

# Medical Necessity Dosage Determination Tool

## *Developer Specification – Input Questions & Treatment Hour Logic*

### 1. Vineland-3 Inputs

- Communication Standard Score
- Daily Living Skills Standard Score
- Socialization Standard Score
- Motor Skills Standard Score (if available)
- Adaptive Behavior Composite (optional)

#### *Hour Adjustments:*

Condition	Hour Adjustment
1 domain < 85	+2 hrs
2 domains < 85	+4 hrs
3 domains < 85	+6 hrs
4+ domains < 85	+8 hrs (cap)
Any domain < 70	+4 hrs
Composite < 70	+4 hrs
Maximum Vineland Add-On	+12 hrs

### 2. VB-MAPP Inputs

- Milestones Total Score (0–170)
- Barriers Total Score (0–24)
- Transition Score (optional)

Category	Score Range	Hour Adjustment
Milestones	0–45	+6 hrs
Milestones	46–100	+3 hrs
Milestones	101+	+0 hrs

Barriers	7–12	+2 hrs
Barriers	13–18	+4 hrs
Barriers	19–24	+6 hrs
Transition	0–6	+2 hrs
Transition	7–12	+1 hr
Maximum VB-MAPP Add-On		+12 hrs

### **3. Functional Impairment Domains (0–4 Each)**

- Communication
- Social Reciprocity
- Adaptive Skills
- Emotional Regulation
- Safety/Aggression
- Self-Injury
- School/Community Functioning
- Family Impact
- Restricted/Repetitive Behaviors

Functional Impairment Index (FII) = Sum (0–36)

FII Score	Base Hours
0–8	10 hrs
9–16	20 hrs
17–24	30 hrs
25–36	35 hrs

### **4. Behavioral Risk Modifiers**

- Aggression 6+ per week = +3 hrs
- Daily aggression = +5 hrs
- Self-Injury mild/mod/severe = +3 / +5 / +8 hrs
- Elopement = +5 hrs
- 1 crisis event = +5 hrs
- 2+ crises = +8 hrs
- Maximum behavioral add-on = +16 hrs

### **5. Environmental Modifiers**

- Each checked item adds +2 hrs
- School placement at risk
- CPS involvement

- Regression
- Caregiver burnout
- Loss of ABA services
- Limited caregiver capacity
- No school supports
- Maximum environmental add-on = +8 hrs

## **6. Age Multiplier**

- Age 0–5 =  $\times 1.2$
- Age 6–12 =  $\times 1.0$
- Age 13+ =  $\times 0.85$
- Override: Severe/high-risk cases use  $\times 1.0$

## **7. Final Calculation Sequence**

- 1. Base hours from FII
- 2. Add Vineland adjustment
- 3. Add VB-MAPP adjustment
- 4. Add Behavioral risk adjustment
- 5. Add Environmental adjustment
- 6. Apply age multiplier
- 7. Round to nearest 5-hour increment
- 8. Minimum 10 hrs / Maximum 40 hrs (configurable)

***Required Outputs:***

- Recommended Direct Therapy Hours per Week
- BCBA Supervision Hours (10–20% based on tier)
- Parent Training Hours (2–8 hrs/month based on tier)
- Case Intensity Tier (1–3)
- Structured risk & impairment flags for reporting