# Health care utilization associated with pediatric chronic pain

NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.\*\*

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## Background

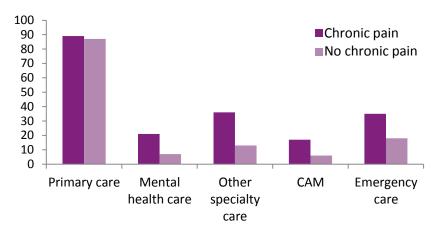
- ➤ The population prevalence of pediatric chronic pain is not well characterized, due to lack of nationally representative data.
- ➤ Pediatric chronic pain prolongs inpatient stay and increases hospitalization costs, but the population-level association between chronic pain and health care utilization is unclear.
- ➤ We used national survey data to describe the prevalence of pediatric chronic pain, and compare health care utilization among children ages 0-17 years by presence of chronic pain.

## Methods

- ➤ Secondary analysis of de-identified data from 2016 National Survey of Children's Health (NSCH), exempt from IRB review.
- ➤ NSCH surveyed caregivers of children 0-17 years, collecting data on health status and health care utilization.
- ➤ Outcome data included any use in past 12 months of: primary care, mental health care, specialty care other than mental health care, complementary and alternative medicine (CAM), and emergency care.
- Chronic pain defined as: "frequent or chronic difficulty [with] repeated or chronic physical pain, including headaches or other back or body pain?" OR moderate or severe headache reported.

# Results

**Health care utilization by presence of chronic pain** (weighted %)



#### Adjusted associations between chronic pain and health care utilization

	OR	95% CI	Р
Primary care	1.4	(1.0, 1.9)	0.052
Mental health care	0.9	(0.6, 1.2)	0.446
Other specialty care	2.0	(1.6, 2.5)	<0.001
CAM	2.3	(1.8, 3.0)	<0.001
Emergency care	1.6	(1.3, 2.0)	<0.001

Multivariable logistic regressions adjusting for survey weights and complex sampling design. Covariates included physical comorbidities, mental health comorbidities, child's age, child's gender, child's race/ethnicity, parents' educational attainment, type of insurance coverage, family income, language spoken in the home, caregiver-reported general health status of the child, and state of residence.

#### Results

- ➤ 43,712 children included in analysis; 6% had chronic pain.
- Common physical comorbidities of chronic pain: allergies (42%), asthma (21%), and heart conditions (4%).
- ➤ Common mental health comorbidities of chronic pain: anxiety (23%), ADHD (17%), and depression (13%).
- ➤ After multivariable adjustment, children with chronic pain were more likely to use **emergency care**, **specialty care other than mental health care**, **and CAM**.

## Discussion

- > Estimated 6% population prevalence of pediatric chronic pain associated with functional limitation.
- ➤ High use of emergency care among children with chronic pain may be related to poor control of chronic pain in this population.
- ➤ High use of CAM among children with chronic pain may be related to high acceptance of CAM for treating chronic pain.

### References

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