

## **Dottie: Your Period Bestie**

**Mission:** To empower adolescent girls with knowledge about their menstrual health through accessible, friendly AI-powered guidance.

**Vision:** A world where young people understand their bodies, recognize menstrual health as a vital sign, and feel confident seeking care when needed.

**What is Dottie?** Dottie is an AI-powered symptom checker designed specifically for adolescent girls and their caregivers to distinguish between normal and abnormal menstruation patterns, delivered through a friendly, approachable digital mascot.

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### **Problem Statement**

**The Challenge:** Adolescent menstrual health faces three critical barriers:

1. **Knowledge Gap:** Many adolescents and caregivers lack clear understanding of what constitutes normal vs. abnormal menstruation.
2. **Communication Barrier:** Stigma and embarrassment prevent open discussions about menstrual concerns between adolescents, caregivers, and healthcare providers.

3. Delayed Care: Without understanding normal parameters, abnormal symptoms often go unreported, leading to delayed diagnosis of underlying conditions like PCOS, endometriosis, or thyroid disorders.

#### Key Statistics:

- Up to 38% of adolescent girls experience menstrual disorders
- The average delay in diagnosis for endometriosis is 7-10 years, often beginning in adolescence
- 75% of young women report receiving inadequate education about menstrual health
- Only 14% of adolescents consult healthcare providers about menstrual concerns

This problem disproportionately affects underserved communities with limited access to specialized healthcare and comprehensive sexual health education.

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#### **Solution: Meet Dottie**

Dottie is a conversational AI assistant designed as a friendly, knowledgeable “Period Bestie” for adolescents navigating menstrual health.

#### Core Features:

**Symptom Assessment:** Evaluates menstrual patterns against age-appropriate clinical guidelines.

**Personalized Education:** Provides developmentally appropriate explanations based on user’s age and knowledge level.

Decision Support: Helps determine when to seek medical attention vs. when patterns are within normal range.

Period Tracking: Simple logging system with visual representation of patterns over time.

Conversation Starters: Provides scripts to help teens discuss concerns with parents and healthcare providers.

### **Unique Approach:**

Character-Based Interface: Dottie's friendly mascot design reduces stigma and anxiety.

Medically Accurate: Built on ACOG guidelines and reviewed by adolescent gynecologists.

Privacy-Centered: Age-appropriate design with strong data protection and privacy controls.

Accessible Language: Uses clear, non-clinical language with optional educational deep-dives.

Culturally Responsive: Content addresses diverse cultural contexts and beliefs around menstruation.

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## How Dottie Works

### User Journey:

1. Onboarding: Brief questionnaire establishes baseline information about age, menstrual history, and concerns.
2. Daily Tracking: Simple interface to log cycle days, symptoms, and other relevant information.
3. Assessment: When users report concerns or unusual symptoms, Dottie guides them through a conversational assessment using clinically-validated questions.
4. Personalized Guidance:

Green: Reassurance when patterns are within normal range.

Yellow: Monitoring recommendations for borderline patterns.

Red: Clear guidance to seek healthcare when patterns suggest potential issues.

5. Educational Content: Contextual information about menstrual health delivered through engaging, age-appropriate explanations.
6. Healthcare Connection: When needed, helps prepare for healthcare visits with symptom summaries and questions to ask.

## **User Experience:**

The interface balances friendly engagement with medical credibility, using accessible language while maintaining scientific accuracy.

## **Datasets & Knowledge Base**

Medical Foundation:

ACOG Committee Opinion No. 651 (2015): Core guidelines on normal menstrual parameters.

Society for Adolescent Health and Medicine clinical recommendations.