

## Web report **Isabel**

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**Website** Isabel

**URL** <http://www.isabel.org.uk>

**Cost** Free to any registered health care practitioner

**Keywords** algorithms, critical care, diagnosis, pediatrics

Isabel (owned and developed by The Isabel Medical Charity, a UK registered charity) is a new pediatric online tool designed with the primary intention of decreasing potential medical errors when caring for critically ill children. The origins of the website lie with the parents of Isabel who, at the age of 3 years, spent 4 weeks in a pediatric intensive care unit (PICU) recovering from the complications of a missed diagnosis.

The paramount function of the website is its utility as a diagnostic aid. After receiving a patient age category and some clinical features, Isabel will output an instantaneous list of up to 15 differential diagnoses. This feature can be invaluable in a difficult-to-diagnose pediatric case and can serve as an excellent, readily available reference for faculty, fellows, pediatric house officers, and medical students. This 'diagnostic tool' has been found to include the correct diagnosis in 91–95% of cases, and is presently being validated in a large, multicenter, real-time trial. Since discovering this website, I have listed the main clinical characteristics of every medical admission to our PICU for the past month, and Isabel has included the correct diagnosis in every case.

Another feature of this user-friendly website is the 'clinical algorithms', which outline a treatment plan for certain pediatric illnesses. Although the algorithms listed are helpful and straightforward, this portion of the site deserves expansion to include a more comprehensive list of topics. There is also a section that lists the guidelines for 'advanced pediatric life support'; an 'experience' section, which highlights clinical lessons learned by experienced clinicians; and an 'image library', which is a growing collection of

photos, radiographs, and slides key to diagnose certain pediatric disease states. There is also a 'discussion forum' that allows practitioners to obtain consultation on particularly perplexing cases. Unfortunately, that area has been disabled recently, so no comment can be made as to its worth.

The website is free to any registered health care practitioner, and the registration process is easily completed in minutes. The site itself is effortless to navigate, and lends itself well to the medical practitioner who may not be very knowledgeable about computer and Internet language. The owners of this website have set a new standard for implementing a real-time clinical tool that is available and useable for pediatric clinicians. I highly recommend this tool to anyone who is involved in the care of critically ill children.

### **Best feature**

The 'diagnostic tool' section is unmatched in scope and simplicity of use. It is foreseeable that Isabel may save a critically ill child from a potentially catastrophic delay in diagnosis.

### **Worst feature**

The lack of function of the 'discussion forum' and the limited topics of the 'clinical algorithms' were the most disappointing features, but both have the potential to become excellent elements.

### **Wish list**

Ranking of the differential diagnosis by likelihood based on the clinical information provided would allow practitioners to

focus on primary aspects of the list while not discounting the remaining possibilities.

### **Other links**

The PedsCCM Evidence-Based Journal Club –

[http://pedscm.wustl.edu/EBJournal\\_club.html](http://pedscm.wustl.edu/EBJournal_club.html)

An excellent resource of critical reviews of clinical trials relevant to the daily practice of pediatric critical care medicine. It is searchable and can be loaded to hand-held devices. (Free).

The Virtual PICU – <http://www.picu.net/>

A growing site aimed at building extensive databases for multicenter knowledge sharing and improving distance learning in the field of pediatric critical care medicine. (Free).

Pediatric Critical Care Education –

<http://www.picucourse.org/>

Website developed by the Pediatric Resident Education Committee, a subcommittee of the Pediatric Section of the Society of Critical Care Medicine. It contains a host of downloadable PowerPoint presentations on common topics in the PICU. (Free).

### **Competing interests**

None declared.