

ACOG PRESIDENTIAL TASK FORCE SERIES ON PREVENTIVE HEALTH CARE

A reliable rubric for evaluating medical apps

To help ObGyns evaluate mobile apps for use in clinical practice, the American College of Obstetricians and Gynecologists Presidential Task Force of Dr. Eva Chalas recommends a quantitative rubric that was developed by the American Society of Health-System Pharmacists (ASHP) for evaluating drug information apps (TABLE)¹. Criteria are graded on a point scale of 1 to 4, with 1 point indicating major deficiencies and 4 points indicating no deficiencies.

The ASHP used the following criteria in evaluating mobile apps:

- **Usefulness:** the app's overall usefulness in a particular practice setting
- **Accuracy:** overall accuracy of the app should be thoroughly examined
- **Authority:** it is critical to assess authority or authorship to determine that the developers are reputable, qualified, and authoritative enough to create the medical content in question
- **Objectivity:** to determine if content is fair, balanced, and unbiased
- **Timeliness:** given that medical information is continually changing, an app must be evaluated based on the timeliness of its content
- **Functionality:** how the app downloads, deploys, and operates across devices and software platforms (that is, iOS, Android)
- **Design:** well-designed apps are generally more user friendly and, therefore, useful. They should require minimal or no training and have easily discernible buttons, a clean and uncluttered format, consistent graphics layout, terminology appropriate for the intended audience, streamlined navigation

The authors report no financial relationships relevant to this article.

doi: 10.12788/obgm.0094

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without extraneous steps/gestures, appropriate-sized text, and sufficient white space to improve readability.

- **Security:** Many apps collect a wide array of personal and device data. Collected data has the potential for being sold to third parties for marketing and advertising purposes. Apps should disclose their privacy policy and provide an explanation as to why personal data are being collected. If personal identifiable information (PII) is collected, then the app should be encrypted. If protected health information (PHI) is collected, the app must follow

FAST TRACK

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Developed in collaboration with the American College of Obstetricians and Gynecologists

TABLE ASHP rubric for evaluating mobile drug information apps

Criteria	4 points = no deficiencies, 1 point = major deficiencies			
Usefulness Points: ___/4	App is relevant and would be very useful in daily practice; will improve efficiency or knowledge base	App is somewhat relevant and could be useful in practice; may improve efficiency or knowledge base	App is not very relevant and probably won't be useful in daily practice; may or may not improve efficiency or knowledge	App is irrelevant and would not be useful in daily practice; may hurt efficiency or knowledge base
Accuracy Points: ___/4	Source material is appropriate and cited throughout; clinical content is thorough/comprehensive	Most source material is appropriate and cited; clinical content relatively thorough	Some material is inappropriate or has few citations; app lacks some important clinical data	No references to source material; missing important content; deficiencies may cause patient harm
Authority Points: ___/4	Publisher and/or authors clearly listed; app developers are considered to be content experts	Publisher and/or authors are listed; developers seem trustworthy and qualified	Publisher and/or authors difficult to locate; app developers may or may not be qualified	Publisher and/or authors not listed; app developers are not qualified/reputable
Objectivity Points: ___/4	Content is fair and balanced; no bias evident; app is only for clinical purposes	Content is relatively fair and balanced; no overt promotion of products is noticed	Content may be biased; some product promotion is evident	Content is heavily biased; app is only for promotional purposes
Timeliness Points: ___/4	Clinical content is current and will be updated regularly	Clinical content is relatively current; may lack some new data but will likely be updated	Content is somewhat old, but still useful to clinical practice; future updates unclear	Clinical content is out of date and irrelevant or harmful to practice; will not be updated in the future
Functionality Points: ___/4	Installs and functions perfectly; no technical problems are evident or anticipated	Rarely crashes, freezes, or has other technical problems	Occasionally crashes, freezes, or has other technical problems	Repeatedly crashes, freezes, or has other technical problems; contains malware
Design Points: ___/4	Incredibly easy to use and navigate; all design elements are consistent and easy to understand	Relatively easy to use and navigate; most design elements are consistent and easy to understand	Often difficult to use and navigate; design elements may hurt some of the app's usability	Very difficult to use and navigate; design elements definitely hinder usability
Security Points: ___/4	Free of malicious software; privacy statement available; personal data are encrypted/protected	Free of malicious software; privacy statement might be available; personal data are probably protected	May contain malicious software; privacy statement difficult to find; unclear if personal data are protected	Contains malicious software; privacy statement unavailable; personal data are not protected
Value Points: ___/4	Price of app is appropriate, given its content and features	Price of app is reasonable, considering its content and features	Price of app is a barrier and may not be worth the content provided	App is overpriced and not worth the cost
Totals: _____/36	Comments			

Abbreviation: ASHP, American Society of Health-System Pharmacists. Used with permission.

compliance with HIPAA/HITECH (Health Insurance Portability and Accountability Act/Health Information Technology for Economic and Clinical Health Act). Addition-

ally, apps should not compromise the security or functionality of the mobile device being used.

- **Value:** appropriateness of an app's cost. ●

Reference

1. Hanrahan C, Aungst TD, Cole S. Evaluating mobile medical applications. American Society of Health-System Pharmacists eReports. <https://www.ashp.org/-/media/store-files/mobile-medical-apps.ashx>. Accessed January 22, 2021.