

SUMARELE: RESURSE PENTRU DECIZIA LA PATUL BOLNAVULUI

C Baicus

Medicina interna, Spitalul Colentina Bucuresti

www.baicus.ro

De retinut:

- Orice informatie: sa se bazeze pe un studiu valid
- Ierarhia dovezii
- Sursele secundare de informatie (cuprind informatie validata)
- Cautarea pe Medline (AND, OR; PICO, Clinical queries)

Cel mai bun tip de studiu in functie de tipul intrebarii

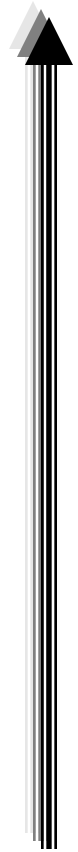
Nivel	Tratament	Prognostic	Diagnostic	Etiologie
I	<i>Analiza sistematica a ...</i>	<i>Analiza sistematica a ...</i>	<i>Analiza sistematica a ...</i>	<i>Analiza sistematica a ...</i>
II	RCT	Cohorta (Inception)	Transversal	Cohorta
III			RCT Cohorta Caz-martor	Caz-martor

Tipurile de studii

Sinteza Sistematica+Metaanaliza

- I. Studii clinice randomizate
- II. Studii de cohortă
- III. Studii caz-martor
- IV. Studii transversale
- V. Cazuri & serii de cazuri
- VI. Laborator, opinia expertului

buna



slaba

VALIDITATE

Nivelul dovezii

Nivelul 1.

- 1.a. Sintează sistematică a unor studii clinice randomizate
- 1.b. Studiu clinic randomizat (RCT).
- 1.c. Studiu tip “toți sau niciunul” (serie de cazuri).

Nivelul 2.

- 2.a. Sintează sistematică a unor studii de cohortă.
- 2.b. Studii de cohortă individuale (sau RCT de calitate slabă, de exemplu cu urmărire < 80%).
- 2.c. Studii ecologice.

Nivelul 3.

- 3.a. Sintează sistematică a unor studii caz-martor.
- 3.b. Studiu caz-martor individual.

Nivelul 4: Serii de cazuri (sau studii de cohortă ori caz-martor de calitate slabă).

Nivelul 5: Opinia expertului, sau bazată pe cercetarea preclinică.

Tipurile de studii

Nivelul dovezii

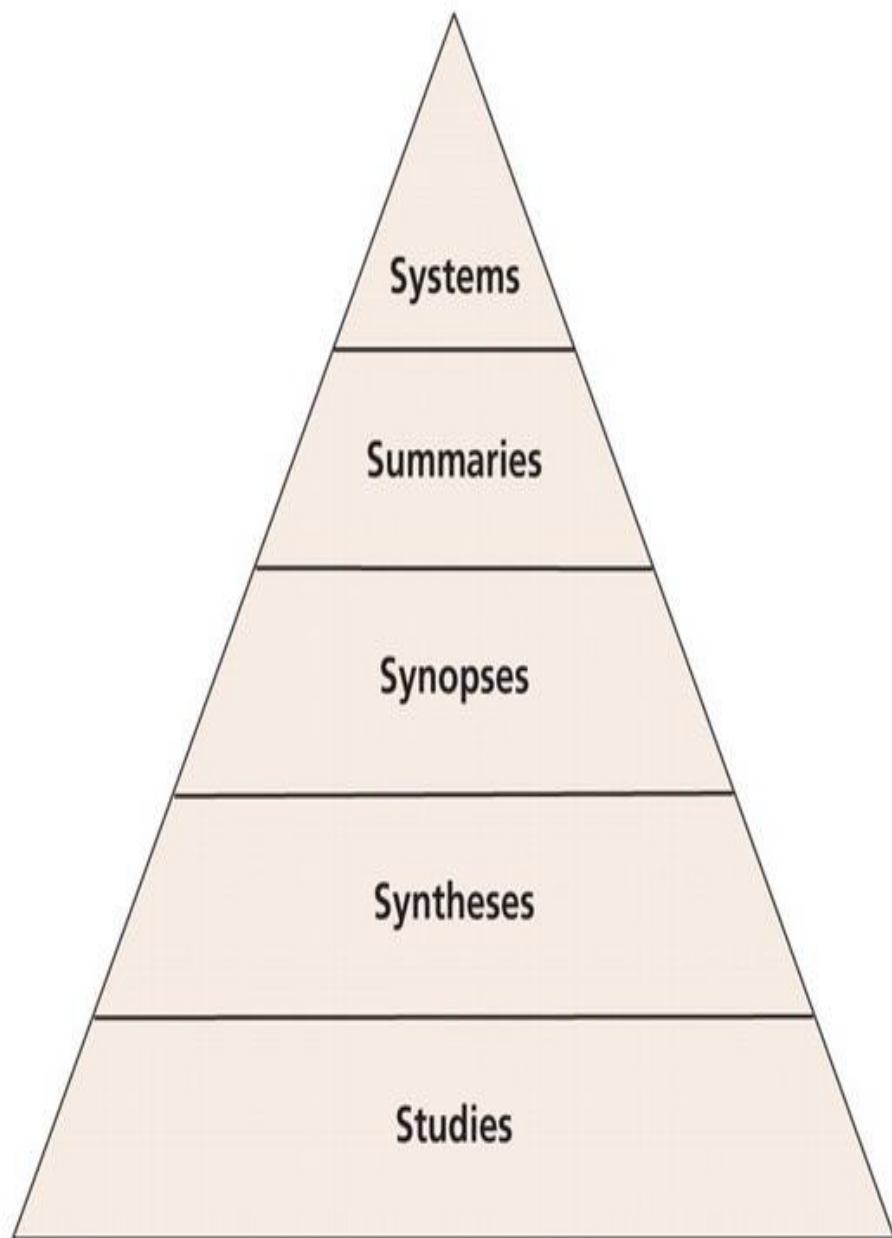
I. Studii clinice randomizate	→	NIV.1
II. Studii de cohortă	→	NIV.2
III. Studii caz-martor	→	NIV.3
VI. serii de cazuri	→	NIV. 4
V. Laborator, opinia expertului	→	NIV.5

