

Model predicts which pediatric ER patients likely to be admitted

April 26 2017



(HealthDay)—A new model can accurately predict pediatric patient

hospitalization early in the emergency department encounter by using data commonly available in electronic medical records, according to a study published online April 25 in *Pediatrics*.

Yuval Barak-Corren, M.D., from Boston Children's Hospital, and colleagues retrospectively analyzed all visits to the Boston Children's Hospital emergency department from July 2014 through June 2015. Half of the data were used to derive a model for early prediction of hospitalizations, and half of the data were used for model validation.

Based on analysis of 59,033 patient visits (11,975 hospitalized cases and 47,058 discharged controls), the researchers found that using data available within the first 30 minutes after presentation, the model identified 73.4 percent of the hospitalizations with 90 percent specificity and 35.4 percent of hospitalizations with 99.5 percent specificity (area under the curve, 0.91). The [emergency department](#) could potentially save 5,917 hours per year, or 30 minutes per hospitalization, by applying this model in a real-time setting.

"Such early identification can be used to advance patient placement processes and shorten ED boarding times," conclude the authors.

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2017 [HealthDay](#). All rights reserved.

Citation: Model predicts which pediatric ER patients likely to be admitted (2017, April 26) retrieved 25 April 2024 from <https://medicalxpress.com/news/2017-04-pediatric-er-patients.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is

provided for information purposes only.