Clinical information at the speed of care

ClinicalKey 이용매뉴얼
Elsevier Korea – 2014

Smarter search. Faster answers.
The Physicians Dilemma

Comprehensive

 Regardless of where they start their online search, 40-53% of doctors use more than one source.

Trusted

 Despite widespread preference and use of electronic resources, 75% of doctors still find formally published resources more trustworthy.

Speed to Answer

 Doctors report significant use of
  • Google (64%)
  • Wikipedia (27%)
  • WebMD (36%)
given need for fast and easy reference.
What are the Frustrations?

- Answers hidden amongst lots of other information: 70%
- Irrelevant answers: 50%
- Answers out of date: 40%
- Too many choices: 30%
- Time wasted: 20%
- Format of delivery: 20%
- Lack of images: 10%

Hospital Physician Information Survey [UK: 100 Clinicians]
Conducted by Opinion Health on behalf of ClinicalKey
The Physicians Workflow

Designed to facilitate the clinical workflows of the hospital based physician.

**Patient Care Management Workflows**

1. **Diagnosis** (22%/26%)*
2. **Create Care Plan**
   2a. **Medical Treatment** (10%/29%)
   2b. **Surgical Treatment** (10%/29%)
   - **Procedures**
3. **Patient Education & Compliance** (14%/20%)
4. **After Treatment Care Plan**

**Collateral Workflows**

5. **Keeping Current** (12%/100%)
   - Conferences / society meetings
   - Reading current literature

4. **Sharing Information** (12%/na%)
   - Patient specific information
   - Case presentation (within dept)
   - Presentation to other bodies (e.g. Treatment committees, drug committees etc)
   - External presentations (Grand rounds, association presentations etc)

Source: Qualitative research (6 interviews and 67 focus groups participants)

*(x/y) = (% of time workflow is done / % of cases where published information is needed)
The Physicians Dilemma Solve

Comprehensive

Trusted

Online Books

Online Journals

Clinical Reviews

OvidMD

MD CONSULT

PubMed

CLINICAL KEY

UptoDate

Google

Aggregators

Wikis

Speed to Answer

Smarter search. Faster answers.
기존의 임상정보 검색엔진 vs ClinicalKey

<table>
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<th>UpToDate®</th>
<th>Google</th>
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<th>OvidMD™</th>
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</tbody>
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* ClinicalKey
⇒ Comprehensive + Trusted + Speed to Answer
≠ conventional clinical search engine

= unconventional clinical insight engine
Comprehensive & Trusted

- over 500 top journals
- over 1,000 books
- over 300 procedural videos
- over 2,100,000 images
<table>
<thead>
<tr>
<th>Content Type</th>
<th>Contents</th>
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<tbody>
<tr>
<td>First Consult</td>
<td>감별진단 도구, 근거중심의학 정보원 (평가, 진단, 임상처치, 예후, 예방, 치료)</td>
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<td>Procedural Consult</td>
<td>시술 및 수술 진행 및 정보 제공 (+비디오)</td>
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<tr>
<td>Medline</td>
<td>Medline의 MESH 용어 full-index로 제공</td>
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<td>Practice Guideline</td>
<td>임상관련 진료지침 제공</td>
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<td>환자교육자료 제공</td>
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<td>약물정보 제공</td>
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<tr>
<td>Clinical Trial</td>
<td>임상실험 정보 제공</td>
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<tr>
<td>Vitals</td>
<td>수술관련 필요정보를 전문가가 요약 제공</td>
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## ClinicalKey & MDConsult

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<tr>
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Multiple products, each delivering relevant content, but not integrated

A single product that combines all Elsevier’s HS medical and surgical content in a single intuitive interface

**Comprehensive & Trusted**

From...

MD Consult  Journals Consult  Procedures Consult
First Consult  Clinics  Expert Consult
E-Clips Consult  Imaging Consult  Clinical Pharmacology
Local HS Med/Surg Content

...To

A single product that combines all Elsevier’s HS medical and surgical content in a single intuitive interface

**Clinical Key**

Smarter search. Faster answers.
EMMeT – A little Deeper

Elsevier Merged Medical Taxonomy (EMMeT)

- Clinical Trials
- Journals
- Clinical Summaries
- Guidelines
- Books
- Procedural Videos
- Drug Info
- Patient Ed

250K+ Core Clinical Concepts
1M+ Synonyms
1M+ Hierarchical Relationships
1M+ Ontological Relationships

Elsevier Custom
UMLS

Concept Mapping

Smarter search. Faster answers.
EMMeT – In the real world

Medical Name
Malignant Neoplasm of the Breast

Consumer Friendly Name
Breast Cancer

Synonyms
Malignant Tumor of Breast
Malignant Breast Neoplasm
Breast Ca

Codes
ICD9 – 174.9
MeSH – D001943
SNOMED – 190121004

Semantic Type/Group
Neoplastic Process/Disease

Children Terms
• Breast Sarcoma
• Familial Breast Cancer
• Malignant lymphoma of the Breast
• Malignant Neoplasm of the breast outer quadrant
• More…

Parent Terms
• Breast Disorders
• Cancer of the Thorax
• Mammary Neoplasms
• More…

Symptoms
Breast Lump, Nipple Retraction, …..

