**National Best Practice Framework for Early Childhood Intervention
Outcome Measures for Services**

This a suite of outcome measures for Services and Practitioners. What is measured needs to be based on the priorities and goals of the ECI team. The **Decision-Making Guide** can support your choice, and the **Measurement Overview** provides information about choosing and using outcome measures.

# Aims for Early Childhood Intervention (ECI) services

To contribute to the development of a collaborative and integrated network of holistic support for children, parents, carers, families, communities and colleagues, and to build supportive networks with colleagues

Outcome statements

ECI Services and Practitioners:

* support children and families through collaborative and coordinated ECI teams
* are integrated in a wider network of community-based and specialist services to support children’s learning, development, participation and wellbeing
* work in partnership with community-based services to help ensure that children with developmental concerns, delay or disability and their families have access to the same services, environments and opportunities as all other children and families
* work with others to ensure the system is easy for parents, carers and families to navigate and is responsive to their individual needs
* achieve meaningful and measurable change by applying the principles and practices of the Framework
* develop and maintain positive networks amongst colleagues

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|  | | **Abbreviated Services and Practitioners Outcome Statements** | | | | | |
| **Outcome Measures** | | Support children and families through collaborative and coordinated ECI teams | Are integrated with a wider network to support children | Work in partnership with community-based services to ensure access | Work with others to ensure system easy to navigate and access | Achieve measurable change by applying Framework | Develop and maintain positive networks |
| Evidence-Based Practice Attitude Scale | [EBPAS](#_Evidence-Based_Practice_Attitude) | No | No | No | No | Yes | No |
| Family-Centered Practices Scale | [FCPS](#_Family-Centered_Practices_Scale) | Yes | No | No | No | Yes | No |
| Measures of Processes of Care | [MPOC](#_Measure_of_Processes_1) | Yes | Yes | Yes | No | No | No |

Note: Use the hyperlinked measure abbreviation to move to the information about that measure.

Yes, measure addresses this outcome area; Partial, measure provides some information about this outcome; No, this measure provides no information for this outcome.

National Best Practice Framework for Early Childhood Intervention
Outcome measures for Services



This is one measure in the **Outcome Measures for Services and Practitioners** suite. What is measured needs to be based on the priorities and goals of the children and families. The **Decision-Making Guide** can support your choice, and the **Measurement Overview** provides information about choosing and using outcome measures.

# Evidence-Based Practice Attitude Scale (EBPAS)

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| **Framework Outcomes Statement(s)** | **ECI Services:**   * achieve meaningful and measurable change by applying the principles and practices of the Framework |

# EBPAS Overview

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| **General description** | The Evidence-Based Practice Attitude Scale (EBPAS) is a tool used to assess attitudes toward adopting evidence-based practices (EBP) among service providers. It measures positive and ambivalent attitudes toward evidence-based practice implementation.  The original EBPAS has 15 items (also known as EBPAS-15). There are two extended versions (EBPAS-50 and EBPAS-36) that include additional test items and subscales.  Several adaptations have been created for use in specific contexts or professions, including disability settings (EBPAS-GEN), behaviour support practitioners (EBPAS-PBS) and teachers (S-EBPAS). |
| **Domains / subscales** | The EBPAS has four subscales: Appeal (assessing how appealing EBP are to providers), Requirements (evaluating the likelihood of adopting EBP if mandated), Openness (measuring service providers' willingness to try new interventions), and Divergence (assessing the perceived gap between research-based interventions and current practice). A total scale score measuring general attitudes towards EBP is also calculated.  The EBPAS-50 and EBPAS-36 have eight additional subscales: Limitations, Fit, Monitoring, Balance, Burden, Job Security, Organizational Support and Feedback. |
| **Cultural adaptation** | The EBPAS has been translated into several languages including Norwegian, German, Swedish, Dutch, Greek, Spanish, Turkish, and Brazilian Portuguese. |
| **Administration** | The EBPAS is a self-report scale completed by service providers and administered by researchers, service leaders, and professionals involved in the implementation of EBP. It may be administered as a paper-based scale or online survey.  The EBPAS takes approximately 10 minutes to complete. |
| **Training requirements** | No specific training is required to administer the EBPAS. |
| **How to access**  *.* | The **EBPAS** is available online through the following publication:  Aarons GA (2004). Mental health provider attitudes toward adoption of evidence-based practice: the Evidence-Based Practice Attitude Scale (EBPAS). *Ment Health Serv Res*, 6(2):61-74. https://doi.org/10.1023/b:mhsr.0000024351.12294.65  The **EBPAS-36** is available online through the following publication:  Rye M, Torres EM, Friborg O, Skre I, Aarons GA. (2017). The Evidence-based Practice Attitude Scale-36 (EBPAS-36): a brief and pragmatic measure of attitudes to evidence-based practice validated in US and Norwegian samples. *Implement Sci*, 12(1):44. https://doi.org/10.1186/s13012-017-0573-0  The **EBPAS-50** is available online through the following publication:  Aarons GA, Cafri G, Lugo L, Sawitzky A. (2012). Expanding the domains of attitudes towards evidence-based practice: the evidence based practice attitude scale-50. *Adm Policy Ment Health*, 39(5):331-40. <https://doi.org/10.1007/s10488-010-0302-3>  The **EBPAS-GEN** and **EBPAS-PBS** are available online through the following publication:  Vassos MV, Carroll MF. (2016). Assessing attitudes toward evidence-based practices of workers supporting people with disabilities: A validation of the evidence-based practice attitudes scale. *Am J Intellect Dev Disabil*, 121(4):364-78. https://doi.org/10.1352/1944-7558-121.4.364 |