Gradele de recomandare

- **Gradul A** (echivalent cu “Acesta-i tratamentul!”): studii de nivelul 1.
- **Gradul B** (echivalent cu “Poți aplica acest tratament”): studii de nivelul 2 sau 3 sau extrapolări de la nivelul 1.
- **Gradul C** (echivalent cu “Ar fi mai bine sa nu...”): studii de nivelul 4 sau extrapolări de la nivelul 2 sau 3.
- **Gradul D** (echivalent cu “Nu trata”, sau, mai corect: “nu există nici o dovadă că tratamentul e bun de ceva”): dovezi de nivelul 5 sau studii neconcludente de orice nivel.

Tipurile de studii

I. Studii clinice randomizate	→	REC A
II. Studii de cohortă	}	REC B
III. Studii caz-martor		
IV. Studii transversale		
V. (serii de cazuri	→	REC C
VI. Laborator, opinia expertului	→	REC D



Examples

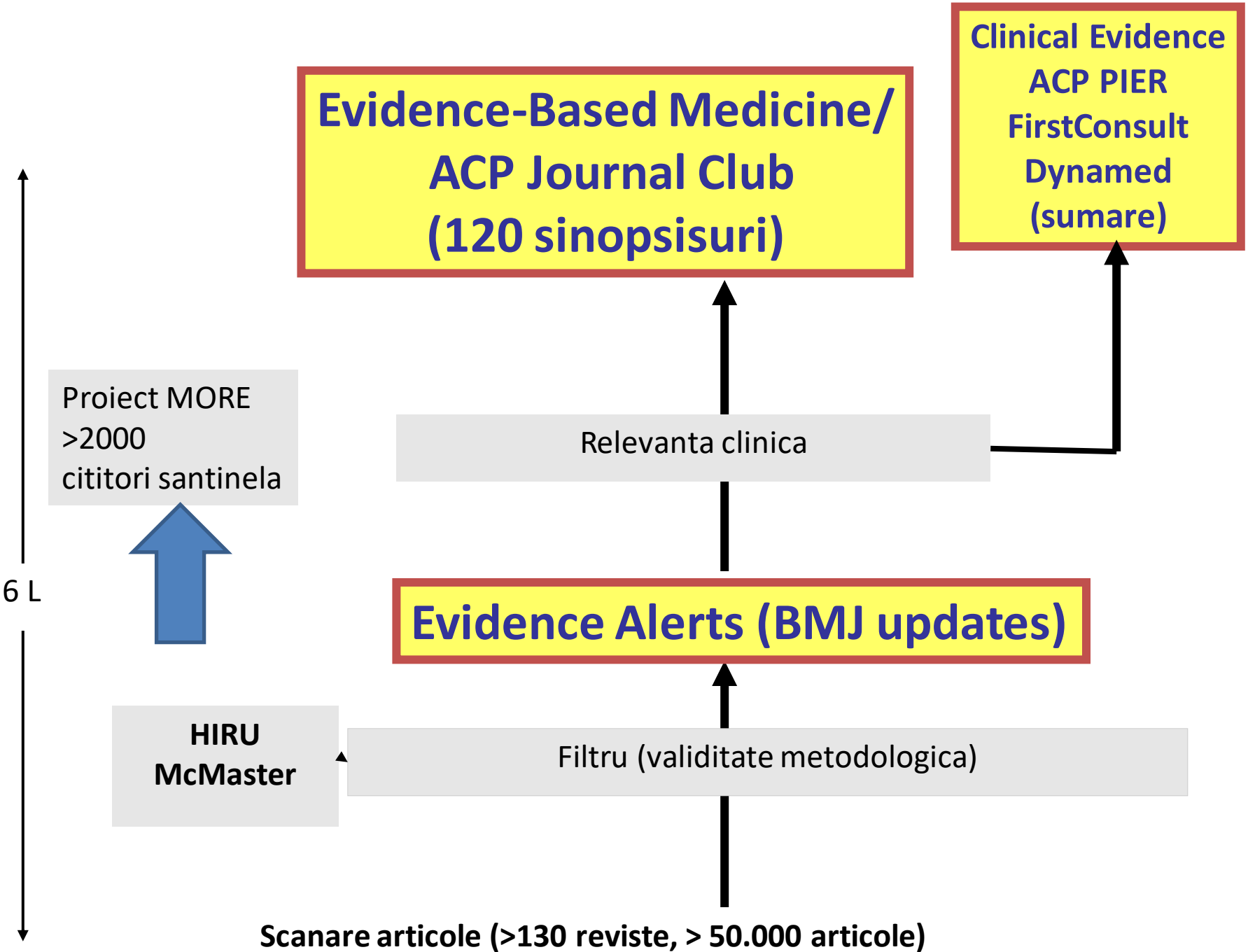
Computerized decision-support systems
(e.g., electronic health records)

