New Northwestern Medicine project aims to understand effects of asthma, eczema on children

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A new Northwestern Medicine project, "Asthma and Atopic Dermatitis Validation of PROMIS Pediatric Instruments" (AAD-PEPR), will focus on two common childhood diseases that affect almost 25 percent of American children under age 18.

Both conditions can have a profound effect on the child's quality of life and functioning. It is not easy, however, to objectively measure that effect and compare it among different children. Researchers and clinicians have to rely on the child's and the parents' or caregivers' reports to evaluate how profoundly these diseases affect a child.

In order to measure the effects in a scientific way, the Patient Reported Outcomes Measurement Information System (PROMIS) was created. PROMIS contains hundreds of questionnaires or tools that measure what patients are able to do and how they feel by asking them the questions. However, these tools were created for use with the general population, and it is not known how precise and useful they are when used with children suffering from certain medical conditions.

Richard Gershon, a professor in medical social sciences at Northwestern University Feinberg School of Medicine, and Dr. Amy Paller, the Walter J. Hamlin Professor and chair of dermatology, also at Feinberg, are co-principal investigators on the study.

AAD-PEPR will take some existing PROMIS tools, as well as create an important new tool to assess itch, and will test their effectiveness with several large groups of children diagnosed with asthma and atopic dermatitis (eczema). Scientists hope the project will provide researchers and physicians with better ways to quickly and reliably assess the impact these two conditions have on lives of the young patients.

Asthma is a chronic lung disease that inflames and narrows the airways, according to the National Institutes of Health (NIH). Asthma causes recurring periods of wheezing, chest tightness, shortness of breath and coughing. Eczema affects more than 10 percent of children and usually begins during the first year of life, according to the American Academy of Dermatology. The red, dry scaling patches of the condition are often so itchy that children cannot sleep.

Source: Northwestern University