

# Advancing pediatric assessment for more reliable clinical outcomes

The Bayley Scales of Infant and Toddler

**Development**<sup>™</sup> are among the most widely used tools in clinical trials assessing neurodevelopmental outcomes. With the release of the **Bayley**<sup>™</sup>-**4**, sponsors and CROs have an opportunity to enhance the validity, sensitivity, and reliability of their trial data.





## Key advancements in Bayley-4 (compared to Bayley™-III)

- **Improved sensitivity to developmental change** The Bayley-4 incorporates updated norms, helping ensure more precise measurement of subtle developmental changes critical for clinical trial endpoints.
- **Refined Growth Scale Values (GSVs)** Updated GSVs track individual developmental progress over time. A GSV Comparability Report includes tables for aligning scores between Bayley-III and Bayley-4 and details on the statistical methods used to establish comparability.
- **Stronger cross-cultural validity** With improved representation in standardization, the Bayley-4 better accounts for diverse populations, reducing potential bias in clinical trials.
- Optimized administration for clinical settings Streamlined subtests help reduce the burden on raters while maintaining psychometric rigor—critical for large-scale, multi-site trials.
- Alignment with regulatory expectations As regulatory agencies increasingly emphasize the use of the most current and validated assessments, the Bayley-4 aligns with best practices in clinical outcome assessments (COAs).



Scales of Infant and Toddler Development™ Fourth Edition







### ADMINISTRATION & SCORING

- Flexible administration with Series Items noted on the record form
- Motor response items embedded in the record form
- Dichotomous scoring approach (i.e., 1, 0)
- Flexible administration with Series Items and Related Items identified on the record form and supported via digital administration
- Motor response items in a separate Motor Response booklet
- Structured caregiver questions to support administration on relevant items

· Retains 5 domains: Cognitive, language, motor, social-

Adaptive behavior content from the Vineland Adaptive

• Updated item content based on research and user feedback

• Polytomous scoring approach (i.e., 2, 1, 0)

Behavior Scales-Third Edition (Vineland-3)

### CONTENT UPDATES

- Assesses 5 domains: Cognitive, language, motor, social-emotional and adaptive behavior
- Adaptive behavior content from the Adaptive Behavior Assessment System - Second Edition (ABAS-II)

## NORMS AND CLINICAL STUDIES

Data collected 2001–2002

Data collected 2017–2019

emotional and adaptive behavior

Updated reliability and validity studies

### ADMINISTRATION TIME

- Completion Time: 30 to 70 minutes (depending upon age of child)
- Adaptive behavior scale contains 241 items for caregiver response
- Completion Time: 30 to 90 minutes (depending upon age of child)
- Adaptive behavior scale contains 120 items to reduce the caregiver administration time

# Comparing the Bayley–III and Bayley-4

### Pearson's Growth Scale Value (GSV) Comparability Report

provides tables of comparable GSVs on corresponding subtests of the Bayley-III and Bayley-4. It also describes the method used to create comparable score tables and relevant statistical findings.



# Scientific consultation

Our pharma research consulting team includes experts in test development, clinical practice, and psychometrics. This team is available to support trial sponsors and CROs in integrating the Bayley-4 into study protocols, ensuring optimal administration, scoring, GSV interpretation, and data analysis. (Fees apply.)



# Bayley-4 translation availability

The Bayley-4 is available in multiple languages to support international clinical trials. Please **contact us** to inquire about specific translations and availability.

# Transition to the Bayley-4 for more robust and validated trial outcomes. **Contact us.**

800-627-7271 PearsonAssessments.com