Evidence-based textbooks (sources include online
summary publications such as *Dynamed* and
ClinicalEvidence)

Evidence-based journal abstracts (sources include
ACP Journal Club, *Evidence-Based Medicine*)

Systematic reviews (sources include Cochrane
Database of Systematic Reviews and DARE [Cochrane
Database of Abstracts of Reviews of Effects])

Original journal articles (sources include Cochrane
Central Register of Controlled Trials, PubMed Clinical
Queries, MEDLINE)



Sumare

- Revizuite cel puțin anual; fiecare capitol să aibă trecută data ultimei revizuirii
- Selectează și evaluează dovezile într-un mod explicit, descris la începutul textului.
- Citează articolele originale pe care se bazează, pentru ca cititorii să poată vedea data publicării și eventual ajunge la ele pentru detalii

- **Clinical decision**

at the point of care (POC)

- **Bedside information tools**



Original Investigation

FREE

May 2014

Clinical Questions Raised by Clinicians at the Point of Care

A Systematic Review

Guilherme Del Fiol, MD, PhD¹; T. Elizabeth Workman, PhD, MLIS²; Paul N. Gorman, MD³

» [Author Affiliations](#) | [Article Information](#)

JAMA Intern Med. 2014;174(5):710-718. doi:10.1001/jamainternmed.2014.368

- Studii care au examinat intrebarile clinicienilor in contextual ingrijirii clinice
- 11 studii, 7012 intrebari
- 0.57 (0.38-0.77) intrebari/pacient
- S-a cautat raspuns la 51% (36%-66%) dintre intrebari
- Raspunsuri la 78% (67%-88%) dintre cele la care s-a cautat raspuns
- 34% - trat medicamentos, 24% - cauze potentiale simptom, semn, rezultat diagnostic

- Nu s-au cautat raspunsuri:
 - Lipsa timp
 - Dubiu ca exista raspuns

Table 3. Clinical Questions Classified According to th

Question Type
What is the drug of choice for condition X?
What is the cause of symptom X?
How should I treat condition X (not limited to drug treatment)?
What is the cause of physical finding X?
What test is indicated in situation X?
What is the dose of drug X?
Can drug X cause (adverse) finding Y?
What is the cause of test finding X?
Could this patient have condition X?
How should I manage condition X (not specifying diagnostic or therapeutic)?
What is the prognosis of condition X?
What are the manifestations of condition X?
What conditions or risk factors are associated with condition Y?

Abbreviation: NA, Not available.

^a Data include the 13 most frequent question types across

80% dintre intrebari

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From

1840



Jan



LEARNING IN PRACTICE

Randomised controlled trial of clinical decision support tools to improve learning of evidence based medicine in medical students

BMJ 2003; 327 doi: <http://dx.doi.org/10.1136/bmj.327.7423.1090> (Published 6 November 2003)

Cite this as: BMJ 2003;327:1090

Clinical trials (epidemiology) Undergraduate

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Gabriel M Leung, *clinical assistant professor* (jjohnsto@hku.hk)¹, Keith *senior research assistant*¹, Lai-Ming *lecturer*¹, Tai-Hing Lam, *chair profes*

[Author Affiliations](#)

Abstract

Objective To assess the educational effectiveness on learning evidence based medicine of a handheld computer clinical decision support tool compared with a pocket card containing guidelines and a control.

Design Randomised controlled trial.

Setting University of Hong Kong, 2001.

Participants 169 fourth year medical students.

Nefrologii din Canada:

- 58% dintre universitari
- 91% dintre cei ne-universitari

Încep căutările cu **UpToDate**.

