Engaging Patients and Primary Care Clinicians Through a Wellness Portal to Improve the Health of Oklahomans

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Wellness Portal Project
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Phases:

- Design, development, and a 6-month pilot study (2008-09)
- A 12-month randomized controlled trial; N=560 (2009-10)
- Dissemination of delivery model and technology (2010)
The “Big Picture”: Integration Into Primary Care

Risk Processor (HRA)
Prioritizes available interventions from clinical guidelines by outcome and size of effects

Prioritized Recommendations Lists
- Decision Support Tool
- Link to Resources

Wellness Plan
- Evidence-based guidelines and population statistics
- Personal attributes, values, goals, preferences, constraints
- Lab results, consults and referrals

Patient
- Wellness nurse

Clinician
- Task Manager
- Registry, reminder, and recall system (PSRS)

Wellness Portal

Billing System, EHR

CCR: Continuity of Care Record
HRA: Health Risk Appraisal; EHR: Electronic Health Record; PSRS: Preventive Services Reminder System
Options for Engagement: Wellness Portal Features

**Welcome ZSOLT! What Is Your Healthy Choice Today?**

- Maintain My Personal Profile
- Update My Preventive Services History
- Edit My Risk Factors And Personal Preferences
- Review My Personalized Wellness Plan
- Chart My Weight, Blood Pressure, Sugar & Cholesterol
- Create And Work On My Symptom Diary
- Update My Medical Encounters History
- Manage My Medication List
- Communicate Securely With My Primary Care Clinician
- Download And Print My Immunization & Wellness Record

**Did you know?**

Even if you lose only a couple of pounds it may have a significant impact on your health.
Personalized Wellness Plan: The Unit of Success
215 personal risk factors are gauged across 13 domains of health in ~20 minutes via a new-generation HRA.
Clinician Report: evidence-based and clinical (life expectancy)
Patient Report: practical, and helpful (Real Age, Wellness Score)
Most Significant Challenges in Portal Participant Engagement

1) Gaps in access and basic computer or Internet literacy in various populations (tiers of Internet use)

2) Understanding secure account management (“I lost my strong password again”): a perpetual problem

3) “When is the study over?” The radical idea of lasting change is a care delivery paradigm shift

4) Keeping Portal users engaged in a periodic care environment: could healthier people benefit?
Who Is the Average Patient? Is He/She Prepared?

- Mean household income is ~$60K (median is ~$50K)
- Post-tax expenses ~ 80% of pre-tax income (95% of median income)
- Minimal assets left over for out-of-pocket expenses
- High school graduate, may have “some” college education
- Reads at 6th-8th grade level
- Roughly 30%-50% chance of being “health illiterate,” or “innumerate”, “computer illiterate” or all of the above
- Well “trained” to demand usual (inefficient) health care
“The difference between genius and challenged is that genius has its limits.” - Albert Einstein (paraphrased)
Understanding Our Audience

The Intricacies of Computer and Internet Literacy

~70% Internet and e-mail use in the Medicare population in rural(!) Oklahoma*, BUT:

Tier I user:  “I click on this thing and it takes me to my e-mail.”
Tier II user:  “I browse the Internet regularly for health and provider information.”

Tier III user:  “I can manage a secure web-based account and communicate with my doctor online.”
Tier IV user:  “I am a geek. I know how stuff works, so errors and glitches usually can’t stop me.”

* Mold, Aspy, Nagykaldi et al. JOSMA, 2009
Addressing Access and Computer / Internet Literacy Problems

- Offering a variety of options to interact with the Portal (home, public library, office kiosk, wireless tablet, web-enabled cell phone, involving family)
- Proactive screening for web utilization tiers and offering a corresponding mode of education / training (from standard website help to brief personal training)
- Early identification of usual barriers and inclusion of helpful tips in general communications and web design
What Worked?

Addressing Account Management Issues & Knowledge Gaps

• Achieving a painstaking balance between security and usability (e.g. pre-created accounts; temporary e-mailed passwords; single sign-on from practices)

• Proactive anticipation of account management problems from security logs and offering individualized help (even before user might ask)

• Audio-visual context-sensitive help and tiered user education about best practices and reasons for balancing security measures with ease of use
Addressing Practice Transformations and Lasting Change: “Meaningful Use”

• #1 lesson from health IT experiences: disconnected technologies don’t work well and won’t last (health IT integration into the process of regular care delivery)
• Practice redesign is an essential part of implementing enabling technologies (HIT - the engine of PCMH)
• New system of care delivery and IT use must become the new standard of care (“usual” practice)
• Practices need help: practice facilitators are agents of change working via health/IT extension centers
Addressing the Problem of Maintaining the Level of Engagement

• Connecting periodically used clinical systems to regular patient activities: payment, scheduling, results feedback, and communication (added value)
• Aligning financial incentives with technology use (e.g. double incentive for adherence to wellness plan)
• Providing just-in-time guidance and useful health information (e.g. influenza self-management toolkit)
• Incorporating social media to involve the community in the wellness process (“the wisdom of the crowd”)
Interventions that Improved or Helped Sustain Patient and Practice Participation – *Value to Patients & Practices*

**Patients:**
- Tiered and context-sensitive online help & patient education
- Interactive and context-sensitive video Portal tutorial
- Short Portal demo video looped in the waiting room
- 24/7 easy access to technical support (phone and e-mail)
- Periodical e-mail reminders and recommendations (newsletter)
- Intelligent problem discovery and proactive user assistance
- Patient wellness record is available as a PHR (in CCR format)

**Practices:**
- Extensive in-practice training and careful process redesign
- Audiovisual practice training materials (role-based)
- Continuous access to a practice facilitator (PEA)
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