

Wellbeing Score Model: Weekly Anchor + Daily Trend

Client-facing explanation for how to combine weekly and daily assessments without making the score unstable.

1. Why change the current behavior?

Today, a high or low daily check-in can overwrite the main wellbeing score immediately. That creates two issues: (a) the score can swing too much from a single day, and (b) the weekly assessment loses its intended role as the primary health signal.

2. Product goal

Keep the weekly assessment as the core score that powers the platform, while letting daily check-ins influence the score in a controlled, meaningful way.

3. Proposed model (recommended)

Use a two-part model: **Weekly Anchor + Daily Adjustment**. The weekly score stays dominant; daily data only nudges it.

Formula:

```
finalWellbeing = weeklyAnchor + dailyAdjustment
```

```
dailyAvg7 = average of the last 7 daily check-in scores
```

```
dailyDelta = dailyAvg7 - weeklyAnchor
```

```
dailyAdjustment = clamp(dailyDelta × 0.25, -10, +10)
```

```
finalWellbeing = clamp(finalWellbeing, 0, 100)
```

4. Why this is a strong approach

- Weekly remains the source of truth for overall wellbeing.
- Daily check-ins still matter and can reflect short-term momentum.
- One extreme day does not cause a misleading score spike/drop.
- The model is easy to explain to users and stakeholders.
- The formula is tunable (multiplier and cap can be adjusted based on product feedback).

5. Example

- Weekly Anchor = 80
- 7-day Daily Average = 100
- $\text{dailyDelta} = 100 - 80 = +20$
- $\text{dailyAdjustment} = +20 \times 0.25 = +5$ (within ± 10 cap)
- Final Wellbeing = $80 + 5 = 85$

Result: daily behavior improves the score, but does not replace the weekly baseline.

6. Data fields to store

- **weeklyScore**: latest completed weekly questionnaire score.
- **dailyTrendScore**: rolling 7-day daily average.
- **wellbeingScore**: final computed score used across dashboard, profile, and rings.
- **wellbeingComponents** (optional): { weeklyAnchor, dailyAdjustment, updatedAt } for transparency/debugging.

7. UI transparency (recommended)

Show the main score plus a small breakdown: “Weekly: 80” and “Daily trend: +5”. This reduces confusion and builds user trust in how the number moves.

8. Rollout notes

- Backfill existing users by setting weeklyAnchor from the most recent weekly assessment where available.
- For users without weekly data yet, temporarily use current score as anchor until first weekly is completed.
- Recompute finalWellbeing whenever a new daily check-in or weekly assessment is submitted.
- Monitor score volatility for 2-3 weeks and tune multiplier (0.25) or cap (± 10) if needed.

Summary: This model keeps weekly assessments in control while still rewarding daily consistency. It is stable, explainable, and production-friendly.