

CALMA Psychometrics

Title	Description	Language	Psychometrics	Reference
Parent Asthma Self-Efficacy Scale and the Child Asthma Self-Efficacy Scale (SE)	Questions address various aspects of attack management and prevention (e.g., How sure are you that you can use an inhaler correctly?). Sub-scales have demonstrated positive relationships to measures of health status, and negative relationships to measures of asthma symptoms (Bursch et al., 1999).		<p>Parent Asthma Self-efficacy (13 items): Cronbach's alpha = .87</p> <p>With subscale of attack prevention (6 items): Cronbach's alpha = .77</p> <p>With subscale of attack management (7 items): Cronbach's alpha = .82</p>	<p>Bursch, B., Schwan-kovksky, L., Gilbert, J. & Zeiger, R. (1999). Construction and Validation of Four Children Asthma Self-Management Scales: Parent barriers, Child and Parent Self- Efficacy, and Parent Belief in Treatment Efficacy. <i>Journal of Asthma</i>, 36(1): 115-128</p> <p>Sierra-Monge JJ, del Río-Navarro BE, Alvarez-Amador M, Blandon-Vijil V, Chico-Velasco RG. (2004).The quality of life of the asthmatic child caregiver. <i>Gac Med Mex</i>. 140(2):139-45.</p>
Pediatric Asthma Caregiver's Quality of Life Questionnaire (PACQLQ)	Quality of life will be measured with the Juniper Pediatric Asthma Care Quality of Life Questionnaire (PACQLQ) (Juniper et al., 1999). The instrument measures problems experienced by parents of asthmatic children, and caregivers' concern about activity limitations and emotional function. The instrument can detect quality of life changes in those patients and caregivers who altered their health status either as a result of treatment or natural fluctuations in their asthma ($p < .001$), and can differentiate these patients and caregivers from those who remained the same ($p < .0001$) (Juniper et al., 1996).		<p>The reliability of the PACQLQ in normal samples is adequate (ICC = 0.84).</p> <p>Internal consistency (Cronbach's a) for overall impact and for each subscale ranges from 0.60-0.88.</p>	<p>Juniper EF, Guyatt GH, Feeny DH, Ferrie PJ, Griffith LE, Townsend M. (1996). Measuring quality of life in the parents of children with asthma. <i>Qual Life Res</i>. 5(1):27-34.</p>
Family Empowerment Scale	Family Empowerment Scale (FES), design to assess empowerment in parents and other family caretakers whose children have emotional disabilities. One of the Family Empowerment Scale's three dimensions is intended to tap the family's feeling of empowerment in relationship to the system. A summary score is generated for this dimension. The entire test consists of 34 Likert questions, 12 of which are concerned with the service system (these questions are intermingled with the other questions. Item content was based on a conceptual framework consisting of two keys dimensions: the level of empowerment and the way it is expressed.		<p>Internal consistency (alpha of the service system dimension was .87 (Koren, DeChillo & Friesen)</p> <p>Test-Reliability of the same dimension was .77</p>	<p>Koren, P.E., DeChillo, N., & Friesen B.J. (1992). "Measuring empowerment in families whose members have disabilities: A brief questionnaire." <i>Rehabilitation Psychology</i>, 37(4): 305-321.</p>
Beck Depression Scale (BDI)	A 21-item scale designed and validated to measure the severity of depressive symptoms (Beck et al., 1979; Beck et al., 1988) or symptom assessment in clinical		<p>The BDI has been translated and adapted into Spanish and high internal consistency (alpha-.88-.89)</p>	<p>Beck, A.T, Rush, A. J., Shaw, B. F, & Emery, G. (1979) Cognitive therapy of depression. Guilford Press,</p>

	settings.		of this Spanish version has been reported for Puerto Rican adults and adolescents (Bonilla et al., 2004; Scharrón-del Río, Bernal & Ramírez, 2002).	New Cork. (Traducción de The Psychological Corporation, 1993). Scharrón-del Río MR, Bernal G, & Ramírez R. (2002). Latent factor structure of the Spanish Language Beck Depression Inventory (BDI-S): Confirmatory Factor Analysis in a Non-clinical Puerto Rican Sample. <i>J Clin Psychology</i>
Center for Epidemiological Studies of Depression Scale (CES-D)	The CES-D is a brief questionnaire that assesses the frequency and duration of the symptoms associated with depression. . Specifically, the “scale was designed to measure the current level of depressive symptomatology, with emphasis on the affective component, depressed mood” (Radloff, 1977, p385). The CES-D Scale can be either self-administrative or interviewer administered. Subjects were asked to indicate how frequently in the past week they experienced a particular symptom: “rarely or none of the time” (0); “some or little of the time” (1); “a moderate amount of time”(2) and “most or all the time”(3). Scores range from 0 to 60.		Internal consistency reliability is generally in the .8 to .9 range and test-retest stability is .5-.6 over follow up periods. Internal consistency: Coefficient alpha (Spearman-Brown, split-halves) General population = 0.85 Patient sample = 0.90 (Radloff, 1977)	Radloff, S.L. (1977). The CES-D scale: A self-report depression scale for research in the general population. <i>Applied Psychological Measurement</i> , 1(3):385-401 Posner, S., Steward, S.L., Marin, G., & Perez-Stable, E. (2001). Factor variability of the CES-D Among Urban Latinos. <i>Ethnicity and Health</i> , 6(2): 137-144. Vera, et all (1991). Depressive Symptoms among Puerto Rican: Island Poor Compared with Residents of the New Cork City Area. <i>American Journal of Epidemiology</i> , 134(5):502-510 Andresen EM, Malmgren JA, Carter WB, Patrick DL. (1994). Screening for depression in well older adults: evaluation of a short form of the CES-D (Center for Epidemiologic Studies Depression Scale). <i>Am J Prev Med</i> .10(2): 77–84
Asthma Assessment Form	This measure is based on The Rosier Scale (1994) was used to generate a measure of asthma functional impact and was used to generate an asthma severity rating according to NHLBI guidelines by a pediatric asthma specialist. This measure has been used in other studies by the Childhood Asthma Research Program (e.g., Project Game, Symptom Perception study, etc.). This measure gathers information about the child’s asthma symptoms that have occurred over the last 4 weeks and the past 12		Validity?	Rosier MJ, Bishop J, Nolan T, Robertson CF, Carlin JB, Phelan PD. (1994). Measurement of functional severity of asthma in children. <i>Am J Respir Crit Care Med</i> . 149(6):1434-41.

