

# Empowering Health: Are Teenagers Taking Part in the Electronic Healthcare Revolution?

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## BACKGROUND

- Adolescents are early adopters of technology; 95% of U.S. teens report they have a smartphone or access to one and 45% of teens now say they are online "nearly constantly"
- Patient portals provide mobile health education, support transition of care, and permit secure messaging, which are designed to engage adolescents in their health care.

## PURPOSE

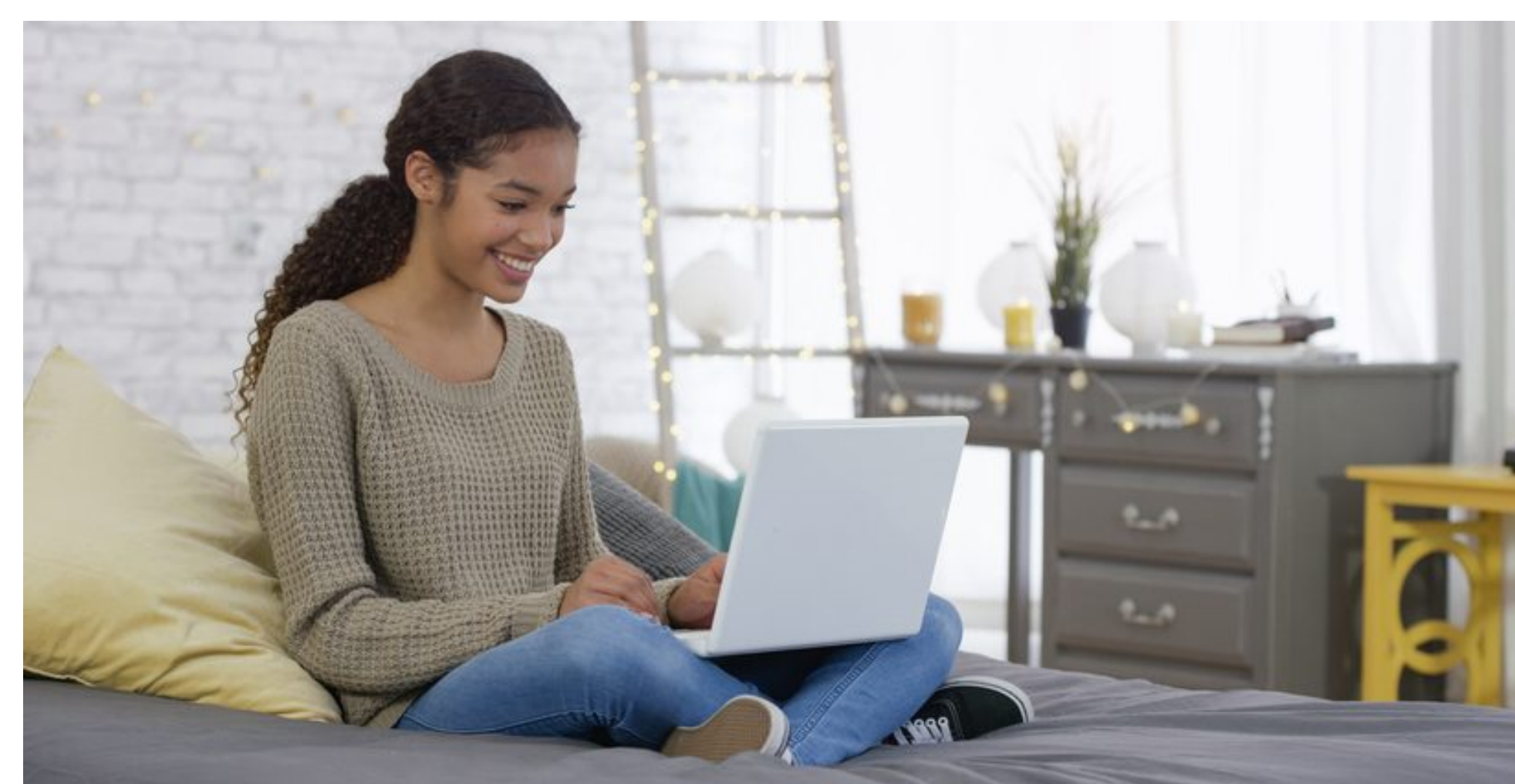
- Quantify adolescent portal utilization patterns and determine if utilization differs between adolescents and parent proxy use for younger patients.

## DESIGN/METHODS

- Retrospective, cross-sectional analysis of electronic portal access audit records from 2011-2016
- Urology patients aged 2-18
- Tertiary academic pediatric hospital outpatient clinic serving 3 counties in Southern California
- Multivariate analysis comparing utilization among parents/caregivers and adolescents

## RESULTS

- During the study period, 4930 accounts had 837,087 transactions
- Approximately 25% of patient parents (2-11) who were offered an activation code, logged into the portal; adolescent activation was under 20%.
- Parents use the portal primarily for secure messaging 352,955 (42%); appointments (setting, canceling, reviewing) 150,926 (18%); and reviewing laboratory results 115,507 (14%).
- Adolescent patients accounted for 43,447 transactions (4%), which were primarily secure messaging 10,505 (31%) and reviewing labs results 8,250 (24%).
- Overall, adolescents wrote fewer messages and reviewed more labs ( $X^2$  5121.2;  $p < .001$ ) than parents of younger children.
- Female teens were more likely to use the portal than male teens ( $X^2$  1329.6;  $p < .001$ ).



## DISCUSSION

- Meaningful use metrics such as electronic access to patient records have led to increased expectations for patients and caregivers to utilize health technology to make appointments, track laboratory results, and communicate with their providers outside of the clinic visit.
- This analysis of portal audit records demonstrates the majority of both proxies and patients use was for secure messaging, appointment setting functions, and reviewing laboratory results.

## CONCLUSION

- Adolescents use patterns differed from parent proxies with less secure messaging and more laboratory results review.
- Both parents and adolescents are accessing the patient portal, although adolescents utilize it at a much lower rate and with a difference emphasis on functions.