3rd year clinical skills: library edition
Tools to make things easier
DynamedPlus - Browse by specialty

Browse by specialty

- Adult primary care
- Allergy
- Anesthesiology and pain management
- Cardiology
- Critical care
- Dermatology
- Ear nose and throat (ENT)
- Emergency medicine
- Endocrinology
- Family medicine
- Gastroenterology
Clinical Prep from AccessMedicine

Prepare for wards with access to thousands of clinical questions and answers.

Ask a Clinical Question...

e.g. "treatment atrial fibrillation" "diagnosis ARDS" "manifestations delirium"  View Search Tips

Bridge the gap between course work and actual patient care experiences
AccessMedicine: the app
NEJM Resident 360

Choose Your Rotation

**Internal Medicine**
- Allergy/Immunology
- Cardiology
- Dermatology
- Endocrinology
- Geriatrics
- Infectious Diseases
- Nephrology
- Oncology
- Pulmonology
- Women's Health

**Pediatrics**
- Adolescent Care
- Neonatal Care
- Pediatric Allergy/Immunology
- Pediatric Critical Care
- Pediatric Emergency Medicine
- Pediatric Endocrinology
- Pediatric Genetic/Metabolic Disorders
- Pediatric Hematology
- Pediatric Infectious Diseases
- Pediatric Mental Health
- Pediatric Oncology
- Pediatric Pulmonology
- Preventive/Well Child Care

More Guides Coming – Check Back Soon!
Peripheral Nerve Blocks for Hand Procedures

Ultrasound-Guided Cannulation of the Subclavian Vein

Digital Rectal Examination and Anoscopy
All of this and more on library Clerkship Guide

Medical Clerkship Resources
Resources for the 3rd year and 4th year School of Medicine Clinical Clerkships

Mobile Resources
Below are free mobile versions of resources included on this research guide.

- **AccessMedicine Mobile Access**
  Apple or Android mobile app that provides access to Quick Medical Dx & Rx, Fitzpatrick’s Color Atlas of Clinical Dermatology, Differential Diagnosis Tool and Diagnostic Tests. You will need to create an AccessMedicine MyAccess account on a computer to be able to login into the app.

- **ePSS Mobile Access**
  The ePSS is an application designed to help primary care clinicians identify clinical preventive services that are appropriate for their patients. Android and Apple app.

- **PubMed for Handhelds**
  Mobile site features multiple ways to search PubMed/MEDLINE including PICO. Apple iOS app or website. Please note that this app does not connect to Temple full text subscriptions.

- **DynaMed Plus Mobile Access**
  Mobile app that allows offline DynaMed Plus access from your iPhone, iPad or Android device. We recommend that you be on Wi-Fi for the initial download of content because it is large.

Evidence Based Focus

guides.temple.edu/clerkship
Tools for DDx
Abdominal aortic aneurysm

DDx
- Perforated viscus, eg, peptic ulcer, appendicitis, gallbladder, diverticulitis
- Pancreatitis or pancreatic pseudocyst
- Urinary calculi
- Pyelonephritis
- Gastritis
- Intestinal ischemia
- Bowel obstruction
- Musculoskeletal pain
- Sudden death due to other causes, eg, ventricular fibrillation, myocardial infarction, pulmonary embolism

See related DDx.
Clinical Prep from AccessMedicine

Diverticular Disease

Diagnosis
1. How are giant colonic divertica diagnosed?
2. How is complicated diverticulitis staged?
3. What are clinical manifestations of diverticulitis?

Prognosis
1. How does the Hinchey staging system predict mortality rate in patients with diverticulitis?
2. What complications are associated with diverticulosis?
3. What complications are associated with giant colonic divertica?

Differential Diagnosis
1. How does the pain of irritable bowel syndrome differ from that of uncomplicated diverticulosis?
2. What are differential diagnoses of diverticular disease?
Hypercalkemia

Differential diagnosis

- primary hyperparathyroidism and malignancy account for > 90% of hypercalcemia
- see Causes for other causes of hypercalcemia
- factitious hypercalcemia
  - factitious hypercalcemia is elevated serum calcium without elevated ionized calcium
  - factitious hypercalcemia may occur with
    - increased serum albumin or protein levels (for example, in multiple myeloma), because 50%-80% of total body calcium is bound to plasma proteins (Postgrad Med 2004 May;115(5):27)
    - underlying disorder (for example, tuberculosis) due to hyperalbuminemia associated with reduction in extracellular fluid volume
    - severe dehydration (Mo Med 2011 Mar-Apr;108(2):99)
    - methods to exclude factitious hypercalcemia
      - measure ionized calcium (most accurate)
      - correct for elevated total protein or albumin levels by reducing serum calcium concentration by 0.8 mg/dL (0.2 mmol/L) for every 1 mg/dL (0.25 mmol/L) increase in albumin or protein above normal
      - see DynaMed calculator for Calcium Correction for Albumin or Calcium Correction for Albumin (SI units)
Asking questions
Types of questions: Part 1

Background question
What therapies reduce postoperative pain?