# EBPAS Evidence Summary

[*Link to EBPAS Reference List*](#_EBPAS_Reference_List)

|  |  |
| --- | --- |
| **Overview** | 20 studies were identified that report on the psychometric properties of the EBPAS or its associated versions (2007-2023). |
| **Review papers** | *No references identified* |
| **Measurement properties** | The measurement properties of the EBPAS have been explored with various service provider populations in the USA, including mental health service providers across 26 states (2010), mental health service providers in 17 states (2007), a large child and family human service agency (2014), an urban child welfare service (2016), and an educational and behavioural organisation (2018). These studies examined the reliability, factor structure, criterion-related validity, and measurement invariance across different service settings.  The original 15-item EBPAS was expanded in 2012 to a 50-item version (EBPAS-50) that includes eight additional attitude domains, providing a more comprehensive assessment of provider attitudes toward adopting evidence-based practices. This was subsequently shortened in 2017 to a 36-item version (EBPAS-36) that maintains the 12-factor structure while demonstrating good psychometric properties in both US and Norwegian samples.  Adapted versions have also been developed for use with service providers supporting people with disabilities in Australia (EBPAS-GEN and EBPAS-PBS, 2016) and general education teachers in the USA (S-EBPAS, 2023). |
| **Cultural adaptation papers** | The measurement properties of the EBPAS have been explored in several countries, including Brazil (clinicians working in child and youth mental health, 2022), Greece (medical doctors, 2012), Norway (mental health practitioners, 2016), Sweden (practitioners working in child and adolescent mental health services, 2020; physiotherapists, 2019), the Netherlands (youth care professionals working in mental healthcare or child welfare institutions, 2015), and Turkey (family medicine residents, 2021).These studies have examined the reliability, factor structure, and validity of the translated versions, with most finding comparable properties to the original English version.  The EBPAS-50 has been validated with Child Welfare professionals in Spain (2015) and nurses in Turkey (2018), and the EBPAS-36 has been translated and validated with psychotherapists in Germany (2021). |
| **Outcome studies in ECI settings** | *No references identified* |

This Evidence Summary was developed with rapid synthesis methods, combining a comprehensive PubMed search, augmented literature identification, and dual reviewer screening. It represents a living resource that maps key evidence on measurement properties, cultural adaptations, and relevant applications in the ECI practice setting for each outcome measure. For complete methodology, see our Methods Explainer.

