

## Short report

# Parents' knowledge of and opinions about healthcare laws and technology in primary care

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### ABSTRACT

**Purpose** Historically, parents have demonstrated poor understanding of adolescent healthcare laws. This study assessed US parents' current knowledge and opinions about technology facilitated physician–adolescent communication and applicable laws to enhance transition to adult health care.

**Methods** A brief survey in two low-income academic paediatric clinics asked parents about their knowledge of health care and laws, and their opinions about technology facilitated contact between physicians and adolescents.

**Results** Almost all parents (96.7%) have internet access at home, work or via a mobile device. Only 44.1% approved of having a physician directly contact their child about annual examinations,

immunisations or to discuss issues of sexuality. Half (55.4%) were aware that adolescents could receive confidential sexuality information and treatment without parents' permission. Only one-third (32.2%) approved of a specific technology for direct communication.

**Conclusions** Parents are divided about direct physician–adolescent contact. Future plans to engage adolescents to understand their health will require parental education and involvement on the value of physician–adolescent communication.

**Keywords:** adolescent, attitude to health, confidentiality, electronic medical record, parental notification

## Introduction

Prior research has suggested that parents' understanding and support of current adolescent healthcare laws may be conflicting and contradictory.<sup>1</sup> Although many are aware that parental consent is required for routine aspects of medical care in the USA, such as the receipt of any vaccination, they may be unaware or un-supportive of the laws that protect the right for their adolescent minors to receive confidential health care,

including services for reproductive health. These opinions and beliefs hinder effective adolescent health. In the USA, comprehensive adolescent care, encompassing preventive as well as immunisations and confidential care, is bundled together in the form of an annual preventive care visit. However, despite this model, only 68.7% of adolescents receive their recommended annual examination; even fewer receive

recommended screenings and immunisations.<sup>2</sup> Furthermore, barriers to adolescent confidential care disproportionately affect those at highest risk.<sup>3</sup> Currently, with enhanced efforts towards effective use of electronic medical records (EMRs) and patient involvement, adolescents could also benefit by having greater communication with their primary care provider through access to their EMR, improved communication using new technologies, or through more accessible and accurate, internet-based information. Given the importance of transitioning adolescents to adult care throughout their teenaged years, direct communication between adolescents and their providers beyond an annual, office-based preventive examination offers numerous and situational opportunities to improve parental and patient education and health literacy. This study was designed to assess parents' current knowledge and opinions of health care and its applicable US laws, and ask their opinions about direct contact with adolescents such as via telephone, email, texting or secure web-based portals.

## Methods

### Survey development

This study was approved by the institutional review board (IRB) of the University of Florida. We developed a brief, 11-question survey written at less than a high school reading level, the standard for most US legal documents and IRBs as measured by the Flesch–Kincaid readability index.<sup>4</sup> The survey was pre-reviewed by five parents and providers for context and feasibility and is given in Appendix 1. The survey queried five domains: basic demographics (insurance, race and whether they currently had an adolescent or younger child), parental access to the internet, parental opinions about whether and when direct contact with adolescents might be appropriate, parental opinions about the value and appropriateness of specific immunisations, and finally, parental knowledge and opinions of US healthcare laws affecting adolescents, such as those which allow physicians to provide reproductive counselling and treatment without parental involvement or consent.

### Sample and setting

We surveyed a convenience sample of English-speaking parents of adolescents presenting at two diverse, academic primary care practices in northeast Florida in October 2011. No identifying information was collected.

## Results

A total of 93 parents completed the survey (response rate 93.9%; six refusals, four incompletes). Seventy percent of respondents received Medicaid; most were from racial or ethnic minorities (35.6% black, 15.4% Hispanic, 8.8% Asian and 6.6% 'other' or multiple categories). Nearly half (39.8%) were parents of an adolescent. Table 1 gives the responses about internet access and knowledge and opinions of healthcare laws. A majority of parents (44.1%) did not approve of direct physician–adolescent contact; those that did approve of contact also approved of any media for contact (all  $p = 0.000$  using Fisher's exact for contact via phone, email, text or portal). Parents did not differentiate between what kinds of immunisations should be discussed without parental consent, such as Tdap or HPV, negating potential concerns over sexual versus community acquired illness. Regression analyses did not show significant variation by race/ethnicity, having an adolescent child or insurance status.

