



## **Can We Move Towards a Universal Terminology for Gestational Age?**

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**Abstract**

*Variations in defining gestational age across countries and clinical practices often lead to confusion among healthcare providers and expectant mothers. This article explores the need for a universal terminology in gestational age estimation by analyzing current discrepancies, proposing unified variables, and suggesting a more transparent system. A standardized framework could enhance clarity in clinical communication, maternal understanding, and research comparability.*

**1. Introduction**

Gestational age is a foundational concept in obstetrics, guiding decisions about prenatal care, screening, delivery planning, and research. However, despite its importance, inconsistencies in the way gestational age is calculated and communicated persist worldwide. These discrepancies are not only geographical but also methodological—stemming from differences in the starting point of gestational age calculation and the units used (weeks vs. months). Consequently, many pregnant women struggle to understand how their due date was determined or how far along they are in their pregnancy.

For example, in France, the estimated date of delivery (EDD) is traditionally calculated using a gestational length of 41 weeks, whereas in Switzerland it is based on a 40-week duration. Compounding this confusion, patients often refer to their pregnancy in months, while scientific literature and clinicians typically use weeks—without always specifying whether the count begins from the first day of the last menstrual period (LMP) or the estimated date of conception (EDC). This has led to interchangeable and ambiguous use of terms like "weeks of amenorrhea" and "gestational weeks."

**The Case for Standardization**

A harmonized terminology could address several current limitations:

1. Clarity for patients – Expectant mothers would benefit from clearer communication about pregnancy progress.
2. Consistency across countries – Standardization would support better data comparison and global

research collaboration.

3. Improved clinical practice – Practitioners would be guided by uniform definitions, reducing misinterpretation.

To achieve this, two main variables should be universally defined:

- (a) Estimated Date of Conception (EDC): A unified method for calculating the conception date.
- (b) Gestational Age Assessment: A clear, consistent choice between counting in weeks of amenorrhea or months of pregnancy.

#### Estimating the Date of Conception (EDC)

The EDC can be estimated using a triangulation of key data:

1. First day of LMP: Taking into account the cycle's regularity and length.
2. Early ultrasound (before 10 weeks of amenorrhea): Particularly when LMP is unknown or irregular; must factor in the method's error margin.
3. Additional indicators: Including ovulation tests, tracking of sexual activity near ovulation, and other biomarkers.

Through the integration of these data points, obstetricians can determine an EDC with higher accuracy. This date would serve as the reference point for counting months of pregnancy.

#### From EDC to Weeks of Amenorrhea

To translate this into weeks, practitioners may define a "virtual" LMP date, which is 14 days prior to the EDC. This virtual LMP could, in some cases, coincide with the actual LMP, but its primary function is to align all gestational age calculations with the standard 28-day cycle model.

- Virtual LMP = EDC – 14 days
- Weeks of Amenorrhea (WA): Counted from this virtual LMP

This system offers both precision and flexibility, allowing clinicians and patients to communicate effectively in either weeks or months, with both counting methods rooted in the same EDC.

## Rationale for Standardization

The gestational age calculation varies depending on:

- **Cultural and national practices** (e.g., France uses 41 weeks vs. Switzerland's 40 weeks),
- **Choice of time unit** (weeks vs. months),
- **Starting point** (last menstrual period vs. date of conception),
- **Ultrasound-based estimates.**

Standardization would help unify communication, improve maternal understanding, and allow for consistent international research reporting.

## Proposed Model: Estimating EDC and Weeks of Amenorrhea

To build a universal model, we propose:

- **EDC (Estimated Date of Conception):** Calculated using LMP, early ultrasound (preferably before 10 weeks), and supporting fertility data (e.g., ovulation tests).
- **Virtual LMP:** Defined as 14 days prior to the EDC, to align with the standard 28-day cycle.
- **Gestational Age Units:**
  - **Weeks of Amenorrhea (WA):** Starting from virtual LMP.
  - **Months of Pregnancy:** Starting from the EDC.

## Clinical Case Studies

### Case 1: Confusion Due to Country-Based Protocols

**Patient:** 30-year-old G1P0

**LMP:** August 1, 2024

**Cycle length:** 28 days

**Early ultrasound (7 weeks):** Confirms EDC of August 15, 2024

- **France protocol (41 weeks):** EDD = May 8, 2025
- **Switzerland protocol (40 weeks):** EDD = May 1, 2025

**Outcome:** Patient confused by conflicting due dates from online sources and different doctors.

*Standardized approach:*

- EDC = August 15, 2024
- Virtual LMP = August 1, 2024
- Gestational Age in WA = Count from virtual LMP
- Gestational Age in months = Count from EDC

### **Case 2: Irregular Menstrual Cycle**

**Patient:** 27-year-old G2P1

**LMP unknown**

**Cycle irregularity:** 31–38 days

**Positive ovulation test:** September 10, 2024

**Early ultrasound (6w6d):** Suggests conception ~September 12, 2024

- **EDC:** September 12, 2024
- **Virtual LMP:** August 29, 2024
- **Gestational Age in WA (on October 10, 2024):** 6w+6d
- **Gestational Age in months:** 1 month (from Sept 12)

**Outcome:** Improved clarity with ultrasound and ovulation tracking, despite LMP being unknown.

### **Case 3: IVF Pregnancy**

**Patient:** 35-year-old G1P0

**Date of embryo transfer (5-day blastocyst):** January 10, 2025

**Calculated EDC:** January 5, 2025

**Virtual LMP:** December 22, 2024

- **Gestational Age WA on March 5, 2025:** 10w+3d
- **Gestational Age months:** 2 months

**Outcome:** IVF date provides precise EDC; virtual LMP aligns perfectly with standard WA count.

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**Table 1: Comparison of Gestational Age Calculations**

Variable	France	Switzerland	Proposed Standardization
Gestational duration	41 weeks	40 weeks	40 weeks
Starting point	LMP	LMP	Estimated Date of Conception (EDC)
Weeks counted from	LMP	LMP	Virtual LMP = EDC – 14 days
Gestational age unit	Weeks of amenorrhea	Weeks of amenorrhea	Weeks of amenorrhea and months
Use of ultrasound	Optional	Recommended	Mandatory before 10 weeks (if possible)

**Table 2: Clinical Guidance for Universal Gestational Age Assessment**

Step	Description
1. Identify LMP	If regular cycle and known, use as baseline
2. Use early ultrasound	Ideally before 10 weeks to confirm gestational age
3. Estimate conception date	Combine LMP, ultrasound, ovulation tracking
4. Define virtual LMP	14 days before EDC
5. Count gestational age	From virtual LMP in WA; from EDC in months
6. Communicate with clarity	Explain both WA and months-based assessment to the patient

## Discussion

Standardizing gestational age terminology would have far-reaching benefits. It would foster better patient education, enhance consistency in prenatal care, and support data integrity across international studies. While it may require recalibration of national guidelines and clinical training, the long-term gains in clarity and safety are substantial.

It is worth noting that this article does not address the ongoing discussions around due date adjustments or post-term pregnancy follow-up beyond 42 weeks of amenorrhea. These topics, while important, require separate, dedicated analysis.

## Conclusion

The move toward a universal terminology for gestational age is both necessary and feasible. By adopting the Estimated Date of Conception (EDC) as a standardized reference point and harmonizing the use of weeks and months, the obstetrics field can greatly improve communication, research consistency, and maternal understanding. Future work should include international consensus-building and integration into clinical protocols.

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