**Project Title:** Evaluation of clinical decision rules for paediatric appendicitis as a novel way to predict those who are at low risk for appendicitis  
**Code:** CHW22

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<th><strong>Host School/ Institute</strong></th>
<th>The Children's Hospital at Westmead Clinical School</th>
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<tr>
<td><strong>Address:</strong></td>
<td>The Children's Hospital at Westmead, Cnr Hawkesbury Rd &amp; Hainsworth St, Westmead, 2145</td>
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**URL:** [http://www.kidsresearch.org.au/](http://www.kidsresearch.org.au/)

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**Project Type:** Data Analysis, Clinical

**Project Category:** Paediatrics/Child Health, Surgery, Emergency Medicine

**Project Keywords:**
1. Appendicitis  
2. Clinical decision rules

**Project Description:**

Appendicitis is the most common surgical emergency surgery in children but it can be difficult to diagnose. If missed there is potential for adverse outcomes, so doctors and parents increasingly request invasive and expensive investigations transfer children for expert paediatric surgical assessment in children’s hospitals. Not all children need either hospital transfer or extensive investigations. We are aiming to identify a scoring system that will recognise when a patient is at low risk and can safely go home without further investigation. This will reduce the need for some tests, the associated expense and inconvenience of transfer to a paediatric hospital.

This study has collected information required for clinical decision rules to then apply prospectively. Clinicians complete an electronic report form for consecutive patients presenting to ED with possible appendicitis including presenting symptoms, signs and results of blood investigations. The primary outcome measure is safe discharge of patients without appendicitis.

This project will look at the utility of this clinical decision rule that has been in practice. Further it will look at differences in patients between local and referring hospitals to assess the feasibility of wide spread implementation across NSW.

We aim to demonstrate that existing clinical decision rules for paediatric appendicitis can be developed in a novel way to predict those who are at low risk for appendicitis. Risk stratification can guide further investigation and management, providing reassurance that low risk patients do not need further imaging or expert surgical review. This standardisation of care has significant implications for cost saving, reducing adverse events associated with unnecessary imaging and preventing the unnecessary transfer of patients to paediatric centres.