Medical Database Editorial Process and Policy

At Medical Database (MDB) a refined editorial process is critical to our ability to is deliver and maintain MDS our best-in-class clinical knowledgebase and decision support system.

Our editorial process is driven via a top down and bottom up approach. The top down path consists of daily review of our surveillance list of online sources (see list below) by the senior editorial team. This approach ensures our knowledgebase will reflect the current state of the lab industry and respond within 30 days or less to any significant change in the laboratory industry or any relevant medical policy changes. The bottom up approach is managed by our junior editors, they are responsible for reviewing 10% or 200 entries per month of our current knowledgebase. The review process is designed to refresh the published knowledgebase information with relevant updates. This process ensures the entire knowledgebase is reviewed and updated each year, and allows the team to process changes at a consistent and manageable pace. The list of resources used in the bottom up approach are listed below.

Our editorial process is managed by a hierarchical team, lead by a hand-selected group of senior editors consisting of Board Certified Clinical Pathologists. The senior editorial team meets each month to review a list of suggested updates as determined by the dual approach described above, and include new entries, updates and discontinued labs tests. The editorial team is listed here.

Based on the collective view of the senior editors a work list is distributed to our affiliated team of over 30 active clinical writers. The writers are segmented into areas of expertise within laboratory medicine, and are then matched to the most appropriate item in the worklist. The MDB clinical editors, reviewers and writers are medical professionals active in academic and clinical practice, board-certified in the appropriate clinical laboratory specialty and well known as an expert in their field .

Several policies are instituted to ensure the editorial sources are well balanced and are not biased by related medical device or pharmaceutical vendor interests. MDB follows a hierarchy of evidence consistent with most evidence-based resources. At the top of the hierarchy are meta-analyses of randomized trials of high methodological quality, followed by randomized trials with methodological limitations, observational studies and unsystematic clinical observations. Inferences are stronger when the evidence is summarized in systematic reviews of the literature that present all relevant data. Writers also consider relevant reference materials and published texts to provide well rounded context as per the reference list below. Our policies also require at least 4 relevant clinical sources are used for each laboratory entry.

Medical relevance scoring is based on clinical information synthesized by the writers and our proprietary ranking process. This process scores each test on several

qualitative scales including medical necessity, clinical evidence of utility and value (clinical decision making, sensitivity, specificity, standard of care) as well as the most appropriate clinical indication. The output of this process is a quantitative score specific to the clinical test, the disease, and the clinical indication. The MDS score is considered one of the most critical data elements within the knowledgebase. For this reason our senior team must be in majority agreement of the interpreted score in order to publish the entry.

Once the MDS medical writers have checked in their drafts into MDS automated editorial system, a team of 7 junior reviewers review the content for accuracy and completeness. All bibliographical entries are reviewed and verified as relevant. Additional reference resources are also considered at this stage. Once approved the entry is passed to senior editors for review and feedback. Once approved by the senior editorial team, the final publication is published by the MDD founder and CEO, who personally reviews each entry as a final step.

It is notable that the MDS knowledgebase constrains more than 2000 laboratory entries, each is being subject to the above editorial process, and that each entry has undergone a minimum of 5 review cycles prior to publication.

Surveillance Resources

Advances in Molecular Diagnostics
American Academy of Forensic Sciences
American Association for Clinical Chemistry
American Association of Blood Banks
American Association of Clinical Chemists
American College of Physicians
American Journal of Clinical Pathology
American Journal of Translational Research
American Medical Association
American Society for Microbiology
American Society of Clinical Pathologists
American Society of Hematology
Annals of Clinical and Laboratory Science
Annals of clinical biochemistry
Annals of diagnostic pathology
Annals of Internal Medicine
Annual review of microbiology
Antimicrobial agents and chemotherapy
Applied and environmental microbiology
Archives of Pathology & Laboratory Medicine
Archives of Virology
Association of Clinical Pathologists (Great Britain)
Biomedical signal processing and control

