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The Development of the Pediatric Migraine Action Plan (Ped-MAP)

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The Migraine Action Plan (MAP) was first introduced in February 2018¹. While headache specialists have used action plans for several years, the MAP was the first standardized plan to be published and widely disseminated. The MAP established a uniform format and defined the essential elements of a plan including a specific headache diagnosis, a preventive treatment plan, a home acute treatment strategy, and an emergency department (ED) treatment plan. Its check-box format facilitated rapid completion and gave clinicians evidence-based treatment options for acute treatment of headaches at home and in the ED.

The Pediatric and Adolescent Headache Special Interest Group (SIG) of the American Headache Society reviewed and discussed the MAP at its Scientific Meeting in June 2018. Some of the SIG members felt that the MAP was too visually and linguistically complex for pediatric audiences to understand and follow accurately. Others felt that a pediatric plan should emphasize a wider array of prevention options including lifestyle modification and psychological interventions, and that both medical and non-medical management strategies were needed to effectively manage headaches at home and at school².

Over the following year, a SIG workgroup met in person and via electronic correspondence to adapt the MAP for use in pediatric patients. Goals of the pediatric version were to align the content with the current evidence for pediatric migraine management, reach a consensus in areas where evidence was lacking, and to make the format easy for pediatric patients and their caregivers to understand and follow. With conflicting evidence surrounding the use of pharmacologic strategies to prevent pediatric migraine², the workgroup recommend that

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providers consider lifestyle modification and cognitive behavior therapy (CBT) either in place of or in addition to medications or dietary supplements. Numerous revisions were required to arrive at a consensus for the recommendations and format of the document.

The workgroup endeavored to make the plan easy for families to read and follow by using plain language and bullet points wherever possible³. It adopted the stoplight format used in asthma action plans to make the appearance more familiar to both pediatric providers and school nurses⁴. The plan's Green Zone provides ample space to define a multimodal prevention strategy. The Yellow Zone emphasizes the need for acute medicine(s) to be taken immediately at the onset of a headache and provides a space to define an alternative strategy that can be used for specific circumstances or as a backup plan. The Red Zone advises patients to call for help if their headache is much more severe or persistent than usual and to go to the ED if they experience new stroke-like symptoms.

The Peds-MAP format requires that only the left side of the document be completed to create a customized plan for each patient. The right side of the document gives families and school nurses generic interventions to consider when implementing the plan at home or school. It provides clinicians with strategies and clinical indicators to help them adjust the plan to match the patient's headache severity and level of disability^{2,5}.

The reverse side of the document provides families with a toolbox of strategies that can be used to better manage headache at home, at school and in life. Biobehavioral interventions like cognitive behavior therapy (CBT) and biofeedback are described. Lifestyle habits that promote brain balance (homeostasis) are outlined along with specific websites that families can use to develop a more personalized prevention plan^{6,7}. Finally, a menu of potential modifications is provided to help schools and families develop effective 504 plans to help students with migraine function better at school.

It is our hope that the Peds-MAP will be useful to children and adolescents, their caregivers, pediatric and family medicine providers, and school nurses across the country. We welcome users to adapt it for their individual programs and needs.

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