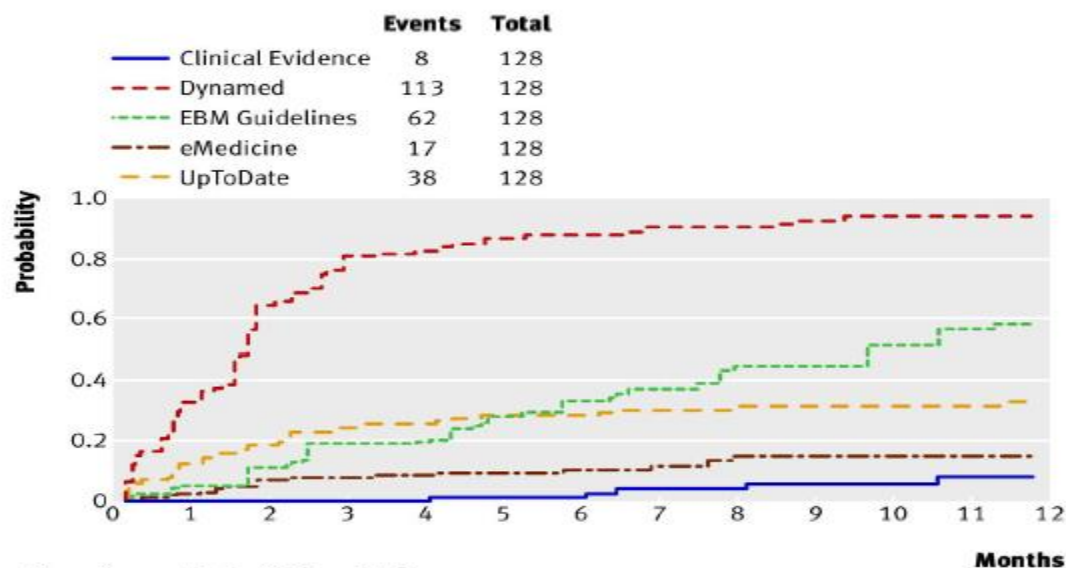
Shariff, 2011

RESEARCH

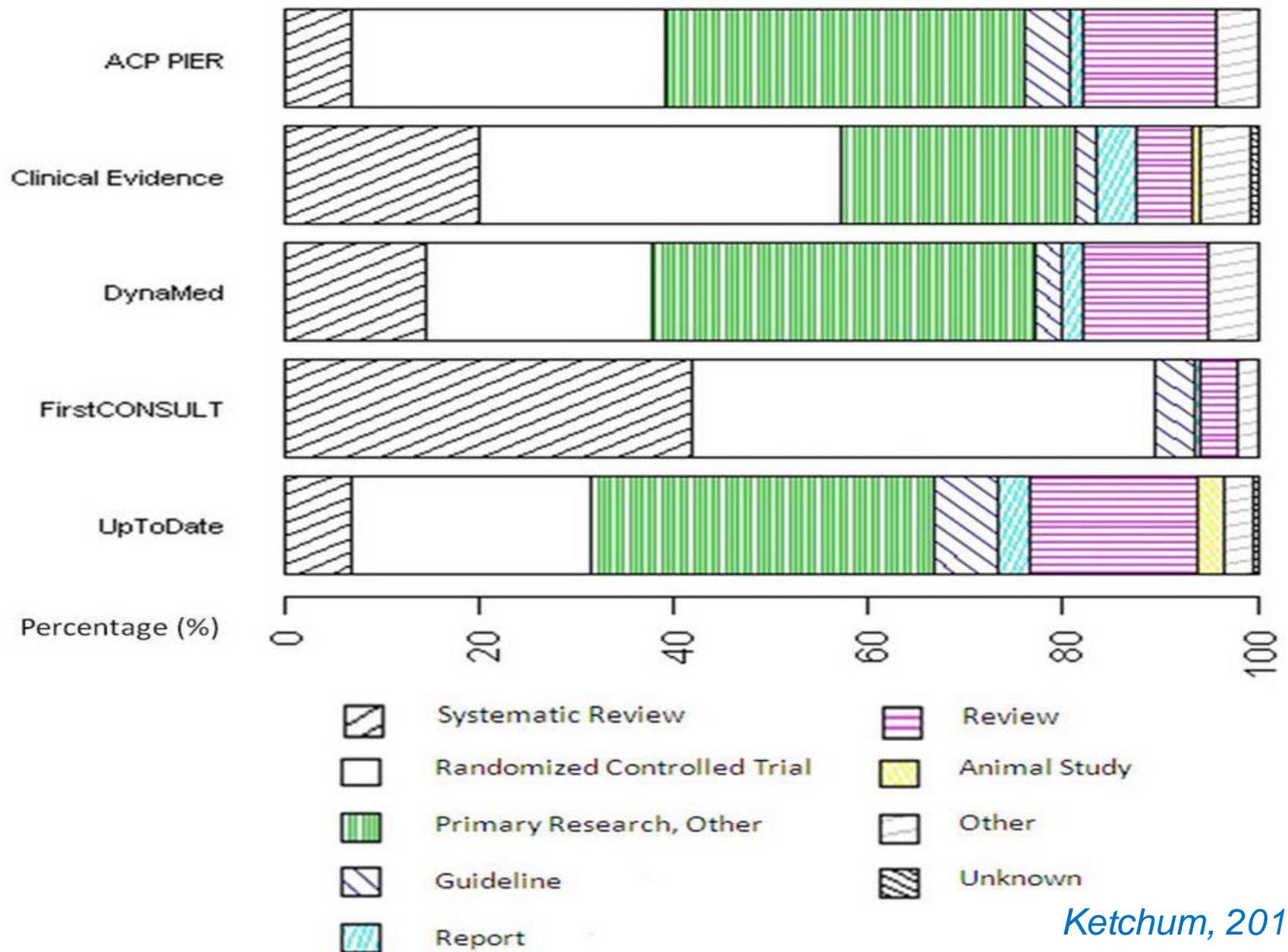
Speed of updating online evidence based point of care summaries: prospective cohort analysis