Biotechnology healthcare
Biotechnology journal
Blood
BMC clinical pathology
BMC Medical Genetics
Centers for Disease Control (US)
Clinica chimica acta
Clinical and vaccine immunology
Clinical biochemistry
Clinical chemistry
Clinical chemistry and laboratory medicine
Clinical Epigenetics
Clinical Infectious Diseases
Clinical Laboratory News
Clinical laboratory science
Clinical Laboratory Science Journals
Clinical microbiology reviews
Clinical Proteomics
College of American Pathologists
Comparative clinical pathology
Comparative immunology, microbiology and infectious diseases
Critical reviews in clinical laboratory sciences
Current Genomics
Current Molecular Medicine
Cytopathology
Diagnostic cytopathology
Diagnostic histopathology
Diagnostic microbiology and infectious disease
European Journal of Human Genetics
Experimental and Molecular Medicine
Genes
Genetics
Genetics & Molecular Biology Journals
Genetics News
Genome Medicine
Human Genomics
Human Molecular Genetics
Infectious Diseases Society of America
International journal of clinical and experimental pathology
International journal of laboratory hematology
International Society on Thrombosis and Haemostasis
JALA
JAMA: The Journal of the American Medical Association
Journal of bacteriology

Journal of clinical laboratory analysis
Journal of clinical microbiology: JCM
Journal of Clinical Pathology
Journal of Clinical Virology
Journal of cytology
Journal of Cytology
Journal of Forensic Sciences
Journal of Gene Medicine
Journal of Genetics
Journal of laboratory physicians
Journal of Medical Genetics
Journal of medical microbiology
Journal of Molecular Medicine
Journal of the American Society of Cytopathology
Journal of Virological Methods
Journal of virology
Laboratory investigation
Laboratory medicine
Laboratory product news
Lancet
Medical laboratory Observer
Medical microbiology and immunology
Microbiology and immunology
Microbiology and molecular biology reviews
Modern pathology
Molecular and cellular biology
Molecular Oncology
Morbidity and Mortality Weekly Reports
Pediatric and developmental pathology
Pharmacogenomics
Pharmacogenomics and Personalized Medicine
PLOS Genetics
PLoS Pathogens
Practical Laboratory Medicine
Reviews in Medical Virology
Seminars in diagnostic pathology
The American Journal of Human Genetics
The Internet journal of laboratory medicine
The Journal of Applied Laboratory Medicine
The Journal of Molecular Diagnostics
The New England Journal of Medicine
The open pathology journal
Thrombosis and Haemostasis
Transfusion

Translational research : the journal of laboratory and clinical medicine
Viral Immunology
Virology
Virology Journal

Bottom Up Review Resources in addition to listed journals

National guideline clearinghouse: www.guideline.gov
Merck Manual, professional version; https://www.merckmanuals.com/professional
Clinical laboratory news from AACC; https://www.aacc.org/publications/cln/cln-daily
Cap today from College of American Pathologist (CAP); www.captodayonline.com/
The American Laboratory News: https://www.americanlaboratory.com/
360Dx, Clinical Laboratory News; www.360dx.com
PubMed for medical and scientific journals and peer review; www.pubmed.com
CDC and other governmental web pages: www.cdc.gov
Nation Human Genome Research Institute: https://www.genome.gov
Dynamed: http://www.dynamed.com/home/
Uptodate: https://www.uptodate.com/home
Accessmedicine: http://accessmedicine.mhmedical.com/
Medlineplus: https://medlineplus.gov/
Ovid: http://ovid.com/site/index.jsp

Reference Texts

Ferri's Clinical Advisor 2016
Wallach's Interpretation of Diagnostic Tests
Laboratory Medicine, the Diagnosis of Disease in Clinical Laboratory
Mosby's Manual of Diagnostic and Laboratory Test, Fifth Edition, 2014, Elsevier, Inc
Tietz Clinical Guide to Laboratory Tests, fourth edition, 2006, by WB Sanders Company
Wallach's Interpretation of Diagnostic Tests, ninth edition, 2011 by Wolters Kluwer
Jacobs and Demott Laboratory Test Handbook, fifth edition, 2001 by Lexi-Comp, Inc.

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42 Contracted Clinical Writers
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