	months. Data from this measure will inform both the clinician's formulation of level of severity and the GINA severity category. In addition, several questions from this measure will contribute to the child's overall level of functional limitation and specific indices of morbidity will be collected.			
Family Asthma Management System Scale (FAMSS)	The FAMSS is a semi-structured interview, administered to parents and children with asthma, which assesses asthma knowledge and management practices. Areas of inquiry include the family's knowledge of the child's illness and medication regimen; knowledge of preventive steps to take and the extent to which of these are taken; knowledge of what to do when the child wheezes and usual behavioral response; threshold for seeking medical care and timeliness in doing so; adequacy of care provided by alternative caregivers; <i>adherence with the physician's medication recommendations</i> ; parents' psychological resources, and overall collaboration with their physician. Findings indicate a significant negative relationship between effective asthma management (as measured by the FAMSS summary score) and low functional severity of asthma (asthma symptom) scores.		Validity for the measure has been established Klinnert et al. (70). The FAMSS has been demonstrated to be internally consistent ($\alpha=0.91$). Inter-rater reliability for the summary score was $r=0.97$.	Klinnert, M.D., McQuaid, E.L., & Gavin, L.A., (1997). Assessing the family asthma management system. <i>Journal of Asthma</i> , 34(1), 77-88.
The Childhood Asthma Control Test (C-ACT)	The Childhood Asthma Control Test (C-ACT) (Nathan et al., 2004) is a unique seven question quiz developed for caregivers, parents, or healthcare providers to assess asthma control in children four to 11 years of age. The test is also consistent with asthma treatment guidelines established by the National Heart, Lung, and Blood Institute (NHLBI) for patients with asthma. Several studies have documented (ACAAI, 2005; SRBI, 2004) have documented that the C-ACT is not only reliable but reliable (classifying 72% of cases) but also accurate in its assessment.		The internal consistency reliability of the 5-item ACT scale is 0.84 and was established by Nathan, et al, 2004.	Nathan RA, Sorkness CA, Kosinski M, Schatz M, Li JT, Marcus P, Murray JJ, Pendergraft TB. (2004). Development of the asthma control test: a survey for assessing asthma control. <i>J Allergy Clin Immunol</i> . 113(1):59-65.
Caregiver Asthma Knowledge Survey instrument	ZAP asthma is a consortium of community, industry, academic, and government institutions with an office based in Georgia in the Atlanta Empowerment Zone (AEZ). ZAP seeks to improve the lives of families in the AEZ who are affected by asthma. Asthma knowledge is measured by a two sets of scores, one based on the caregivers' responses to questions about asthma triggers (18 items addressing agree/disagree statements assessing awareness of things that may worsen asthma). The other is based on their responses to questions about symptoms and treatment (17 items addressing agree/disagree statements assessing awareness of information about the features and treatment of asthma).			Williams SG, Brown CM, Falter KH, Alverson CJ, Gotway-Crawford C, Homa D, et al. (2006). Does a multifaceted environmental intervention alter the impact of asthma on inner-city children? <i>J Natl Med Assoc</i> . 98(2):249-60.

<p>Patient Provider Communication</p>	<p><i>Patient Provider Communication</i> measure includes 11 (yes or no response) items on topics recommended by the NAEPP guidelines as important to discuss with primary care providers (PCP). Items were summed to form an Overall Communication Score and a median split was used to categorize communication as 'High' or 'Low' communication. "At your child's last asthma visit with his/her PCP, did you talk about whether the asthma medicines are helping child?", "When PCP makes changes in treatment, do you talk about how it might get in the way of your daily routine or lifestyle?" are some example of items included.</p>		<p>Overall Communication Score ($\alpha = .74$ in original measure and $\alpha = 0.87$ in our study Spanish version)</p> <p>Cronbach's alpha = .074.</p>	<p>Butz, AM., Riekert, KA., Eggleston, P, Winkelstein, M, Thompson, RE., & Rand, C. (2004). Factors Associated with Preventive Asthma Care in Inner-City Children. <i>Clinical Pediatrics</i>, 43(8): 709-719</p> <p>Butz AM, Huss K, Mudd K, Donithan M, Rand C, Bollinger ME. (2004). Asthma management practices at home in young inner-city children. <i>J Asthma</i>. 41(4):433-44.</p>