Foreground question
Does the addition of music or guided imagery provide better pain control post op?
Which of these refers to the P in PICO?

A. Reduction of the risk of developing diabetic retinopathy in patients with type 2 diabetes
B. Diphenhydramine-lidocaine-antacid mouthwash
C. Adolescents with abuse-related PTSD

HOLD UP THE CARD WITH THE CORRECT ANSWER!
In adult patient undergoing surgery how does the use of guided imagery compare with music therapy in analgesia use within the first 24 hours post-op?

Using PICO we can turn that clinical question into something we can search

P  Patient  adults surgery patients
I  Intervention   guided imagery
C  Comparison   music therapy
O  Outcome   reduction of analgesia in the immediate post op period

PICO is a way to think about a clinical question and turn it into a searchable question.
Which of these refers to the I in PICO?

A. 70 year old woman with primary insomnia and a previous adverse reaction to hypnotics
B. Reduction in the number of seizure over 6 months
C. Carotid endarterectomy

HOLD UP THE CARD WITH THE CORRECT ANSWER!
<table>
<thead>
<tr>
<th>Types of questions and PICO beyond therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intervention or therapy</strong></td>
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<td><strong>Diagnostic</strong></td>
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<tr>
<td><strong>Prognosis</strong></td>
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<tr>
<td><strong>Harm/Etiology</strong></td>
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About study types
What kind of study would best answer your question?

Therapy Question - RCT (randomized control trial)

Diagnostic Test Question - Prospective, blind controlled comparison to a gold standard

Prognosis Question - Cohort study > case control > case series

Harm / Etiology Question - RCT > cohort study> case control > case series
Only looking at unfiltered evidence
Case Series

Source: http://library.downstate.edu/EBM2/2600.htm
Case Control Studies

Source: http://library.downstate.edu/EBM2/2500.htm
Cohort Studies

[Diagram showing the process of cohort studies with a group of interest (e.g., smokers) and a comparison group (e.g., non-smokers) being followed over time and compared for outcomes.]

Source: http://library.downstate.edu/EBM2/2400.htm
Randomized Controlled Trials (RCT)

Source: http://library.downstate.edu/EBM2/2200.htm
Systematic Reviews

➔ Usually focus on a clinical topic
➔ Answers a specific question
➔ Extensive literature search
➔ Identifies studies with sound methodology
➔ Studies are reviewed & assessed
➔ Results summarized according to the predetermined criteria of the review question

Meta Analysis

➔ Thoroughly examines a number of valid studies on a topic
➔ Combines the results using accepted statistical methodology
➔ Reports the results as if it were one large study
How to figure out the study design from the title and abstract
What kind of study would best answer your question?

Therapy Question - RCT (randomized control trial)

Diagnostic Test Question - Prospective, blind controlled comparison to a gold standard

Prognosis Question - Cohort study > case control > case series

Harm / Etiology Question - RCT > cohort study > case control > case series
Name that study!
Can you tell the study type?

A total of 244 children aged 2 to 10 years undergoing their first set of Shepard tubes for otitis media with effusion and concomitant adenoidectomy were randomized to 2 groups: 1 with ear protection during water exposure (ear plugs and headbands, n = 130) and 1 without (n = 114). Bathing or swimming with unprotected ears was considered the exposure event and incidence of otorrhea, the primary outcome. Outcomes were assessed during the 6-month follow-up period.
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Can you tell the study type?

This was a hospital-based study, which included 67 cases and 134 controls (1:2). Women were selected consecutively between April, 2013 and June, 2015 among those attending the Department of Gynecology at the University Hospital of Santa Maria. Cases were selected among women diagnosed with breast cancer (ICD-10 C50), and controls were matched for age (±2 years), and smoking status (never, former and current smoker).
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Can you tell the study type?

**DESIGN, SETTING, AND PARTICIPANTS:**
Observational study of data from United States hospitals in the Get With The Guidelines-Resuscitation registry. Pediatric patients (<18 years) with index in-hospital cardiac arrest between January 2000 and December 2014 were included.

**EXPOSURES:** Tracheal intubation during cardiac arrest.

**MAIN OUTCOMES AND MEASURES:**
The primary outcome was survival to hospital discharge. Secondary outcomes included return of spontaneous circulation and neurologic outcome.
Can you tell the study type?