# EBPAS Reference List

[*Link to EBPAS Evidence Summary*](#_EBPAS_Evidence_Summary)

## Reviews

*No references identified*

## Measurement Properties

Merle JL, Cook CR, Locke JJ, Ehrhart MG, Brown EC, Davis CJ, Lyon AR. (2023). Teacher attitudes toward evidence-based practices: Exploratory and confirmatory analyses of the school-adapted evidence-based practice attitude scale. *Implement Res Pract*, 4. https://doi.org/10.1177/26334895221151026

Cook CR, Davis C, Brown EC, Locke J, Ehrhart MG, Aarons GA, Larson M, Lyon AR. (2018). Confirmatory factor analysis of the Evidence-Based Practice Attitudes Scale with school-based behavioral health consultants. *Implement Sci*, 13(1):116. https://doi.org/10.1186/s13012-018-0804-z

Rye M, Torres EM, Friborg O, Skre I, Aarons GA. (2017). The Evidence-based Practice Attitude Scale-36 (EBPAS-36): A brief and pragmatic measure of attitudes to evidence-based practice validated in US and Norwegian samples. *Implement Sci*, 12(1):44. https://doi.org/10.1186/s13012-017-0573-0

Keyser, D., Harrington, D., & Ahn, H. (2016). A confirmatory factor analysis of the evidence-based practice attitudes scale in child welfare. *Children and Youth Services Review*, 69:158-165. https://doi.org/10.1016/J.CHILDYOUTH.2016.08.005

Vassos MV, Carroll MF. (2016). Assessing attitudes toward evidence-based practices of workers supporting people with disabilities: A validation of the evidence-based practice attitudes scale. *Am J Intellect Dev Disabil*, 121(4):364-78. https://doi.org/10.1352/1944-7558-121.4.364

Patterson Silver Wolf DA, Dulmus, CN, Maguin E, Fava N. (2014). Refining the evidence-based practice attitude scale: An alternative confirmatory factor analysis. *Soc Work Res*, 38(1):47-58. https://doi.org/10.1093/swr/svu006

Aarons GA, Cafri G, Lugo L, Sawitzky A. (2012). Expanding the domains of attitudes towards evidence-based practice: the evidence based practice attitude scale-50. *Adm Policy Ment Health*, 39(5):331-40. https://doi.org/10.1007/s10488-010-0302-3

Aarons GA, Glisson C, Hoagwood K, Kelleher K, Landsverk J, Cafri G. (2010). Psychometric properties and U.S. National norms of the Evidence-Based Practice Attitude Scale (EBPAS). *Psychol Assess*, 22(2):356-65. https://doi.org/10.1037/a0019188

Aarons GA, McDonald EJ, Sheehan AK, Walrath-Greene CM. (2007). Confirmatory factor analysis of the Evidence-Based Practice Attitude Scale in a geographically diverse sample of community mental health providers. *Adm Policy Ment Health*, 34(5):465-9. <https://doi.org/10.1007/s10488-007-0127-x>

Aarons GA (2004). Mental health provider attitudes toward adoption of evidence-based practice: the Evidence-Based Practice Attitude Scale (EBPAS). *Ment Health Serv Res*, 6(2):61-74. https://doi.org/10.1023/b:mhsr.0000024351.12294.65

## Cultural Adaptations

Baumann AA, Vázquez AL, Macchione AC, Lima A, Coelho AF, Juras M, Ribeiro M, Kohlsdorf M, Carothers BJ. (2022). Translation and validation of the evidence-based practice attitude scale (EBPAS-15) to Brazilian Portuguese: Examining providers' perspective about evidence-based parent intervention. *Child Youth Serv Rev*, 136:106421. https://doi.org/10.1016/j.childyouth.2022.106421

Ayhan Başer D, Ağadayi E, Gönderen Çakmak S, Kahveci R. (2021). Adaptation of the evidence-based practices attitude scale-15 in Turkish family medicine residents. *Int J Clin Pract*, 75(8):e14354. https://doi.org/10.1111/ijcp.14354

Szota K, Thielemann JFB, Christiansen H, Rye M, Aarons GA, Barke A. (2021). Cross-cultural adaption and psychometric investigation of the German version of the Evidence Based Practice Attitude Scale (EBPAS-36D). *Health Res Policy Syst*, 19(1):90. https://doi.org/10.1186/s12961-021-00736-8

Santesson AHE, Bäckström M, Holmberg R, Perrin S, Jarbin H. (2020). Confirmatory factor analysis of the Evidence-Based Practice Attitude Scale (EBPAS) in a large and representative Swedish sample: is the use of the total scale and subscale scores justified?. *BMC Med Res Methodol*, 20(1):254. https://doi.org/10.1186/s12874-020-01126-4

Skavberg Roaldsen K, Halvarsson A. (2019). Reliability of the Swedish version of the Evidence-Based Practice Attitude Scale assessing physiotherapist's attitudes to implementation of evidence-based practice. *PLoS One*, 14(11):e0225467. https://doi.org/10.1371/journal.pone.0225467

Yildiz, D., Fidanci, B., Açikel, C., Kaygusuz, N., & Yildirim, C. (2018). Evaluating the properties of the Evidence-Based Practice Attitude Scale (EBPAS-50) in Nurses in Turkey. *Int J Caring Sci*, 11(2):768.

