

# Proposed National Patient Safety Goal on Pediatric Computed Tomography (CT) Imaging

Ambulatory Health Care (AHC), Critical Access Hospital (CAH), and Hospital (HAP) Accreditation Programs

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## NPSG.17.01.01

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1 AHC Improve the appropriate use of computed tomography (CT) imaging of the head and chest for pediatric  
2 patients.

***Rationale for NPSG.17.01.01***

3 CT imaging is often used for pediatric patients with head trauma. When used properly, CT imaging  
4 saves lives. However, children are more susceptible than adults to the effects of ionizing radiation, so it  
5 is important to eliminate unnecessary radiation exposure. This can be achieved by the use of guidelines  
6 to determine when CT examinations are necessary for minor pediatric head trauma and when dual  
7 phase CT exams of the head and chest are needed for pediatric patients.

8 CAH Improve the appropriate use of computed tomography (CT) imaging of the head and chest for pediatric  
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## Elements of Performance for NPSG.17.01.01

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### EP Text for NPSG.17.01.01, EP 1

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22 AHC 1. Implement evidence-based practices for CT imaging of pediatric patients with minor head trauma.  
23 Note: Organizations are expected to adopt evidence-based practices such as the Pediatric  
24 Emergency Care Applied Research Network's (PECARN) Childhood Head Trauma: A Neuroimaging  
25 Decision Rule, which predicts the need for brain imaging after pediatric head injury.

26 CAH 1. Implement evidence-based practices for CT imaging of pediatric patients with minor head trauma.  
27 Note: Critical access hospitals are expected to adopt evidence-based practices such as the Pediatric  
28 Emergency Care Applied Research Network's (PECARN) Childhood Head Trauma: A Neuroimaging  
29 Decision Rule, which predicts the need for brain imaging after pediatric head injury.

## Ambulatory Health Care (AHC), Critical Access Hospital (CAH), and Hospital (HAP) Accreditation Programs

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- 30 HAP 1. Implement evidence-based practices for CT imaging of pediatric patients with minor head trauma.  
31 Note: Hospitals are expected to adopt evidence-based practices such as the Pediatric Emergency  
32 Care Applied Research Network's (PECARN) Childhood Head Trauma: A Neuroimaging Decision  
33 Rule, which predicts the need for brain imaging after pediatric head injury.

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### EP Text for NPSG.17.01.01, EP 2

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- 34 AHC 2. Implement criteria for the appropriate use of dual-phase CT examinations (with and without contrast)  
35 of the head and chest for pediatric patients.
- 36 CAH 2. Implement criteria for the appropriate use of dual-phase CT examinations (with and without contrast)  
37 of the head and chest for pediatric patients.
- 38 HAP 2. Implement criteria for the appropriate use of dual-phase CT examinations (with and without contrast)  
39 of the head and chest for pediatric patients.

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### EP Text for NPSG.17.01.01, EP 3

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- 40 AHC 3. Monitor compliance with the evidence-based practices in EP 1 and the criteria in EP 2 of this NPSG  
41 for pediatric CT imaging.
- 42 CAH 3. Monitor compliance with the evidence-based practices in EP 1 and the criteria in EP 2 of this NPSG  
43 for pediatric CT imaging.
- 44 HAP 3. Monitor compliance with the evidence-based practices in EP 1 and the criteria in EP 2 of this NPSG  
45 for pediatric CT imaging.

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### EP Text for NPSG.17.01.01, EP 4

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- 46 AHC 4. Establish goals for compliance with the evidence-based practices identified in EP 1 and the criteria in  
47 EP 2 of this NPSG and take steps to improve when performance does not meet these goals.
- 48 CAH 4. Establish goals for compliance with the evidence-based practices identified in EP 1 and the criteria in  
49 EP 2 of this NPSG and take steps to improve when performance does not meet these goals.
- 50 HAP 4. Establish goals for compliance with the evidence-based practices identified in EP 1 and the criteria in  
51 EP 2 of this NPSG and take steps to improve when performance does not meet these goals.