



Three good apps for calculating the date of delivery

➔ Strict scoring system criteria applied to due date calculator apps helped cull the multiple offerings to these top picks

Katherine T. Chen, MD, MPH

Technology has changed—and continues to change—the practice of medicine. Health care providers access word processing programs, e-mail, and electronic medical records using desktop and laptop computers. Now, providers are accessing these same tools with handheld devices such as smartphones, tablets, and “phablets” (a class of mobile devices designed to combine the form of a smartphone and a tablet).

Critical to the popularity and functionality of handheld devices are mobile applications, also known as “apps.” An app is a self-contained program or piece of software designed to run on handheld devices to perform a specific purpose. App overload and app inaccuracy, however, are major problems. Health care providers do not have the time to search through thousands of medical apps in app stores to find specialty-related apps that might be useful in their practice—or to check the accuracy of those apps.



Dr. Chen is Professor of Obstetrics, Gynecology, and Reproductive Science, Vice-Chair of Ob-Gyn Education for the Mount Sinai Health System, Vice-Chair of Ob-Gyn Career Development and Mentorship, and Director of Ob-Gyn Medical Student Clerkship and Electives, Icahn School of Medicine at Mount Sinai, New York, New York.

Dr. Chen is an OBG MANAGEMENT Contributing Editor.

The author reports no financial relationships relevant to this article.

Vetted apps for ObGyns

My team’s research has focused on identifying apps for ObGyns to use in clinical practice.¹ In the process, we have developed the APPLICATIONS scoring system, which contains objective and subjective components to help differentiate among the accurate apps.² This new quarterly “App review” series in OBG MANAGEMENT will showcase recommended apps for the busy ObGyn in the hope of improving work efficiency and the provider-patient relationship.

First up: Apps for calculating the date of delivery. This first app review focuses on pregnancy wheels, or due date calculators. Calculator apps are preferred over other types of apps such as procedure/case documentation apps, as providers use smartphones at point of care to allow rapid decision making.³ Calculating the estimated date of delivery (EDD) and gestational age (GA) is an important, vital task for providers of obstetric care. In fact, new guidelines for calculating EDD were recently developed by the American College of Obstetricians and Gynecologists (ACOG), the American Institute of Ultrasound in Medicine (AIUM), and the Society for Maternal-Fetal Medicine (SMFM).⁴ Notably, pregnancy wheel apps are more accurate than paper wheels.⁵ My team checked the accuracy of the pregnancy wheel apps by applying strict criteria to ensure the correct EDD and GA and then scored them in a systematic, nonbiased, conflict-of-interest-free manner.²

IN THIS ARTICLE

Due date calculator apps

page 45

3 recommended apps

page 46

UP NEXT

Dr. Chen recommends top medical translator apps in her next column




CONTINUED ON PAGE 46



The **TABLE** below lists the top 3 recommended pregnancy wheel or due date calculator apps vetted by our research. The apps are listed alphabetically, and details for each app

are provided based on a shortened version of the **APPLICATIONS** scoring system, **APPLI**—app comprehensiveness, price, platform, literature use, and important special features.

TABLE Top 3 recommended apps: Pregnancy wheel or due date calculators

App	App comprehensiveness	Price	Platform	Literature used	Important special features
 <p>Estimated Due Date (EDD) Calculator within the ACOG App</p> <p>iTunes Preview: https://itunes.apple.com/us/app/american-congress-obstetricians/id616323665?mt=8</p> <p>Google Play: https://play.google.com/store/apps/details?id=vspringboard.acog.activity&hl=en</p>	<ul style="list-style-type: none"> • Ultrasound-determined gestational age • Biometry measurements 	Free	iTunes and Google Play stores	ACOG Committee Opinion No. 611 ⁴	Ability to reconcile the discrepancy in due dates between the ultrasound-determined dates and the date of the last menstrual period
 <p>Ferring IVF Wheel by Ferring Pharmaceuticals, Inc.</p> <p>iTunes Preview: https://itunes.apple.com/us/app/ferring-ivf-wheel/id684536707?mt=8</p> <p>Google Play: https://play.google.com/store/apps/details?id=com.ferring.ivfwheel&hl=en</p>	<ul style="list-style-type: none"> • Ultrasound-determined gestational age • Assisted reproductive technology dates 	Free	iTunes and Google Play stores	Not reported	Display of expected fetal length and weight based on standard fetal growth curves
 <p>OB Calc Pro by Glen Botha</p> <p>iTunes Preview: https://itunes.apple.com/us/app/ob-calc-pro-pregnancy-wheel/id943181948?mt=8</p> <p>Google Play: https://play.google.com/store/apps/details?id=com.glen.apps.maternity&hl=en</p>	<ul style="list-style-type: none"> • Ultrasound-determined gestational age • Biometry measurements 	\$3.99	iTunes and Google Play stores	Not reported	<ul style="list-style-type: none"> • Ability to e-mail information in table format • Ability to customize important test date reminders

Abbreviation: ACOG, American College of Obstetricians and Gynecologists.

References

1. Farag S, Chyjek K, Chen KT. Identification of iPhone and iPad applications for obstetrics and gynecology providers. *Obstet Gynecol.* 2014;124(5):941–945.
2. Chyjek K, Farag S, Chen KT. Rating pregnancy wheel applications using the **APPLICATIONS** scoring system. *Obstet Gynecol.* 2015;125(6):1478–1483.
3. Payne KB, Wharrad H, Watts K. Smartphone and medical related App use among medical students and junior doctors in the United Kingdom (UK): a regional survey. *BMC Inform Decis Mak.* 2012;12:121.
4. American College of Obstetricians and Gynecologists. Committee Opinion No. 611. Method for estimating due date. *Obstet Gynecol.* 2014;124(4):863–866.
5. Chambliss LR, Clark SL. Paper gestational age wheels are generally inaccurate. *Am J Obstet Gynecol.* 2014;210(2):145.e1–e4.