Rye M, Torres EM, Friborg O, Skre I, Aarons GA. (2017). The Evidence-based Practice Attitude Scale-36 (EBPAS-36): A brief and pragmatic measure of attitudes to evidence-based practice validated in US and Norwegian samples. *Implement Sci*, 12(1):44. https://doi.org/10.1186/s13012-017-0573-0

Egeland KM, Ruud T, Ogden T, Lindstrøm JC, Heiervang KS. (2016). Psychometric properties of the Norwegian version of the Evidence-Based Practice Attitude Scale (EBPAS): To measure implementation readiness. *Health Res Policy Syst*, 14(1):47. https://doi.org/10.1186/s12961-016-0114-3

De Paúl J, Indias S, Arruabarrena I. (2015). Adaptation of the Evidence-Based Practices Attitude Scale in Spanish child welfare professionals. *Psicothema*, 27(4):341-6. https://doi.org/10.7334/psicothema2015.67

van Sonsbeek MA, Hutschemaekers GJ, Veerman JW, Kleinjan M, Aarons GA, Tiemens BG. (2015). Psychometric properties of the Dutch version of the Evidence-Based Practice Attitude Scale (EBPAS). *Health Res Policy Syst*, 13:69. https://doi.org/10.1186/s12961-015-0058-z

Melas CD, Zampetakis LA, Dimopoulou A, Moustakis V. (2012). Evaluating the properties of the Evidence-Based Practice Attitude Scale (EBPAS) in health care. *Psychol Assess*, 24(4):867-76. https://doi.org/10.1037/a0027445

## Outcome Studies

*No references identified*

National Best Practice Framework for Early Childhood Intervention
Outcome measures for Services



This is one measure in the **Outcome Measures for Services and Practitioners** suite. What is measured needs to be based on the priorities and goals of the children and families. The **Decision-Making Guide** can support your choice, and the **Measurement Overview** provides information about choosing and using outcome measures.

# Family-Centered Practices Scale (FCPS)

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| **Framework Outcomes Statement(s)** | **ECI Services:**   * support children and families through collaborative and coordinated ECI teams * achieve meaningful and measurable change by applying the principles and practices of the Framework |

# FCPS Overview

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| **General description** | The Family-Centerd Practices Scale (FCPS) is a tool used to assess the degree to which staff in early childhood intervention centres implement family-centred therapeutic approaches. It evaluates whether staff are building positive relationships with families, involving parents in decision-making, providing appropriate information and support, and respecting family values and preferences. |
| **Ages** | The FCPS is designed for use in early childhood intervention settings working with children aged 0–6 years and their families. |
| **Domains / subscales** | The FCPS measures two constructs:1) Relational Practices and 2) Participatory Practices. |
| **Cultural adaptation** | A Spanish version of the FCPS has been developed and validated for use. |
| **Administration** | The FCPS is completed by a parent of caregiver in paper format. |
| **Training requirements** | No specific training is required to administer or score the FCPS.  A manual including information about the FCPS is available from Winterberry Press <https://www.wbpress.com/shop/technical-manual-for-measuring-and-evaluating-family-support-program-quality-and-benefits/> |
| **How to access** | In Australia, an adapted version of the FCPS is available on the Professionals and Researchers in Early Childhood Intervention (PRECI) website:  <https://www.preci.org.au/practice-tools/> |

