

TELE-PHARMACY

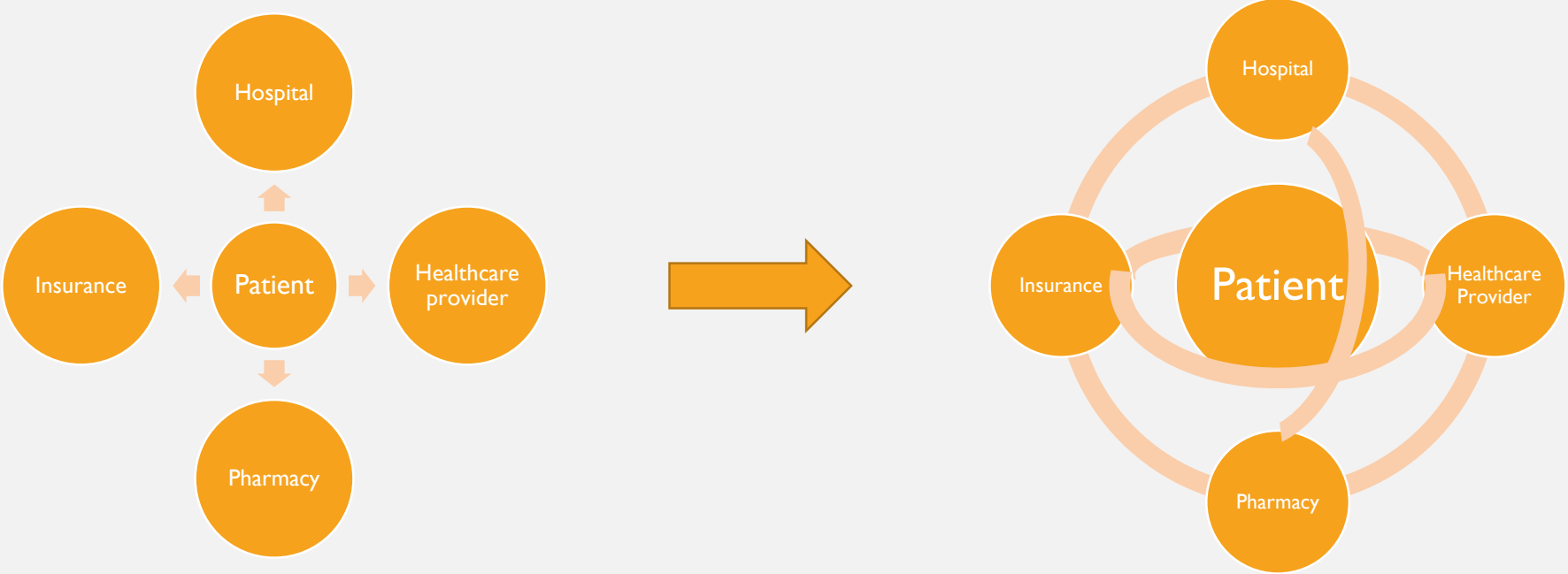
WHERE PERSONALIZATION MEETS TECH

NOTHING TO DISCLOSE

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PATIENT CENTERED CARE



CURRENT HEALTHCARE CHALLENGES

PATIENTS AND HEALTHCARE PRACTITIONERS FACE MANY CHALLENGES WHEN ATTEMPTING TO NAVIGATE THE HEALTHCARE SYSTEM

- COVERAGE/ ACCESS
- COST
- COMMUNICATION
- COMPREHENSION/ BELIEF/ TRUST
- COMPLIANCE/ADHERENCE
- EXPECTATIONS

CAN TECHNOLOGY SOLVE THESE PROBLEMS?

AMERICAN HEALTHCARE INSTITUTIONS CONTAIN SOME OF THE MOST ADVANCED DIAGNOSTIC TOOLS IN THE WORLD, YET FALL BEHIND MOST INDUSTRIES IN TERMS OF TECHNOLOGICAL DEVELOPMENT OF PATIENT INTERACTION, DATA MANAGEMENT, AND DELIVERY OF SERVICES.

- WHAT DO WE HAVE AVAILABLE TO US NOW:
 - EHR- ELECTRONIC HEALTH RECORDS
 - MOBILE APPS FOR SCHEDULING AND REMINDERS
 - TELE-HEALTH/ TELE-MEDICINE

THESE SOLUTIONS PROVIDE IMPROVEMENT BUT ARE NOT ENOUGH TO DELIVER THE KIND OF OUTCOMES WE NEED TO SEE TO BRING THE COST OF CARE DOWN.

WHAT ABOUT PERSONALIZED ATTENTION AND CARE?

- WE KNOW THAT PERSONALIZED MEDICINE YIELDS THE BEST RESULTS BUT IT'S TIME CONSUMING

SO WHAT DO WE NEED?

- TECHNOLOGY SOLUTIONS THAT FACILITATE PERSONALIZATION
 - INTEGRATION OF SYSTEMS
 - COMMUNICATION WITH PATIENTS AT HOME
 - RESOURCES AND SUPPORT FOR PROVIDERS AND PATIENTS

CAN MOBILE APPS MAKE THE DIFFERENCE?