Diagnostic Procedures
Mammography, Breast Biopsy, …..

Treatment Procedures
Chemotherapy, Mastectomy, ….

Medications
Tamoxifen, Doxorubicin, …..

Physician Specialties
Surgical Oncologist, Radiologist, ….

Risk Factors
Family History, Genetics, Predisposition, ….

Prevention
Screening, Preemptive Mastectomy, ….

Complications
Metastatic Cancer, ….

Nutritional Supplements
Vitamins, Flaxseed, ….

Alternative Procedures
Meditation, Yoga, ….
Smart Content—Increasing Relevance

* 임상사례연구
  - 울혈성 심장 마비 치료에 안내된 biomarker 사용에 대한 최신 정보 검색
  - 검색용어 : “BNP guided therapy in CHF”

- 2009년에 업데이트된 하나의 결과 검색

- Google™
  - 뉴스 요약 310,000결과 검색
  - 저널 아티클의 리스트를 위해 Google Scholar 요구

- PubMed
  - 연대순으로 10개의 결과 검색
  - 두번째 결과는 원하지 않는 결과값
  - 용어확장 및 약어를 혼동하여 주요 간행물을 찾지 못함
Smart Content—Increasing Relevance

* ClinicalKey 결과

- 다양한 콘텐츠에서 128개의 결과값 검색
- 현재 의학 정보를 바탕으로 결과 제공
  - 첫 번째 4개의 결과는 가장 관련되고 현재의 연구 중인 저널에 인용된 것

ClinicalKey’s Smart Content ensures you see the most clinically relevant answers reducing search time
www.ClinicalKey.com
PubMed vs ClinicalKey
검색 결과 첫 페이지
Filtering: Image
After Filtering: Image
Presentation Maker
Histologic appearance of Addison's disease. The postmortem histology is shown of autoimmune adrenalitis (A) and tuberculous adrenalitis (B) in patients who died of Addison's disease. A, The adrenal capsule is markedly thickened and the surviving cortex consists of scattered hypertrophied adrenocortical cells that are heavily infiltrated with lymphocytes (H&E, ×120). B, Pink-staining, amorphous, caseous necrosis can be seen, in addition to tuberculous granulation tissue and a Langerhans’ giant cell (H&E; ×80).

(Courtesy of Professor I. Doniach.)

Addison's disease
Ferri, Fred F., M.D., F.A.C.P., Ferri's Color Atlas and Text of Clinical Medicine, Chapter 272, 887-889

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Filtering: PC (Procedures Consult)

Arthrocentesis
Filtering: Vitals

700 surgical topics focused on 6 specialties:

- General Surgery
- Ob/Gyn Surgery
- General Orthopedic Surgery
- Surgical Oncology
- Hand/Foot/Ankle Surgery
- Thoracic Surgery

Surgery for Gastric Cancer

Scott A. Hitian
Last Updated: 05/20/2013
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Key Points

- For selected T1 gastric cancers unlikely to be associated with nodal disease, endoscopic submucosal resection offers excellent results without the morbidity and risk of major surgery.
- For T2-T4 cancers, negative-margin (R0) resection is to be achieved by distal subtotal gastrectomy whenever feasible.
- The vascular beds to an independent predictor of both overall survival and disease-free survival.
- Prospective randomized trials have shown no advantage to routine paraaortic node dissection.
- The values of omental, peritoneal, splenectomy for selected tumors, and surgical debulking are being investigated.

Clinical Conclusion

For selected T1 gastric cancers unlikely to be associated with nodal disease, endoscopic submucosal resection offers excellent results without the morbidity and risk of major surgery. For T2-T4 cancers, negative-margin (R0) resection is to be achieved by distal subtotal gastrectomy whenever feasible.

East-West Differences in Diagnosis and Staging

- Eastern and Western groups classify gastric cancer differently, even at the level of histologic diagnosis.
- Noninvasive mucosal disease is categorized routinely as early gastric cancer by the Japanese General Rules for Gastric Cancer Study, but as simple dysplasia, or carcinoma in situ, by Western pathologists.
- The Vienna Classification explicitly documents and addresses major differences in diagnostic definitions, making it applicable worldwide.

