ts
  - Takes into account comprehensive drug interaction combinations

## **PRODUCT VIRTUAL PATIENT NAVIGATOR**

- Patient navigators charge \$50-\$450/hour.
- We will do it for a reasonable fee.
- We start manually but eventually use analytics & machine learning to identify patterns & lower costs over time.
- Bizmodel: upcharging





**JOIN ME!**

- I believe in the power of technology to save lives.
- I believe in tackling BHAG's: Big Hairy Audacious Goals.
- I believe the whole is greater than the sum of its parts: we are stronger together.