## Discussion

Confirming a previous report, parents have a persistently low understanding of or support for US healthcare laws affecting adolescents.<sup>1</sup> Given that more than 70% of adolescents frequently, even preferentially, seek health information online, it is troubling that parents are divided over the merit of media-based physician–adolescent communication, even for routine information about annual preventive care or immunisations. There is no internationally accepted age or developmental level that discerns when a child can make their own medical decisions; even the models of paediatric care differs significantly within states and across countries and continents.<sup>5</sup> In the USA, there are national and state laws that specifically allow for adolescents to seek health information and care when involving issues of sexuality; in the UK, physicians are asked to measure a child's 'Gillick' competence to allow for the making of their own healthcare decisions.<sup>6</sup> As these laws suggest, the educational process towards personal health management must be gradual, throughout adolescence, with ongoing efforts to engage both parents and their children. As such, clinical improvements in adolescent care, particularly using EMR prompts such as a secure, web-based portal for direct contact with adolescents and education in their own health literacy can only be successful if parents perceive enhanced benefits to them or their child from this communication.

**Table 1** Parental responses to internet access and knowledge and opinions of healthcare laws (*n* = 93)

Specific questions	Per cent answering 'yes', in agreement to question	Percent answering 'sometimes' to question
Personal access to the internet:		
At home	78.3	5.4
At work	56.2	4.5
Via mobile device	73.6	2.2
Any of the above	96.7	n/a
Their child has a mobile phone	26.1	1.1
Their adolescent has a mobile phone	54.3	n/a
If yes, does this mobile device have internet access?	44.8	3.5
		Percent answering 'unsure' to question
In favour of adolescents 'directly receiving personalised, private information from their healthcare provider, without their knowledge' about:		
Immunisations	37.4	5.5
Sexuality and screening	26.4	13.2
Annual check-ups	42.9	5.5
Any of the above	44.1	n/a
In favour of adolescents 'directly receiving personalised, private information from their healthcare provider, without their knowledge' via:		
Telephone	22.0	7.7
Email	17.6	5.5
Text message	15.4	6.6
Secure web-based portals	23.1	8.8
Any of the above	32.3	n/a
Awareness that all children must have their parent's permission to receive shots	92.4	n/a
Awareness that laws allow adolescents to 'discuss sexuality and get screened and treated for sexually transmitted infections, without parental knowledge and permission'	55.4	n/a
Believe these are good laws	38.0	10.9

n/a, not applicable.

The current system of evaluating, counselling and immunising US adolescents at the time of annual preventive care examinations is inefficient, as evidenced by the significantly low national and state-wide immunisation and sexuality screening rates. Providers have continually sought models of care that improve direct access to adolescents, such as through school-based health clinics, yet these programmes often go underfunded. Given the current evolution of EMRs in primary care, adolescent providers need to take advantage of how medical informatics can involve

patients in their health, specifically through facilitated communication via access to their medical record. Health portals, for example, defined as individual and secure sets of online tools that allow patients defined access to their EMR, have been recently developed to interface with EMRs to facilitate this gap. Internet-based adult portals have shown an increased perception of physician communication and result in increasingly informed patients.<sup>7,8</sup> Paediatric portals designed for parents show promise, yet research on adolescent care has lagged, and none has focused on

racial, ethnic or socio-economically disadvantaged children. To the best of our knowledge, only one study has begun to discuss the impact that an adolescent-focused health portal might have on health behaviour.<sup>9</sup> Providing adolescents with access to health portals is appropriate and needed given the increasing technological aptitude of US youth. However, with only a minority of parents approving of any communication, even those protected by law (such as calling an adolescent to give follow-up information on confidential screening), future research will be hampered until providers create meaningful partnerships with parents, which will enable direct adolescent communication.<sup>10</sup>

This study has several limitations. First, we used a convenience sample of English-speaking parents from two, albeit diverse, academic clinics in one university based town. These findings, therefore, cannot generalise to those from different regions or who speak different languages. Second, our sample was predominantly low-income, although significant differences in attitude according to insurance type did not exist. Additionally, this study used a questionnaire that lacked internal testing for validity or reliability. Finally, we relied on opinions and thought questions as opposed to actual, personal situations.