- MOBILE APPLICATIONS ARE APPEALING BECAUSE THEY PROVIDE THE OPPORTUNITY TO ENGAGE THE PATIENT THROUGH A CONSTANTLY ACCESSED MEDIUM.
 - APPS CAN TRACK HEALTHCARE BEHAVIORS, DATA, AND TASKS
 - MANY ARE NOW HIPAA COMPLIANT
 - READY-MADE APPS OFFER COST EFFECTIVE COMMUNICATION TOOLS

EXISTING MOBILE HEALTH APPS

- Healthy Living/Tracker Apps
 - Diet Assistance
 - Exercise and Fitness
 - **YouPlus (Los Angeles)**
 - Developed by a team of physicians, psychologists and MIT-trained computer scientists, the YouPlus mobile app provides daily lifestyle coaching to make healthy living easier. Science-driven exercise programs, meal recommendations for at-home or restaurant dining and restorative sleep advice provides users with personalized health guidance.



CONDITION SPECIFIC

- **DiabetesPal** – The software enables users to log all relevant information for diabetes management such as blood sugar, Insulin, medications, ketone in mmol/L and free form, HbA1C, weight/height, etc. The platform generates printable reports and graphs, based on these values, for patients to bring to their next check-up.
- **Kidney Health Tracker** – A medical diary that allows people with kidney disease to track appointments, medications, and measurements like urine protein levels, body weight, or even stress levels over time. Data can be displayed together on a single timeline, which can also be shared with patient provider(s).



TELEMEDICINE

- **Teladoc** - The nation's largest telehealth platform, Teladoc, resolves medical issues between patients and physicians via phone or video consults.
- **HealthTap** – Get instant free answers and help from U.S. doctors from your phone or tablet. You can also pay for a virtual consult to video or text chat with a primary care doctor 24/7.
- **HelloMD**
- **LiveHealth Online**



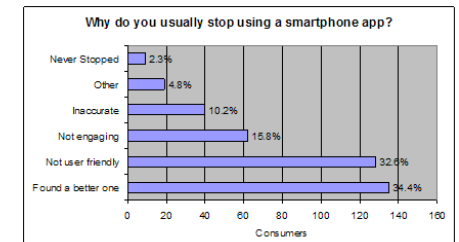
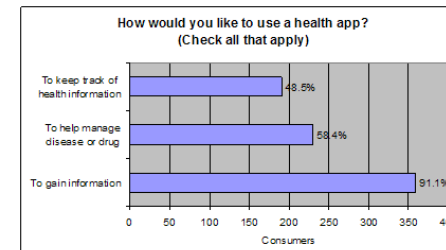
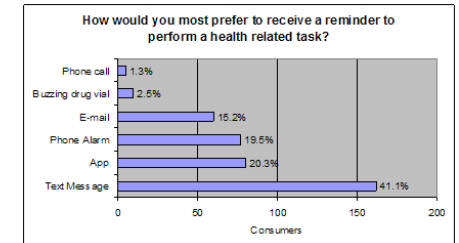
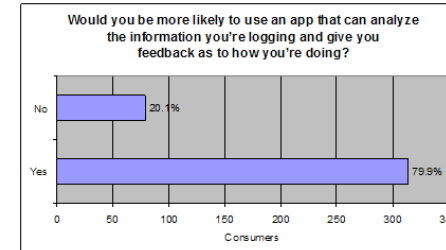
DATA ANALYSIS

- **Blue Star (Baltimore)** analyzes diabetes data entered by the patient, such as blood glucose levels. The software delivers summarized data and analytics to a patient's healthcare team and provides a self-management plan to help the patient improve their condition
- **FollowMyHealth Mobile (Chicago)** The app integrates with Apple Health to automatically update information such as blood pressure, changes in weight and glucose readings. FollowMyHealth also includes capabilities such as bill pay, prescription requests, appointment management and secure, two-way messaging with physicians.



CHIC SURVEY 2011

- 90.9% reported ease of navigation as the top feature that made apps favorable
- 91.1% would be most interested in using a health app to gain information
- 79.9% are more likely to use an interactive app that can analyze logged information and provide feedback
- better app (34.4%) and lack of user friendliness (32.6%) are the top reasons for discontinuation of smartphone apps.



DISADVANTAGES TO TECHNOLOGY/MOBILE APPS

- Regulating HIPAA Compliance
- Meeting Customer Expectations
- Inciting Motivation
- Loss of Non-verbal Communication
- Cost

UPDATE THE ROLE OF THE PHARMACY

- HEALTHCARE HAPPENS AT HOME.
- THE PHARMACY IS A SINGLE SOURCE OF HEALTHCARE CONTINUITY FOR PATIENTS WITH MULTIPLE PROVIDERS AND CHANGING INSURANCE CARRIERS
- PATIENTS WILL INTERACT MORE WITH THEIR PHARMACY THAN THEIR DOCTOR
- PHARMACIES NEED TO LEAD THE TECHNOLOGICAL CHARGE TO BRIDGE THE GAP BETWEEN DIAGNOSIS AND HEALTH OUTCOMES

WHAT PHARMACIES ARE DOING

- MEDICATION THERAPY MANAGEMENT
- ADHERENCE INTERVENTION
- PHYSICIAN REPORTING
- MEDICATION RECONCILIATION, EDUCATION AND COACHING
- HEALTH AND WELLNESS FOLLOW-UP

WHAT TECH IS BEING DEVELOPED BY/FOR PHARMACIES TO IMPROVE HEALTH OUTCOMES?