 OPEN ACCESS

Rita Banzi *researcher*^{1 2}, Michela Cinquini *statistician*², Alessandro Liberati *associate professor*^{1 3}, Ivan Moschetti *general practitioner*¹, Valentina Pecoraro *researcher*¹, Ludovica Tagliabue *medical resident*^{1 4}, Lorenzo Moja *assistant professor*^{1 4}



systematic reviews at risk of being cited



- **FirstCONSULT** a avut cea mai mare proporție de referințe cu nivele înalte ale dovezii precum SR și RCT (137/153, 89.5%), deși a conținut cel mai mic număr de referințe (153/2330, 6.6%).
- **DynaMed** a avut cel mai mare număr de referințe (1131/2330, 48.5%) și cea mai mare proporție de referințe recente (170/1131, 15%).

- Un rezultat neașteptat a fost acela că gradul de suprapunere al referințelor a fost mai mic de 1% între toate cele 5 produse

60 topics

The quality, breadth, and timeliness of content updating vary substantially for 10 online medical texts: an analytic survey

Jeanette C. Prorok^a, Emma C. Iserman^a, Nancy L. Wilczynski^a, Robert B. Haynes^{a,b,c,*}

Results

Quality scores ranged from a high of 9 of 11 points (Clinical Evidence) to a low of 0 of 11 points (PEPID), with a mean score of 6.7. Breadth of coverage ranged from 83% of randomly selected topics covered (UpToDate) to 25% (Clinical Evidence), with 6 of 10 texts covering 60% or more; average coverage across all texts was 57%. Variability was also observed with regard to average time since last content update, ranging from 3.5 (DynaMed) to 29 months (First Consult), with an average time since update of 12.4 months.

