



# CalmStep

Support in the moment.

An AI Guided Crisis Support Companion

# Problem Statement

## The Problem

Millions of people struggle with anxiety panic symptoms, or emotional overwhelm, yet over half never received treatment due to stigma, cost, waitlists, or lack of health insurance.. When symptoms hit, people often have no immediate support, just a phone full of apps that aren't built for in the moment regulation.

## Why It Matters

Untreated anxiety and emotional dysregulation can impact work, relationships, school performance, and physical health. People need fast, stigma-free, accessible support they can use anytime, without waiting weeks for an appointment.

# Idea 1: AI Guided Crisis Support App

## Concept Overview:

A mobile app that helps users navigate panic attacks, anxiety spikes, racing thoughts, or emotional flooding.

## Core Features:

- Tap → choose what you're experiencing (panic, racing thoughts, overwhelm, etc.)
- App walks you through grounding steps or breathing
- Real-time symptom interpretation ("Are you dizzy? Chest tightness? Trouble focusing?")
- AI suggests the correct coping flow (backed by research)

## User Benefit:

When you can't think straight, the app does the thinking *for* you.

## Idea 2: Panic Button Widget

### Concept Overview:

A one-tap widget on the phone home screen for immediate support.

### How It Works:

- User hits the panic button → simple AI chatbot asks what's happening
- User selects symptoms from a checklist
- App generates personalized grounding instructions or coping exercises
- Hands-free audio guidance for situations like driving anxiety

### User Benefit:

Instant support for people who can't unlock, navigate, or think through options during a crisis.

# How AI Is Applied

## AI Usage (High Level, Non-Clinical):

- Classifies the user's chosen symptoms to match them with the right support flow
- Adapts coping steps based on previous user choices (personalized but simple)
- Identifies patterns in user logs (optional feature) to recommend tools that work best for them

## Important Note:

The AI *does not diagnose*. It only helps choose the appropriate coping flow based on user input.  
We can use science backed research and experts in the field to avoid negative results

## AI Method: How CalmStep Thinks

- Uses classification to label a users state: panic spike, rising anxiety, overwhelm, grounding needed
- Uses lightweight NLP to interpret short quick user text - “my chest is tight,” “I can’t focus”
- Uses a rule based flow engine to pick the right coping script for the user (breathing, grounding, etc.)
- Makes sure to stay non-clinical (no diagnosis, no therapy advice)

Sources: <https://www.uhc.com/news-articles/healthy-living/6-signs-of-a-panic-attack>

[Google AI Search](#)

[https://www.kaggle.com/datasets/suchintikasarkar/sentiment-analysis-for-mental-health?utm\\_source=chatgpt.com](https://www.kaggle.com/datasets/suchintikasarkar/sentiment-analysis-for-mental-health?utm_source=chatgpt.com)

# Data Plan: Sources & Types

- Open mental-health datasets (Kaggle, survey-style stress/anxiety data)
- Synthetic messages based on public symptom descriptions (CDC/other orgs)
- Optional, consent-based in-app data: which flow they picked + “did this help?”
- Data types: short text, labels (panic/stress/overwhelm), optional timestamps

## Limitations & Risks

- Not a diagnostic tool; must clearly say “support only, not emergency service”
- NLP can misread slang / vague messages
- Some users will be in true medical or safety crisis
  - Will route to **988/emergency**, not just breathing
- Bias risk: models may perform differently across cultures/languages
  - need diverse data & auditing