# FCPS Evidence Summary

[*Link to FCPS Reference List*](#_FCPS_Reference_List)

|  |  |
| --- | --- |
| **Overview** | 4 studies were identified that report on the measurement properties of the FCPS or its use as an outcome measure in the ECI setting (2018-2022). |
| **Review papers** | *No references identified* |
| **Measurement properties** | *No references identified* |
| **Cultural adaptation papers** | The measurement properties of the Spanish version of the FCPS have been explored for use with families receiving ECI services, including for young children with developmental delays (2021), for children with Down Syndrome (2022) and children with autism spectrum disorder (2021).  The FCPS has been used as an outcome measure to explore the relationship between family-centred practices and parents’ psychological well-being in families recruited from ECI programs (Spain, 2019). |
| **Outcome studies in ECI settings** | *No references identified* |

This Evidence Summary was developed with rapid synthesis methods, combining a comprehensive PubMed search, augmented literature identification, and dual reviewer screening. It represents a living resource that maps key evidence on measurement properties, cultural adaptations, and relevant applications in the ECI practice setting for each outcome measure. For complete methodology, see our Methods Explainer.

# FCPS Reference List

*[Link to FCPS Evidence Summary](#_FCPS_Evidence_Summary)*

## Reviews

*No references identified*

## Measurement Properties

*No references identified*

## Cultural Adaptations

Robles-Bello MA, Sánchez-Teruel D. (2022). The Family-Centred Practices Scale: Psychometric properties of the Spanish version for use with families with children with Down syndrome receiving early childhood intervention. *Child Care Health Dev*, 48(4):634-642. https://doi.org/10.1111/cch.12970

Robles-Bello M, Sánchez-Teruel D. (2021). Psychometric properties of the Spanish version of the Family Centred Practice Scale for use with families with children with Autism Spectrum Disorder. *Child Youth Serv Rev,* 121:105863. https://doi.org/10.1016/j.childyouth.2020.105863.

Mas JM, Dunst CJ, Balcells-Balcells A, Garcia-Ventura S, Giné C, Cañadas M. (2019). Family-centered practices and the parental well-being of young children with disabilities and developmental delay. *Res Dev Disabil*, 94:103495. https://doi.org/10.1016/j.ridd.2019.103495

Mas JM, Cañadas M, Balcells-Balcells A, Giné C, Serrano AM, Dunst CJ. (2018). Psychometric properties of the Spanish version of the family-centred practices scale for use with families of young children receiving early childhood intervention. *J Appl Res Intellect Disabil*, 31(5):851-861. https://doi.org/10.1111/jar.12442

## Outcome Studies

*No references identified*

National Best Practice Framework for Early Childhood Intervention
Outcome measures for Services



This is one measure in the **Outcome Measures for Services and Practitioners** suite. What is measured needs to be based on the priorities and goals of the children and families. The **Decision-Making Guide** can support your choice, and the **Measurement Overview** provides information about choosing and using outcome measures.

# Measure of Processes of Care (MPOC)

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| **Framework Outcomes Statement(s)** | **ECI Services**:   * support children and families through collaborative and coordinated ECI teams * are integrated in a wider network to support children’s learning, development, participation and wellbeing * work in partnership with community-based services to help ensure that children with developmental concerns, delay or disability and their families have access to the same services, environments and opportunities as all other children and families |