Prorok et al, 2012

Breadth of Coverage

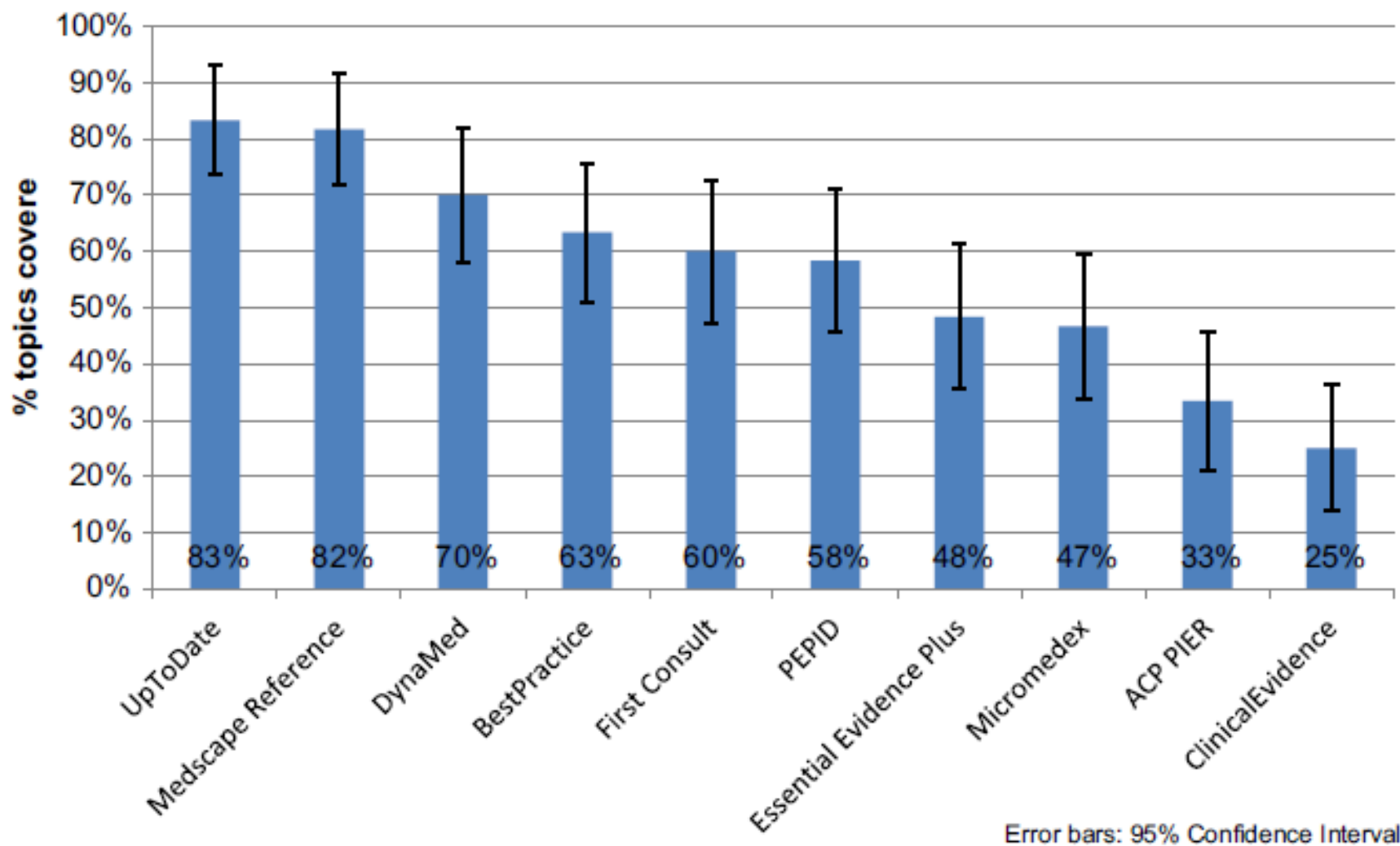


Fig. 1. Percentage of 60 ICD-10 codes covered by each of the selected online texts.

Timeliness

Average date of update
(months from date of search)

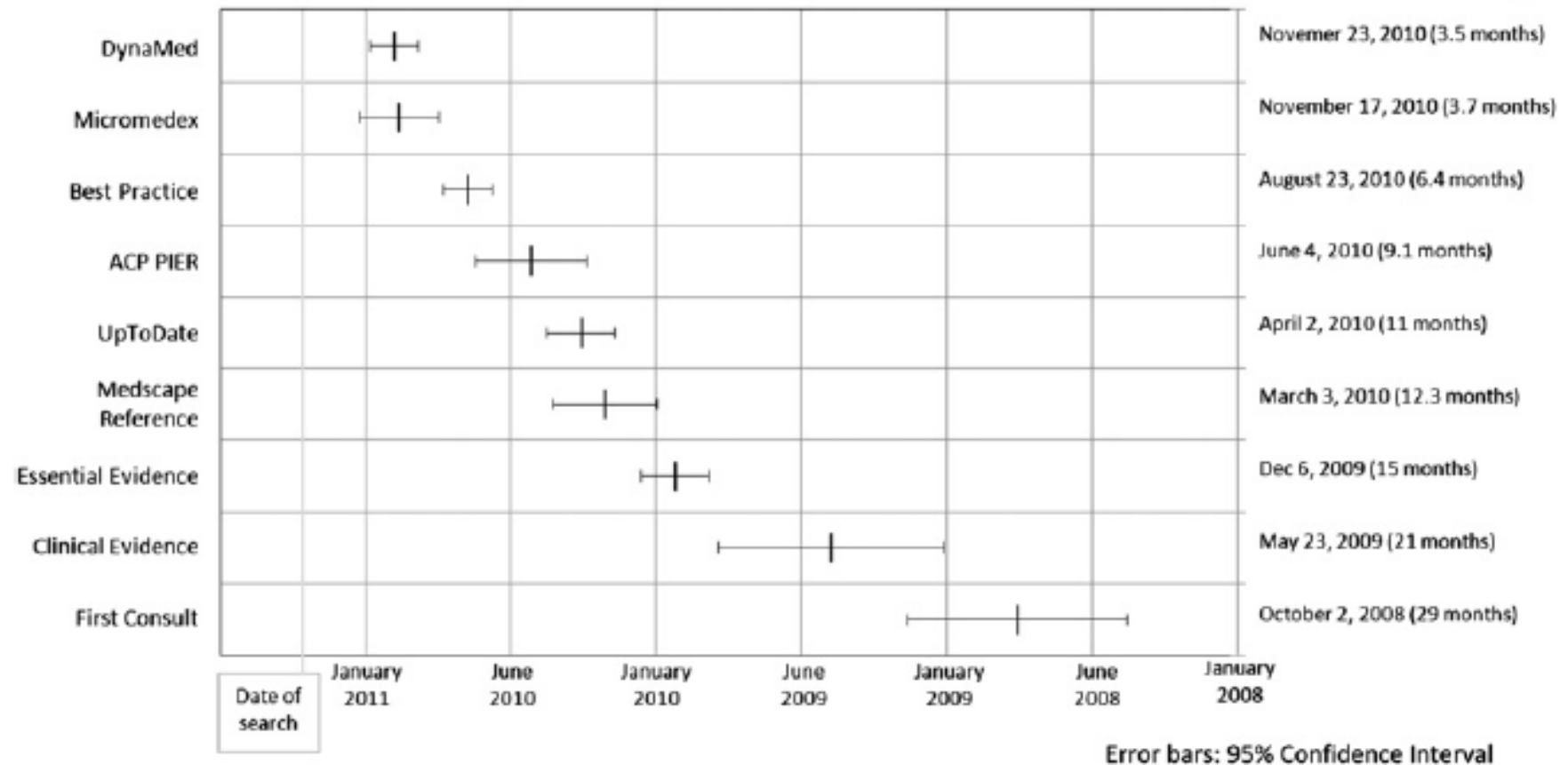


Fig. 2. Timeliness of updates of each of the selected online evidence-based texts.

