Understanding Patient Engagement in a Primary Care Setting: A Patient Health Portal Quality Improvement Project
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Key Findings:
• The motivating factors of the Health Information Technology Acceptance Model (HTAM) demonstrates no significant difference between registered (n = 44) and non-registered (n = 29) eCW users from a primary care setting.
• To broaden the use of eCW, we suggest focused strategies on enhancing patients’ positive attitude about eCW, emphasizing its usefulness, reliability and increasing patients’ self-efficacy when using eCW.

Background
• In an effort to comply with Meaningful Use (MU), Millcreek Primary Care (MCPC), a primary care clinic affiliated with St. Mark’s Hospital in Utah, initiated eClinicalWorks Patient Health Portal (eCW).
• Stage 2 of MU mandates that 15% of patients adapt the electronic health record (EHR) through engagement by:
  - Secure messaging with providers and
  - Viewing their personal health information through the portal
• MCPC met Stage 2 goals; however, these providers had concern patients were not experiencing the benefits of portal engagement based on portal use data.
• Our research question is:
  What motivating factors influence patients’ behaviors to use Health Information Technology (HTIT)?

Methods
• Framework: HTAM [Figure 1]
  • Determine what factors played an influential role in HTIT use.
• Survey developed based on HTAM
  • Assess motivating factors
  • Demographic data
  • eCW registration status
• Survey disseminated through REDCap
  • Active from November 17, 2017 to December 31, 2017
• Survey availability:
  - Mass email to all MCPC patients with a valid web-enabled email address
  - Paper-based survey
  - Desktop computer via REDcap survey link
• Participant recruitment incentive: one $100 gift card via random raffle selection.
• Descriptive statistics described participant characteristics.
• Independent t-tests examined different motivating factors between participants who registered for eCW and those who did not.
• Pearson’s r was used to assess the correlation between each motivating factor from the HTAM.
• The statistical analysis was conducted in SPSS 24.0.

Results
• The demographic characteristics of equality revealed no statistical difference between participants registered (n = 44) or not registered (n = 29) for the eCW portal (Table 1).
• The independent t-Tests showed no statistical difference between participants who registered for eCW and those who did not regarding all eleven motivating factors from the HTAM (p-values ranged from .263 to .886) [Table 2].
• The Cronbach’s alpha values for the subscales from the HTAM: survey were between .37 and .96 (Table 3).
• “Intention to use” had significant and strong correlations with attitude, perceived usefulness, HIT reliability, and HIT self-efficacy (Table 4).

Conclusions
• To solve MCPC’s dilemma of less than stellar patient engagement with eCW, we sought to understand the motivating factors that influence patient engagement with the portal.
• This project provided an understanding analogous to Kim & Park’s study, “Intention to use” the portal correlated with patients’ attitude, perceived usefulness, HIT reliability, HIT self-efficacy, perceived ease of use, subjective norm, and health beliefs and concerns.

Clinical Application
• According to the HTAM, patients’ behavior to use HIT is guided by “Intention to use”,
• To improve utilization of eCW, we suggest MCPC develop strategies focusing on enhancing patients’ positive attitude about eCW, emphasizing the usefulness, reliability and increasing patients’ self-efficacy when using eCW.

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Reference