The Balance

- Maintaining Optimum Arousal and Performance through the balance of
  - Risk Factors and
  - Protective Mechanisms/Resilience

Family is the Foundation

- Comprehensive assessments guide families to improve the balance.
Potential risk factors in 22q11.2DS

- Development is different from typical expectations
  - Environment-Person Mismatches
- Body differences
  - The role of illnesses
- Mind differences
  - Perceiving
  - Sensing/Feeling
  - Thinking
  - Emoting
  - Behaving
  - Learning

Potential protective factors/resilience

- Environment
  - Expectations and abilities match
  - Adaptive coping is modeled and actively coached
  - Strengths are identified and emphasized
  - Weaknesses are supported
- Individual
  - Personal attributes
Examples of risk

- Fatigue
  - Bodily
  - Mental
- Poor spatial awareness motor incoordination
- Speech & Language delays/disorders
- Sensory processing and integration
  - Easily overwhelmed
- Cognitive delay/disability
- Rigidity/difficulty switching mental sets
- Ineligibility for supportive services

Examples of resilience

- Concrete and literal leads to a charming, earnest naïveté
  - “sweet”, “likable”
  - Concrete thinking also contributes to humorosity
- Superficial social chatting can be a captivating diversion
- Learning by rote repetition is a strength
  - Songs, scripts
- Predictable
  - Performs best knowing what is next
CABIL Core Developmental Neuropsychological Assessment

- Measures are selected to optimize communication between the research team and school-based professionals as well as other community agencies.
  - Measures are selected to facilitate the ability of agencies to determine the individual’s eligibility for entitlement services.

- Results are interpreted from a functional, biobehavioral approach with an eye towards offering evidence-based recommendations.
  - In other words, the approach to interpreting the test data makes this a neuropsychological assessment, not the tests themselves.
Areas typically screened/examined

- Psychosocial & environmental factors
- Adaptive functioning
- Cognitive ability
- Academic achievement
- Sensory aversions, interests and integration
- Motor
- Anxiety
- Neurocognitive processes

CABIL Core Developmental Neuropsychological Assessment Activities

- Wechsler Intelligence Scale for Children, Fourth Edition (WISC-IV) if none within last twelve months
- Wechsler Individual Achievement Test, Second Edition (WIAT-II)
- Children’s Self-perceptions of Adequacy in and Predilection toward Physical Activity (CSAPPA)
- Spence Children’s Anxiety Scale, child and parent report (SCAS)
- Short Sensory Profile (SSP)
- Five Minute Speech Sample (FMSS)
- Teacher’s anecdotal report
CABIL Supplemental Developmental Neuropsychological Assessment Activities

- Depends on areas of concern & hypotheses derived from core assessment. May include:
  - Selected measures from the
    - NEPSY- Second Edition (NEPSY-II)
    - Delis-Kaplan Executive Function System (D-KEFS)
  - Berry-Buktenica Developmental Test of Visual-Motor Integration (VMI)
  - Rey-Osterreith Complex Figure Test (R-O CFT)
  - Clinical Evaluation of Language Fundamentals, Fourth Edition (CELF-4)
  - Behavior Rating Inventory of Executive Function (BRIEF)
  - Social Communication Questionnaire (SCQ)

Processes and associated tests*

<table>
<thead>
<tr>
<th>NEUROCOGNITIVE PROCESSES</th>
<th>ASSOCIATED TESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention &amp; executive control</td>
<td>Selected subtests from WISC-IV, NEPSY-II, D-KEFS, BRIEF</td>
</tr>
<tr>
<td>Immediate recapitulation</td>
<td>Selected subtests from WISC-IV, CELF-4</td>
</tr>
<tr>
<td>Working memory</td>
<td>Selected subtests from WISC-IV, BRIEF</td>
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<tr>
<td>Memory &amp; learning</td>
<td>Selected subtests from WISC-IV, WIAT-II, NEPSY-II</td>
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</tbody>
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*This list is not comprehensive. Many tests simultaneously tap several processes.
### Neurocognitive Processes and Associated Tests

<table>
<thead>
<tr>
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<tr>
<td>Visual analysis, reasoning, synthesis &amp; construction</td>
<td>Selected subtests from WISC-IV, NEPSY-II, D-KEFS</td>
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<tr>
<td>Verbal knowledge &amp; abstract reasoning</td>
<td>Selected subtests from WISC-IV, NEPSY-II</td>
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<tr>
<td>Visual-motor production speed and efficiency</td>
<td>Selected subtests from WISC-IV, NEPSY-II, D-KEFS</td>
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<tr>
<td>Visual-motor integration</td>
<td>Berry VMI, selected subtests from NEPSY-II</td>
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<td>Planning &amp; organization</td>
<td>R-O CFT, BRIEF</td>
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<td>Gross motor screen</td>
<td>CSAPPA</td>
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<tr>
<td>Language- phonology, fluency/ word-generation, vocabulary, oral comprehension</td>
<td>Selected subtests from CELF-4, NEPSY-II, WISC-IV</td>
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<tr>
<td>Social perception</td>
<td>Selected subtests from NEPSY-II, Social Communication Questionnaire (SCQ)</td>
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