- 10 resurse *online* au fost evaluate pt calitate, acoperire, rapiditatea actualizării.
- Au fost variații mari în fiecare dintre categorii. Deși câteva resurse au performat bine în fiecare dintre categorii, niciuna nu a fost ideală.
- Clinicienii nu trebuie să se bazeze pe o singură resursă atunci când vor să ia decizii importante (motoare de căutare în resurse multiple – TRIP database?).



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Below are the resident EPs assigned to you that need to be evaluated. You may also search for resident EPs by entering a question id or choosing a resident from the dropdown list provided.

Resident	Due Date	PICO	ID	Status	My Score	View	Evaluate
Leonard Dobre	03/21/2013	Patient with COPD stage 3 GOLD.	DOBRE- 1	Evaluated by other Faculty		View	Evaluate

Filter By:

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EP ID:

Evaluation Status:

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You may [click here](#) to update your evaluation for this question.

Question ID:	DOBRE-1
Learner:	Leonard Dobre
Rotation Type:	Not Applicable
Grader:	Cristian Baicus
Due Date:	03/21/2013

Case (2–3 sentences):

In a patient with COPD stage 3 GOLD , currently in treatment with LABA/ICS combination, would adding inhaled anticholinergics reduce the number of exacerbations or perception of dyspnea?

Question Type: Foreground

Question: (PICO as appropriate)

P:

Patient with COPD stage 3 GOLD.

I:

anticholinergic and laba and ics

C:

laba and ics

O:

number of exacerbations, perception of dyspnea

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Case (2-3 sentences):

In a patient with COPD stage 3 GOLD , currently in treatment with LABA/ICS combination, would addi number of exacerbations or perception of dyspnea?

Question Type: Foreground

ACP Journal Club
BMJ Clinical Evidence
Cochrane Database of Systematic Reviews
Database of Abstracts of Reviews of Effects (DARE)
Essential Evidence Plus
Google Scholar
MD Consult
PubMed
Up-to-Date

O:

number of exacerbations, perception of dyspnea

Educational Prescription Grading Guidelines

	Not Yet Competent	Competent	Superior
	question	question.	
Searching	Foreground: <ul style="list-style-type: none"> • Uses textbook or Up-to-Date • Inappropriately used PubMed/Medline as first source • Inappropriate search terms • Inappropriate limits Background: <ul style="list-style-type: none"> • Uses primary resources 	Foreground: <ul style="list-style-type: none"> • Therapy searches start with secondary resource including Cochrane unless compelling reason • Only uses PubMed/Medline after secondary sources • Does not use Cochrane or Clinical Evidence for non-therapeutic/ prevention questions • Search terms appropriate Background: <ul style="list-style-type: none"> • Uses textbook, Up-to-Date, Clinical Evidence, etc. as appropriate 	Foreground: <ul style="list-style-type: none"> • Appropriate synonyms are used (Cochrane, DARE, ACP JC) <p>-OR-</p> <ul style="list-style-type: none"> • Limits by question type appropriately used in PubMed (Clinical Queries) Background: <ul style="list-style-type: none"> • N/A
Evaluation of Evidence and Results	Foreground: <ul style="list-style-type: none"> • Uses incorrect critical appraisal sheet for question type • Does not recognize other major potential 	Foreground: <ul style="list-style-type: none"> • Addresses major questions from appropriate critical appraisal sheet • Identifies other major potential causes of bias 	Foreground: <ul style="list-style-type: none"> • Addresses all questions from appropriate critical appraisal sheet • Identifies all potential causes of bias



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First	Last	EP's Completed	EP's Graded	EP's Pending
Cristian	Baicus	1	1	0
Ioana	Berza	1	1	1
Bogdan	Busuioc	0	0	1
Ovidiu	Ciobotaru	1	0	0
Ioana	Cociasu	1	1	0
Leonard	Dobre	1	1	0
Alexandru	Draghici	1	1	0
Alexandra	Frentescu	1	1	0
Cristina	Garbulet	1	1	0
Roxana	Giurcan	0	0	0
Cristian	Gutu	0	0	0
Alexandra	Gutu	1	1	0
Dana Miruna	Iancu	1	1	0
Alexandra	Iernici	0	0	0

Date EP Created:



to





Evidence-based
clinical reference
updated daily

FREE TRIAL

ASH ANNUAL MEETING

Stop by the *DynaMed* booth (#2013) at the 2012 American Society of Hematology (ASH) Annual Meeting and Exposition in Atlanta, GA, December 8-11.

