Standardizing Patient Care at the Children’s Hospital at Lehigh Valley Health Network: Assessing the Need for a Pediatric Migraine Clinical Pathway

Kelli Dunker MS4  
*:USF MCOM-LVHN Campus, kelli.dunker@lvhn.org*

Melissa L. Brannen MD  
*:Lehigh Valley Health Network, melissa_l.brannen@lvhn.org*

Follow this and additional works at: [http://scholarlyworks.lvhn.org/select-program](http://scholarlyworks.lvhn.org/select-program)

Part of the [Medical Education Commons](#)

Published In/Presented At


This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.
Standardizing Patient Care at the Children’s Hospital at Lehigh Valley Health Network: Assessing the Need for a Pediatric Migraine Clinical Pathway

Kelli Dunker, MS4 and Melissa Brannen, MD
Lehigh Valley Health Network, Allentown, PA

Introduction and Problem Statement

- Clinical pathways are evidence-based management plans that guide providers in decision-making, with regard to specific diseases, with the goal of standardizing care.
- Based upon studied prevalence, headache and migraine rank in the top five health problems of childhood.
- Currently, there is no clinical pathway for pediatric migraine patients at LVHN.
- This quality improvement project seeks to determine if a pediatric migraine pathway is necessary at this time, based upon patient volume, variability in the current state of management, and provider perceptions.

Methodology

- A literature review regarding headache and migraine management and existing clinical pathways was conducted.
- A 19-question survey was created, piloted, and distributed to pediatric care providers to assess perception of the current state.
- A retrospective chart review of pediatric patients admitted to LVHN with headache or migraine from January 2014 to July 2015 was completed to analyze the true current state.

Selected Survey Responses

- **Literature review:** yielded consistent set of management recommendations, LVHN's clinical practice guideline, and prototype pathways created at CHOP.
- **Survey:** Fifty nine respondents believe that the greatest variability in care is first-line medication prescription. One hundred percent would support pathway development.

Results

- **Chart review:** Fifty one of the 345 patients who presented to the ED with headache/migraine were admitted and were therefore included.
- The mean age was 13, and 63% of the population was female.

- Despite the general recommendation against routine imaging and neurology consult, 75% and 55% of the patients received them, respectively
- Twenty five percent received recommended adjunctive therapies (decreased light/noise, child life, nutrition, psychiatry consult) on the floor.
- There was no significant difference in management between pediatric and adult-trained emergency medicine physicians.
- ED length of stay was shorter (5.28 hours vs. 6.06 hours) when pain was reassessed within 45 minutes and for those who received adjunctive therapies (5.25 hours vs. 5.96 hours).

Conclusions and Future Implications

- It is recommended that pediatric migraine clinical pathway development move forward.
- A team of key stakeholders should be assembled to review the results of this project and to create action items for pathway creation.
- Areas for improvement include standardizing first-line medications, using anti-emetics for all nauseous patients, using adjunctive therapies, documenting clear indications for imaging studies and neurology consults, and overall documentation of key diagnostic criteria.