

Medal, A Compendium Of Medical Algorithms For Access Over The Internet

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Overview: The Medical Algorithms Project (Medal) is an evolving collection of over 1,300 medical algorithms covering 43 subject areas freely available over the world wide web at www.medal.org.

Background: Numerous algorithms and calculations have been reported in the medical literature, but many are underutilized or difficult to access reliably. Our goal is to implement a large number of these to aid in clinical decision support.

System Description: Medal provides a collection of algorithms implemented in MS Excel with documentation in MS Word. These are divided into chapters according to medical domain. Each chapter is compressed as a zip file which can be downloaded separately by the user.

The intent was to provide information in a format accessible to clinicians, yet sufficient to allow development by programmers while providing a means of validation. In addition, Excel spreadsheets can be enhanced using Visual Basic, and they can be directly imported into PDAs.

The general approach has been to keep the implementation as simple as possible, using tools that are stable and widely accessible on multiple platforms. Special attention has been paid to clarify problematic areas in calculations and to incorporate appropriate unit conversions. One constraint for development has been the FDA regulations on medical software. Problems in maintenance and version control have

increased as the number of algorithms have grown.

User feedback is invited for suggestions on new directions and to correct errors. Currently access averages retrievals from 50 unique hosts per day. An unexpected aspect has been the level of interest shown outside of the United States. A mirror site for Latin America is in development.

Conclusions: The Internet proves an effective method for collaborative exchange of information over large distances.