# MPOC Overview

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| **General description** | The Measure of Processes of Care (MPOC) is designed to evaluate parents' and carers’ perceptions of the care that they and their children receive from paediatric rehabilitation services. The MPOC measures the extent to which services are family centred. The full version of the MPOC contains 56 items (MPOC-56). The short version of the MPOC contains 20 items (MPOC-20).  Note. A fully revised version of the MPOC – the 16 item MPOC 2.0 - is being developed using a collaborative co-design process.  The Measure of Processes of Care for Service Providers (MPOC-SP) is a 27-item self-assessment tool designed for paediatric service providers to measure the extent to which the services they provide are family-centred. The MPOC-SP helps service providers evaluate their own practices and identify areas for improvement in delivering family-centred care.  The MPOC-SP may be used alongside the parent / carer completed version (MPOC-20 or MPOC-56) to obtain multiple perspectives about service delivery. |
| **Context** | The MPOC is designed for parents or carers (MPOC-20; MPOC-56) or service providers (MPOC-SP) supporting children from birth to 17+ years. |
| **Domains / subscales** | The MPOC-20 and the MPOC-56 assess five domains: 1) Enabling and Partnership, 2) Providing General Information, 3) Providing Specific Information about the Child, 4) Coordinated and Comprehensive Care for the Child and Family, and 5) Respectful and Supportive Care.  MPOC 2.0 will assess four domains: 1) Supportive and Collaborative Communication, 2) Availability of Care, 3) Family Well-being; and 4) Coordinated Care.  The MPOC-SP measures four domains of family-centred care: 1) Showing Interpersonal Sensitivity, 2) Providing General Information, 3) Communicating Specific Information about the Child, and 4) Treating People Respectfully. |
| **Special considerations** | A new version of the MPOC (MPOC 2.0) is in development and due to be released in 2025. Further information about its development can be found in the following paper:  Pozniak, K., King, G., Chambers, E., Martens, R., Earl, S., Kraus de Camargo, O., McCauley, D., Teplicky, R., & Rosenbaum, P. (2024). What do parents want from healthcare services? Reports of parents' experiences with pediatric service delivery for their children with disabilities. *Disability and rehabilitation*, *46*(12), 2670–2683. <https://doi.org/10.1080/09638288.2023.2229733>  The following paper is in preparation for submission in 2025 and will provide evidence of the psychometric properties of the new tool.  King, G., Pozniak. K., Rosenbaum, P., Duku, E., Chambers, E., Kraus de Camargo, O., Martens, R., McCauley, D., Teplicky, R., Wellman-Earl, S. (under review). “New directions in measuring family-centred service: The updated Measure of Processes of Care (MPOC 2.0)”. *Disability and Rehabilitation*. |
| **Cultural adaptation** | Caregiver report versions of the MPOC (MPOC-20 and/or 56) have been adapted for use in many languages and countries including Brazil, India, South Africa, Turkey, Jordan, Korea, Japan, Slovenia, Sweden, and the Netherlands.  The MPOC-SP has been translated and adapted for use in various languages and cultural contexts, including Brazilian Portuguese, Japanese, Chinese (Taiwan), Korean, Dutch, Slovene, and Persian versions. |
| **Administration** | The MPOC is designed to be completed as a self-report measure by caregivers (MPOC-20 and MPOC-56) or service providers (MPOC-SP). It can be completed in a paper questionnaire or online survey format. Administration time is approximatively 15-20 minutes for the MPOC-20 or MPOC-56. The MPOC-SP can be completed in 10-15 minutes. |
| **Training requirements** | No specific training is required to administer or score the MPOC tools. Information to support understanding of the tool is available on the CanChild website.  <https://www.canchild.ca/en/resources/47-measure-of-processes-of-care> |
| **How to access** | The MPOC-20, MPOC-56 and MPOC-SP can be purchased from the CanChild website. These tools are available in paper (downloadable PDF) or online survey formats.  <https://canchild.ca/en/shop> |

# MPOC Evidence Summary

[*Link to MPOC Reference List*](#_Measure_of_Processes)