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DYNAMED RANKS HIGHEST AMONG CLINICAL REFERENCE RESOURCES

DynaMed has ranked highest among ten online clinical resources in a new study in the *Journal of Clinical Epidemiology*.

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Looking for a change? The *DynaMed* editorial team is expanding and looking for medical writers!

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BMJ RESEARCH ARTICLE

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EDUCATION FOR CLINICIANS IN TRAINING



Residents in all specialties are now expected to conduct scholarly effort during training. The *DynaMed* Editors are committed to contributing to the medical training of health care professionals by providing scholarly effort opportunities. Residents and students can co-review *DynaMed* topics with a supervising faculty member who has clinical practice experience.

Residency and allied health care training programs

benefit two-fold:

- Residents and students have the opportunity to learn critical appraisal, evidence synthesis and other evidence-based processes
- Faculty can provide real-time, hands-on opportunities for residents and students in which to evaluate clinical learning, evidence evaluation and use of a clinical resource to improve patient care

Traditional research and publication efforts do not routinely adapt to residency program schedules. At *DynaMed*, we can tailor review opportunities to fit specific topics of interest and adjust deadlines to meet residency program schedules.

Additional benefits for Residency Programs participating in *DynaMed* peer review include:

- An additional educational opportunity for residents and students to learn critical appraisal, evidence

DYNAMED MOBILE

DynaMed is available as a mobile application, compatible with devices such as the iPhone, iPad, iPod touch, BlackBerry, Android Smartphone, Microsoft Mobile and Palm.

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DYNAMED REVIEWERS

DynaMed is supported by an editorial team of physicians, multi-disciplinary health care professionals, scientists, medical writers and librarians, as well as a network of **over 1,500 practicing clinicians** that provide additional reviewing and editorial support.

1. Theodor Voiosu: *Acute variceal hemorrhage - treatment*
2. Teodora Ursica: *Pulmonary sarcoidosis*
3. Paul Balanescu: *Cardiac sarcoidosis*
4. Camelia Dragoi/Cristian Guțu: *Aortic stenosis*
5. Ciprian Olaru/Alexandra Guțu: *Dyspnea*
6. Bogdan Ivanus/ Andrei Voiosu: *Gastroesophageal variceal hemorrhage - primary prophylaxis*
7. Daniela Mihai/Mirela Enache: *Acute cholecystitis*
8. Meda Apetroae: *Eosinophilic esophagitis*
9. Ioana Ion: *Malignant hyperthermia; Huntington disease*
10. Caterina Delcea: *Andersen-Tawil syndrome*
11. Ioana Berza: *Pulmonary interstitial Disease*
12. Lavinia Lipan: *Thrombotic thrombocytopenic purpura*

The following residency programs are currently participating in *DynaMed* review:

- Baylor College of Medicine, Houston, TX – Internal Medicine
- Cleveland Clinic, Cleveland, OH – Child Neurology
- Colentina University Hospital, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania – Internal Medicine
- Emory University School of Medicine, Atlanta, GA – Internal Medicine
- Grand Rapids Medical Education and Research Center, Grand Rapids, MI – Family Medicine
- Harvard Medical School/Cambridge Health Alliance, Cambridge, MA – Internal Medicine
- Mayo Clinic, Rochester, MN – Adult Neurology
- Middlesex Hospital, Middletown, CT – Family Practice
- Phoenix Baptist Hospital, Phoenix, AZ – Family Medicine
- Southern Illinois University, Carbondale, IL – Family Medicine
- St. Elizabeth Medical Center, Youngstown, OH – Family Practice
- St. Joseph Mercy Hospital, Ypsilanti, MI – Internal Medicine
- St. Vincent Hospital, Worcester, MA – Internal Medicine
- University of Massachusetts Medical School, Worcester, MA – General Practice Residency in Dentistry
- University of Tennessee Graduate School of Medicine, Knoxville, TN – Family Medicine
- University of Wisconsin, Eau Claire, WI – Family Medicine
- Waukesha Memorial Hospital, Waukesha, WI – Family Medicine
- West London Mental Health NHS Trust, London UK
- West Virginia University, Charleston, WV – Internal Medicine

Studii

BMJupdates+→Evidence

Updates → **Evidence Alerts**

MEDLINE / Clinical Queries

Welcome to EvidenceAlerts

EvidenceAlerts provides a continuously updated, searchable database of quality-assessed, clinically rated citations from the medical literature, with links to their abstracts, ratings, full text articles, and DynaMed topics.



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- Ierarhia dovezii
- Sursele secundare de informatie (cuprind informatie validata)
- Cautarea pe Medline (AND, OR; PICO, Clinical queries)

- Paracenteza la pacient anticoagulat
- IECA sau sartani in insuficienta cardiaca?
- Tratamentul b. Takayasu / prognostic
- Dg diferential al adenopatiilor benigne/maligne prin ecografie
- Pacienta sondata urinar: diferenta colonizare/infectie urinara