## Conclusion

Many US parents disapprove of direct adolescent communication with their physicians. Even in the current digital age, media type of communication does not alter these attitudes. Given the advantages of web-based communication and its attractiveness to adolescents, technology-facilitated communications between physicians and patients have the potential to impact life-long health and wellness. This study necessitates novel and engaging approaches for both parents and adolescents to increase, in a developmentally appropriate way, their adolescents' access to direct physician communication.

### CONFLICTS OF INTEREST

None.

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## Appendix 1

Thank you for agreeing to participate in this study. Please CIRCLE the answers to the questions below regarding your knowledge of and opinions about health care and laws affecting children.

1. Does your child have health insurance or health coverage?  
**Yes**      **No**
2. If yes, what type of insurance or health coverage?  
**Private**      **Medicaid**      **Other**
3. Please provide your child's race/ethnicity. You may circle all that apply  
**Black**      **White**      **Hispanic**      **Asian**      **Other**
4. Do you have any adolescents (roughly ages 13–19) that live in your household?  
**Yes**      **No**
5. These questions are about internet access:

Do you have internet access at home?	Yes	No	Sometimes
Do you have internet access from work?	Yes	No	Sometimes
Do you have internet access on your mobile phone?	Yes	No	Sometimes
Does your child have their own mobile phone?	Yes	No	Sometimes
If yes, does your child have internet access on the mobile phone?	Yes	No	Sometimes

6. Would you be in favour of your adolescent directly receiving personalised, private information from their healthcare provider on any of the following topics, without your knowledge:
  - a. Immunisations  
**Yes**      **No**      **Unsure**
  - b. Sexuality and screening  
**Yes**      **No**      **Unsure**
  - c. Annual check-ups  
**Yes**      **No**      **Unsure**
7. Would you be in favour of your adolescent directly receiving personalised, private information from their healthcare provider by any of the following ways, without your knowledge:
  - a. By telephone?  
**Yes**      **No**      **Unsure**
  - b. By email?  
**Yes**      **No**      **Unsure**
  - c. By text message?  
**Yes**      **No**      **Unsure**
  - d. By secure web-based portals?  
**Yes**      **No**      **Unsure**
8. *Please imagine the following scenario:* It is recommended that your adolescent receive two vaccinations. The first is a booster from their childhood DTaP called **TDaP**. The second is relatively new series of three vaccinations, called the **HPV** vaccine, which protects against genital warts and cancer in boys and girls.
  - a. Would you be in favour of your adolescent receiving **TDaP**?  
**Yes**      **No**      **Unsure**

- b. Would you be in favour of your adolescent receiving **TDaP** information from their healthcare provider without you knowing?  
**Yes**      **No**      **Unsure**
- c. Would you be in favour of your adolescent receiving the **HPV** vaccinations?  
**Yes**      **No**      **Unsure**
- d. Would you be in favour of your adolescent receiving information on the **HPV** vaccinations from their healthcare provider without you knowing?  
**Yes**      **No**      **Unsure**
9. Are you aware that all children must have their parent's permission to receive vaccinations?  
**Yes**      **No**
10. Are you aware that the law allows adolescents to discuss sexuality and get screened and treated for sexually transmitted infections, without your knowledge and permission?  
**Yes**      **No**
11. Do you feel this is a good law (that adolescents may receive certain types of healthcare information and services without parental permission)?  
**Yes**      **No**      **Unsure**