TITLE: Bayley-III Screening Tool versus the Bayley-III Scales for the Assessment of Development in Infants and Toddlers: Diagnostic Accuracy and Clinical Utility

DATE: 14 June 2016

RESEARCH QUESTIONS

1. What is the diagnostic accuracy of the Bayley-III Screening Test versus the Bayley-III Scale for identifying infants and toddlers with developmental delay?

2. What is the clinical utility of the Bayley-III Screening Test versus the Bayley-III Scale in infants and toddlers?

KEY FINDINGS

One non-randomized study was identified regarding the clinical utility of the Bayley-III Scales of Infant and Child Development Screening Test.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD), PsycInfo, Medline, Canadian and major international health technology agencies, as well as a focused Internet search. No methodological filters were applied to limit retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2011 and June 6, 2016.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

SELECTION CRITERIA

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

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Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Infants and toddlers</th>
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</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Bayley-III Scales of Infant and Child development (BSID) Screening Test</td>
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<tr>
<td>Comparator</td>
<td>Bayley-III Scales of Infant and Child Development and other clinical developmental scales for children (e.g., Alberta Infant Motor Scale, Milani Comparetti Motor Development Screening Test)</td>
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<td>Outcomes</td>
<td>Q1: Diagnostic accuracy (e.g., sensitivity, specificity, positive and negative predictive value, likelihood ratio); Q2: Clinical utility (e.g., predictive capacity regarding need for intervention and long-term developmental outcomes, identification of patients who require more detailed evaluation or treatment, ease of use)</td>
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<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies</td>
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</table>

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials and non-randomized studies.

One non-randomized study was identified regarding the clinical utility of the Bayley-III Scales of Infant and Child Development Screening Test. No relevant health technology assessments, systematic reviews, meta-analyses or randomized controlled trials were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One relevant non-randomized study\(^1\) was identified regarding the clinical utility of using the gross motor subset of the Bayley-III Screening Test for identifying children from the neonatal intensive care unit who were eligible for unspecified early interventions. This study found that the Bayley-III Screening Test was effective in identifying these children and had applicability for this setting.\(^1\)
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies

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APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies

Bayley III Screening Test as a Component of Screening


Uncertain Version of Bayley Screening Test


Uncertain Version of Bayley III


Additional References