- The new Group Classification incorporated into the Japanese Classification of Gastric Carcinoma separates lesions into 5 categories, from benign to obviously neoplastic; this should remedy the problem.
- The Japanese Gastric Cancer Association (JGCA) staging represents an internationally popular alternative to the American Joint Commission for Cancer (AJCC)/Union for International Cancer Control staging.
- Modern JGCA II level lymphadenectomy definitions are driven by whether a (mandated) total gastrectomy or distal gastrectomy is performed, based on primary tumor characteristics.

* For total gastrectomy, a D2 lymphadenectomy is now defined as complete removal of node stations 1 to 7, 8a, 9-11, and 12a.
* For distal gastrectomy, a D2 lymphadenectomy is now defined as complete removal of node stations 1, 2, 3, 4a, 4b, 5-7, 8a, 9, 11b, and 12a (Fig 1).
Browse - Journals

Neurosurgery Clinics of North America

Articles in Neurosurgery Clinics of North America

In 1809, Johann Christian Reil (1759–1835), the German anatomist, physiologist, and psychiatrist, first described the island (or insula) of Reil. This anatomically and functionally complex structure is located in the depth of the sylvian fissure.

The Rise and Fall of “Biopsy and Radiate”: A History of Surgical Nihilism in Gliona Treatment [Journal]

Han, Seungju J., MD, Suphren, Michael E., MD Neurosurgery Clinics of North America. 2012-04-01, Volume 23, Issue 2, 207-214

Commonly held views about glioma treatment involving gliomas, defined as World Health Organization grade II through IV astrocytic or oligodendroglioma neoplasms, are known to all with even casual exposure to their clinical history as invariably m...

The Use of Motor Mapping to Aid Resection of Eloquent Gliomas [Journal]

Choi, Byun D., AB, Menkes, Michael D., MD, Batch, Kristen A., BA, Friedman, Allan H., MD, Sampson, John H., MD, PhD, MS Sc, Neurosurgery Clinics of North America, 2013-04-01, Volume 23, Issue 2, 215-226

One of the oldest and still most important forms of treatment available for patients with glioma is surgery. Even in the contemporary milieu of multimodal regimens, including radiotherapy and chemotherapy, glioma resection remains a mainstay of treatm...

Characteristics and Treatment of Seizures in Patients with High-Grade Glioma: A Review [Journal]


High-grade gliomas (HGGs), including anaplastic astrocytoma (AA) and glioblastoma multiforme (GBM), are the most common primary tumors of the central nervous system. Despite medical and surgical advances, the prognosis of patients with HGGs remains...
Establishing the Diagnosis of HIV Infection

AIDS Therapy - Third Edition, Chapter 1, 1-22, @ 2008

Sequence of viral and antiviral responses after HIV infection. Schematics of HIV-1 viral elements useful for establishing a diagnosis of HIV infection. Classification of HIV. Circulating recombinant forms. Unique recombinant forms. Sequence of reac...

Primary Care in Developed Countries


Natural history of persons infected with HIV. Variable CD4 cell count decline. This schematic drawing shows variable patterns of CD4 cell count decline. The top curve represents a long-term nonprogressor and the bottom curve represents a rapid CD4...

Antiretroviral Therapy and Comprehensive HIV Care in Resource-Limited Settings


WHO Clinical and Immunologic Criteria for Initiating ART: Lymphocyte Count, total lymphocyte count. Laboratory Methods to Monitor CD4+ T-Lymphocyte Counts in Resource-limited Settings. Automated add-on loaders available to increase capacity. Can be ...

Strategic Use of Antiretroviral Therapy


Natural history of HIV-1 infection over time. HIV-1 replication is rapid in vivo. Plasma HIV-1 viremia, depicted here as HIV-1 viremia results from spillover of recently produced virus from infected cells in lymphatic tissue. Uninfected, activate...
Chapter 2
Primary Care in Developed Countries

In developed countries, persons infected with human immunodeficiency virus (HIV) have experienced a profound improvement in survival, mainly as a result of the widespread availability and use of highly active antiretroviral therapy (HAART). With this tremendous success and with persons living much longer, the role of long-term primary care of HIV-infected persons has taken on increased importance. In the US and other developed nations, a wide range of medical providers, including infectious diseases specialists, internists, family practitioners, physician assistants, and advanced registered nurse practitioners, now serve in the capacity as HIV primary medical care providers. Excellent primary care for HIV-infected individuals consists of competent management of both HIV-related issues, as well as those general medical issues not directly related to HIV. Fundamental elements of competent HIV-specific primary care consist of identifying HIV-infected persons, recognizing common HIV-related manifestations, performing the initial comprehensive evaluation, providing appropriate vaccinations, prescribing appropriate medications to prevent major opportunistic infections, diagnosing common opportunistic infections, initiating optimal antiretroviral therapy when indicated, and providing counseling for prevention of the transmission of HIV to others. In addition, because of the rapidly changing nature of the field of HIV, these medical providers not considered HIV experts should make every effort to remain current with updated key treatment guidelines and receive consultation advice as needed, particularly for complicated HIV-related issues, such as interpretation of resistance tests and management of serious opportunistic infections. Conversely, many HIV experts may not have expertise in general medical care, and thus should attempt to remain current on the management of common primary care problems, such as hypothyroidism, hypertension, and diabetes, as well as on the provision of essential preventive medicine services. This chapter will focus on HIV-related clinical issues essential for the primary care management of HIV-infected individuals.