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The primary outcome was survival to hospital discharge. Secondary outcomes included return of spontaneous circulation and neurologic outcome.

https://www.ncbi.nlm.nih.gov/pubmed/27701623
All candidate outcome predictors were recorded at the beginning of rehabilitation, except for mobility. Mobility was assessed at the end of rehabilitation, since initial mobility was considered less relevant for living at home 3 months after rehabilitation. At the 3-month follow-up it was recorded whether patients were living at home. Patients were sent a postal questionnaire and, in case of non-response, contacted by telephone.
Can you tell the study type?

All candidate outcome predictors were recorded at the beginning of rehabilitation, except for mobility. Mobility was assessed at the end of rehabilitation since initial mobility was considered less relevant for living at home 3 months after rehabilitation. At the 3-month follow-up it was recorded whether patients were living at home. Patients were sent a postal questionnaire and, in case of non-response, contacted by telephone.

PICO Game
How to play

1) Open your envelope and **read your phrase** -- you each have one part of a PICO question
2) Figure out **which part** you have (P, I, C or O?)
3) **Find 3 other people** who have the other parts to make a complete PICO question
4) As a group:
   a) Figure out the **type of question** being asked (therapy, diagnosis, prognosis, diagnostic test, or harm/etiology)
   b) The best **type of study** that would help answer it
Round 1

Jane brings her three-year-old son in to the emergency room. She says that her son has been having frequent fevers, which she has judged by feeling his forehead. Because she hasn’t been using a thermometer, you wonder if she could have accurately determined if he had a fever.
Round 1 answers

**P** 3 year-old African American male child

**I** Mother’s touch

**C** Thermometer

**O** Correct diagnosis of fever

**Question type**
Diagnosis

**Study type**
Prospective, blind controlled comparison to a gold standard
Round 2

A 65 year old man admitted with a stroke. On examination he was found to have mild weakness of the right arm and right leg and bilateral carotid bruits. The patient is sent for carotid doppler ultrasonography. The resulting report states he has moderate stenosis (50-69% by NASCET criteria) of the ipsilateral carotid artery. In discussing treatment options with the patient he wonders which is best, surgery or drug therapy.
Round 2 answers

**P** 65 year old Vietnamese man with stroke & moderate carotid stenosis

**I** carotid endarterectomy

**C** medical therapy

**O** decreased risk of stroke

**Type of question** Therapy

**Type of study** RCT
Article appraisal tools: beyond study type

1. Does this study address a clearly focused question?
2. Did the study use valid methods to address this question?
3. Are the results of this study important?
4. Are these results applicable to my patient or population?

If the answer to any of these questions is “no”, you can save yourself the trouble of reading the rest of it.

https://www.cebm.net/2014/06/critical-appraisal/
Article appraisal tools: beyond study type

Centre for Evidence Based Medicine - Appraisal Tools and EBM Calculators
Duke University - Appraisal Tools
Knowledge Translation - Evidence based Medicine Toolbox
BestBETS Critical Appraisal Worksheet
Maternal screening of childhood fever by palpation

JOHN W. GRANETO, DO, MED, DAVID F. SOGLIN, MD

Fever is a common chief complaint for the pediatric emergency patient. It has been reported that a mother's tactile examination of a child, as historical information, offers little useful information. The study objective is to determine whether mothers can accurately detect the presence or absence of a fever without using a thermometer. The study is a prospective comparison of historical information with measured temperature, performed over a two-month period. The settings are in two inner-city university hospital emergency departments. Mothers of children less than 10 years old who presented to the emergency department with any chief complaint were selected as subjects. The interventions were interviewing the mother and the performance of routine vital signs on the child. Three hundred and twenty-two mothers participated. Of 124 examination have long been evident in emergency departments as well as physicians' offices. Because of the method of determining fever without using a thermometer, it has been suggested that delays in medical care have resulted because of a misconception by the parent that there is no fever. Sometimes fever determination has been delayed because of a lack of a thermometer in the home, or lack of knowledge as to how to use or read a thermometer. The purpose of the study is to determine if tactile sensation is an effective alternative to the use of a thermometer in determining a child's febrile status.

METHODS

A prospective study was developed which asked mothers of
When you need the full text

Full text links

Interlibrary Loan Services

Use this service to request materials that are not available at any of Temple's libraries. Enter your Temple AccessNet user name and TUniversity secure password below. Then press the Logon to ILLiad button to continue.

ILLiad Logon

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Ginsburg Health Sciences Library

Temple University

http://library.temple.edu/hsl

215-707-2665

http://library.temple.edu/hsl/ask

LKSOM Librarian:
Jenny Pierce
jenny.pierce@temple.edu

OHSU Library Evidence Based Practice Toolkit for Nursing

Centre for Evidence Based Medicine

Duke University Medical Center Library and Archives Evidence Based Practice Guide

Knowledge Translation Program - Evidence based Medicine Toolbox

BestBETS