Phenylketonuria (PKU) is the model disease in the domain of inborn errors of metabolism. At present there are 4 published national guidelines from the UK, Germany, USA and France that have been developed following systematic procedures. The UK National Society for PKU has supplemented the British guideline by a manual describing the management of PKU patients. In addition, many other countries follow informal – non published - recommendations for age graded target values for phenylalanine levels. Surprisingly, although all these guidelines and recommendations more or less rely on the same body of research, they show substantial variability. The clinical validity as well as the application of these guidelines still remains to be demonstrated, although there are first attempts in this direction.

The content of these guidelines will be reported and it will be shown how the optimal guideline – based on the best scientific and clinical evidence - for PKU could be developed by an international guideline group with members originating from three professional backgrounds: (1) clinicians and managers with clinical experience and administrative power who will be ready to implement and apply the guideline, (2) content experts with knowledge in relevant domains (medicine, biochemistry, dietetics, psychology, evidence based medicine), and (3) guideline experts ensuring a rigorous project management. Such a guideline should not only deal with the diagnosis and treatment of PKU as a nosological entity but also the management of the patient, his/her family as well with the central legal and social aspects of their daily life. Last not least an optimal guideline also cares for the scientific progress of diagnosis, treatment and care by providing data bases for benchmarking of patients, treatments, treatment centres as well as the guideline itself.