- ADHERENCE AND CONVENIENCE PACKAGING
 - PRE-SORTED AND INDIVIDUALLY PACKAGED DOSES THAT BUNDLE ALL MEDS AND SUPPLEMENTS BY DOSING INSTRUCTION FOR EASE OF USE AND INCREASED ADHERENCE
- MEDICATION CASE MANAGEMENT AND RESOURCE PLATFORMS
 - PHARMACIES ARE USING WEB-BASED PLATFORMS LIKE MIRIXA AND OUTCOMES TO REACH PATIENTS STRUGGLING WITH ADHERENCE AND COMPLIANCE DUE TO COMPLICATED OR ERRONEOUS MEDICINAL TREATMENTS

WHAT TECH IS BEING DEVELOPED BY/FOR PHARMACIES TO IMPROVE HEALTH OUTCOMES? (CONT.)

- TELE-PHARMACY
 - HIPPA COMPLIANT WEB AND MOBILE INTERFACES THAT ALLOW VIDEO CONFERENCING BETWEEN PATIENT AND PHARMACIST ABOUT MEDICATION AND HEALTHCARE ISSUES.
 - NEW MEDS, REFILLS, PRESCRIPTION MANAGEMENT
 - CONSULTATION, RECONCILIATION, EDUCATION, COACHING
- MEDICATION QR CODING
 - PATIENTS CAN SCAN QR CODES ON MEDICATION BOTTLES THAT WILL PROVIDE THEM WITH ADDITIONAL INFORMATION ABOUT THE MEDICATION THEY ARE TAKING
 - INDICATIONS
 - SIDE EFFECTS
 - DOSING

WHAT TECH IS BEING DEVELOPED BY/FOR PHARMACIES TO IMPROVE HEALTH OUTCOMES? (CONT.)

- MEDICATION CARE PLAN APPS
 - APPS DESIGNED TO PROVIDE MEDICATION REMINDERS, TRACK MEDICATION USAGE, LOG USER SIDE EFFECTS AND VITALS, MEASURE AND ANALYZE RESULTS
 - SPECIFICALLY USEFUL FOR CHRONIC CARE CONDITIONS
- PHYSICIAN-PHARMACY REPORTING AND INTEGRATION
 - TIMELY REPORTS AND ANALYSIS SENT TO PATIENT APPROVED CARE TEAMS ABOUT MEDICATION USAGE
 - CREATES UNIFIED MESSAGING AND COMMUNICATION BY AND AMONG ALL HEALTHCARE PRACTITIONERS TREATING A PATIENT

A GOOD PHARMACY MATTERS

- MANY PHARMACIES ARE ALREADY PROVIDING FRONT-LINE AND SUPPORT CARE TO PATIENTS IN THEIR COMMUNITIES
- MANY OF THESE SERVICES ARE FREE TO ALL PARTIES IN THE HEALTHCARE SPECTRUM FROM PROVIDER TO PATIENT TO HEALTH INSURANCE CARRIER
- PHARMACIES THAT PRO-ACTIVELY ENGAGE PATIENTS HAVE PATIENTS
 - THAT ARE MORE ADHERENT,
 - SPEND LESS HEALTHCARE DOLLARS
 - HAVE MORE SUCCESSFUL RESPONSES TO TREATMENTS THAN PHARMACIES THAT JUST PROVIDE MEDICATION ACCESS

A GOOD PHARMACY MATTERS

- PROVIDERS THAT ACTIVELY RECOMMEND HIGH PERFORMING PHARMACIES TO THEIR PATIENTS
 - HAVE MORE TIME TO SPEND ON PATIENT CARE
 - MORE INFORMATION WITH WHICH TO PROVIDE THE BEST CARE
 - AND MORE MONEY TO DEVOTE TO THE DEVELOPMENT OF THEIR PRACTICE AND INVEST IN PATIENT CARE TECHNOLOGIES OF THEIR OWN

TECHNOLOGY CAN BE PERSONAL

- TECHNOLOGY CAN BE USED TO FACILITATE COMMUNICATION AND MAKE COMMUNICATION MORE EFFECTIVE
- INSTEAD OF RELYING ON THE TECH TO DO THE JOB OF THE HEALTHCARE PROVIDER, HEALTHCARE PROVIDERS CAN USE TECH TO ENHANCE HOW THEY DO THEIR JOB
- TECHNOLOGY CAN PROVIDE THE TIME AND ACCESS WE NEED TO REACH PATIENTS AND DELIVER CARE THAT WILL HAVE A MEANINGFUL IMPACT ON HEALTHCARE OUTCOMES.