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| **Overview** | 46 papers were identified that report on the measurement properties of the MPOC-20, MPOC-56 or MPOC-SP, or use of these tools as an outcome measure in the ECI practice setting (1996-2025). |
| **Review papers** | A systematic review and meta-analysis of the research on the MPOC-SP has been performed to determine the extent service-providers of children with developmental disabilities perceive while they provided family-centred care (2021).  Another review was identified that included a systematic search of papers citing any version of the MPOC over 20 years of research (2014). |
| **Measurement properties** | The measurement properties of the MPOC-56 have been explored with parents of children with chronic health problems (Canada, 1996), parents of children hospitalised with head injury (USA, 1999), parents of children receiving care in paediatric rehabilitation centres (Netherlands, 2004), and parents using child disability services in rural and urban communities where there are no Child Development Centres (UK, 2003).  The MPOC-20 was derived from the MPOC-56 with the aim of improving utility and its ability to discriminate between programs with different delivery models (Canada, 2004). Its measurement properties have been described for 4- to 12-year-old children with epilepsy (Canada, 2016). The MPOC-SP was also derived from the MPOC-56; its measurement properties have been described in a development study (Canada, 2010).  Measurement properties of the MPOC-2.0 have not yet been published and are anticipated to be available in 2025. |
| **Cultural adaptation papers** | The measurement properties of the MPOC-56 have been explored in Sweden (families served by four habilitation centres, 2004) and the Netherlands (parents of children from nine rehabilitation centres, 2004).  The measurement properties of the MPOC-20 have been explored in multiple cultural settings with different caregiver groups, including China (children with cerebral palsy, 2015); Iceland (children with physical disability, 2012); India (children with developmental disabilities, 2022); Jordan (children with cerebral palsy, 2014); Korea (rehabilitation services, 2018); Malaysia (children with neurodevelopmental disabilities, 2020); Netherlands (children from rehabilitation centres, 2007); Norway (children receiving rehabilitation, 2012); Slovenia (children admitted as inpatients or outpatients, 2015); and South Africa (children with cerebral palsy in resource-poor settings, 2009). These studies reported on reliability (internal consistency and test-retest) and validity (construct, concurrent, and convergent) across diverse cultural contexts. While most adaptations maintained the original structure, some required modifications to improve cultural relevance, with South Africa developing a shortened 8-item version specifically for resource-constrained settings.  Several studies have examined the measurement properties of multiple versions of the MPOC tools across different cultural settings including Brazil (MPOC-20 and MPOC-SP in rehabilitation centres, 2020); Finland (MPOC-20 and MPOC-SP for children with cerebral palsy, 2012); Japan (MPOC-56 and MPOC-20 for rehabilitation services, 2013; MPOC-20 and MPOC-SP for preterm infants, 2017); and Turkey (MPOC-56 and MPOC-20 for children with disability, 2023). These comparative studies explored family-centred care from both parent/carer and service provider perspectives.  The measurement properties of the MPOC-SP have been explored in multiple cultural settings with different professional groups, including Finland (multidisciplinary rehabilitation teams for children with cerebral palsy, 2012); Israel (occupational and physical therapists, speech pathologists, and special education teachers in family-centred care training, 2019); Japan (multidisciplinary teams in neonatal intensive care units, 2015); Singapore (teachers, therapists, psychologists and social workers in early intervention programmes, 2012); Slovenia (seven professional groups from hospitals and health centres, 2020); South Korea (rehabilitation service providers, 2022); Spain (early childhood service professionals, 2025); Taiwan (physical therapists, occupational therapists, speech-language pathologists, social workers and early childhood educators, 2017); the Netherlands (paediatric rehabilitation service providers, 2006; professionals supporting people with profound intellectual and multiple disabilities, 2014; professionals providing rehabilitation and educational services to children with cerebral palsy, 2008); and the United Arab Emirates (health professionals involved in disability diagnosis, referral and ongoing support, 2024). These studies report on reliability (internal consistency and test-retest) and validity (construct, concurrent, and content) across diverse cultural contexts. |
| **Outcome studies in ECI settings** | The MPOC-56 and MPOC-SP have been used as outcome measures to evaluate services received from the Cerebral Palsy Association of Western Australia (Australia, 2006) and to explore the acceptability and feasibility of collaborative coaching training to improve family centredness within acute paediatric rehabilitation (Canada, 2017).  The MPOC-20 has been used as an outcome measure in evaluating: a community-based, parent-mediated QuickStart early intervention program for toddlers with or at risk for autism spectrum disorder (Canada, 2023); a programme evaluation of applied behaviour analysis services for children with autism spectrum disorder (Canada, 2018); and a study exploring family-centred care and therapist communication in an early intervention program using the Intentional Relationship Model (USA, 2023).  No studies yet available for MPOC 2.0. |

This Evidence Summary was developed with rapid synthesis methods, combining a comprehensive PubMed search, augmented literature identification, and dual reviewer screening. It represents a living resource that maps key evidence on measurement properties, cultural adaptations, and relevant applications in the ECI practice setting for each outcome measure. For complete methodology, see our Methods Explainer.

# MPOC Reference List

[*Link to MPOC Evidence Summary*](#_MPOC_Evidence_Summary)

#### Note. The reference lists have not been separated by MPOC version as many studies related to more than one version.

## Reviews

Gao Y. (2021). Service providers’ perception of providing family-centered care for children with developmental disabilities: A meta-analysis. *International Journal of Disability, Development and Education*, 70(5):722-734.doi:10.1080/1034912X.2021.1921124. https://doi.org/10.1080/1034912X.2021.1921124

Cunningham BJ, Rosenbaum PL. (2014). Measure of Processes of Care: A review of 20 years of research. *Dev Med Child Neurol*, 56(5):445-52. https://doi.org/10.1111/dmcn.12347

## Measurement Properties

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