IDENTIFYING HIV-INFECTED PATIENTS

Unfortunately, approximately one-fourth of persons now living with HIV in the US remain unaware of their HIV infections, and many persons who eventually obtain a diagnosis of HIV do not get tested until late in the course of their disease. The rationale for emphasizing early diagnosis of persons with HIV infection is twofold: those individuals identified earlier in the course of their disease are likely to benefit more from antiretroviral therapy and opportunistic infection prophylaxis and, moreover, persons who are aware of their HIV status may be less likely to transmit HIV to others. Four major settings exist within which a medical provider might identify an HIV-infected individual: (1) routine HIV screening of an individual, (2) recognizing acute (primary) HIV infection, (3) recognizing a non-life-threatening HIV-related manifestation, such as oral hairy leukoplakia or oral candidiasis, and (4) diagnosing an AIDS-related complication, such as Pneumocystis pneumonia or Toxoplasma encephalitis.
G Practice Guidelines
Find a practice guideline by title

ALL A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Authoring Organizations

Specialty

- All
- Anesthesiology (123)
- Cardiothoracic Surgery (72)
- Cardiovascular Disease (645)
- Critical Care Medicine (250)
- Dentistry (54)
- Dermatology (143)
- Emergency Medicine (492)
- Endocrinology, Diabetes and Metabolism (310)
- Gastroenterology and Hepatology (289)

Show more...

G (1) 2006 consensus guidelines for the management of women with abnormal cervical cancer screening tests. (2) 2009 addendum.
American Society for Colposcopy and Cervical Pathology - Medical Specialty Society [2002 04 24]

American College of Cardiology Foundation - Medical Specialty Society [1996 11 01]

American Society of Clinical Oncology - Medical Specialty Society [1997 05 01]

G (1) Assessment and device selection for vascular access. (2) Assessment and device selection for vascular access 2008 supplement.
Registered Nurses’ Association of Ontario - Professional Association [2004 05 01]

American Academy of Neurology - Medical Specialty Society [2000 10 01]

G (1) Best practice guideline for the subcutaneous administration of insulin in adults with type 2 diabetes. (2) For the subcutaneous administration of insulin in adults with type 2 diabetes 2009 supplement.
Registered Nurses’ Association of Ontario - Professional Association [2004 06 01]
2006 consensus guidelines for the management of women with abnormal cervical cancer screening tests. 2009 addendum.
Hagerstown (MD): American Society for Colposcopy and Cervical Pathology; 2009. 3 p. [5 references]

Scope

Disease/Condition(s)
- Atypical squamous cells
  - Of undetermined significance (ASC-US)
  - Cannot exclude high-grade squamous intraepithelial lesion (HSIL) (ASC-H)
- Low-grade squamous intraepithelial lesion (LSIL)
- HSIL
- Atypical glandular cells (AGC)

Guideline Category
- Management
- Prevention
- Risk Assessment
- Screening

Clinical Specialty
- Family Practice
- Internal Medicine
- Obstetrics and Gynecology
- Oncology
- Pathology
Browse – Patient Education

Patient Education
Find a patient education title

Authoring Organizations
- All
- American Academy of Family Physicians (689)
- Elsevier Gold Standard (3685)
- ExitCare, LLC (4174)
- Ferri’s Netter Patient Advisor (737)
CAREING FOR YOUR CHILD WITH ASTHMA

In asthma, normal airflow in airways (bronchi) is blocked. It most often starts in childhood. Children have small airways, so their asthma is especially serious.

Asthma attacks may be caused by pollen, dust, dander, smoke, cold weather, flu, and stress.

Symptoms include wheezing, coughing, chest tightness, and trouble breathing.

Automated pulmonary (lung) testing

Testing is done before and after breathing in a short-acting drug that dilates bronchi.
Comprehensive
Integrated Medline and link resolver for access to third-party, full-text journal content.

Trusted
Authoritative medical and surgical content from Elsevier.

Speed to Answer
Smart content enables fast discoverability of the most relevant answers and more intuitive searching.