Lay abstract: People with autism experience a multitude of challenges in social, educational and occupational areas of life. While diagnostic systems are widely used in health care and science to define and classify the characteristics of autism as such, there are to date no internationally accepted tools established or applied to systemize the impact of autism on these important aspects of daily functioning and quality of life. The World Health Organization has developed a nomenclature, the International Classification of Functioning, Disability and Health (ICF), that is suitable for this purpose. However, the ICF is comprehensive which makes it difficult and time-consuming for practical use. To address this limitation, the development of ICF "Core Sets" is helpful. Core Sets are shortlists of ICF categories pertinent to specific health conditions. Their development involves a rigorous international scientific procedure aimed at reducing the number of ICF categories to those that are most significant for a given condition. This study aimed to identify Core Sets for autism. Based on evidence from four global transdisciplinary preparatory studies, 20 international autism experts met for a consensus conference to select the most relevant ICF categories to constitute the autism Core Sets. The consensus process generated a standard Core set for autism, as well as brief Core Sets for preschool children, school-age children as well as older adolescents and adults. Compared to the current common assessment of autism, the Core Sets particularly emphasize the role of participation and the responsibility of the environment for the functioning and life quality of autistic individuals. The accessibility of autism Core Sets marks a milestone towards an improved and more holistic understanding of autism, assessment, and intervention planning, and offers novel options for tailored calculations of health related costs.